Understanding Postgraduate Research Students Disclosure of Mental Health Challenges within the UK University Context

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Abstract

Postgraduate Research Student (PGR) mental health is a growing area of interest to Higher Education Institutions and researchers due to the attrition and potential suicide risk in this population. The aim of this Thesis was to explore perceptions and experiences of disclosing a mental health challenge within the university context. This was achieved through a systematic literature review and three sequential multi-method studies exploring student disclosure of mental health challenges, including a quantitative survey and qualitative interviews with PGRs and supervisors. It was found that few studies examined the PGR experience of disclosing mental health challenges, and the differences between PGRs and taught students is often unacknowledged in policy and practice. The experience of doing a PhD can have substantial impact on the mental health of PGRs (both positive and negative) and PGRs are reluctant to talk about mental health due to the importance of the supervisory relationship, and impact on supervisory perceptions. Supervisors felt ill-equipped to encourage and support disclosures, whilst institutions expected them to support the mental health and pastoral needs of their PGRs. HEIs are not adequately recognising, rewarding, or work-loading the complex and valuable role that supervisors play in PGR success. The results of the multi-method studies are then discussed in relation to existing literature within the field and the pandemic. Reflection is made on the quality of the studies and role of the researcher and a series of recommendations for the UK Higher Education sector, researchers and university communities are presented in relation to policy, process, and individual action.

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Chapter 1: Introduction

The UK Higher Education Context

The number of university students is rising year on year, with enrolments increasing from 2.3 million in 2016/17 to 2.7 million in 2020/21 academic years (Higher Education Statistics Agency, 2022).

The mental health of university students is an important issue for institutes of higher education (HEI's); mental distress can impact severely on academic success, and university counselling and support services are reporting more and more students struggling with their mental health. The Universities and Colleges Admissions Service in the UK (UCAS) reported in 2021 that nearly one in twenty-five UK student applicants had reported an existing mental health condition in their UCAS application, marking a 450% increase in declarations since 2011 (3.7% up from 0.7%). It is important to note that UCAS data comes from applications to universities and does not include disclosures once a student has started their university journey, with their report estimating around 74,000 students entered university with a mental health challenge in 2020 (despite only 21,105 stating this on their UCAS forms). UCAS data is also limited by the lack of nuance in reporting, with applicants only able to select one disability code. UCAS data can also exclude many postgraduate taught (PGT) and postgraduate research (PGR) students, due to differences in their application styles between institution, and may not capture the rates of mental health challenges within international student populations, who may again utilise different means of application for university. Mental health declarations now account for 27.2% of all disability disclosures within UCAS data, however there are significant issues with the positioning of mental health as a disability and within disability characteristics, which will be discussed in the next section.

Student suicides have also been a focus of reporting, with Universities UK producing a guide on preventing student suicide following over 95 confirmed student suicides in 2016 and 174 in 2019 (Office for National Statistics, 2018; 2020, Universities UK, 2020). As there is no legal requirement for universities to count student suicides, this number may be much higher. The largest ever mental health survey conducted on UK university students (n= 37,654) also found that nearly one in ten students (9.4%) frequently think about self-harming, and almost half of students (44.7%) reported using alcohol or recreational drugs to cope with problems in their life (9.5% admitting to engaging in this often, or all the time) (Insight Network, 2020). Clearly, students are experiencing levels of distress and engaging in behaviours that can be dangerous, and student mental health is an unignorable issue.

Student mental health also has implications for student progression and attainment, with HESA statistics showing that in the 2014-15 academic year, 1,180 students who experienced a mental health challenge dropped out, an increase of 210% compared to 2009-10 (HESA, 2017). University support services are also experiencing an increased demand, with 94% of surveyed counselling services (n= 48) reporting increased demand, and 61% reporting increased demand of over 25% (IPPR, 2017).

Despite this rise in mental health issues on campuses, prior research has indicated that students are reluctant to access support and disclose their distress, experiencing fear of judgement and stigma (UCAS, 2021; Student Minds, 2014).

Whilst some university support services, such as wellbeing services can be accessed by any student, more formal forms of support such as specialist mentors, extensions or adjustments require students to formally ‘declare’ their disability (physical or mental health related). Therefore, any discussion of mental health and disclosure of mental health difficulties necessitates first a consideration of disability. Disability discourses and considerations of disclosure are important considerations when investigating mental health challenges, as it can be an enabler and barrier to help-seeking and support. Disclosure can allow access to help and support and will be explored further throughout this Chapter.

Disability

Discourses of mental health and disability within this Thesis

This research positions itself from the framework of the social constructionist, neurodiverse model of disability, with many disability issues being mostly external to the individual. Disability is a category one can be born into or acquire and is acknowledged here as a category that intersects with other stigmatised social categories, and the ambiguities that can arise from impairment specific issues.

Disabling factors have been identified to include negative social attitudes, policies and practices of institutions and the public, and ideologies that position disability as an inferior way of being (Dirth and Branscombe, 2018). It is worth noting that the social approach to disability also has an ideological component; it demands both identification and analysis of the social, political, and economic conditions that are restrictive for individuals (Mulvany, 2000). Whilst it is beyond the scope of this work to explore these issues in depth, they should not be ignored when examining disability, mental health, and identities.

It is important to acknowledge that for some, their conceptualisation of mental health incorporates biological influences. Disabled people with undisclosed mental health challenges, and/or invisible disabilities arguably cannot be authentic in the same sense as their non-disabled colleagues as forging an authenticity of self would necessitate disclosure, despite evidence that disclosure could be to the detriment of their career image or status (Procknow, Rocco and Munn, 2017).

The recovery model underpins the basis of this Thesis. The recovery model (Jacob, 2015) views mental illness differently to more traditional psychiatric approaches, with the concept of recovery being about staying in control of one's life (rather than 'curing' people or returning to a 'premorbid' level of functioning), enhancing resilience and not just symptom treatment. Recovery here is seen as not getting rid of problems, but seeing beyond them, to the individual, and recognising their abilities, interests and fostering their development. It is acknowledged that students may continue to enter (and leave) HE with mental health challenges, recovery and management of mental health challenges is possible, and should be embraced by universities and the sector, enhancing students' abilities to thrive in academia, despite, or emboldened by, their experiences of mental health.

This Thesis aims to work from an inclusive framework that respects all perspectives; the acknowledgement of bio-psychosocial influences on our mental health, which we all have, and exists on a continuum, with the question of disability left to personal identification, to acknowledge the range of views, feelings and mitigating factors that affect the disability label and identifying with it. Neurodiversity, a term emerging in the late 1990's (Graby, 2015), is an umbrella term for a range of conditions which constitute a variety of 'neurotypes' that are in the minority but are equally valid to the majority (or so-called normal) human neurotype. Neurodiversity activists argue for equal opportunity and social acceptance for all (regardless of neurology or neurotype) with no single neurotype representing normality, a best way, or the only way of existing within our world. The framework of neurodiversity enables the inclusion of both the medical and social models; those who identify mental distress as biochemical or biological in cause, and those who identify mental distress as socially reactive in cause.

The terms 'students with mental health challenges' and 'neurodiverse students' will be utilised, as an attempt to be sensitive to issues of identity and perceptions, and what the term 'disability' may evoke in students, as previous work has found that the term 'disabled students' can be uncomfortable or felt to be inappropriate for students, particularly with the intersection of mental health (Lister, Coughlan, Kenny, et al., 2021). It is acknowledged that for some distress may be caused by physical or chemical factors, for others social and/or environmental factors, for others a mixture of the two; and writes from the perspective that distress and disorder can be exacerbated and affected by social, political, and environmental conditions – including those within universities.

Disclosure and disability

As touched upon above, accessing more formal forms of support such as specialist mentors, extensions or adjustments require students to formally 'declare' their disability (physical or mental health related). Accessing these supports also requires providing evidence, meaning students must seek out a diagnosis, undertake a specialist educational assessment, collate, and provide formal statements of disability, diagnosis, or additional needs (often with a financial cost associated).

As noted by Lovett, Nelson & Lindstrom (2015), schools are often tasked with actively seeking out or identifying students who might have disabilities or special educational needs, however post-secondary institutions put the onus on the student to identify their disability status and request any accommodations. Therefore, any discussion of mental health and disclosure of mental health difficulties necessitates first a consideration of disability. It has also been found that the term ‘disabled student’ can be uncomfortable for students (Lister, Coughlan, and Owen, 2020), and students who distance themselves from disability labels may consider themselves ineligible for support and may not engage in research studies that are recruiting students experiencing ‘disability’ (Hitches, Woodcock and Ehrich, 2021). It is acknowledged that language norms (sometimes referred to as ‘linguistic hegemony’) can subtly empower certain discourses whilst disempowering other discourses and individuals. As such, the wider discourses surrounding disability will be briefly examined.

Disability discourses

To begin, it is important to consider the relationship between, and meaning of disability and mental health. Depending on one’s epistemological and ontological view, disability is often seen within the binary of medical, or social models, resulting from biological or medical origins (with a focus on the individual), or from social oppression and environmental barriers (focusing on wider societal contexts) (Brown and Leigh, 2018). There are a myriad of conflicting, and often contradicting viewpoints and discourses on the nature, determinants, and effects of disability (Imrie, 2004) with no consensus about language (Beresford, 2019). It is pertinent to note, however, that the UK’s Equality Challenge Unit (2009) wants to encourage higher education to embrace the social model of disability. Universities UK (2015) posit that mental illness arises from organic, genetic, psychological, or behavioural factors (or a combination of these), suggesting a biopsychosocial model of health is applied when talking about mental health amongst students within their guidance and publications.

Disability discourses are not clear cut, especially concerning mental health. As noted by Rashed (2019), some psychiatric service users (or survivors) endorse the terms disabled or impaired, feeling it creates a sense of community. Others refuse it, not considering themselves to have an impairment, or are reluctant to identify with it due to fear of not being disabled enough.

Traditionally, disability has been viewed from the medical model; with illnesses, conditions and disabilities being purely biological in aetiology. Whilst general discourse has moved away from the medical model through acknowledging the social construction of disability and issues of power dynamics, many of us shift in, out and through the disability identity; for example by breaking a leg or becoming unwell with a virus (Withers, 2010). Viewing disability through the lens of Critical Disability Theory acknowledges the fact that ableism can create a binary view (disabled vs not disabled) when it is more accurate to view disability on a continuum, often socially constructed and individualised (Procknow, Rocco & Munn, 2017). Disability is often considered to be unchangeable and congenital, when in reality, up to 80% of disabled people acquire their disabilities (i.e., are not born with them), and most people will probably experience some sort of disability at some point in their lives (Withers, 2010).

The binary view of disabled/not disabled, often prevalent within HE (and society) is a form of ableism, as it is more accurate to consider disability a continuum that accounts for the social construction of the phenomena of disability, one’s right to self-determination, and the influence of the medical industry (Jette, 2005). Ableism is the belief that being without a physical, cognitive, or chronic illness is the ‘norm,’ and includes what Jette (2005) refers to as sanism; the perception of those labelled, or identifying as mentally ill as inferior, abnormal, and resulting in their othering, through stigma, culture and belief systems maintaining the ‘norm’ as superior. It has been noted (Deal, 2007) that ableism can be subtle, and can be incorporated into a framework of prejudice; individuals and institutions may not be anti-disabled, but rather they are pro-non-disabled.

As definitions and perceptions of what constitutes a disability, and the multifaceted manifestations of ableism affect perceptions of mental health challenges and thus disclosure decisions, the discourses, and perspectives around mental health as a disability and their impact on disclosure of mental health will now be explored.

Mental health discourses

Within the social constructionist perspective, mental health is seen as a complex multidimensional concept, having varying positions and dimensions (Johansson, Brunnberg and Eriksson, 2007). Arguably, there is no 'neutral' position to practice mental health that is outside of the history and society within cultures, and is divorced from political concerns, norms, and values. From such historically and politically constructed psychiatric discourses, people are given the identifier of being 'mentally ill' when diagnosed, tying them to a specific identify. Foucault (2000) argued that through this, an individual becomes a subject, as they are made subject to others through their conscience or self-knowledge of understanding themselves as ill and being understood as ill by others. Within this Thesis, student mental health will be referred to in person-first language (students with mental health challenges), as students often do not identify as disabled, which will be explored later. Beresford (2019) and others (Rashed, 2019; Gernsbacher, 2017) argue, that there is no consensus regarding preferred language, terms, and boundaries of identity; this can be seen within the ongoing debate between person-first (person with disability) and disability first (disabled person) or diagnosis first (schizophrenic person) language.

Given the variety of purposes that the term mental health has been adopted for, it is unsurprising that some controversy surrounds the definition of mental health (Beresford, 2019). Core concepts and definitions around mental health vary from individual, to functional and societal, and acceptance of them is not universal. Conceptualisation and definition of mental health are largely dependent on both theoretical and paradigmatic foundations, with definitions varying by discipline, branch of discipline and history.

It is also important to note, most notions of mental health and mental illness within literature are processes of the prevailing traditions, formed through the lens of Western countries and ideals; with cultural values, contexts, and traditions shaping how they are conceptualised across contexts and geographies. An international investigation into defining mental health was conducted by Manwell, Barbic, Roberts et al., (2015), aiming to begin an interdisciplinary, inclusive dialogue to establish conceptualisation and an agreed definition of mental health. Mental health experts from 8 countries were provided with differing definitions of mental health (sourced from international organisations, public health agencies and research papers) and asked to rank them. A third of the academic and clinician participants surveyed felt none were satisfactory. Whilst the Public Health Agency of Canada definition was the preferred choice of the 50 respondents, this was only at 46%, with the World Health Organisation (WHO) definition being preferred by only 20%. More respondents felt none of the provided definitions were satisfactory than preferred the WHO definition, showing the difficulty in defining mental health in a universally or widely accepted way.

Without a widely accepted definition of mental health, psychology and psychiatry arguably finds itself in an anomalous position; psychological literature rarely includes discussions about what mental health is or what the general nature of mental health is, whilst simultaneously asserting knowledge about the concept of mental health (Lofgren, Hewitt & das Nair, 2015). A central point of contention about mental health’s ontological and epistemological status is whether mental health and mental illness should be conceptualised as representing extreme ends of the same continuum (Lofgren et al., 2015); and if they should be viewed as separate to physical health and physical illness.

It is the view of this Thesis that the conflation of mental health and wellbeing is problematic for students, staff, and universities. Those who suffer from clinical levels of distress need dedicated interventions and potentially treatment, whilst those with lower levels of wellbeing (and arguably, all of the university community) can benefit from more generalised intervention sources such as increased information, self-care, and preventative work. A Policy Note from the UK Higher Education Policy Institute (Hewitt, 2019) highlights the problematic nature of using the terms mental health and wellbeing interchangeably, with UK organisations such as AdvanceHE using dual continua models to demonstrate that whilst connected, the two are not necessarily correlated. There is also the issue of framing wellbeing through neoliberal discourses (Cox and Brewster, 2021), where rather than society (and universities) acknowledging that there could be structural reasons for the pressure on student mental health, responsibility for welfare is placed back onto the student themselves.

As this Thesis is focusing on student and PGR mental health challenges, and the disclosure perceptions and processes that those who attend university may encounter, the importance, role, and existing frameworks of disclosure within higher education will now be examined.

Disclosure

Disclosure is generally understood to mean the telling, revealing, disclosing, admitting, or declaring something about the individual (Venetis, Chernichky-Karcher and Gettings, 2018). This could be something that the individual wishes to keep hidden, is not immediately obvious, or a part of the individual that they feel like opening up about, such as sexuality, disability, or mental health. The primary model that has been developed for application across a range of situations and has been utilised when investigating disclosures of disability such as invisible illnesses and mental health (Greene, Magasmen-Conrad, Venetis et al., 2012) is the Disclosure Decision Making Model (DD-MM) (Greene, 2009). The DD-MM, they suggest, could be used to examine the psychological and relational outcomes of enacting differing disclosure strategies, and research considering how students can disclose information that results in satisfying interactions, examining the recipient perspective.

Disclosure can provide a starting point to accessing professional help and can also facilitate support and validation from others (Simone and Hamza, 2021). Disclosure has been theorised to alleviate some of the stress associated with active concealment, as hiding a part of yourself from others can have a detrimental effect on your mental health and sense of self, which can affect one's ability to engage with others and receive social or professional support (Camacho, Reinka and Quinn, 2020). Disclosure can allow the implementation of accommodations or support plans. However, it has been noted that in order to disclose, students require information and guidelines ahead of time to facilitate their disclosure (Mamboleo, Dong, Anderson, and Molder, 2020).

Whilst disclosure can have many positive outcomes, it can often create a catch-22 situation (Procknow, Rocco and Munn, 2017) where disclosure can positively impact an individual's ability to be truly authentic and themselves (and potentially receive accommodations) but can also pose a real threat to their ability to grow and progress in the workplace due to stereotypes, systemic ableism, and perceived notions of what the individual is capable of doing. Research with students has identified lack of knowledge and understanding of invisible disabilities (including mental health), and fear of stigma as a threat to their identity (Mamboleo et al., 2020).

Literature from the workplace is relevant here, as it arguably has a lot of overlap with the university context, particularly for Postgraduate Research Students as will be explored later in this Chapter. This literature has examined disclosure processes and the role of various factors in disclosure decisions. Brohan, Henderson, Wheat, et al. (2012) note that a dichotomous conceptualisation of disclosure, i.e. someone either discloses or they do not, is inadequate due to the complexities involved in the process. This consideration is important and will be explored throughout the Thesis, as disclosure is more complex than often observed. Brohan et al. (2012) identified four main dimensions of disclosure within their systematic review of disclosure of a mental health challenge in the workplace; the voluntary or involuntary nature of disclosure, if one disclosed fully or partially, who was selected to be the recipient of the disclosure, and the timing at which disclosure is made. In the student context, these can be conceptualised as below.

Voluntary or involuntary disclosure: does the student have control over their disclosure, or not. For example, if a student has a visible facet of their difficulty (such as in their speech, behaviour, or appearance), often disclosure is involuntary and outside of the individual's control. The idea of involuntary disclosure can involve entrapment disclosure, where a student feels forced to reveal information about their mental health. This can occur in situations where a stigmatising or judgemental view has been shared, and the student reactively shares information to correct these views. It can also occur in the heat of an argument, or during difficult communications, and risks emotional distress as the student may not be ready to or have planned to disclose any information about their mental health. There is also an argument that disclosure at crisis point is a form of involuntary disclosure – if a student feels that disclosure is the only way out of their situation, can this truly be considered a voluntary disclosure? Evidence suggests that some students may only disclose when necessary academic situations necessitated it – i.e., they were being disciplined for absences or missing exams (Mamboleo, et al., 2020; Shahaf-Oren, Madan, and Henderson, 2021).

Full or partial disclosure: does the student disclose part of their challenges, and omit other aspects of their condition, or its impact on them? This has been seen in the literature around students who will disclose a physical disability, but not disclose their mental health status (Student Minds, 2014). Partial disclosure can often occur in a step-like fashion: where a student shares small details about their mental health, one at a time. This is done in order to allow the student to gauge the recipient’s reactions, both positive and negative, before revealing any further information about themselves, dependent on the reaction received. This can also be initiated by the recipient party, who may ask probing questions regarding mental wellbeing or general mood, without expectation of a full direct disclosure of any mental health challenges, however it may lead to partial disclosure, which has its own limitations and impacts. Interviews with medical students have highlighted the complexity of partial disclosure, with students feeling ‘lucky’ when the first step of partial disclosure goes well and they feel comfortable disclosing further (Shahaf-Oren et al., 2021).

Selectiveness of disclosure: does the student disclose to the university disability / student support services, or to some select individual(s)? Research into disclosure of non-suicidal self-injury (commonly referred to as self-harm) highlight the importance of selective disclosure in light of the risk that can be posed to the relationship between the discloser and the recipient, particularly for students, where duty of care and risk assessments are involved (Simone and Hamza, 2020).

*Timing of disclosure***:** does the student disclose in their application, on arrival, later in their course, or when they reach a crisis point? Data from the Higher Education Statistics Agency shows that students tend to disclose when they first arrive at university (or pre-enrolment through application), or at a time where their health begins to suffer or have an impact on their studies. Students within the medical and professional disciplines also have to consider the timing of disclosure when undertaking placement work, itself a stressor (Deasy et al., 2016), and postgraduate research students (PGRs) may consider disclosure during their progression reviews (Vitae, 2018). It is also important to consider that the earlier that disclosure occurs, the earlier support and accommodations can be enacted and put into place.

In addition to the above dimensions of disclosure identified by Brohan et al. (2012), it is felt pertinent to this Thesis to discuss some additional dimensions of disclosure that may be more specific to the university context or student preferences:

- Third party disclosure: this is when a student may utilise a third-party individual to disclose information about their mental health to the recipient. This could be a more formal party, such as a mental health advisor or mentor passing information about the students’ mental health onto their lecturer or supervisor, or it can be an informal source of support for the individual, such as a friend or colleague. Third party disclosure can allow the student to be shielded from potential negative reactions, or unwanted questioning about their mental health, however this form of disclosure can have an impact on the perception of trust from the recipient. The recipient may feel like they cannot be trusted fully, and it also widens the opportunity for misunderstanding and over / under-sharing of information (CACTUS Foundation, 2020; Universities UK, 2020).

- Indirect disclosure: this is when a student discloses through a mediated channel (usually not face to face) such as through an e-mail, text message, letter or on the phone. Indirect disclosure can be perceived as less threatening, as there is both a physical distance between the student and the recipient, which can mediate any anticipated negative reactions. Indirect disclosure also allows the student more control over what they share and how they share it (compared to entrapment, or even direct disclosure), and often can feel safer, as they have control over the specific wording, and can spend time crafting their disclosure. The recipient also has the ability to take time to process the disclosure and craft their responses. There is, however, the risk of information leaking (e.g. being shared online, emails being forwarded to unintended individuals, etc.) (Higher Education Policy Institute, 2019; Higher Education Commission, 2020). There is also the difficulty in understanding tone and sincerity without non-verbal and facial reactions, among other communication cues, with students previously identifying their dyslexia making written forms challenging (Lister et al., 2021).

Definitions of disclosure within this Thesis

Within this Thesis, disclosure will be referred to in a number of ways:

- Disclosure / Disclosing: revealing or telling a person or the university about one's disability and / or mental health challenge
- Formal disclosure: formally declaring one's disability and / or mental health challenge to the university, which includes submitting evidence of the impact on one's academic studies, which usually is logged within centralised

university systems on the students record, and is often shared with relevant staff members / pastoral support services

- Informal disclosure: telling a member of staff (teaching, supervisory or technical) about one's disability and / or mental health challenge, without formal declaration to the university, without necessitating the production of evidence of impact on academic studies
- Peer disclosure: a form of informal disclosure, but to a student's peers / friends, rather than a member of university faculty

Disclosure and help seeking in HE

When considering student mental health and student disability, legal frameworks, and responsibilities within HE must be considered, as universities have a duty of care (Association of Managers of Student Services in Higher Education, AMOSSHE, 2001). Disability in HE is often thought of as a binary state, you are either disabled, or not disabled, which is not how individuals tend to conceptualise disability, as only a fraction of the population with a disability identifies as such, as explored earlier (Bogart et al., 2017). HEIs have a duty of care to their students and prospective students, and this extends to students with mental health difficulties (AMOSSHE, 2001). In the UK, the Disability Discrimination Act (1995) and the Special Educational Needs and Disability Act (2001) clearly set out that HEIs must not discriminate against students with mental health conditions in terms of admission, provision of education, or provision and access to support services.

Disclosure is commonly understood in connection with disclosing or revealing something that people keep hidden, are ashamed of, or feel obliged to open up about (Brown and Leigh, 2018) and help seeking is defined by Biddle et al. (2007) as those who had sought help, and/or advice, from a range of sources, including friends, teachers, the voluntary sector, and healthcare professionals. Disclosure has previously been associated with increased use of health services, engagement with treatment and management of symptoms (Camacho et al., 2020). Within higher education, help seeking facilitated by disclosure can include support from peers, supervisors, lecturers, the university counselling or student support service, GPs, and institutions designed to support students such as Student Minds. UCAS note the misinformation and misunderstanding surrounding disclosure when applying to university, highlighting that information disclosed about health (both mental and physical) is not used to make an academic judgement; however their research findings suggest that students are unaware of this, and feel disclosure of mental health can have a negative impact on their candidature, with 90% of admissions advisors surveyed reporting fear of impact on application outcome as a reason for student non-disclosure (n = 257, UCAS, 2021).

Students who disclose their mental health status have varying experiences. Non-disclosing students in a single faculty felt that they would be seen as telling lies, or wanting privileges, however two thirds of students felt they had received positive responses (n= 54). Students chose to not disclose, despite acknowledgement that their mental health was negatively affecting their performance and engagement with their course. This notion of not disclosing despite acknowledgement of a detrimental impact on their studies arguably speaks to the pervasive nature of stigma, and the need for feelings of personal security and safety within the university context (Mamboleo et al., 2020). Whilst Martin (2010) only surveyed 3.6% of the student body, these results highlight the issue of stigma and disclosure as an important issue. The majority of students who did not disclose did so for fear of discrimination and disadvantage, even if their mental health struggles were negatively impacting academic performance. Students fear judgement, stigma and even losing their place at university. These results are also in accordance with findings (Corrigan et al., 2016) that there is a systemic issue of stigma and fear of disclosure within university environments. For students undertaking medical or professional based courses, there is the additional complexity of fitness to practice processes. Guidance in the UK from the General Medical Council (2015) states that mental health challenges alone would not result in the initiation of these processes, however evidence suggests fears persist. The culture of the medical school environment in particular has been identified as a complicating factor for disclosure within in-depth interviews with medical students in the UK (Shahaf-Oren et al., 2021).

Students may identify with having mental health challenges but not possess a formal diagnosis. This can occur for a myriad of reasons including (but not limited to), access to resources, finances, stigma, and knowledge. Students who disclose often hope that staff will empathise with their situation, but acknowledge, and fear that staff may have access to incomplete information and knowledge about studying at university whilst experiencing mental health challenges (Carette, Van Hove and De Schauwer, 2018). Within interviews with students identifying as having mental health challenges, Carette et al. (2018) reported public stigma, and feelings that staff need to show more willingness to listen to (and learn from) students, with staff reacting differently to disclosures of mental illness than other disabilities. Students faced questioning about their functioning, and incorrect ideas about the risk they may then pose to other students (based on wider stigmatising beliefs about mental health). These findings mirror the societal stigma that many with mental health challenges report (Student Minds, 2014, Corrigan et al., 2014, Martin, 2010).

According to HESA data collected at the start of each academic year, formal mental health disclosure rates are rising year on year; 1.79% (2014-15); 2.25% (2015-16); 2.87% (2016-17); 3.51% (2017-18); 4.30% (2018-19); 4.88% (2019-20). Whilst formal disclosure rates are useful, there are some important caveats to consider. The current HESA disability categories are restrictive, and only allow the following categorisations:

a. A specific learning difficulty
b. Blind or a serious visual impairment
c. Deaf or a serious hearing impairment
d. A physical impairment or mobility issues
e. Mental health condition
f. Social communication/ Autistic spectrum disorder
g. A long standing illness or health condition

h. Another disability, impairment, or medical condition
i. Two or more conditions

Therefore, if a student discloses a physical disability, and a mental health challenge, they are recorded under ‘two or more conditions’ with no ability to elaborate on their experiences, or for researchers to know which two or more conditions they fall under. As students cannot specify their circumstances, it is not clear how many students within the ‘two or more conditions’ statistics have disclosed a mental health challenge, thus mental health disclosures may be higher than HESA reporting suggests. Disclosure rates also vary greatly depending on perceived anonymity, who is asking, how they ask questions about mental health, and what students feel the consequences of disclosure are. For example, in the 2016-17 academic year, HESA statistics (2022) show 2.7% (n= 3,110) of postgraduate research students (n= 113,315) had disclosed to institutions; within the Postgraduate Research Experience Survey (n= 13,922, PRES, 2022) the same year, 6.3% of PGRs reported mental health challenges, and data collected from Vitae (2018) found 17% of 1,875 PGRs reported mental health challenges. Individual survey sampling has found rates of mental health challenges anywhere from 25% to 41% (Lipson et al., 2016 (n= 5,980); Vitae, 2018 (n= 1,875). Research has found that students are uncertain what happens to information they formally provide to their institutions (HEPI, 2019), and thus official disclosure statistics should be acknowledged as serving a specific purpose, and many not reflect the true rates of mental health challenges amongst students.

Alongside the noted challenges with collecting rigorous information on disclosure rates, there is also a need to understand the reasons that students choose not to disclose. Previous investigation into non-disclosure choices (Grimes et al., 2019) have identified themes of individual responsibility, stigma/fear, institutional processes, and student identity. Students felt their learning challenges were an individual issue that required them personally tackling the problem and finding their own solutions, often feeling that help-seeking detracted from their personal achievement of getting a degree (n= 994). Whilst data comes from a single institution in Australia, it conceptualises disability similarly to HESA (in that students with two or more challenges were defined as such). The finding that high numbers of students who identified as experiencing a learning challenge did not disclose supports previously discussed work around stigma, availability of support and disability perceptions. This supports the previous evidence that students may choose to disclose informally, rather than through an official university process or mechanism.

Help-seeking and mental health literacy

An important aspect of disclosure and help-seeking is the ability (of staff and students) to recognise when support is needed. It has been shown that correctly identifying mental health challenges is a key predictor of appropriate help seeking (Wright et al., 2007, O’Connor and Casey, 2015) with scores on the Mental Health Literacy Scale (O’Connor and Casey, 2015) significantly correlated with help-seeking behaviour. Within university populations, mental health literacy is thought to be varied, but in line with research suggesting that females are more likely to disclose mental health challenges (Brown et al., 2017). It is worth noting that there is a current drive from the scholars associated with ‘mental health literacy’ as a term to adjust the emphasis in our terminology to action. Jorm (2020) argues that whilst the coining and promotion of the idea of mental health literacy has been important and impactful, we now need to move the emphasis to action; the actions that individuals or groups can take to benefit their own mental health, or the mental health of others, and that literacy (and knowledge) can only go so far to change behaviours and improve mental health.

Students and staff at universities have highlighted that disability accommodation requests are often met with resistance; especially for those in graduate school. It has been noted that proving their need for accommodation was emotionally difficult and made them feel less legitimate as students, despite having the skills and being able to excel to the point of bachelors and even doctoral study (Gabel and Miskovic, 2014; Mullins and Prevde, 2013).

The evidence suggests that disabled students must know the law in their country of study (such as their right to accommodations under the Americans with Disabilities Act, or the UK’s Equality Act), the universities policies and procedures and where to obtain assistance and evidence of their disability. Students must then follow institutional procedures, and gather evidence, often meaning they have to be willing and able to self-disclose confidential (and often very sensitive) medical information, sometimes to multiple different people. Unsurprisingly, the onus on students to self-advocate and prove their disability to their HEI can have a negative impact on student mental health, as well as enhancing stigmatising beliefs.

This is mirrored in evidence from the UK with the burden of evidence gathering, stress of having to chase accommodations and advocate for entitled rights and adjustments in the face of academics who did not understand, advocate for, or represent and promote student rights and the law was also highlighted by the Disabled Students Network (2020). In the UK, Disabled Students Allowances (DSA) are designed to enable students to pay for information technology equipment, other equipment, bridged transport costs, and allowed students to pay for additional support such as note-takers, mental health mentors, and personal support. As touched upon previously, the restrictive political and economic conditions that can be considered disabling can be seen with the cuts to DSA. In ministerial statements in 2015, support for computer allowances and financial support with accommodation were removed from students (Ministerial Statements, December 2015). These restrictions were then tightened again, where the previous four strands of DSA were replaced with a single scheme, meaning students could lose over £2,000 a year with further reductions to equipment costs and general allowance (Ministerial Statements, July 2020). This economic environment may understandably contribute to concerns around disclosure and the available accommodations and adjustments.

Disabled Students UK (2020) ask universities to consider working from the assumption that disabled students are competent, truthful and trust that they (as adults) can determine if support such as study skills help, or computer software will be useful for them to use or not, rather than relying on positioning medical professionals and doctors’ notes/proof of disability as expert. However, it appears that there will need to be broad changes to HE’s perception of student disability and student mental health challenges, and acknowledgement of student autonomy and the pressures of self-advocacy to allow these assumptions to become embedded in practice.

Disclosure decisions

There is a small body of research that has explored factors that influence disclosure decisions amongst university students. There does appear to be individualised factors that influence both mental health, and disclosure decisions such as ethnicity, gender, and student status. For example, trans* students have been identified as experiencing higher levels of stress (Gorczynski, Sims-Schouten and Wilson, 2020), and also faced more negative comments or conduct from university staff (Stonewall, 2018), showing potential individualised influences on mental health and on disclosure decisions respectively. Influences on mental health and disclosure within specific student groups will be explored in Chapter 3, when discussing the rationale for data collection procedures. More structural and institutional factors such as stigma, university processes and cultures specific to the student context have also been identified and will be explored here.

Stigma

Students who identify as disabled are likely to have a decreased sense of belonging to the general student population compared to unidentified students due to social and public stigma, with differing social integration throughout the years of university, although belonging within the disability community was not examined (Aquino and Bittinger, 2019). However, survey methodology does raise the question of whether students who do or don’t identify as disabled do so just within anonymised surveys, or if this reflects their identification to (or with) the university disability support services, or as demonstrated in previous studies, specific staff (Grimes et al., 2019, Cage et al., 2018).

Students report feeling that staff might view them as a ‘lesser’ student, and it may impact on their future employment (Student Minds, 2014, Martin, 2010). This mirrors findings that students avoid disclosing mental health challenges for fear of jeopardising their career or even degree attainment (Grimes et al., 2019, Student

Minds, 2014). This, again, suggests that stigma is still an important issue for HEIs to address.

Within their investigation of disclosure decisions of university students (n= 994), Grimes et al. (2019) highlight the student identity as an emergent theme; there was a construction of the ‘normal’ student (who was not defined by their disability), and students wanted to be in control of their normality perception, among others. Getting support was sometimes framed as an unfair advantage. However, there was also the perception that if they accessed support, it would cause other students (perceived to require the resources more) to miss out on support. Non-disclosure decisions resulted from careful, active reasoning, continually weighing up risk and benefits, impact on attainment and on mental health throughout their studies, with difficulty negotiating these processes and understanding disclosure implications. These findings are mirrored in Chandrasekara (2016) study findings from interviews with both students and student counsellors, that the fear of what peers and friends would think was a key barrier to students in Sri Lanka seeking help for their mental health. The current evidence suggests that stigma is easily internalised (Pedersen and Paves, 2014, Student Minds, 2014) and that this can have a substantive effect on decisions to seek adjustments and open up about one’s mental health.

Processes

The issues of social oppression and structures of control cannot be missed when discussing disclosure. As noted by Brown and Leigh (2018) in their commentary, when formally declaring disability, chronic illness, or neurodiversity, one must be comfortable and confident in identifying as such in order to tick the ‘I am disabled’ box, either when applying to a HEI through UCAS in the UK, or later within their course. This becomes more complex with mental health, as there are many factors that can influence disclosure and acknowledgement of a mental health challenge.

Institutional processes, which can be burdensome, also influence disclosure decisions. Students report feeling uncertain about how institutional processes work, how they should proceed, financial costs and access to resources (Student Minds, 2014; Metcalfe, Wilson, and Leveque, 2018; Aquino and Bittinger, 2019). Students have shown awareness that some universities are under financial strain and may have limited or insufficient resources, meaning there may not be a positive outcome of their stress and work in the process of evidence gathering, diagnosis seeking and requesting adjustments (Byrom and Smithies, 2018). The administrative burden on disabled students has been noted by the Higher Education Commission (2020), highlighting how students with disabilities or mental health issues (who already often have to spend more time on their university work than other students to keep up) must get through a plethora of paperwork and bureaucratic loopholes just to enable them to have proper access to teaching and learning. It is also noted that the language that the higher education sector uses can differ greatly to that of the schools and colleges that students come from; special educational needs and access to a special educational needs coordinator becomes disability support or specialist mentor, and little attention is given (by both schools and universities) to ensuring students are informed of the differing terminology alongside having to self-advocate.

Guidance for HEIs around disclosure tend to reference the World Health Organisation's Mental Health Declaration for Europe (2005) Mental Health Action Plan 2013-2020 affirming the importance of considering mental health (Universities UK, Mental Wellbeing in Higher Education Working Group, 2015), and Federal laws in the US (JED Foundation, 2008), however it appears that institutions interpret this guidance differently, leading to a range of student experiences of disclosing mental health challenges.

Having explored disclosure processes in HE, and evidence surrounding general student perceptions of disclosure of mental health challenges and disclosure decision making, PGR mental health stressors and disclosure experiences and perceptions will now be examined.

PGRs

Postgraduate Research Student (PGR) is the term used within this Thesis to refer to those undertaking their PhD. There are many terms associated with this group, such as graduate student (commonly used in the USA and Canada), PhD candidate, PhD researcher, Doctoral student, Doctoral researcher, Doctoral candidate. Sometimes in the UK, PGR refers to those who are completing Master's by Research degrees, however for the purposes of this Thesis, PGR is only referring to PhD students, not postgraduate taught students, Master's students, or Professional Doctorates.

PGRs are a unique cohort, for a number of reasons. Many have familial or caring responsibilities (Metcalfe, Wilson and Levecque, 2018), often study part-time or remotely, and because of their involvement in academic and teaching communities, PGRs often fall into a 'grey' area between students and staff. Mental health challenges have previously been identified as a significant contributory factor to attrition and drop out from doctoral studies, (UKCGE, 2018) so it is imperative that HEIs address PGR mental health, to support their current students and ensure that the future generation of academics succeeds and thrives.

In 2021-22, there were 104,645 students completing a PhD in the UK. Of these, 1,605 disclosed a mental health condition. The 2017 Postgraduate Research Experience Survey (PRES) reported 3.3 % of PGRs with mental health challenges, despite 0.9% officially disclosing in previous academic years (Metcalfe, Wilson and Levecque, 2018). The Equality Challenge Unit 'Equality in Higher Education' report (2016) found within the 2014-15 academic year, only 7% of PGR students disclosed as disabled, and reports support the idea that postgraduate students are less likely to disclose mental health challenges than undergraduates (IPPR, 2017), despite previous findings that over a quarter of PGRs (n = 5,980) meet the criteria for at least one mental health problem (Lipson, Zhou, Beck & Eisenberg, 2016), and the specific stressors of the doctoral environment. The PhD trajectory has been noted to be a period of intense work, with many ups and downs, stressors and energisers and often personal sacrifices (Kusukar, Isilk, van der Burgt et al., 2021).

However, these estimates are often different to the findings of published research studies, with Vitae's 2018 research project finding 17% of their PGR respondents were experiencing mental health challenges; a significantly higher level of experience than the Higher Education Statistics Agency and Postgraduate Research Experience Survey found to be disclosed (Metcalfe et al, 2018). Other international surveys have mirrored this, with 41% of 2279 PGRs scoring moderate to severe anxiety (compared to 6% of the general population) within Evans, Bira, Gastelum et al. (2018). The purpose of collecting data around PGR mental health should be considered when evaluating this data and exploring the different rates of reporting. It could be argued that it implies the persistence of stigma and fear around reporting mental health challenges, as disclosure rates differ when students are assured the anonymity of their responses, such as in the independent research opposed to the PRES and HESA data.

According to the AdvanceHE (2020) report based upon all registered students in the UK through HESA (provided by all registered HE providers) 10% of all PGR students had disclosed some form of disability, with 22.6% relating to mental health challenges. Again, the problematic nature of current disability conceptualisation is prominent, as 10% of disclosures were of ‘two or more conditions’ and one cannot know if one of those conditions are mental health related.

PGR mental health is a growing area of interest to HE institutions and researchers with sector wide concerns that PGRs are struggling with their mental health at higher rates than other student groups and may be at higher risk of suicide (Evans, Bira, Gastelum et al., 2018, Mackie and Bates, 2019). Despite the opportunity that adjustments and appropriate support could have on academic success, there appear to be issues in the communication and understanding of how these processes work for PGR students. Many PGRs may be ill-informed about university mental health disclosure processes and how disclosed information is used (Mackie and Bates, 2019, Higher Education Policy Institute, 2019). Despite often being the first port of call for students, staff appear to be ill-informed about disclosure processes (Hughes, Merh, Tulcidas and Byrom, 2018). Concerns about data management, staff perceptions, future career prospects and stigma act as barriers to disclosure by PGRs (HEPI, 2019, Student Minds, 2014). Currently, limited evidence exists about PGR experiences and expectations of disclosing mental health challenges. It is likely that there is a hidden population of PGRs who would benefit from open discussions of their mental health, but do not engage with this, or disclose any challenges, despite the availability of support.

PGR mental health and help seeking

PGRs have been shown to rely far more on friends, family, and peers than on their faculty and/or supervisors (Evans et al., 2018). PGRs who consider themselves disabled, especially those experiencing a mental health challenge are more likely to have considered leaving their studies (Metcalfe et al., 2018). There has been no large-scale epidemiological survey in the UK of mental health challenges in PGRs, so the population prevalence is unknown.

Within their scoping review of the literature, Mackie & Bates (2019) identified four main contributors to the mental health challenges of PGRs: 1. Issues affecting the mental health of PhD candidates are likely to be multifaceted and interrelated; 2. There is a need for interventions that are better aligned to the range of stressors; 3. There is a need for better designed and more standardised instruments to validate stressors and to evaluate interventions; 4. To move forward the field will need updated typologies with categories encompassing the complete range of known stressors. A number of stressors will now be highlighted, with further detail on them explored throughout the Thesis.

The PGR environment

Burdening factors on PGR mental health have previously been identified by PGRs at the University of Helsinki such as poor support for learning and research, lack of meaningfulness, and complexity of community situations (Stubb, Pyhältö and Lonka, 2011). The scholarly community could either be ‘empowering’ or ‘burdening’ and this had a significant impact on PGR wellbeing; when students experienced the community as empowering, they experienced less stress, anxiety, and exhaustion (Stubb et al., 2011). It has been found that the mental and physical health of PGRs tends to drop across their doctoral journey, with less sleep, poorer diets, and increased stress (National Association of Graduate Professional Students, 2015). For HEIs to try to minimise potential negative impacts of doctoral study on PGR physical and mental health, it must be a priority, and PGRs must be included in university wide mental health considerations and interventions.

PGRs are in a unique position, often both student and staff, with conflicting sources of information and guidance around support entitlements and processes acknowledged by PGRs themselves and Professional Services staff (Crook, Gooding, Whittaker et al., 2021). Additionally, the power relationship between supervisor and supervisee, especially within students who were undertaking teaching can be tricky to balance (Hargreaves, De Wilde, Juniper & Walksh, 2017). The nature and range of competing demands that PGRs manage is diverse; they can study part time, or full time, undertake teaching work, expectations of publishing and conference attendance, around 10% have children at home, international students may move to new countries to study, and many have familial or financial responsibilities to balance (Metcalfe et al., 2018). All of these are potential stressors on PGR mental health, and further support the notion that interventions and mental health support for PGRs should not merely be extrapolated from that designed for undergraduate students. The range of stressors that PGRs may experience show the need for more tailored support that attempts to reflect the range of experiences and situations that PGRs may have during their academic journey.

Byrom, Dinu, Kirkman et al. (2020) utilised survey data to predict levels of stress and mental wellbeing among 431 doctoral researchers. They note that the language used around doctoral study often normalises stress and distress, such as ‘surviving the PhD’, ‘staying sane’, and highlight the culture of long working hours and sustained mental effort. A quarter of respondents identified low levels of wellbeing, and 59% reported poor, or very poor, general health. There was a substantive correlation between a PGRs academic support network, and their supervisory relationship success. The levels of support PGRs received from their supervisors was linked to lower stress (although this did not predict wellbeing), and family support, good sleep levels, and better overall health were linked to better wellbeing and lower levels of stress. Self-deprecating behaviours and thought patterns were significantly related to both stress and wellbeing, and PGRs were less likely to be self-deprecating when they felt comfortable in their living conditions, felt confidently prepared for their studies and had a stronger academic support network.

The environment that PGRs exist in, their potential for self-deprecation and links to low levels of wellbeing are concerning in light of past evidence around suicidality and substance abuse. An epidemiological survey in 81 US colleges (n=64,519) found that PGRs are significantly more likely than undergraduate students to screen positive for depression and report suicidal ideation (Lipson et al., 2016). Garcia-Williams, Moffit and Kaslow (2014) found that 7.3% of PGRs in 1 US college (n= 301) had experienced suicidal thoughts in the two weeks prior, with 9.9% having made a suicide attempt at some point during their PhD, and were more likely to report abusing alcohol, prescription or illicit drugs, and report concerns about their eating habits or weight than PGRs who had not experienced suicidality. In order for PGR students to thrive in academia, and successfully complete doctoral study, their mental health must be supported, especially in light of data around suicidality and substance abuse, which raise serious concerns for the welfare of PGRs.

For some PGRs, it is their first taste of the world of academia outside of taught study, and many who pursue a PhD do so as a gateway to an academic career, thus, the better the PGR experience and behavioural coping strategies that PGRs can have, the healthier and more resilient the next generation of academics will be. The CACTUS foundation investigated the mental health of researchers across the world, collecting data between October 2019 and July 2020 from over 13,000 researchers at various career stages in 169 countries (30% of the respondents were PGRs). PGRs were consistently more likely to state they felt overwhelmed frequently, compared to those in other academic roles, with over half (56%) agreeing or strongly agreeing that ‘I am unhappy about the overall culture in academia’, where only 35% of professors agreed or strongly agreed. PhD students were also far less satisfied with their overall health and wellbeing compared to senior academics, with 44% disagreement on health and wellbeing satisfaction amongst PhD researchers compared to 26% of senior academics.

The supervisory relationship

Much of the literature around PGR mental health highlights the impact of supervisory relationships (Mackie and Bates, 2019), with scoping reviews of over

160 studies identifying the importance of supervisory ‘fit’ key to student satisfaction and success (Sverdlik, Hall, McAlipine and Hubbard, 2018). The doctoral environment has its own specific stressors, meaning data and interventions should not merely be extrapolated from undergraduate or general student populations and expected to improve PGR mental health (Waight and Giordano, 2018).

There are a number of vulnerabilities within the PGR and supervisor relationship (Leadership Foundation for Higher Education, 2018). PGRs noted the ease at which they can become lost or go ‘off track’ with their reading and research, and how easy it is to self-blame for difficulties or failures, despite these being a natural part of the research process. Additionally, the change in feedback and assessment can be emotionally turbulent. Many students enter their PGR journey having had quantifiable and numerical grading and feedback from primary school, and the ability to self-monitor their performance was often missing, leading to emotional struggles. PGRs felt their supervisors often endorsed the idea that their doctorate was all or nothing, and many feared not being awarded their PhD at the end of their studies. They also spoke of the conflict between the need for personal and professional development (through things like conference attendance) and their supervisors push for data generation and publication output. PGRs found trust within the supervisory relationship when they felt their supervisor had their bests interests at heart, valued their input, and felt secure about working together and working standards. These results could be a useful input to university training for supervisors and those working with PGRs and could have real positive impact on the mental health of both PGRs and their supervisors, ensuring the relationship functions as best as possible.

As many of the stressors described above have been exacerbated by the COVID-19 pandemic, and the changes to learning and teaching in HE have been swift, no discussion of contemporary mental health challenges in higher education would be useful without consideration of the impact of the pandemic, which will now briefly be discussed.

COVID-19 and student mental health

Just as the COVID-19 pandemic has affected people’s mental health globally, students have also felt the effect of lockdowns, stress, and worry. There is evidence from both students and staff suggesting that worldwide, students have struggled (and often felt forgotten) by universities and governments. In research conducted by the Office for National Statistics and the National Union of Students (2020) in the UK, 57% of the 100,000 students they surveyed reported their mental health had worsened since the start of the COVID-19 pandemic (Office for National Statistics, 2020). Disabled Students UK (2020) found that 81.3% of disabled students agreed that the covid situation is negatively impacting their studies. This is arguably unsurprising, given the impact of COVID-19 on the disabled community (Office for National Statistics, 2020). Additionally, research with over 1500 faculty members in the USA found 87% believed that student mental health had worsened or significantly worsened due to the pandemic (Mary Christie Foundation & Healthy Minds Network, 2021).

The pandemic for students

There appeared to be an increase in mental health symptoms for students irrespective of geography or infection rates. Canadian students (n= 576) found reported decrements in attention, disruption to study, and lack of confidence in the government handling of the pandemic (Copeland, McGinnis, Bai et al., 2021). Wellness data from across the spring semester (encapsulating the time the pandemic hit the USA) showed mood and wellness changes were associated with how personally disruptive the crisis was, with those who knew someone who had tested positive (23.8% of students) or had died (2.4%) struggling more. Unsurprisingly, the more disruption that students experienced relating to COVID-19 the more they internalised symptoms of distress, and the more their mood and wellness was disrupted.

Research from Texas paints a similar picture. Wang, Hedge, Son et al. (2020) utilised the PHQ-9 and the GAD-7 to explore mental health, COVID-19 related stress, and coping mechanisms/barriers to wellness. Of the 2,031 responses, 48% reported moderate or higher depressive symptoms and doctoral students reported worse scores on PHQ-9 and GAD-7 than undergraduate students. Ninety-seven percent of students felt their peers would also be experiencing anxiety or stress because of the pandemic, with 71% of those surveyed reporting increased levels of stress and anxiety, and 18% having thoughts related of self-harm or suicide. The biggest contributors to this increase were academic circumstances, general uncertainty around the pandemic, and mental health concerns. Over 90% of students were having difficulty concentrating, almost 90% were worried about their academic progress, 76% finding it difficult to adapt to online learning, and 66% reporting an increased workload due to the pandemic.

The rapid change to course delivery was also a stressor for mental health, with changes to teaching, learning and examinations having to be swift. Sani, Hamza, Chedid et al. (2020) write about UK undergraduate medical students concerns, primarily the suspension of clinical placements and the cancellations of Objective Structured Clinical Examinations (OSCEs). These are compulsory for registration at the end of certain courses, and also serve as an evaluation point for students to gain feedback on their development. Additionally, the loss of extra-curricular activities that distinguish candidates when applying for core or speciality training in the future was also a worry, with lost opportunities risking anxiety over career progression. Sani et al. (2020) note that the integration of technology into teaching modalities within medicine may change the outlook of medical education, but that technology can only go so far in replicating the placement work in hospitals, general practices and communities.

The effects of the pandemic and its effects on mental health are unlikely to simply disappear when the pandemic plateaus or disappears, so universities must think proactively and consider the long-lasting effects on students. There is evidence that particular groups of students may have been more vulnerable to the effects of the pandemic.

Taught students

With the swift pivot to online delivery, socio-cultural factors that previously may not have influenced student attrition and success became detrimental for some. Students from lower socio-economic backgrounds with limited access to technology and the social and / or cultural capital to seek out support independent of their institution were placed into disadvantaged positions over the pandemic trying to study from home, or access support resources (Raaper and Brown, 2020). Trying to engage with online lectures with poor internet, siblings who are also needing home-education, young siblings, or lack of quiet space to work was difficult for many and impossible for some. The Student Experience in the Research University Consortium (n= 30,697) report found students from 'poor and working-class backgrounds' (n= 7,082) significantly more likely to experience financial hardships and scored significantly higher on the GAD-2 generalised anxiety and PHQ-2 major depressive disorder screening tools than their peers during the pandemic and transition to remote learning in 2020. This data was mirrored in findings from the UK, where 'non-traditional' students (those with population characteristics not normally associated with entrance to university) expressed their amplified distance from feelings of community and ability to access university-based support (both academic related and mental health based) over the pandemic, despite these being deemed essential (Raaper, Brown and Llewellyn, 2021).

Levels of depression and anxiety appear to have increased over the pandemic. Moawad (2020) highlights the risks associated with students developing depression, and how the pandemic situation has heightened the probabilities, with higher coursework demands, internet issues, and lack of access to university facilities in Saudi Arabia. Research from Greece mirrored this with Patsali, Mousa, Papadopoulou et al. (2020) finding that female students were at double risk for developing depression than their male peers, and females who had previously attempted suicide were five times higher risk to develop depression over the lockdown. Students reported increased anxiety due to the full country lockdown, with 65% of the over 1,500 students surveyed reporting their anxiety had increased 'much' or 'very much'. Twelve percent of the students screened clinical levels of major depression, and 13% were experiencing severe distress. These findings show the seriousness of both the issue of student mental health and the impact of the pandemic.

PGRs

As explored above, PGR mental health is already of some concern to the sector with anxiety and depression viewed by some as 'common' struggles (Evans et al., 2018; Byrom et al., 2020; Levecque et al., 2017). Anxiety rates in the over 15,000 graduate students in the Student Experience in the Research University consortium were higher than undergraduates with 43% of doctoral and 39% of undergraduate students screening positive for possible generalised anxiety disorder using the GAD-2. Chirikov, Soria, Horgos and Jones-White (2020) found the number of graduate students experiencing major depressive disorder was two times higher in 2020 compared to 2019, and anxiety was 1.5 times higher; suggesting the increase is COVID-19 related. This is also supported by their finding that graduate levels of major depressive disorder were more prevalent among low-income, working class and poor graduate students, those with caring responsibilities, and those from minority backgrounds, mirroring the groups that are noted to be at higher risk of developing COVID-19 (Iacobucci, 2020). PGRs who had pre-existing mental health conditions reported the pandemic had disrupted the management of their mental health with this disruption being significantly associated with higher levels of depression, stress, and anxiety (Ligus, Fritzson, Hennessy, et al., 2021).

The impact of the supervisory relationship has become increasingly important since the COVID-19 pandemic hit the UK. Isolation has been previously noted as a contributory factor to PGR mental health difficulties (Metcalfe et al., 2018, Garcia-Williams, Moffitt, and Kaslow, 2014) and it appears that lockdown has compounded these issues. The Student Mental Health Research Network (SMaRteN) and Vitae conducted research from March-May 2020 with over 4800 PGR or ECR respondents; three quarters reported a negative impact on research progress and interaction opportunities with colleagues (Byrom and Metcalfe, 2020). PGRs reported substantially more negative impacts on their research activity than research staff, and both groups reported low levels of wellbeing, with over three quarters of respondents' mental wellbeing declining since the lockdown began (Byrom and Metcalfe, 2020). A potential buffer to the effects of lockdown was university and supervisory support, with mental wellbeing levels higher among those PGRs who felt well supported by their supervisors. For many PGRs, over the lockdown periods their supervisory team was a primary source of contact. Thus, it is imperative that PGRs and supervisors feel comfortable discussing mental health; both due to the strains that COVID-19 has placed on all of our mental health (especially for PGRs with pre-existing mental health challenges), and to continue the pre-lockdown work to improve the landscape of PGR mental health.

As shown from the evidence preceding and during COVID-19, the role of staff, supervisors and support staff on student mental health and disclosure is incredibly important. These roles, responsibilities and repercussions will now be explored, including the impact of providing support for student mental health on staff wellbeing, and how the current systems within HE are set up to support, appraise or neglect university staff.

University Staff

HESA data suggests that excluding non-academic atypical workers, there are around 224,500 staff employed in the HE sector, with 32% on fixed-term contracts, rising to 44% for teaching-only academics and 68% for research-only staff. Within this Thesis, staff refer to any employee of a university, with faculty / academics referring directly to academic teaching staff, and supervisors referring to those who supervise PhD's.

Staff are often the first port of call for students, and it is imperative they have the ability and knowledge to support students who are concerned about their mental health. It appears from current literature that staff may not be properly equipped for this role. This poses challenges for students who may call on staff for support, and for staff in managing their own mental health and wellbeing. Research from 2021 found that in a sample of over 1600 faculty members, 79% reported having had a one-on-one conversation with students regarding the students' mental health and wellbeing (Healthy Minds Network, 2021). Signposting to services and interventions is a complex skill requiring nuance, knowledge and understanding, and these skills cannot be assumed to exist within staff (Student Minds, 2014). Students may be unsure as to who they should disclose their difficulties to, who has access and what happens to any information they give (McAuliffe, Boddy, McLennan, Stewart, 2012). PGRs have also reported feeling unclear about the extent to which the supervisor role is pastoral, and when they should seek alternative resources such as the university student support service (Metcalfe et al., 2018), and academic staff have also reported being unsure of how to respond to student disclosure. However, staff do feel that non-disclosure is a significant barrier to the development of supportive staff-student relationships, and some felt it was detrimental to their ability to meet the needs of struggling students. This shows the importance of understanding barriers to disclosure and how both students and staff experience disclosure decision making.

Research suggests that academics are frequently required to offer assistance to students experiencing mental health challenges, but many feel ill-equipped to do so (Hughes et al., 2018), particularly if they feel unable to recognise when a student is in distress (Healthy Minds Network, 2021). Reasons for this can vary from lack of knowledge about services and referral procedures (Metcalfe et al., 2018, IPPR, 2017), the dimensions of the difficulties, conflict with their pastoral role and balancing supporting students with their own emotional wellbeing and work schedule (McAllister et al., 2014). Academic staff have also noted the complexity that discussing mental health with international students can pose and differences in language, gender and sexuality can affect disclosure to them (Hampole et al., 2019, Brown et al., 2017*)*. It has also been acknowledged by academics that cultural differences influence disclosure and discussion of mental health with PGRs, where ideas around mental health, the role of the supervisor, and of accessing support are different (Hughes et al., 2018, Metcalfe et al., 2018).

The University Mental Health Charter (Student Minds, 2019) is a framework designed to create a reference point, guidance, and evaluation for universities to adopt a whole-university approach to mental health. Some universities are adopting aspects of this approach with evidence showing that university librarians are supporting student mental health (Bladek, 2021), purchasing resources to support wellbeing, and referring students to support services (Phinney and Kiester, 2021). However, it has been noted that librarians do not inherently possess the professional competencies to support student mental health individually, and that institutions need to ensure that librarians are adequately supported to plan, participate, and decompress from events and interventions to support wellbeing (Cox and Brewster, 2021). The university approach to embedding mental health, and the support provided to all staff has implications for the culture around mental health and thus disclosure and disclosure decisions.

Staff perceptions of student mental health

Staff perceptions of mental health challenges in both undergraduate and postgraduate students, and their levels of mental health literacy are varied. Wynaden et al. (2014) found that generally staff (n =270) had positive responses to people with mental illnesses. However, specific issues relating to the integration of people with mental health difficulties into communities had more mixed responses, with less agreement on trusting those with mental health challenges, and 88% identifying that they felt discomfort in discussing their own mental health with their employers

Staff ability to identify students who may be experiencing a mental health challenge is mixed. Some of Wynaden et al., (2014) results were aligned with previous studies (Hughes et al, 2018), with 90% of staff agreeing that there is a responsibility to provide the best care for anyone with a mental health difficulty, and that anyone of us can develop a mental health difficulty. Margrove, Gustowska and Grove (2014) utilised vignettes based on DSM-IV clinical symptoms to assess if staff would be able to identify if a student was experiencing signs of a mental health problem. Almost all (93.4%) of the surveyed staff identified the vignette describing a student experiencing symptoms of schizophrenia as 'very likely' experiencing signs of a mental health problem. When presented with the vignette describing a student experiencing symptoms of depression, 54.9% of staff felt it was 'very likely' the student was experiencing signs of a mental health problem, and 39.6% felt it was 'somewhat likely). Whether the staff would feel comfortable in approaching the student in practice was not addressed in this study, and it is necessary to note that this Thesis does not utilise DSM-IV clinical symptoms as a threshold for mental health challenges.

However, stigmatising views persisted, with 50% of staff in the Wynaden et al. (2014) study agreeing that if a woman had been under inpatient mental health care, they could not be trusted to look after children, and almost a quarter of staff attributed violence to people who have a mental illness (despite evidence showing that people with mental health issues are far more likely to be victims than perpetrators of violence). If there has been little institutional change in levels of stigma and discrimination, it is unsurprising that stigmatising and factually unsupported views around the danger of those experiencing mental health concerns, or those who have experienced mental health challenges in the past are still being openly reported within research. This is important as when students are considering disclosure, the attitudes they observe from staff are a contributing factor to their decisions.

Staff experience of supporting student mental health

It is important to understand the experiences of staff who are supporting students and receiving disclosures around mental health. Their perspectives on what helps or hinders them in this can help to inform a whole university approach to student mental health, and ensure they have the tools and support to maintain their own wellbeing. McAllister et al. (2014) explored the nature, extent and impacts of staff interactions with students who disclose that they are experiencing a mental health challenge. Academic and professional services staff (n= 27) from two Australian universities reported four themes; factors that facilitate initiation of staff support, barriers to providing student support, challenges that face staff supporting students, and how the university supports students. Most disclosures were initiated by the students, with results highlighting the need for staff knowledge disclosure practices, as staff reported often feeling uncomfortable and unconfident in supporting students. This was somewhat mediated when staff had previous experience dealing with students’ mental health challenges, supporting findings that staff are currently learning from experience, rather than receiving training or guidance (Hughes et al., 2018, Brockleman et al., 2006, Metcalfe et al., 2018). However, there is an argument to be made that staff should not have to learn through experience when dealing with the (often serious) mental health challenges that students face, and that universities should be preparing staff better for disclosures and student mental health challenges.

The most frequent source of information around mental health challenges may be personal experience, rather than formal training or knowledge exchange. Older evidence suggests whilst staff perceptions of working with students with mental health challenges was generally positive, the confidence levels of staff to do so were more varied (Brockelman, Chadsley and Loeb, 2006). Many of the staff sampled felt they did not have the adequate knowledge or training to work with students who are struggling with their mental health, with 84% agreeing that more resources to do this would be preferred. Sixty-two percent of 314 staff from two universities surveyed by Margrove et al. (2014) reported they had provided support to a student for psychological distress. However, under a third of the staff had received any formal mental health training, with 71.4% reporting never having attended any form of training around mental health in their HEI. Over half of the staff (54.9%) surveyed felt that more training in the area of mental health would benefit them in their current job roles, and half (50.5%) felt training in mental health could also benefit their own wellbeing. Participants noted the issue of HEIs approach to training, with staff noting the need for careful planning to avoid potential emotional harm for staff and students, and uncertainty about reasoning for more training on already full workloads.

These feelings appear to have persisted over time with a recent study with 152 lecturers and 21 academic staff members found that a key barrier to providing support to students was the lack of mental health information, including unclear guidance and procedures on referring students (Putri, Yahya, and Saputra, 2022). Clearly, there is some considerations needed around mental health training and resources for staff, as they consistently report their roles including supporting student mental health. There is also the careful balancing act of the role staff have as a teacher and evaluator when having to provide support (Langoren, Kermit and

Magnus, 2018), with staff expressing the tension between being hired to teach content unrelated to mental health, and focus time and energy on academic issues, being evaluated on teaching and research metrics, rather than educating students on, spending time on and being evaluated on supporting mental health (Rudick, Kyle and Dannels, 2018).

It is clear from the research discussed above that supporting student mental health, responding to disclosures, and maintaining one's own mental health can be a difficult balancing act. As such, a more in-depth exploration of our current understanding of staff mental health and the impact of supporting students follows.

Staff mental health

Growing attention has been given to the mental health of academic staff, with literature from almost 30 years ago citing the 'publish or perish' mentality (Fisher, 1994), and issues of burnout, occupational stress and workload continuing to persist (Gillespie, 2001). To explore staff mental health, the risks associated with providing support to students will be discussed, before highlighting the potential impact of their role on their mental health

The impact of supporting student mental health

One can understand the potential emotional impact on staff when supporting student mental health, especially if they do not have sufficient training available to them. For staff, unsuccessful experiences, and the emotional impact of providing support affected motivation to support student disclosures (McAllister et al., 2014; Grimes et al., 2019). Staff stressed the tricky balance of supporting students without becoming emotionally drained, whilst acknowledging the positivity and satisfaction gained from these interactions. The relatively small sample of 27 in McAllister's work is buffeted by the overlap of themes and factors from two different institutions, speaking to the overall landscape of student mental health support, with findings mirrored in more recent evidence (Grimes et al., 2019). Again, the argument is made that as staff are regularly required to provide pastoral care, they need to have sufficient training and materials to enable them to do so safely and to the best of their ability.

There are also the interpersonal, organisational, and personal challenges of seeing/supporting students in acute distress that can be both emotionally challenging, and rewarding (McAllister, Wynaden, Happell et al., 2014). Staff vary in their own mental health literacy which may influence confidence and willingness to engage (Wynaden et al 2014; Brockelman, Chadsley & Loeb, 2006).

In their commentary on stigma in higher education, Rudick and Dannels (2018) discuss the disparity between what academics are hired to do; teach content, evaluate student academic progress, and conduct research (and are evaluated and appraised on their ability to do this), and the issue of mental health. Staff evaluation metrics likely do not include the ways that staff support student mental health, provide advice on pastoral issues, or success in dealing with mental health crises. They argue that due to the way that mental health stigma operates within the culture of higher education, whilst faculty have some control over areas that could affect mental health (such as course design, assessment, and adjustments), they may not be sufficiently knowledgeable or comfortable eliciting disclosures from students or identifying and following up with students who may need accommodations and mental health support.

Hughes et al. (2018) suggest that staff feel unsure, ill-equipped, and unable to support and work with students in the ways they would like to – and the way their position demands. These concerns have been raised previously with Brockleman et al. (2006) finding that the most frequent source of information on mental health was either previous experience or the media, with little formal training available. These findings coupled with Rudick and Dannels (2018) commenting that university staff are often unable to meet the needs of students and the needs of their roles as academics, and universities need to be clearer in providing resources and time for student mental health and protecting the mental health and academic prosperity of their staff.

The mental health of HE staff

Mirroring students, the mental health of staff can be tricky to assess due to concerns about disclosure and data protection. Anonymous surveys have highlighted a need for universities to be much clearer about responsibilities and repercussions for staff as well as students. Evidence shows that understanding about disability accommodations, equality and accessibility are concerns for staff who may be struggling with their mental health.

Despite the law enshrining certain protections, there are findings that staff are not familiar with their entitlements. Price et al.'s (2017) findings from 267 staff in the USA with self-disclosed mental health challenges suggest that concerns about differential treatment, career impact and uncertainty about accommodations span across institution types. This further supports the argument made by the UK's Equality Challenge Unit (2009) that universities must be forthcoming with clear and cohesive policies and practices – highlighting to both staff and students the implications of disclosure and what happens to the information. The development of effective communication to staff about why information surrounding disability and mental health is being collected, and how it will be used may help staff. The ECU also recommended that institutions carry out regular impact assessments of interventions on staff and student wellbeing, disability, and disclosure, although this does not appear to be widely implemented. A further report from ECU (2011) which analysed 333 disabled staff survey responses, interviews with staff, human resources faculty, and equality and diversity managers recommend highlighting the visibility of disabled staff and students, celebrating national disability day, disability history month, the development of a library of publications and literature for staff to use and refer students to, and including diversity objectives within performance appraisals. They also recommend the acknowledgement of fear of repercussions for staff and student disclosure of mental health challenges, and encouraging declarations and disclosures, ensuring abilities to do so are embedded at all stages of the staff and student journey. Specific mental health related recommendations included the Mindful Employer scheme to support staff wellbeing, and guidance for line managers and colleagues around mental health and promoting healthy working practices.

PGR supervisors

The supervisory relationship is unique and often requires a careful balancing of power, with many PGRs perceiving their supervisors as expecting them to complete work and meet deadlines outside of normal work hours routinely (Metcalfe et al., 2018, Stubb et al., 2011), feeling disclosing to their supervisor may cause doubt in their ability to complete their doctorate (Evans et al., 2018, Scott and Takarangi, 2019). Whilst some HEIs view the annual progress reviews as an opportunity to highlight any mental health challenges (Metcalfe et al., 2018), these reviews typically focus on academic performance, so candidates may be unwilling to raise the subject of well-being or mental health in case it reflects badly on their progression (Hampole et al., 2019). The mental health of supervisors also needs to be considered, both in light of evidence surrounding their experience providing mental health support for candidates, and university structures. When examining PGR disclosure, the supervisory relationship must not be ignored.

The impact of supporting PGR mental health

Supervisors who support the mental health of their PGRs can find the experience emotionally challenging and the potential detrimental impact on their own mental health should be acknowledged. A report produced through the UK Council for International Student Affairs Grant Scheme (2020) investigated UK supervisors' understanding and responses to mental health and wellbeing challenges of international doctoral students. The 15 supervisors from 7 HEIs reported a range of experience levels around understanding the mental health and wellbeing of international PGRs, ranging from previous clinical experience to very little experience. Those with less experience were more likely to feel comfortable talking about stress, than mental health or wellbeing, as there was confusion about the meaning of key concepts such as 'mental health' and 'mental wellbeing.' There are also concerns for supervisors around completion rates and meeting funders' expectations reflecting on their own academic record and career progression.

The staff interviewed in the UKCISA Grant Scheme (2020) felt that issues around disclosing mental health were commonly associated with international students; staff suggested hierarchical, gender and cultural differences and perceptions as potential reasons for this. The staff also felt that international PGRs employed protective factors due to their international status, such as having a strong work ethic, and being more resilient, and noted that the beginning and end of the PhD process were the most stressful periods for all students (which could be heightened for international students due to funding and visa factors). It appears that the existing frameworks for supporting international students are not sufficient (or are not communicated effectively). A collaborative effort from international students themselves, and the staff who work closely with them may help understand the disclosure decision process, and how their mental health can best be supported.

University structures and staff mental health

Whilst much literature has focused on teaching staff and supervisors, there is also evidence that PGRs based in laboratory or technical settings discuss and disclose challenges to support technicians. The Technicians (2020) report which detailed findings of a 2019 survey of 735 responses from 59 HEIs in the UK found that technical staff are providing unrecognised pastoral support to PGR students. Fifty-seven percent of those surveyed felt they ‘never’ or ‘only sometimes’ felt equipped to support PGR students. Sixty-eight percent of technical staff had not had training, with 11% stating their HEI offered no training to technical staff in supporting students, and 43% did not know if their employer offered any training to staff in supporting student mental health. Eighteen percent of those surveyed felt any basic mental health training would be helpful for them to perform their job role, and participants reported that HEIs did not acknowledge their role in providing pastoral and mental health support to students and were unaware of support available to them within (and beyond) the institution. This mirrors similar results from lecturers that staff are not properly equipped to support student mental health and wellbeing (despite this being a growing part of their role) and are unaware of support for their own mental health and wellbeing (if the support even exists).

In the Leadership Foundation for Higher Education (2018) investigation, supervisors who had received formal, institutionally sponsored training were in the minority. Focus groups with 26 PGRs at four research intensive universities, and analysis of a study blog in 2018 (The Leadership Foundation for Higher Education) found a key vulnerability for PGR mental health was being unsure or unaware of who to contact in the event of challenges personally, and within the supervisory relationship. The Catalyst report (2020) also highlighted that signposting of services and support (and the support itself) needs to be tailored specifically for the PGR community given their unique cohort, with recognition that attention needs to be paid to PGR mental health, especially for PGRs in vulnerable groups and protected characteristics. The issue of training for supervisors will be further unpacked in Chapter 5.

These findings highlight the necessity for HE to put in place support strategies and training for staff on assisting in disclosure decisions, not just relevant information on the institutions processes, but also the implications of the processes, and appropriate staff reactions. A common theme across studies of staff have been their want for formal training and signposting information to be available, and lack of acknowledgement of the impact of disclosure decisions on them. Thus, any research into student or PGR disclosures should understand staff perspectives, and to utilise their perspectives in tandem with students'.

Methodological considerations

Many of the studies discussed above utilise clinical diagnostic tools, allowing understanding of the levels of clinical distress amongst certain student populations – however, the range of measures used makes comparative work incredibly difficult to do successfully. Barkham, Broglia, Dufour, et al. (2019) argue we need greater clarity in definitions and data sets to provide an evidence-based approach to inform service and policy decisions around student and PGR mental health. There is also the issue of the utility of clinical diagnostic tools within a student population, where they may not have been designed/validated, and whether mental health challenges or mental distress is only pertinent if students meet clinical levels of distress.

The current blurring of terminology throughout the mental health and wellbeing continuum is not enough to address current issues. It is important for researchers to be upfront about their purposes and definitions around mental health. Studies and tools utilise different language and conceptualisations, and this should be considered when interpreting the evidence. Research into mental illness may serve a different purpose than that exploring wellbeing, and conflation of the terms can impact on appropriate inferences and conclusions that may be made. Previous literature reviews on PGR mental health and wellbeing have noted there is a range of different ways that wellbeing is operationalised within individual studies (Schmidt and Hansson, 2018) and that the inclusion or exclusion of stress as a factor of wellbeing affects the measures used within investigations (Scott and Takarangi, 2019).

Barkham et al. (2019) argue for sector-wide agreement on a unified approach to measurement of mental health and wellbeing, including counselling services, NHS service provisions and developmental transitions prior to, and across the student journey through university. It is clear that purely wellbeing focused models are not alone sufficient to address student mental health, and measures often omit contextual, historical, and socioeconomic factors that are unique to the student experience (Hewitt, 2019). Wellbeing measures reported in the literature may not have validity and reliability information available (and those that did, were measures of mental illness such as the GHQ-12 and PHQ-9), or not be validated within student populations (Scott and Takarangi, 2019). The development of the Warwick-Edinburgh Mental Wellbeing Scale (Tennant, Hiller, Fishwick, et al., 2007), aimed to address this through being both designed and standardised for use with university students, may be a good start, being recommended as a candidate measure from the Evidence Based Practice Unit at University College London.

This literature has provided important information on the prevalence and perceptions of mental illness within universities, but there are methodological considerations such as described above. Additionally, sampling is often convenience based, and so students who are more aware and interested in the topic of student mental health challenges may be more likely to engage and participate into research into this area, which may affect the external validity of the studies. Quantitative investigations also rely heavily on self-report measures, which are open to interpretation by participants (especially in ill-defined Likert type scales), which could affect the utility of the data. Within the range of literature explored above, there were varying levels of exploration and positioning of the research itself, meaning interpretation of frameworks and definitions used can be difficult, with few studies providing their definitions of terms like mental health, how they conceptualise disability, and how sampling was achieved. The most common sampling techniques were emails and internet advertising, but some studies did utilise university databases to contact students (which, following the discussion around formal disclosure, means that students who have mental health challenges but have not formally declared this may be omitted from the sampling). Furthermore, few studies involving staff and supervisors stated their recruitment methods, again highlighting the issue that the knowledge may be from those with a pre-existing interest in student mental health and wellbeing, and not capture the breadth of staff experiences and perceptions.

Aims and Objectives

The aim of this Thesis was to explore perceptions and experiences of disclosing a mental health challenge within the university context, particularly for Postgraduate Research Students (PGRs). To meet this aim, a series of sequential studies were undertaken. Each Chapter of this Thesis reports on a study, with the final Chapter drawing the findings together for discussion. The Thesis then concludes with recommendations for the sector, universities, supervisors and PGRs. Future avenues for research are noted and the Thesis is reflected upon. The aims and primary objectives of the sequential studies were as follows.

Chapter 2: Student Disclosure of Mental Health Challenges: A Systematic Review Evidence Map

- To understand the evidence base cataloguing the experiences of university student disclosure of mental health challenges both formal and informal

- To identify what evidence exists surrounding student perceptions about disclosing formally and informally
- To identify what the current evidence suggests may be a barrier, or enabler to student disclosure
- To identify if disclosure perceptions and / or experiences vary by student group, or subject area
- To identify evidence around staff supporting disclosure decisions or being the recipient of disclosures.

Chapter 3: Student Mental Health Challenges: Support, Disclosure and Perceptions

- To explore student perspectives on formal and informal modes of disclosing or discussing a mental health challenge.
    - To explore student perspectives on formally disclosing mental health challenges to their university
    - To explore student perspectives on informally disclosing mental health challenges to a staff member or their supervisor
    - To explore student willingness to potentially disclose a mental health challenge formally
    - To explore student willingness to potentially disclose a mental health challenge informally
    - To gain insight into the reasons students may choose institutional non-disclosure, or informal disclosure
- To explore student understanding and experiences of disclosure processes in UK universities.
    - To identify if PGR perceptions are different from other student groups
    - To gain insight into the role the supervisory relationship of PGR students plays in their perceptions of discussing or disclosing mental health challenges

Chapter 4: Postgraduate Research Student Mental Health Challenges: Support, Disclosure and Perceptions

- To explore PGR perspectives and experiences with formal and informal modes of disclosure to their university or their supervisor
- To understand PGR perspectives on the supervisory relationship and how it may impact on their mental health and wellbeing
- To gain insight into the role the supervisory relationship plays in PGR perceptions of discussing or disclosing mental health
- To explore the impact of the supervisory relationship on PGRs mental health and wellbeing
- To gain insight into the role the supervisory relationship of PGR students plays in their perceptions of discussing or disclosing mental health challenges
- To explore the impact of the COVID-19 pandemic on PhD experiences

Chapter 5: Supervision of PhD Students: Challenges, Support and Perceptions

- To explore supervisor experiences of supporting PhD candidates in UK universities
- To identify levels of training in supporting the mental health of candidates (and if supervisors wish to have more support available to them)
- To gain insight into the role the supervisory relationship plays in supervisor perceptions of their role
- To identify perceived barriers to effective supervision of candidates
- To explore supervisor willingness to discuss mental health challenges with their candidates

Chapter 6: Discussion, Recommendations and Reflexivity.

- To synthesise the knowledge gained through the sequential research studies
- To situate the new knowledge within the existing research landscape
- To provide recommendations for policy and practice
- To reflect on the limitations of the Thesis, and the novelty of the work contained within

Chapter 2: Student Disclosure of Mental Health Challenges: A Systematic Review Evidence Map

Structure

As discussed in Chapter 1, PGR students are a diverse cohort, with differing relationships with academic faculty and the institution itself. Therefore, any meaningful investigation into PGR student disclosures and discussion of mental health challenges, must first assess the existing evidence, categorise the types of data, frameworks and findings that currently inform knowledge and practice. However, limited knowledge exists here; there has yet to be a large-scale review specific to PGR disclosure, or even student disclosure as a whole. As such, this Chapter reports on an evidence map systematic review to collect, organise and understand the current knowledge and previous studies into student disclosure, to aid in the development of the sequential research studies undertaken for this Thesis.

Rationale

Objectives

This research aims to systematically identify, organise, and summarise current understanding of student mental health disclosures, identify evidence gaps and explore theoretical frameworks to develop future research questions and interventions to improve disclosure and discussion of mental health challenges.

Disclosure

Disclosure and support for disability are of strategic importance to universities; however, few have clear processes and procedures surrounding disclosure, and the various types of disclosure that may be considered. Higher Education Institutions need to have accurate data about mental health to properly fund and support interventions and accommodations for their PGR communities. Limited PGR specific support services currently exist within universities, however 17 Catalyst Fund projects funded by Research England and the Office for Students to support the mental health and wellbeing for PGRs) in 2018-2020 highlighted the potential within HEIs to improve support for PGRs. Despite these important advancements, access to a number of forms of support (specialist mentors, extensions on deadlines, adjustments to physical environments, specialist software or equipment, etc) which can often include mental health support, have gatekeeping disclosure expectations. This can also include having to disclose further in order to implement the support across their modules and years of study, or evidence their importance.

PGR disclosure

PGR's have previously been shown to rely on non-university based support (Evans et al., 2018, Metcalfe et al., 2018) and the supervisory relationship can act as a key knowledge source for PGRs who may be experiencing concerns with their mental health. Therefore, considerations of disclosure within PGRs must encompass both formal and informal disclosures. As discussed in Chapter 1, formal disclosure can often be a difficult thing for PGR students to do prior to enrolment, as many applications do not go through a centralised platform such as UCAS, and opportunities to disclose the need for adjustments and/or support can vary by institution. Additionally, the importance of the supervisory relationship is an important factor in the success of the PGR candidate (Metcalfe et al., 2018, Hughes et al., 2018), and for many PGRs, the most contact time they have is with their supervisor or supervisory team, meaning informal disclosures can often cover all necessary bases of support and adjustment. For example, an undergraduate student may disclose to the institution formally, in order for this information to be passed to perhaps 20 lecturers and seminar tutors within an academic year (in order to theoretically prevent multiple disclosures), whereas the difference in teaching time and degree set up with PGRs may mean informal disclosure to their supervisor is all that is deemed necessary, as they do not have multiple lecturers to inform in the same way. Therefore, it would be inappropriate to attempt to capture perspectives and experiences of disclosure without inclusion of both formal and informal disclosure, as students in general appear to be ill-informed about mental health disclosure processes within university systems. Moreover, concerns about data management, staff perceptions, future career prospects and continued stigma may act as barriers to disclosure of mental health challenges. It is likely there is a hidden population of students who would benefit from open discussions of their mental health, but do not engage with this, or disclose any challenges, despite the availability of support.

Importance of understanding disclosures

Any university provisions are typically based upon official enrolment statistics of disclosures, requiring a recognised diagnosis of a mental health difficulty. However, many disclose informally within their studies (not prior to) and the barriers of stigma, lack of clear communication from the institutions, and staff uncertainty around disclosure processes, interventions and support mean these cannot be distributed in a way that reflects the reality of student mental health. HEIs should be promoting a culture of normality, safety, and security around disclosure of mental health problems. As such, understanding of perceptions around, and experiences of disclosure are vital to creating meaningful data, meaningful interventions, and meaningful guidance to improve accessibility and suitability of university services.

Key questions and outcomes

Through the objectives of this evidence map systematic review, it was hoped that answers to a number of questions will be gained (even if that answer is that limited evidence exists, or that there is a gap in our knowledge around this). These include:

- What evidence exists cataloguing the experiences of university student disclosure of mental health challenges, both formal and informal?
- What evidence is there of student perceptions about disclosing formally?
- What evidence is there of student perceptions about disclosing informally?
- What does the current research suggest barriers to student disclosure are?
- What does the current research suggest may enable student disclosures?
- Does the evidence suggest that PGRs differ from other taught students in disclosure perceptions and / or experiences?

- Does the evidence suggest that disclosure perceptions and / or experiences vary by student group, or subject area?
- Does the evidence highlight any particular student groups that may be less informed or less willing to consider disclosure?
- What evidence exists around staff experience of supporting disclosures, or being disclosed to?
- What does the existing evidence suggest about the awareness of disclosure processes?

This evidence map will present the first review of findings on student experiences of disclosure and discussion of mental health challenges, and the role that university policies and staff attitudes play in disclosure decision making. The systematic identification, organisation, and summary of current understanding of student mental health disclosure will inform the subsequent studies contained within this Thesis.

Methods

Evidence map methodology

Evidence maps are formed by a systematic search of a broad field, to identify gaps in current knowledge and allowing identification and evidence of potential theoretical frameworks to help development of future methodological decisions. Evidence mapping involves conducting a systematic synthesis of a broad range of literature, including grey literature, organising, and presenting the evidence (Whyle and Olivier, 2020). They can also identify future research needs, and typically present their results in a user-friendly format, designed for non-professionals, often with visual figures or graphs (Miake-Lye et al., 2016). They are utilised within various disciplines, allowing informed judgement and evidence-based decision making in development and policy (Snilstveit et al., 2013), and to indicate areas for future research (Whyle and Olivier, 2020).

Evidence mapping allows users to see what existing evidence there is around the topics or questions that they are interested in (O'Leary et al., 2017). A key feature of evidence maps is their user-friendly format, often including visual figures or graphical representation of the evidence for users (Snilstveit et al., 2013), with Miake-Lye et al.'s (2016) review of evidence maps finding 87% of reviewed publications presenting an explicit map of the evidence for readers. They have previously been shown to provide useful contextual information on how, why and in whom, public health interventions are effective (Adams et al., 2016).

Evidence mapping can help address problems in the design and conceptualisation of research projects (Alahdab and Murad, 2019). From a stakeholder perspective, they can allow communication of important contextual information such as health disparities, geographical distribution of evidence, historical prevalence of evidence, or representation of specific characteristics of populations studied within existing evidence, without needing to sift through large amounts of individual research papers (Alahdab and Murad, 2019). Evidence maps can also highlight sources of contextual heterogeneity and call attention to potential concerns around external validity (Snilstveit et al., 2013), however it has also been noted that some evidence maps do not include a quality assessment process (Grant and Booth, 2009).

An evidence map was selected for this topic due to the range of methodology utilised when examining student mental health, and especially disclosures. There has been substantial work around student mental health from charities and other third sector organisations, and the methods used within the existing research did not allow for a meta-analysis review. To capture the scope and breadth of disclosure research, an evidence map was suitable.

Grey literature

Grey literature is often designed to bring research knowledge into the public domain (without the need for subscription database or journal access). It can explain concepts and ideas to a wider audience and may act as a tool, positioning research as an initial development, uncovering information, and identifying ways that wider audiences can utilise research in practice (Bell, 2018). For example, grey literature around the area of student mental health includes reports from charities such as Student Minds or Mind, Higher Education Organisations such as the National Union of Students or Higher Education Policy Institute, and student focused networks such as the Student Mental Health Research Network or Vitae, among others.

Grey literature can take a wide variety of forms, monographs, theses, conference presentations, proceedings from workshops, meetings, congresses, or symposia, and encompass literature that may or may not be peer reviewed, including policies, reports, working papers, and records that cannot be categorised easily (Haddaway et al., 2015). Other definitions highlight the non-commercially controlled aspect of grey literature as one of its defining features (Paez, 2017), but acknowledge that this can make quality assurance and evaluation a concern for researchers who are conducting reviews (Pappas, 2011).

Grey literature can provide useful contextual information on public health and is typically not controlled by commercial publishing organisations. Adams et al. (2016) posit that grey literature can mediate the impact of publication bias, as typically null findings are less likely to be successfully published in peer-reviewed journals, so grey literature can allow reporting of all results, significant or not.

Adams et al. (2016) highlight the impact that search strategies and their sensitivity and specificity can have on retrieval of grey literature searches. The depth of searching has also been identified as key in retrieving grey literature, with Haddaway, Collins, Coughlin, and Kirk (2015) finding that when utilising Google Scholar, the greatest volume of literature occurs beyond search result page 35. They suggest that researchers should look further than the first few pages, as Google Scholar's relevancy sorting is not as precise as peer-reviewed literature databases. To this end, the search strategies for grey literature within this study were carefully considered and explored below.

Protocol and registration*:* protocol is registered on PROSPERO # CRD42020188868

Eligibility criteria*:* The inclusion criteria were:

- Studies involving university students, across all disciplines, modes, and levels of study
- The focus of the research was disclosure of mental health challenges to the university (or supervisor, personal tutor, or other faculty members)
- Presented original research in a peer-reviewed journal, or publicly available report (opinion, commentary and editorial pieces were excluded)

Studies were excluded if:

- The student population were non university (secondary school, Post-16 etc.)
- The focus of the research was on mental health from a purely prevalence or descriptive perspective.
- The research did not discuss or explore disclosure of mental health challenges (i.e., the study described an intervention to improve wellbeing that did not include disclosure or discussion of mental health, or the study reported data around service utilisation

There was no prerequisite of official clinical diagnosis of mental health (or scores above clinical threshold for mental health condition) in the eligibility criteria. To appropriately capture relevant work in this area, papers must have been published in the last 20 years (since 2000), as this review was concerned with contemporary practice, development, and policy.

Search*:* Searches were conducted in EBSCO, PsycINFO and PubMed databases, and ASSIA as citation index on 20th May 2020 and re-run on 11th November 2021 and 10th May 2023. Grey literature was searched utilising Google and Google Scholar, alongside relevant mental health charities (Student Minds, Insight) and relevant higher education focused websites (Vitae, NUS, .gov), with reference lists hand searched for relevant studies/reports. Google Scholar results were screened up to page 50 of search results in line with Haddaway et al. (2015) recommendations. The search terms were determined in consultation with an institutional Librarian and were set up utilising MeSH and truncation to capture all available evidence and are reported below.

The following search terms appearing in abstract: Student (N2 college OR doctor OR universit* OR grad* OR postgrad* OR undergrad*) AND disclos* OR reveal* OR discuss* OR help* (N2 seek) AND mental (N2 health OR ill* OR well* OR disord*) OR depress* OR anxi* OR stress* OR eat* (N2 disord* OR difficult*) OR anorex* OR bulimi* OR ptsd* OR self* (N2 harm* OR injur*) OR suicid *.

Data collection processes*:* Data was organised using EndNote software and Microsoft Excel, with spreadsheet set up for data extraction for both grey and published literature, and where information was missing this was recorded as ‘Not Listed’. In the event that important data was missing from the literature, named contact authors were planned to be contacted, although this did not occur. Information extracted from papers were: aims/objectives, conceptualisation/definition of mental health and of disclosure, funding source(s), design and methodology, sample characteristics, key findings, and any recommendations given by the authors. The PRISMA reporting guidelines for scoping reviews, which includes evidence mapping methods (PRISMA-ScR) and the PRISMA flowchart have been used to demonstrate methodological rigour, transparency, and relevancy.

Risk of bias in individual studies: As noted by Bell (2018), the quality of studies within evidence maps can be a challenge. To combat this, the relevant Joanna Briggs Institute Critical Appraisal Tool for Qualitative Studies (Lockwood, Munn, Porritt, 2015) was used to rate biases for qualitative studies. To appraise grey literature, the AACODS (authority, accuracy, coverage, objectivity, date, significance) checklist was used (Tyndall, 2010). For survey-based research, which were all cross-sectional, the Appraisal for Cross-Sectional Studies (AXIS) quality appraisal tool (Downes et al*.,* 2016) was used. No studies were excluded on the basis of quality appraisal or bias risk.

Synthesis of results*:* A systematic approach to comparisons of studies was conducted following data extraction. Data was narratively synthesised, with discussion of disparities/comparability based on study characteristics, with frequency tables for study design, and bubble graphs of themes that emerged. Subgroup findings are presented and compared where appropriate (such as findings relating specifically to undergraduate student cohorts, postgraduate research students, or medical students), with codes denoting subgroup, following O'Leary et al., (2017) guidance.

Results

Study selection*:* 5194 studies were screened. One-hundred-and-thirty-nine full texts were assessed for eligibility. When searches were repeated to capture recent developments, 18 additional texts for title and abstract screening were included, when full text was reviewed the study did not meet inclusion criteria. Thirty-six studies were included, which are detailed below, following PRISMA guidelines for reporting screening of published literature, and adapting the PRISMA diagram utilised within Godin et al*.*, (2015) for applying systematic review search methods to grey literature (Figures 1 & 2).

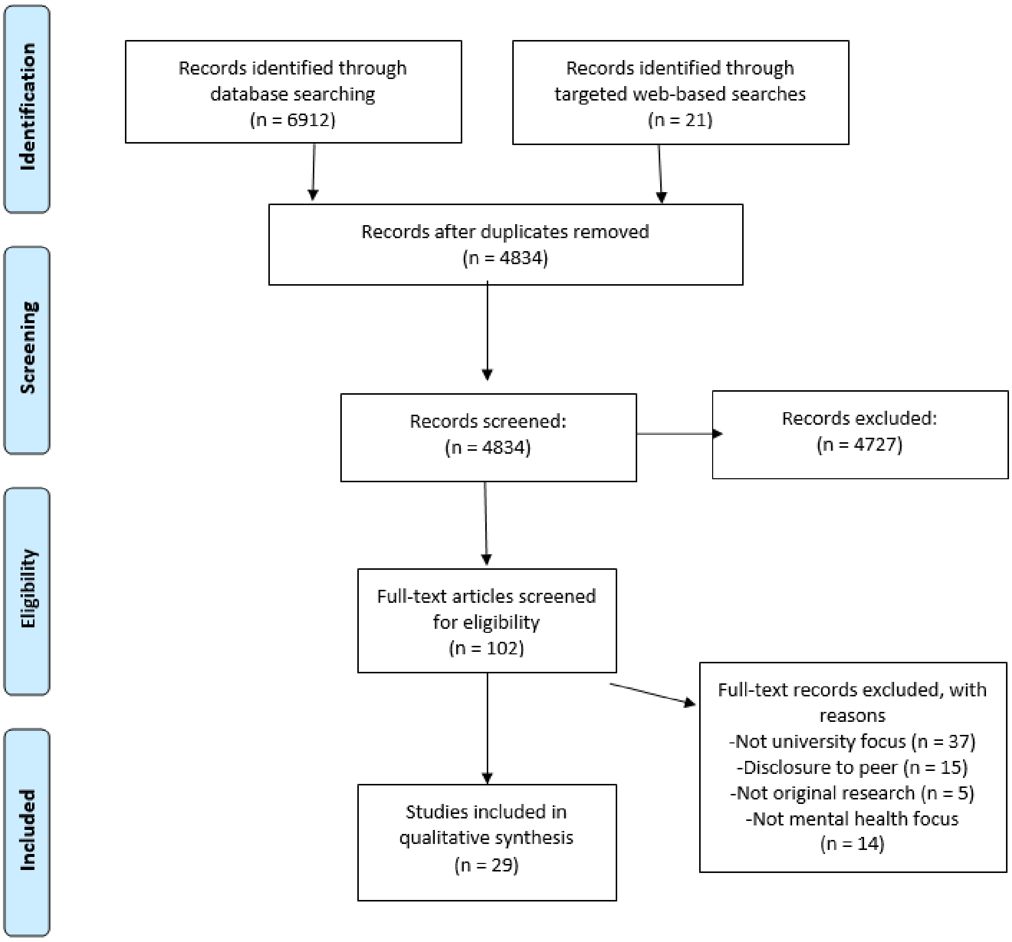

Figure 1: PRISMA diagram for published study selection process.

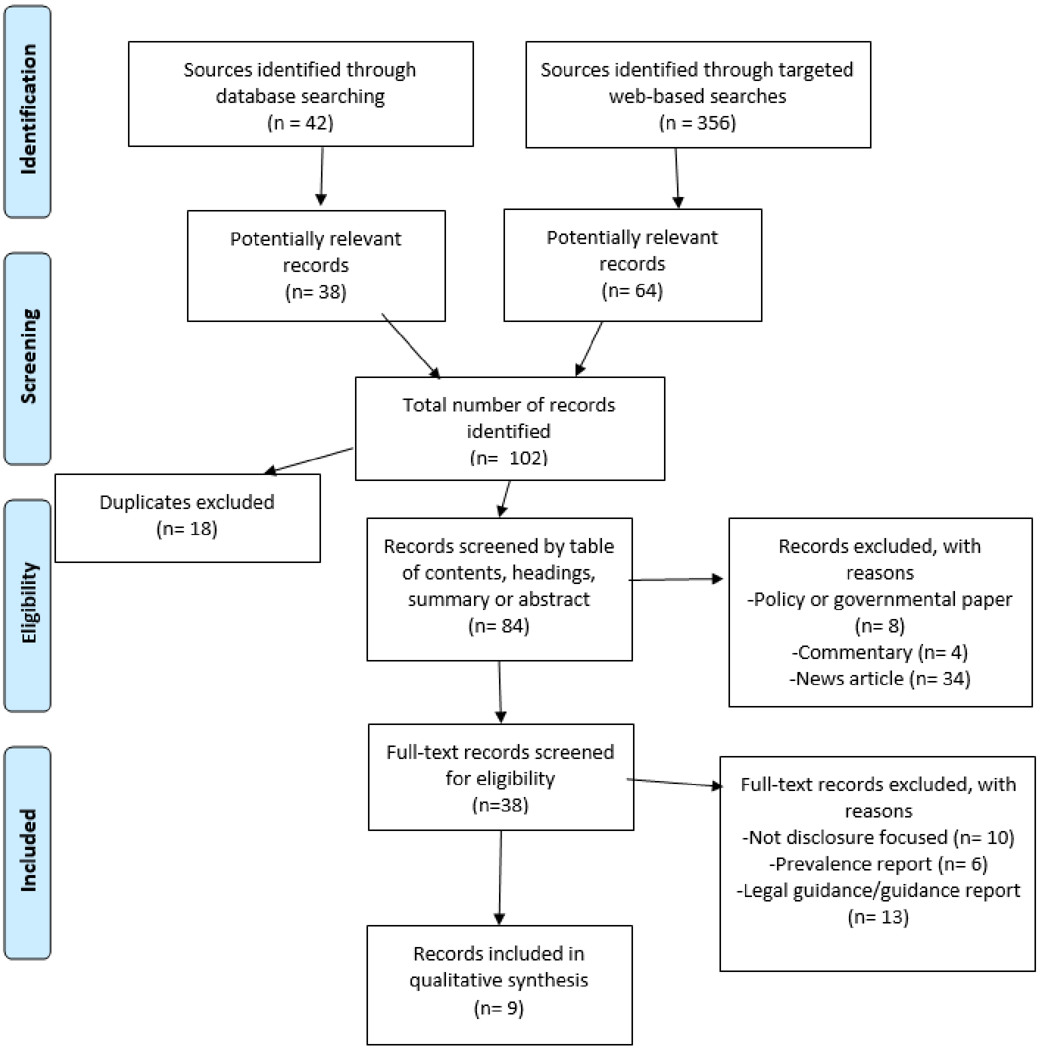

Figure 2: PRISMA based diagram for grey literature selection process

Published literature study characteristics:

Twenty-eight peer-reviewed studies met the inclusion criteria and were included in this evidence map. Fourteen of the peer reviewed studies reported their funding sources. The majority of the funding came from the universities where the research was conducted, primarily from programme and/or research development or evaluation services [1, 6, 11, 14, 21, 24, 27] sometimes specific to the School of study the research was conducted in or came from the institutions Equality and Inclusion centres (or equivalent inclusivity-based funding) [3, 4, 5 16, 18]. Individual institution funding was often supported by larger governmental grants [12]. The remaining studies either did not report their funding source or stated that the research had no specific funding.

The majority of studies were based in Australia [2, 3, 5, 7, 13, 16, 18 21] and the USA [4, 6, 8, 9, 11 14, 19, 20, 23, 24, 25] accounting for eighteen of the studies. Five studies were based in the UK, [12, 26, 27, 28, 29] and two in Canada [1]. One study was based in South Africa [17], and one study was multi-national across the UK, USA, Canada, and Australia [10].

The majority of the studies were focused on students, with four focused specifically on medical and professional disciplines [26, 28, 29 30]. One study was comprised entirely of postgraduate (Masters and Doctoral) students [17], with a mixture of Undergraduate or unspecified student cohorts forming the participant pools of the other studies. Seven of the studies focused on staff and faculty perspectives on student mental health disclosure and their role in supporting students and encouraging discussion and disclosure of mental health challenges [18, 19, 20, 21, 22, 23, 24].

There was more quantitative work than qualitative, with seventeen studies utilising a quantitative methodology [1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 15, 20, 24, 25, 27] and one mixed methods methodology [18]. Eleven studies utilised a qualitative focus, including interviews [13, 14, 15, 17, 19, 21, 22, 26, 28, 29] with students, and one study utilised written narratives [17]. Eleven studies were based on a single campus [1, 2, 3, 4, 5, 6, 7, 11, 18, 20, 25] and four studies on multiple campuses [8, 9, 10, 22, 28]. The majority of qualitative studies focused on one institution [12, 13, 4, 15, 17, 19, 28].

Two of the studies sourced their participants from professional bodies and outside registries, and thus did not specify how many individual institutions the participants were based at [23, 24]. Most quantitative surveys were completed online, and participant recruitment was often through university emailing lists, with some studies utilising purposive sampling through the university disability services [4, 5,6 11]. Quantitative surveys tended to incorporate Likert scales, with some allowing free-text responses from participants. Whilst six studies utilised pre-existing measures, none of these measures overlapped between surveys, with varying focuses in the measures chosen. One study assessed participants psychological and psychiatric symptoms using the Symptom Checklist 90-R (Derogatis, 1994) [27], and one utilised an adapted version of the UK HESA Disability Categories to investigate student disability status [2]. One study[1] utilised a number of measures, the Inventory of Statements About Self-Injury (ISAS, Klonsky & Glenn, 2009), Suicide Behaviours Questionnaire-Revised (SBQR, Osman, 2002), Self-Esteem scale (Rosenberg, 1965) and Parent and Peer Attachment Inventory (Armsden & Greenberg, 1987).

The remaining measures were related to perceptions and attitudes, such as the Students with Accommodation Needs Satisfaction Survey (SWANSS; Smith, Woodhead & Chin-Newman, 2019) [4], the Willingness to Accommodate Students-R (Baker, Boland & Nowik, 2012) [6], College Students Attitudes about Mental Health scale (Corrigan, 2015)[8], and Secrecy scale (Link et al., 1991) [8].

In terms of qualitative methodology, one study utilised a modified version of the semi-structured interview instrument Subjective Experience of Medication Interview (Floersch et al., 2009) [13]. The majority of qualitative analysis was thematic analysis, with one study [28] reporting a framework analysis approach.

Definitions of mental health challenges were only provided by two studies, one citing the World Health Organisation definition of mental disorders[29] and the other citing the Americans with Disabilities Act definition[20]. Three studies discussed the issue of language when discussing mental health and mental health challenges, two studies from the same author[2, 3] utilised the term ‘learning challenge’ due to perceptions that this term was less stigmatising and one study explored their use of the term ‘psychosocial disabilities’ due to it being in contemporary usage within the disability rights movement in their country[17]. The language used varied between studies, such as ‘mental health disorders’, ‘mental health conditions’, ‘mental health problems’, ‘mental illness’, ‘mental disorders’, ‘mental health and wellbeing issues’, ‘mental health/neurodevelopmental issues’, ‘psychiatric disorders’, ‘psychiatric disabilities’, ‘emotional or psychological impairment’, ‘psychological distress’ and ‘mood disorders’.

Although it is likely that all of the peer-reviewed studies were grounded in some sort of theory or theoretical framework, just three reported these. Two studies explicitly outlined their work was informed by the social model of disability and gave the reader a brief overview of what this model is and why they chose to position themselves from the social model rather than the medical, or biological model[5, 15]. One study was grounded in Nodding’s ethic of care (1984), Selke and Wong’s mentoring-empowered model (1993) and Yob and Crawford’s conceptual framework for mentoring (2012)[22]. These were the only studies that provided positioning in this way.

The key features of the published literature studies are provided below in Table 1, and graphically represented in Figures 1 and 2.

Table 1: Author, Location, Participants, Aims, Key Findings from Published Literature.

	Author	Setting	Participants	Design	Aims	Measures used / Questions	Key findings
Studies with Undergraduates							
1	Armiento et al. (2014)	Canada	268 undergraduates 71% Female 87.5% Canadian Nationals -Mean age 19.15	Quantitative survey using convenience sampling (emails, posters, and classroom announcements) from one institution	Examine prevalence and sources of disclosures	Standardised measure: Inventory of Statements about Self-Injury. Standardised Measure: Suicide Behaviours Questionnaire Revised. Standardised Measure: Inventory of Parent and Peer Attachment Scales. Author developed measure of Disclosure of NSSI	-69% of men had never disclosed, 53% of women. 74% of disclosures were to informal sources (e.g. friends, romantic partner, family). -26% disclosed to informal sources prior to formal sources, suggesting possible mediator relationship between disclosing informally and making the decision to formally disclose. -10.3% disclosed to teacher or professor

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2	Grimes et al. (2017)	Australia	9941 undergraduates	Quantitative survey using convenience sampling (email from University Executive Unit) at one institution	To identify how many students with learning challenges there were at the university, characterise the disclosing and non-disclosing student groups and explore factors predicting a student's choice of non-disclosure	Use and rating of formal (13 supports as detailed from the institution and informal support (drawn from the literature). Previous support and accommodation from both formal and informal sources. Assessment or diagnosis using a modified version of the UK Higher Education Statistics Agency (HESA) disability categories. Impact on learning. Institutional disclosure status	-22.4% had learning challenges and did not disclose, 12.8% had disclosed. -29.9% identified two or more learning challenges and of those 95.3% identified mental health issues as one of the challenges. -Disclosed population had higher proportion of females. -First-generation and English as second language lower disclosed proportion. -Students under 25 likely to choose non-disclosure. -Students with mental health challenges 3.1

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						and reasons for non-disclosure	times more likely to choose non-disclosure than students with other learning challenges. -Students are more comfortable with non-disclosure over disclosure even when this means loss of opportunity for accommodations
3	Grimes et al. (2019)	Australia	663 undergraduate students at one institution. 77.4% female	Quantitative survey method used, paper reporting on only non-disclosing students identified from the Grimes et al. (2017) study	To explore the reasons that institutionally non-disclosed students had chosen not to disclose their disability	-Questions were developed detailing reasons for institutional nondisclosure based on the literature, and students could choose as many reasons as they felt applied. They could	-Students with mental health issues accounted for 88% of the total non-disclosing sample. -31% of the non-disclosing sample did not know there was any assistance and 30% did not think the help offered would be of use

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						also offer additional reasons for non-disclosure in an open-ended question	-19.9% of the non-disclosing sample felt disclosure would result in being treated differently -Students who were younger were more likely to feel they did not need help, and that help would not be useful compared to older students
4	Hampole et al. (2019)	USA	66 Undergraduates from one institution. 72.3% Female 36.4% Hispanic/Latino, 31% Asian, 16.7% Caucasian	-Quantitative surveys -Convenience (all psychology students emailed) and purposive (emails from the campus accessibility centre to students	To compare disclosure experiences of students from different ethnic backgrounds	-Students with Accommodation Needs Satisfaction Survey. Question topics include background information on condition, accommodation use if formally	-Main effect of ethnicity for disclosure to staff. Post hoc analyses found that Latino students were more comfortable disclosing to staff than Asian American students -No significant effects for disclosure to peers

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				registered with them) sampling		registered, disclosure and visibility of conditions (author developed) -Satisfaction scales for disclosing to faculty, staff, and peers (author developed)	-Asian American students reported negative experiences disclosing to staff compared to other ethnic groups (particularly White students)
5	Kent et al. (2018)	Australia	125 undergraduates at a large public university 76.8% Female	Quantitative surveys utilising purposive sampling of students who had registered as being a person with a disability through the University Disability Office	To explore attitudes of students with disabilities towards disclosure	Adapted version of National Centre for Student Equity in Higher Education survey. Topics included accessibility of online learning environments, disclosure of disabilities, conditions of	-19.2% rarely disclosed their disabilities, 8% had never disclosed. -26.6% said they had received mostly adequate and appropriate accommodation during their degree

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						disclosure, effectiveness of disclosure	
6	Mamboleo et al. (2019)	USA	289 students 18.3% freshmen, 20.4% sophomores, 11.4% graduate students from six major public colleges and universities located in a Mid-Atlantic US state. 67.1% Female	Quantitative surveys utilising purposive sampling (emails to students from the Disability services)	To examine contextual and individual factors associated with disability disclosure	-Willingness to Accommodate Students Scale revised (a=.83) -Willingness to Disclose Disability scale (a=.815) -Two author developed items inquiring about past experiences with requesting accommodations	-Willingness to disclose was hindered by feeling hesitant and fearful of the professor, fear of the professor thinking differently of them, and telling other students -Previous accommodation request experiences were correlated with willingness to disclose. Perception of faculty willingness to provide accommodations was correlated with willingness to disclose -Gender, grade level and past experiences were

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							significantly associated with student's willingness to disclose -Freshmen were more likely to disclose than juniors / seniors / graduates, and males more likely to disclose than females.
7	Martin (2010)	Australia	54 undergraduates 35 identified as having depression, 23 anxiety. 28 students reported multiple conditions	-Quantitative survey utilising convenience sampling from one School in an Australian university (School identified by the Disability Liaison Unit as having the highest number of students with mental health	To generate knowledge about the mental health of university students	-Author defined survey questions. Topics included how mental health conditions had affected studies and if they had disclosed to staff. Depending on disclosure status, students were asked how staff responded, why they did not tell	-Slightly under 2/3 of students had not disclosed even though many were experiencing considerable difficulties. -12 students said there was no need to disclose, despite 11/12 having their studies negatively impacted by their mental health -Students were fearful of being found out /

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				difficulties using their services).		staff, and helpful / problematic experiences, with a question allowing advice to staff and students.	judged / stigmatised / discriminated against and concerned they would be seen as telling lies or wanting special privileges. The issue of losing their place at university, or disclosure following them to the workplace was highlighted. -Of the 24 students who had disclosed, 18 had a positive response, 4 had no response from staff and 2 had a negative experience.
8	Brown et al. (2017)	USA	1393 undergraduates from 5 universities (107, 338, 579, 293, 76)	-Quantitative survey -Administered at five universities. Eligibility criteria	To better understand the mechanisms linking public stigma and mental health disclosure	-Disclosure willingness scale (a=.89) -College Students Attitudes About	-The effect of public stigma is significant. The perceived stress burden was associated with disclosure willingness

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			-63.7% female	and sampling strategies varied by institution. These included students solicited in introductory sociology classes, psychology classes, for course credit, or via a university wide email		Mental Health: Attribution Scale (a=.87) and Secrecy Scale (a=.92) -Perceived Stress Burden	-Men were less likely to endorse disclosure willingness in the context of public stigma than women -Nondisclosure carries an emotional toll, with those who have disclosed having a reduced tendency to internalise public stigma -Greater public stigma was associated with greater perceived stress burden of disclosure. Those with greater perceived stress burden in the context of public stigma would be more willing to disclose mental illness to garner support.

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9	Corrigan et al. (2016)	USA	1390 undergraduates 5 colleges at private and public institutions 63.7% female 48.9% Caucasian	Quantitative survey utilising convenience sampling (psychology students, sociology students, university wide emails)	To examine if desire to disclose is associated with identity, and public stigma	-Author derived Secrecy Scale (a=.83) -Author derived Disclosure Scale (a=.89) -Author derived Join Program Scale (a=.95) -Author derived Attribution Scale (a=.92) -Author derived vignette and questions about common stereotypes about mental illness	-15% endorsed the idea of disclosure, with 16.3% saying they would be interested in joining a program to help them consider disclosing, but 21.2% agreed with keeping mental illness a secret -Men were significantly more likely to be ashamed of their mental illness and support secrecy. -White students were more likely to endorse the idea of joining a disclosure program. -Students who were more distressed were more likely to identify with a mental illness,

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							and in turn this was associated with interest in disclosing.
10	Osborne (2019)	UK, USA, Canada, Australia	105 students 75% undergraduates, remainder foundation and postgraduate taught from 5 universities 75% White 70% Female Aged between 18-59 years 66% felt their disability was invisible, 32% felt their disability was a mixture of visible and invisible	Quantitative survey utilising convenience sampling through online distribution, and facilitated through a number of well-known student disability advocacy groups and practitioner focused JISC mailing lists	To ground issues of ignorance and social justice in relation to HE classroom experiences 1. What kinds of classroom experiences and academic staff interactions are beneficial or detrimental to the success of disabled students? 2. Do students' experiences relate to epistemic injustice? 3. Are students being treated in	-Questions were informed by outcomes of surrounding literature, such as if they felt included, how well they felt their needs were met in the classroom settings, interactions with academic staff and the wider university, and if these were influenced by ignorance or structural epistemic injustice	-19% of students specifically mentioned they wished academic staff would understand they were not lazy or faking to get marks. -Students noted difficulties in the burden of evidence gathering for disclosure, compounded by failure of communication between point of disclosure and academic staff -Disclosure and acceptance of this disclosure by the university and staff had

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					ways consistent with epistemic ignorance?		an impact on student's ability to access support and feel accepted -Many helpful adjustments can be applied universally, regardless of disclosure or disability such as lecture recordings, breaks in lectures, self-management techniques, mindfulness around contact hours
11	Busch et al. (2022)	USA	2175 undergraduates	-Quantitative survey using purposive sampling	To examine extent to which students were revealing depression to instructors of online science courses and why	-Questions focused on if students had disclosed depression, why (or why not) and asked to describe benefits and costs perceived to be associated with disclosure	-Students who disclosed did so for accommodations, were struggling, or felt instructor was kind -Students who did not disclose felt it was not impacting on their work, it would feel

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							uncomfortable, the instructor would be dismissive
12	Redpath et al. (2013)	UK (Northern Ireland)	13 undergraduate students within various years of study at one institution 6 of the participants identified as having mental health challenges	Qualitative interviews utilising purposive sampling. A network of disability organisations with key representatives of the target population, and university support services used to recruit	To understand issues relating to the exclusion of young people with disabilities from academic pursuits	-Interview questions revolved around obstacles that were identified from the literature; physical environment, access to information, entrance to Higher Education, assumptions of normality, levels of awareness and any other additional obstacles	-Access to information variable, advertisement of disability services needs to be improved -Issues with communication, need to improve the links between student support and academic staff
13	Venville (2010)	Australia	5 undergraduate students from a large regional institute. Four	-Qualitative interviews utilising non-probability purposive sampling (poster	To understand the lived experience of learning for students with mental illness	-Key questions asked participants to describe their learning experience, their experience of	- All spoke of a need to control the release of information relating to their mental health, and whilst all cited reasons

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			males and one female Eligibility criteria were those over 18, with diagnosed mental illness as defined by DSM-IV and ICD-10, and studying full time	displays and information sessions in classes)		mental illness, and the intersection between the two	why disclosing may have been helpful, none had done this – but they would if asked about it -Students felt unable to trust they would continue to be treated like their peers following disclosure. Uncontrolled disclosure was seen as a victory for the mental illness. -Staff engaging in check in behaviours with genuine concern was valued by all students, and staff respect for capacity and privacy influenced their learning experiences -To disclose or not is a complex decision, and

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							when those with mental illness are seen as needing 'experts' to assist and gain believability for their experiences, they are placed in positions of passivity/helplessness
14	Kranke et al. (2013)	USA	17 undergraduates 76% Female 82% White 88% reported taking between one and three prescription medications for their conditions 82% reported diagnosis of a mood disorder	-Qualitative semi-structured interviews -Purposive sampling following a larger quantitative survey (n=86) where respondents could consent to contacting for qualitative study	To investigate factors impacting disclosure of non-apparent disabilities 1) What factors influence student's disclosure of a non-apparent disability to receive classroom accommodations What factors influence their decision to delay disclosure to receive	-Modified semi structured interview instrument Subjective Experience of Medication Interview - Eliminated or modified questions for adults and developed age-relevant questions	-Factors contributing to non-disclosure: ideas of normality, professor perspective. More likely to disclose if professor seemed supportive. Students felt vulnerable about managing their non apparent disability. -Perception of negative perceptions as greater potential than the likelihood that their

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					classroom accommodations?		disability would become significant impairment -Fear that professors would perceive them as incompetent to complete study, impact on recommendations for graduate school, and then risk to future career -Pathways: 1) immediate disclosure to raise professor awareness, 2) delay of disclosure until disability limits functioning, 3) no disclosure during course of study
15	Eccles et al. (2018)	UK	18 Undergraduates at one institution 13 female	Qualitative participatory research	Explore why students enter HE with a disability but do not disclose it	Two open ended questions about the UCAS application	-Many did not disclose at application as they were unclear about confidentiality and were

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							not sure why UCAS or the university wanted the information -Some did not perceive themselves as disabled and wished to reject the label -The UCAS form is time consuming, and students feared getting it wrong, or had to fill it out in a public space with peers or teachers who did not know about their disability -Disability menu is populated with pre-determined criteria with no allowance for comments

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16	Bathurst & Grove (2000)	Australia	17 Undergraduates at one institution No demographic information provided	-Qualitative written narratives submitted	To examine the prevalence of mental illness and describe the themes around the issue of disclosure	-Personal experiences of disclosing their mental health status at a tertiary institution	-Students felt if accommodations were being utilised and there was no obvious physical disability, other students will deduce their mental illness. Students are aware of the hierarchy of stigma and that some conditions are more acceptable than others – some students using physical illness or disability (or even fabricated them) to explain rather than disclose mental health. -Students tended to only disclose to people they felt needed to know -Only two students disclosed in application,

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							believing disclosure would be used to discriminate against them. Other students only disclosed when they became seriously unwell, or their academic progress was impacted -Students reported incidences where their evidence was dismissed as a convenient excuse for laziness or emotionality, which they then internalised and appropriated feeling they really were lazy, and not deserving of special consideration, and there was guilt with disclosure

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							-Great deal of anxiety and stress related to the requirements for disclosure, and dilemma over who to disclose to and under what circumstances, risking seeming lazy or manipulative to them and self
PGR specific studies							
17	Vergunst & Swartz (2020)	South Africa	15 PGRs 15 Females	-Qualitative interviews using purposive sampling in two universities (students with a diagnosed psychological disability were identified and asked if they	To explore decisions of disclosure status with supervisors and impact on their relationship	-Questions explored what it was like to be supervised having a psychosocial disability	60% had disclosed to their research supervisor. Of those 9 students, 4 felt they had a positive relationship with their supervisor afterwards, feeling understood, accepted, accommodated, and supported. 5 students did not have a positive

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				would be willing to be interviewed)			experience disclosing, felt their supervisor did not know what was going on, was not understanding, did not know how to react. Individual coping styles used by supervisors may play an integral role in pathways to disclosure -Reasons to not disclose supervisor is downright outspoken about people with mental illness, supervisor responds negatively about the student's capabilities, lack of trust in supervisor, supervisors not knowing how to react appropriately.
Staff specific studies							

	Author	Setting	Participants	Design	Aims	Measures used / Questions	Key findings
18	Fossey et al. (2017)	Australia	218 faculty members completed survey: sample was representative of the universities teaching staff profile 67% female respondents to the survey with mean age 47.7 years 5 faculty (3 male) participated in interviews	-Mixed methods -Quantitative data collected using online survey of a random sample of staff from one multicampus university -Subsequent interviews were conducted using purposive sampling with teaching staff who had experience of supporting students with disabilities	To understand the views, knowledge, and experience of faculty in supporting students with mental health or acquired brain injury	-Quantitative survey was developed by the research team, with items exploring views, knowledge, and experience of teaching, providing reasonable adjustments and actions taken to support students with MHI or ABI, potential study related issues for students, and participation in related staff development -Semi-structured interview guide developed to further explore	-95% reported teaching students with mental illness, 79% agreed that students with mental illness can manage university successfully. 94% agreed that these students have a right to seek reasonable adjustments -Only 1/3 of staff felt they had adequate support to make reasonable adjustments for students, despite 90% believing part of their role was to support students with mental illness to undertake their studies -Staff expressed a preference for students

	Author	Setting	Participants	Design	Aims	Measures used / Questions	Key findings
						findings identified in the survey	to disclose some information in order to help them understand
19	Rocco (2000)	USA	9 faculty 6 Males 31-64 years old	-Qualitative interviews with convenience sampling from one institution	How do students with disabilities communicate what is needed for accommodation?	-Questions were grouped into three categories, general context, education, and employment. -Questions asked about disclosure; comfort level, under what conditions, describing the disability, reactions of others, and types of coaching or advice received.	-Staff assumptions included lowering standards, excusing poor performance, fairness to all students, students taking advantage of the educational system, that students use claims of disability as an excuse for poor quality work or late work -Staff had mixed perceptions of fairness based upon their own assumptions and not their knowledge, for some it was not important or necessary what experts felt about

	Author	Setting	Participants	Design	Aims	Measures used / Questions	Key findings
							accommodations, or for them to examine documentations, with one faculty member stating that he had the right to ignore accommodation recommendations and requests, with other staff members feeling students used their disabilities to get whatever they could from the system, and this should not be tolerated
20	Sniatecki et al (2015)	USA	123 faculty 63.4% female, 68.3% full-time, 30.9% part time	-Quantitative survey using convenience sampling at a mid-sized public liberal arts university,	To examine faculty attitudes and knowledge regarding students with various types of disability	-Adapted faculty survey previously used at the University of Oregon to collect data regarding	-Faculty had the most positive attitudes to physical disabilities, then learning disabilities, with least

	Author	Setting	Participants	Design	Aims	Measures used / Questions	Key findings
				with emails distributed from the director of the teaching and learning centre		faculty knowledge about disability and disability services. -Items modified to accurately reflect institutional characteristics and items added to explore differences between disability types (physical, learning, and mental health)	positive attitudes towards mental health. -Over half of faculty either disagreed, or were uncertain if students had to declare a disability in order to get support, with 49.6% correctly identifying disclosure as a necessary step for support
21	McAllister et al. (2014)	Australia	26 faculty from two universities 22 academic staff, 4 professional staff	-Qualitative interviews utilising snowball sampling and open invitation convenience sampling through emails at both universities	To explore the nature, extent and impacts of interactions between university staff engaging with students who disclose they are experiencing a mental health challenge	-Questions explored previous interactions with students who they believed to be affected by a mental health problem, if they referred on, if they needed	-Majority of interactions were facilitated by student disclosure to them -Staff felt on-campus students had better access to support -The extra workload attached to student

	Author	Setting	Participants	Design	Aims	Measures used / Questions	Key findings
						support for themselves and how they felt following the experience, the commonality, lessons learned and significance of the experience, and if the faculty had any changes, they felt should be made following their experiences	disclosures was balanced for some by the personal satisfaction derived from successfully providing help and support to the student. There was a personal impact of seeing students in acute distress, and often no formal debriefing services to assist them with this. -Staff felt it was difficult to meet the needs of obviously struggling students if they did not disclose -Staff often felt they lacked knowledge about mental health leading to them feeling

	Author	Setting	Participants	Design	Aims	Measures used / Questions	Key findings
							uncomfortable and unconfident in providing support in response to disclosure
22	Woloshyn et al. (2019)	Canada	7 tenured professors from 5 public universities in one city. Participants held minimum of 10 years work experience at their university 4 females, 3 males	-Qualitative interviews utilising purposive sampling (professors who had previously taken part in a survey volunteered to be interviewed on graduate level instruction and supervision)	To explore professors' perceptions of mental health and wellbeing in graduate students and challenges in supporting this	-Interview questions were based on the concepts outlined within the literature review and conceptual frameworks, exploring participants understandings of mental health and wellbeing, the ways they supported graduate students' academic success and wellbeing, knowledge about on campus services	-Staff were concerned about the capacity and suitability of campus services to meet and support the unique emotional and learning needs of graduate students -Staff's perceived ability to support students was impacted by their perceptions of institutional culture and their awareness of student demographics. Staff felt there was tension between wellbeing rhetoric and

	Author	Setting	Participants	Design	Aims	Measures used / Questions	Key findings
						and resources, and how HEIs could work to support graduate student academic success and wellbeing	institutional practices which can be detrimental to mental health
23	Pheister et al. (2020)	USA	380 medical program directors from across the USA 60.7% male 45.5% had 10+ years reviewing experience	-Quantitative survey utilising purposive sampling (program director contact information was obtained from the Accreditation Council for Graduate Medical Education public database source)	To answer if disclosing an illness during the residency application process with affect their ranking and progression	-3 applicant vignettes were used, the language of which was identical except for the presence of illness which was disclosed as either major depressive disorder or diabetes mellitus type 1. Vignettes were either of a 'perfect' applicant, 'good' applicant, or 'average' applicant.	-Applications with disclosure of depression were more likely to be placed in a lower category for interview likelihood and ranked lower compared with the applicant disclosing diabetes when the strength of their applications was equal or lower. -If an applicant chooses to disclose for a reason other than explaining a shortcoming in their

	Author	Setting	Participants	Design	Aims	Measures used / Questions	Key findings
						-Questions were then asked if they would look further at the application (and why), if they would extend invitation to interview (and why) and how they would rank the applicant (and why)	application, they should consider the purpose of the disclosure and their aims in disclosing. -Bias against applicants who chose to disclose a mental illness compared to those who disclosed a medical illness.
24	Abraham et al., (2022)	USA	99 medical school admissions committee members	-Quantitative survey utilising purposive sampling from accredited medical schools and publicly available directories	Assess potential biases and opinions regarding applicants who reveal a mental health condition on their medical school application	-3 applications were provided which were identical in Medical College Admission Test and GPA score. In the personal statement, applicant described a drop in grades due to mental health,	-No statistically significant differences in ranking for acceptability, likeability, and competence -More concerns were raised around the mental health than physical health applications, with some responses feeling the

	Author	Setting	Participants	Design	Aims	Measures used / Questions	Key findings
						physical health, or no explanation -Likert scales assessing acceptability, competence and likeability, and a question inviting them to describe any concerns about the application	mental health condition itself was a concern -62% felt disclosing mental health would be viewed neutrally, 22% negatively -If applicant did not describe seeking treatment or the condition was reoccurring this was felt to be detrimental
Studies with staff and students							
25	Becker et al. (2002)	USA	315 faculty (41% female, 59% aged 36-54) -1901 undergraduate students (60.6% female, 57.8% aged 18-24) at one university	-Quantitative survey utilising convenience sampling (all faculty members were contacted) and the student sample was a 15% randomised	To obtain information regarding faculty and student attitudes, beliefs, knowledge, and experiences with mental illnesses	-Questionnaires were developed specifically for this study based upon the review of the literature and the authors own teaching experience	- Female faculty were significantly more likely to perceive themselves as able to discuss concerns and convince students to seek help. -13% of faculty reported students with mental illness made them feel

	Author	Setting	Participants	Design	Aims	Measures used / Questions	Key findings
				stratified sample via email from the Office of Institutional Research and Planning		-Questions assessed sociodemographic and teaching characteristics, perception of exposure to student behaviours that may be symptoms of mental illness, offering accommodations, attitudes knowledge and beliefs about mental illness, and confidence in university services to meet student needs, referrals to mental health services (faculty only)	unsafe and 8% felt these students were dangerous. 5% of faculty felt students with mental illness should not be allowed to attend university. Faculty who felt students shouldn't be allowed to attend classes also felt uncomfortable dealing with those students -85% of students and 81% of faculty believe that students with mental illnesses can succeed in their academic pursuits -73% of students and 36.7% of faculty felt they were not familiar

	Author	Setting	Participants	Design	Aims	Measures used / Questions	Key findings
							with available campus mental health services
Studies with medical or professional students							
26	Stanley et al. (2011)	UK	22 nursing, teaching and social work students in England Scotland and Wales 78% Female 17 students were disabled at point of entry to the profession	Qualitative interviews using purposive sampling (heads of programs contacted them)	To study the experience of disclosure in the HE setting.	-Interview schedule developed that included questions about experiences of disclosing disability, attitudes to and understandings of disability disclosure in participants profession and the personal consequences of disability disclosure	-3 had not disclosed at all and 11 had only partially disclosed (understating impact/extent or only disclosing one condition) -Disclosure was a multi-staged process, not a single event. It involved a series of decisions or negotiations. The need to disclose afresh at points of transition such as moving between work placements could act as a barrier to career development

	Author	Setting	Participants	Design	Aims	Measures used / Questions	Key findings
							-Disclosure was felt to lead to exclude them from job posts or other professional training programmes, particularly mental health disclosure -Participants were uncertain about fitness to practice standards following disclosure, with confusion about when and whether disclosure was necessary, and requirements were especially unclear for those with fluctuating conditions such as mental health who were unsure if they had to disclose afresh when

	Author	Setting	Participants	Design	Aims	Measures used / Questions	Key findings
							their mental health deteriorated -Regulatory bodies were perceived as generally remote, impersonal, and providing no feedback following disclosure, depriving the individual of control over the disclosure process, and were conceptualised as restrictive and threatening
27	Mitchell (2018)	UK	121 undergraduate student nurses 84% Female, average age was 26 Full time adult, mental health, learning	-Quantitative cross-sectional survey of student nurses recruited through email	To investigate the level of psychological distress in students and highlight facilitators and barriers to help seeking	-Symptom Check List-90-R to reflect psychological and psychiatric symptoms (a=.86-.90) -Author devised Seeking Support Questionnaire to	-47.2% of those above clinical thresholds for anxiety and 42.9% of those above clinical thresholds for depression feared disclosure. -For the students who feared disclosure at

	Author	Setting	Participants	Design	Aims	Measures used / Questions	Key findings
			disabilities or child nursing student			reflect help-seeking and potential barriers to disclosure and help seeking behaviours (a=.77-.88)	least moderately, they felt it would change people's perceptions of their suitability as a nurse (77.1%), that it would result in others talking about them (68.7%) and result in others watching your practice more closely than other students (57.8%)
28	Ramluggun et al. (2018)	UK	9 undergraduate mental health nursing students 7 Females, 2 males, aged between 22-32 enrolled on the mental health preregistration nursing	-Qualitative semi-structured interviews using convenience sampling (posters and invitation letters to those who expressed interest)	To explore the student experience of undertaking a mental health nursing programme while also managing their mental health issues	-Interview schedules were based on the available literature on the topic, and revised as new topics arose from interviews	-Most students disclosed only after their mental health worsened. Some thought of disclosing before enrolling but decided against it – feeling apprehensive about being asked about it in their interview.

	Author	Setting	Participants	Design	Aims	Measures used / Questions	Key findings
			programme and had a pre-existing mental health condition				-Those who did not disclose in their application feared they would not get an interview if they disclosed, or that it would affect the decision of the interview panel. -There was a lack of readily accessible information on disclosure on the university website. Some students felt it would be helpful to discuss this at open days. -Most students reluctantly disclosed during their course, or during placement, with

	Author	Setting	Participants	Design	Aims	Measures used / Questions	Key findings
							some having to take time off. Attitudes of others made it difficult to disclose. -Occupational Health assessments and appointments were felt by some to be physical health focused, with mixed feelings around disclosing there
29	Winter et al. (2018)	UK	40 undergraduate medical students across 5 Universities 75% Female	-Qualitative focus group interview data utilising convenience sampling (posters and VLE used to recruit) -7 focus groups with between 5-9 participants	To explore what beliefs contribute to medical students' reluctance to seek help and the mechanisms behind this	-Three main topic areas; beliefs or assumptions held by medical students about mental health issues as they affect their careers, the factors that reinforce these assumptions and the consequences	-Fitness to practice was seen as covering every aspect of their lives and a system designed to exclude the weak, including those with mental health issues. Support procedures were seen to be in place to filter out those not fit to be doctors.

	Author	Setting	Participants	Design	Aims	Measures used / Questions	Key findings
						students believe might come from revealing a mental illness	-Students were distrustful and wary of revealing their mental health to medical school staff, openly anticipating judgement rather than support, and felt it would be on their record forever. Students felt there were grey areas in terms of conduct, a lack of transparency over fitness to practice and exclusion over mental health

Study characteristics: Grey literature

Nine grey literature reports were included in this evidence map. An overview of the reports and findings can be found in Figure 3. The majority of the reports were from the UK[30, 31, 32, 33, 34, 35, 36, 37] and one report was from the USA[38]. There were four reports that utilised a mixed methods approach [31, 33, 34, 35]. These ranged from student focused surveys with staff interviews and student focus groups, to quantitative student surveys and interactive workshops with students to qualitative case studies of HEIs, interviews with staff and focus groups with students. Four papers reported on the findings of quantitative surveys with students[30, 38], or students and staff [31], with one also including healthcare professionals[36]. One report was purely qualitative in approach, reporting findings from interviews and focus groups with academics[32].

One report reflected on the terminology used, explaining their phrasing, and stating they positioned their research within the context of the social model of disability[31]. One report positioned mental health and wellbeing as a continuum approach, providing definitions of mental illness, mental distress and wellbeing and clearly defined the meaning of disclosure within the report[36].

Table 2: Authors and Organisations, Location, Participants and Key Findings of Grey literature.

	Author	Country /Setting	Participants & Design	Design and method	Question areas and Key findings
30	Dig In & The Insight Network (2020). University Student Mental Health Survey.	England, Scotland, and Wales	-21,027 students -140 universities -59.5% female -68% first year -50.5% from UK	Quantitative survey with questions around: prior mental illness, mental distress, or low well-being, current mental difficulties, depressed or anxious feelings, self-harm, stigma and disclosure, sleep disturbance, knowledge, and use of support services	-Females and non-binary students tended to report more than male students. -University year was significantly associated with reporting mental health issues; lowest in first year, increased in second year and peaked significantly in third year. -78.1% concealed symptoms from university and did not disclose due to fear of stigma. -Ethnicity was significantly associated with both previous psychological difficulties and mental health diagnoses. -International students were less likely to report mental health concerns. *Authors: Dr Stephen Pereira, Dr Nick Early, Leon Outar, Mihaela Dimitrova, Lucy Walker and Chris Dzikiti (Insight) and Christopher Platt (Dig-In)*
31	Equality Challenge Unit (2014) Understanding adjustments	UK	-2,063 staff and 1,442 students -Had experienced	Quantitative survey investigating: if staff and students are choosing not to disclose and why, the experiences of talking to colleagues or fellow	-Reasons to disclose: mental health difficulties were part of their life and felt it was necessary to talk about, to get practical support, and to challenge misconceptions. -Reasons to not disclose: students didn't want other students to think less of them, staff didn't want to be treated differently or

	Author	Country /Setting	Participants & Design	Design and method	Question areas and Key findings
			mental health difficulties	students about mental health, whether they sought and received support and adjustments from their HEI and if they had recommendations to HEIs on ensuring the promotion of an inclusive environment	thought less of and didn't want anyone they told to pass the information on. -Where disclosure had occurred to fellow student or colleague, most were supportive however a minority did indicate a very unsupportive response. -Organisational Recommendations: provide all staff and students with information around disclosure, highlighting positive and negatives, clarity on what happens following disclosure and providing case studies and examples of support available. Improve communication within and between departments regarding workload and adjustments, involve staff who have experienced mental health difficulties and mental health organisations in design and communication of policies and practices. When collecting information on mental health, be clear about why this is being collected, outlining how information will be treated confidentiality and details of equality legislation and individual rights. *Authors and funding: not listed*
32	Student Minds (2018) The Role of the Academic	UK	-52 academics -58% female	Semi-structured questions around:	-Responding to student mental health problems is now an inevitable part of the academic role but many academics do not feel the necessary structures and cultures exist to support them in

	Author	Country /Setting	Participants & Design	Design and method	Question areas and Key findings
			-14 interviews and 7 focus groups.	-How they would become aware of a mental health concern -If they had sufficient resources to support students and where they turned to for support -Impact of responding to student mental health on them	this work, and the demands placed on them in responding to student mental health are not properly recognised. -Responding to student mental health problems has a substantiate, negative impact on the wellbeing of academics, and they do not have clear and visible access to support to manage the impact of this. *Authors: Gareth Hughes, Mehr Panjwani, Priya Tulcidas and Dr Nicola Byrom. Funded by the University of Derby VC Ideas Forum and Student Minds*
33	Association for Young People's Health (2019) Student Health Project	UK	-60 students -44 living with long term health condition -2 workshops and quantitative survey	Workshops focused on challenges of managing conditions within HE, best practice, and support. Surveys focused on challenges, practical solutions, management of conditions and recommendations to HEs and students	-UCAS forms were too general about health conditions – words like disclosure or disabilities did not feel applicable to students managing long term health conditions. Students did not feel disability services were aimed at them as they did not necessarily consider their condition a disability. -Students can be reluctant to talk to professionals until crisis point. Personal tutors need better understanding of links between mental and physical health, access to training and a more comprehensive knowledge of signposting to wellbeing services or charities. -University GPs could be reluctant to give students prescriptions for their conditions, often denying medication to the students.

	Author	Country /Setting	Participants & Design	Design and method	Question areas and Key findings
					-Students who were able to access mental health services found they were able to manage better. *Authors: Jeremy Sachs and Emma Rigby. Funded by BUPA UK Foundation*
34	Vitae and Institute for Employment Studies (2018) Exploring wellbeing and mental health and associated support services for PGRs	UK	-1,857 survey responses -10 focus groups with PGRs -Qualitative interviews with staff	Interviews and focus groups explored the policies and provisions relating to the wellbeing and mental health of PGRs, the challenges HEIs face in supporting PGR mental health and the effectiveness of provision, experiences of institutional services and support Survey explored PGR wellbeing, who they would approach and what services they would access if they were having mental health	-Support services staff at several institutions commented that PGRs could be reluctant to give permission for their supervisors/department to be informed. -PGRs reported disorientation at support; if ill during doctoral studies should access student support, but when employed as teaching assistant should access staff services -Supervisors were first point of contact and PGRs saw them as crucial in the likelihood of completing doctorate and were reluctant to raise issues about their mental health and wellbeing (and were aware that supervisors were stressed), supervisors were unclear what was required in their pastoral role in respect to wellbeing and mental health – some from feeling unqualified, some from disinterest in PGR wellbeing. Supervisory relationship difficulties highlighted as one of the most common reasons for wellbeing issues. -International PGRs could associate disclosure with stigma, weakness, or shame, so it was felt full extent of issues in some groups was not known.

	Author	Country /Setting	Participants & Design	Design and method	Question areas and Key findings
				problems, factors that would impact on their wellbeing such as workload, work-life balance, and career intentions	-Staff highlighted challenge of identifying PGRs who are struggling if they were not spending much time in the institution or interacting with staff, and felt part-time PGRs were more likely to be at risk of poor mental health. -Several HEIs mentioned annual review meetings and progress reviews as an opportunity to highlight and record mental health and wellbeing issues, however they typically focus on performance so PGRs may be unwilling to discuss there – additional issues of confidentiality in conversations/reporting in this setting so there is only a real opportunity for disclosures if the culture is one of trust and openness. *Authors: Dr Janet Metcalfe, Dr Sally Wilson, and Professor Katia Levecque. Funded by Vitae in partnership with Institute for Employment Studies for the former HEFCE.*
35	Institute for Employment Studies (2019) Review of Support for Disabled Students in HE in England	England	Institutional online surveys from 67 institutions and 9 case studies of HE providers	Indicators were: existence of written policies on disability inclusivity/accessibility, levels of student engagement, regular reviewing of support for disabled students,	-At least 90% of the providers in the survey reported that they took steps to encourage disclosure during application and throughout the student journey. Large providers and low tariff HEIs were most likely to encourage disclosure. -Methods to encourage disclosure pre-application included disability support being present at open days, taster days and outreach events, some offering specific events for those who had

	Author	Country /Setting	Participants & Design	Design and method	Question areas and Key findings
				accessibility plans, lecture capture, self-assessed levels of inclusivity for disabled students	disclosed in application to support their transition to the institution. -Some HEIs provided staff with relevant training on dealing with disclosure, however this was not always a straightforward process and several individuals raised concerns around confidentiality and data protection when sharing information students had shared in confidence. -Most providers encouraged disclosure at the application stage, fewer did so at other points in the education journey *Authors: Matthew Williams, Emma Pollard, Helena Takala, Dr Ann-Marie Houghton. Funded by Institute for Employment Studies in partnership with REAP (Researching Equity, Access, and Participation) in Lancaster Universities Department for Educational Research.*
36	Student Minds (2014) Grand Challenges in Student Mental Health	UK	-163 students -87% female, -72% personal experience -73 professionals (university staff	Participants invited to submit their thoughts on challenges facing student mental health, using thematic analysis to identify 13 themes. Participants were then asked to rate each	-Top 10 challenges for students and staff included: 1) fear of being judged, 3) finding the confidence to tell people you have a mental health problem or are struggling, 4) mental health problems are seen as a weakness, 6) finding the confidence to ask for help, 8) poor general understanding of mental health problems, 10) general reluctance to disclose mental health problems.

	Author	Country /Setting	Participants & Design	Design and method	Question areas and Key findings
			and healthcare professionals)	challenge in terms of its priority for student mental health	-Lack of clarity about how tutors and the university will respond to disclosures of mental health, with students rating clarity regarding disclosure and responsibilities higher than staff. *Authors: not listed. Funders: not listed, but Student Minds is supported by Comic Relief, The Welton Foundation, UnLtd and Student Hubs*
37	Institute for Public Policy Research (2017) Not by Degrees	UK	-Survey of 58 HEIs -6 qualitative stakeholder case studies -Interviews with staff -Focus groups with students at each institution	Literature review and secondary dataset analysis led to survey and interview questions around student mental wellbeing, student services and provisions, prevention and promotion of positive mental health and accessing care and support	-Predominant way to disclose is through UCAS form, however PGs cannot disclose through UCAS. -Disclosure defined as formally communicating to the HEI that they experience an enduring or disabling mental health condition, as opposed to approaching a member of university staff about their mental health in a less formal way -Significant increase in number of first years disclosing, but still only 2%. Mental health accounts for 17% of all disclosed disabilities (2015/16), undergraduates more likely to disclose than postgraduates, and full time more likely than part time. The vast majority who disclose do so in their first year *Author: Craig Thorley. Funded by Universities UK, Guy Baring and the Mental Health and Wellbeing in Higher Education (MHWBHE) Group.*

	Author	Country /Setting	Participants & Design	Design and method	Question areas and Key findings
38	National Alliance on Mental Illness (2012) College Students Speak	USA	-765 responses -48 states -82% Caucasian -78% straight -82% female -59% current students -9% graduates -16% recent graduates	Quantitative survey developed by NAMI and students, with questions around: student drop out, disclosure, mental health awareness, available information, accommodations, clinical services and support, crisis support, general college supportiveness	-50% of respondents had not disclosed. -Reasons to disclose: to receive accommodations, to reduce stigma and act as a role model, to educate staff and students about mental health, to avoid disciplinary action and avoid losing financial aid -Reasons not to disclose: fear or concern for the impact that disclosing would have on how students, faculty and staff perceive them (including within mental health degree programs), there is no adequate opportunity to disclose, the diagnosis does not impact academic performance, they did not know that disclosing could help secure accommodations, and they did not trust that their medical information would remain confidential. Professors did not honour accommodations, with the DRC not checking to ensure they had received the accommodations following disclosures. *Authors: Darcy Gruttadaro and Dana Crudo. Funded by NAMI*

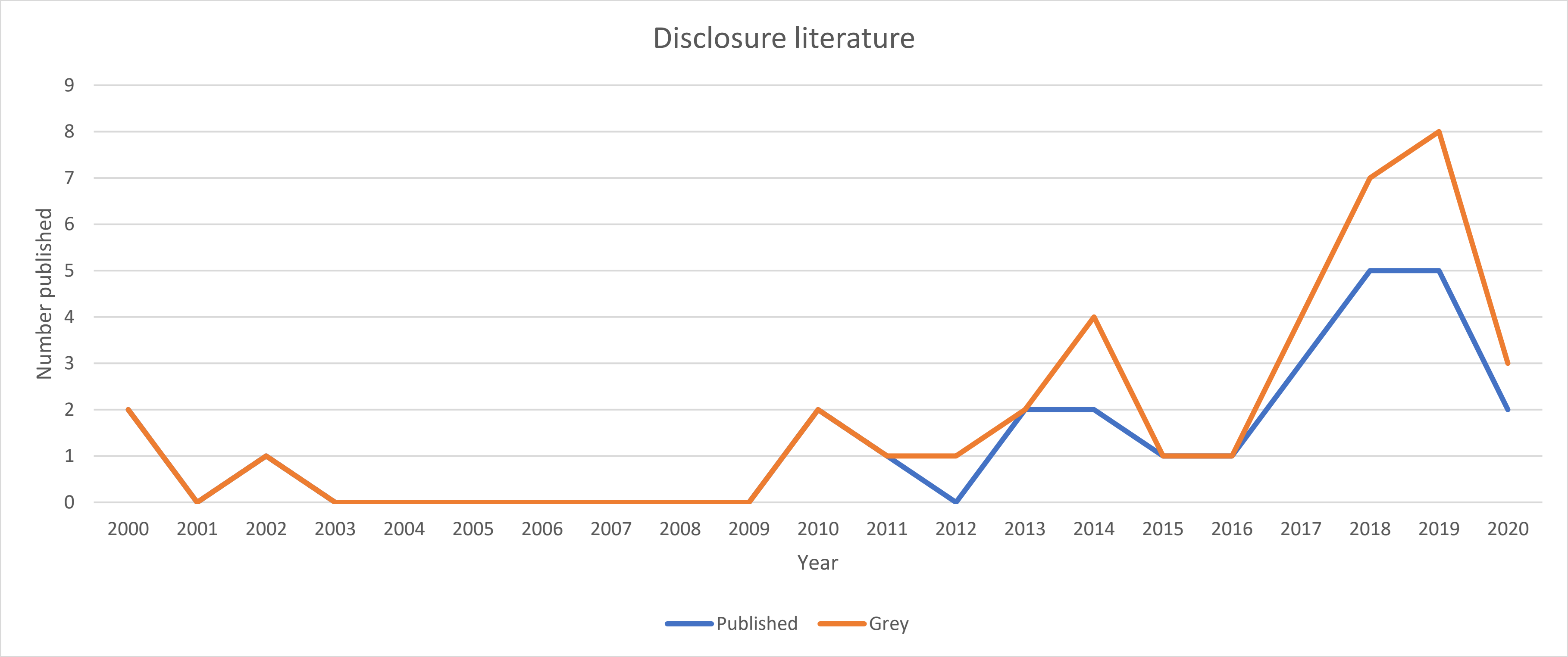


Figure 3: Trends in grey and published literature exploring student mental health disclosure from 2000-2020.

Policy and practice-relevant elements within grey and published literature

All literature, grey and published noted barriers to disclosure however less than half (n = 16), described facilitators of disclosure. Due to some of the aims of the studies, this was to be expected. Fifteen studies gave some examination of policy and/or processes that may enable or hinder disclosure or made commentary within their results or discussion around the impact of policies and processes on disclosure decisions. More grey literature than published literature explicitly defined any frameworks they were working from, but overall discussion of this was low with only eleven commenting on a theoretical framework the work was based on, and only seven describing using a disability framework. Table 3 shows the presence of any theoretical framework, framework or definition of disability, examination of policy or processes around disclosure, and if there are barriers or facilitators to disclosure discussed within the paper or report.

Table 3: *Policy and practice-relevant elements within grey and published literature such as frameworks and examinations*

Author	***Aim(s)***	***Participants***	***Data source***	***Theoretical framework***	***Disability framework***	***Policy / process examination***	***Barriers discussed***	***Facilitators discussed***
Abraham et al. (2022) USA	Assess biases and opinions on medical student applications who disclose mental health conditions	99 Admissions committee members	Quantitative Cross sectional Purposive sampling				X	X
Armiento et al. (2014) Canada	Examine prevalence and sources of disclosure	286 undergraduates Single institute	Quantitative Cross sectional Convenience sampling				X	X
Becker et al. (2000) USA	Understand faculty and student attitudes to mental illness	315 faculty 1901 undergraduate Single institute	Quantitative Cross sectional Convenience and stratified sampling				X	
Bathurst & Grove (2000) Australia	Describe themes surrounding disclosure	17 undergraduates Single institute	Qualitative Written narratives	X			X	

Author	***Aim(s)***	***Participants***	***Data source***	***Theoretical framework***	***Disability framework***	***Policy / process examination***	***Barriers discussed***	***Facilitators discussed***
			Convenience sampling					
Brown et al. (2017) **USA**	Understand mechanisms of disclosure and stigma	1393 undergraduate Multi institution	Quantitative Cross sectional Varied sampling by institute				X	
Busch et al. (2022) **USA**	Examine disclosures of depression to online science instructors	2175 undergraduate Single institution	Quantitative Cross sectional Convenience sampling				X	X
Corrigan et al. (2016)	Examine disclosure and identity	1390 undergraduate Multi institution	Quantitative Cross sectional Convenience sampling				X	X
Eccles et al. (2018)	Explore why students do not declare	18 undergraduates Single institute	Qualitative Focus groups	X			X	

Author	*Aim(s)*	*Participants*	*Data source*	*Theoretical framework*	*Disability framework*	*Policy / process examination*	*Barriers discussed*	*Facilitators discussed*
			Purposive sampling					
Fossey et al. (2017) Australia	Understand faculty views on supporting students	218 faculty (5 then interviewed) Single institute	Quantitative Cross sectional Random sampling Qualitative Interview Purposive sampling			X	X	X
Grimes et al. (2017) Australia	Characterise disclosing and non-disclosing students	9941 undergraduates Single institute	Quantitative Cross sectional Convenience sampling		X		X	
Grimes et al. (2019) Australia	Explore reasons for non-disclosure	663 undergraduates Single institute	Quantitative Cross sectional Purposive sampling	X	X	X	X	

Author	*Aim(s)*	*Participants*	*Data source*	*Theoretical framework*	*Disability framework*	*Policy / process examination*	*Barriers discussed*	*Facilitators discussed*
Hampole et al. (2019) USA	Compare disclosure experiences	66 undergraduates Single institute	Quantitative Cross sectional Convenience and purposive sampling				X	
Kent et al. (2018) Australia	Explore attitudes towards disclosure	125 undergraduates Single institute	Quantitative Cross sectional Purposive sampling		X	X	X	
Kranke et al. (2013) USA	Investigate factors impacting disclosure	17 undergraduates Single institute	Qualitative Interviews Purposive sampling	X		X	X	X
Mamboleo et al. (2019) USA	Examine factors associated with disclosure	289 undergraduates Multi institution	Quantitative Cross sectional Purposive sampling			X	X	X

Author	*Aim(s)*	*Participants*	*Data source*	*Theoretical framework*	*Disability framework*	*Policy / process examination*	*Barriers discussed*	*Facilitators discussed*
Martin (2010) Australia	Generate disclosure knowledge	54 undergraduates Single institute	Quantitative Cross sectional Convenience sampling				X	
McAllister et al. (2014) Australia	Explore interactions between staff and students	26 faculty Multi institution	Qualitative Interviews Snowball sampling	X		X	X	X
Mitchell (2019) UK	Highlight facilitators and barriers to help seeking	121 undergraduate student nurses Single institute	Quantitative Cross sectional Convenience sampling				X	
Osborne (2019) UK, USA, Canada, Australia	Social justice in HE classrooms and epistemic injustice	105 multi-level students Multi institution	Quantitative Cross sectional Convenience and purposive sampling	X	X	X	X	X

Author	*Aim(s)*	*Participants*	*Data source*	*Theoretical framework*	*Disability framework*	*Policy / process examination*	*Barriers discussed*	*Facilitators discussed*
Pheister et al. (2020) **USA**	Impact of disclosing illness on residency application	380 medical program directors Multi institution	Quantitative Cross sectional Purposive sampling				X	
Ramluggan et al. (2018) **UK**	Student experience of managing mental health	9 undergraduate mental health nurses Single institute	Qualitative Interviews Convenience sampling	X		X	X	
Redpath et al. (2013) **UK**	Understand exclusion from academia	13 undergraduates Single institute	Qualitative Interviews Purposive sampling	X	X		X	
Rocco (2000) **USA**	Understand communicating accommodations	9 faculty Single institute	Qualitative Interviews Convenience sampling		X		X	
Sniatecki et al. (2015) **USA**	Examine faculty knowledge regarding disability	123 faculty Single institute	Quantitative survey			X	X	

Author	*Aim(s)*	*Participants*	*Data source*	*Theoretical framework*	*Disability framework*	*Policy / process examination*	*Barriers discussed*	*Facilitators discussed*
			Cross sectional Convenience sampling					
Stanley et al. (2011) UK	Study experience of disclosure in HE	22 undergraduate healthcare students	Qualitative Interviews Purposive sampling			X	X	X
Venville (2010 Australia	Understand lived experience of learning with mental illnesses	5 undergraduates Single institute	Qualitative Interviews Purposive sampling				X	X
Vergunst & Swartz (2020) South Africa	Explore disclosure impact on supervisory relationship	15 postgraduate researchers Multi institute	Qualitative Interviews Purposive sampling			X	X	
Winter et al. (2018) UK	Explore medical students' reluctance to seek help	40 undergraduate medical students	Qualitative Focus groups Convenience sampling				X	

Author	***Aim(s)***	***Participants***	***Data source***	***Theoretical framework***	***Disability framework***	***Policy / process examination***	***Barriers discussed***	***Facilitators discussed***
		Multi institution						
Woloshyn et al. (2019) Canada	Explore perceptions of mental health in graduate students	7 tenured professors Multi institution	Qualitative Interviews Purposive sampling	X			X	X
Grey literature								
Association for Young People's Health (2019) UK	Exploring challenges and solutions to managing health conditions	60 undergraduates Multi institution	Quantitative Cross sectional Qualitative Workshops				X	
Dig In & The Insight Network (2020) UK		21,027 undergraduates 140 institutions	Quantitative Cross sectional Convenience sampling				X	
Equality Challenge Unit (2014) UK	Investigating disclosure choices and adjustments	2063 staff 1442 undergraduate	Quantitative Cross sectional	X	X		X	X

Author	*Aim(s)*	*Participants*	*Data source*	*Theoretical framework*	*Disability framework*	*Policy / process examination*	*Barriers discussed*	*Facilitators discussed*
		Multi institution	Convenience sampling					
Institute for Employment Studies (2019) **England**	Reviewing support for disabled students in HE	67 institutional surveys 9 HE providers	Quantitative Cross sectional Qualitative Case studies				X	X
Institute for Public Policy Research (2017) **UK**	Exploration of student wellbeing, disclosure and accessing support	58 institutional surveys 6 HE providers Staff Students	Quantitative Cross sectional Qualitative Interview Focus groups	X			X	
National Alliance on Mental Illness (2012) **USA**	Exploring disclosure, awareness and help seeking	765 multi-level students and recent graduates Multi institution	Quantitative Cross sectional			X	X	X
Student Minds (2014)	Identifying challenges for	163 multi-level students	Quantitative	X			X	

Author	*Aim(s)*	*Participants*	*Data source*	*Theoretical framework*	*Disability framework*	*Policy / process examination*	*Barriers discussed*	*Facilitators discussed*
UK	student mental health	73 university staff and healthcare professionals	Cross sectional					
Student Minds (2018) UK	Exploring academic role in supporting student mental health	52 academics Multi institution	Qualitative Interviews Focus groups			X	X	
Vitae (2018)	Explore policies and provisions for postgraduate researcher mental health	1857 staff and students Multi institution	Quantitative Cross sectional Qualitative Focus groups Interviews			X	X	X

Synthesis of results

The main findings from the review are synthesised as themes that outline the five main domains of findings: barriers to disclosure, barriers for specific groups, facilitators of disclosure, communication processes & accessibility, and supporting mental health and wellbeing at university.

1. Barriers to disclosure

Several barriers to disclosure were highlighted across the studies including fear of stigma, lack of knowledge about disclosure processes and how to disclose, concerns about information sharing and confidentiality, and concerns about potential consequences of disclosure. When thinking about the intersection between physical and mental health, studies found that students are acutely aware of hierarchy of stigma and that some conditions (primarily physical health) are more acceptable than others (Bathurst and Grove 2000) and staff appear to participate in their hierarchy (Sniatecki et al., 2015). This was also found in studies specifically focused on staff, with evidence that staff show a bias against students with mental health challenges when compared to students with physical health challenges when providing access to provisions and are more likely to view students with a physical health challenge more positively (Phiester et al., 2020). There appears to be a distinct lack of clarity around how staff at universities will respond to disclosures and students lacked the confidence and knowledge on how to disclose and to whom (Student Minds, 2014).

The idea of physical health concerns being more 'valid' than mental health concerns, and student awareness of mental health, unsurprisingly forms a large barrier to disclosing. Students with mental health challenges were three times more likely to choose non-disclosure compared to other learning challenges (Grimes et al., 2017). Unfortunately, it appears that student fears around staff attitudes if they disclosed were not wholly unfounded, with older studies showing that a minority of staff feel that reasonable accommodations for mental health are unfair, that they should be ignored (Rocco, 2000), and even that students with mental illness should not be allowed to attend university (Becker, 2002).

If this is the environment that students are existing in, it is predictable that students have been shown to be more comfortable with non-disclosure, even when it means loss of opportunities for communications and adjustments (Grimes et al., 2019; Mamboleo et al., 2019). Alongside fear of stigma from staff, a further barrier to disclosure was the concern around treatment by peers; and as a peer (Venville 2010; Equality Challenge Unit, 2014).

Students' identity was also found to be a barrier to disclosure; as noted, in the university context, mental health (and accommodations or adjustments for) is put under the 'disability' umbrella. For students who did not identify as disabled or feel that their mental health challenge was 'disabling', they did not disclose, as they did not feel disability services were aimed at them (Association for Young People, 2019). As mental health and its impact on academic studies can fluctuate, a further barrier to disclosure was the concern around when to disclose, and if students should 're-disclose' if they started to struggle more (Stanley et al., 2011).

2. Barriers or impacts for specific groups

The review also identified barriers to disclosure and impacts of disclosure for specific groups. There is evidence that there are ethnic differences in disclosure experiences (Dig In & The Insight Network, 2020; Hampole et al., 2019), with more positive experiences of disclosure being reported by white students; a clear equality and diversity concern.

For students who are studying medicine and allied healthcare subjects, disclosure can be additionally complex due to the role of placements as a necessary part of their degree, with students often needing to disclose afresh at points of transition (Stanley et al., 2011). Students felt that disclosing in the placement setting led to their practice being watched more closely and critically by others (Mitchell, 2018). For medical and professional students, the role of regulatory bodies and fitness to practice procedures played into this complexity. Regulatory bodies were perceived as remote, and depriving students of control over the disclosure process (Stanley et al., 2011). For students who experienced mental health challenges, regulatory bodies were seen as there to exclude the ‘weak’ which they felt they were categorised as. Interactions with occupational health perceived to focus on physical health, causing issues for students when they had mental health concerns and wished to disclose (Ramluggun et al., 2018).

Whilst only three studies focused explicitly on postgraduate research students, there is evidence that they may be less likely to choose disclosure, particularly those who are part-time (Vitae, 2018), and barriers are further heightened for postgraduate research students who also teach, as there are uncertainties around whether disclosure should occur to student support systems, or employee assistant programmes (or their equivalents) (Vitae, 2018). There is also the factor of the supervisory relationship, with concerns from postgraduate research students echoing those of undergraduate students around information sharing and if disclosure will affect their supervisor’s perspective of them or affect their career progression (Vergunst & Swartz, 2020).

As well as barriers to disclosure, there were important findings around the impact of disclosure. Staff feel unsupported to make reasonable adjustments for students, despite feeling part of their role was to support students with mental illness to undertake their studies (Fossey et al. 2017). Universities need to consider and support the extra workload for staff who are dealing with student disclosures (McAllister et al., 2014). Currently, the evidence suggests staff feel there are not structures in place to aid them in supporting students (Student Minds 2018), as it has a detrimental emotional impact on them (Student Minds, 2018; Institute for Employment Studies, 2019; McAllister et al., 2014). Support for staff on dealing with disclosure from institutional case studies and surveys is mixed, at best (Institute for Employment Studies, 2019).

3. Establishing facilitators of disclosure

Some studies examined possible facilitators to disclosure, however there was not as much discussion and evidence for facilitators when compared to barriers and areas of concern. As could be expected, a common facilitator of disclosure was the attitudes of staff, with students being more likely to disclose if staff appeared supportive (Kranke et al., 2013), seemed to respect privacy (Venville, 2010), and engaged in check-in behaviours (Ramluggun et al., 2018).

One potentially concerning facilitator was the level of distress that students were experiencing. Students who are in higher levels of distress were more likely to consider disclosing (Corrigan et al., 2016; Ramluggun et al., 2018). Whilst these findings do allow understanding of a reason why students may choose disclosure, the sector may benefit from students feeling comfortable enough to disclose without experiencing high levels of distress.

There was suggestion of disclosing to informal sources (friends, partner, family) as a mediator to disclosing formally (Armiento et al., 2014), suggesting that the intersection between personal and institutional disclosure should be examined further. There was the idea presented from some studies that students would disclose to be a trailblazer (Stanley et al., 2011), a role model, to challenge misconceptions (Equality Challenge Unit, 2014), or to educate others (National Alliance on Mental Illness, 2012). There are valid concerns to be made about the individualisation here; should students themselves have to disclose to educate others, or should general attitudes to mental health at university be such that students do not have to disclose for the benefit of others? Some students who had disclosed did so because they felt mental health was a part of their life and it was necessary to talk about (Equality Challenge Unit, 2014). When examining facilitators of disclosure, it is important to consider the motivations behind the disclosure, and an argument could certainly be made that students should not feel they have to disclose to improve education levels of others surrounding mental health.

4. Communication, processes, and accessibility concerns

The typical system for disclosing to an institution involves the completion of forms, production of evidence and then dissemination of accommodations. It was found that there is a burden of evidence gathering for disclosing (Osborne, 2019), with forms noted to take a lot of time, and students being concerned that they might get them ‘wrong’ (Eccles et al., 2018). Particularly in the UK, the conceptualisation of mental health in university applications leaves little room for explanation, and students reported finding them confusing (Association for Young People, 2019). The Equality Challenge Unit (2014) recommends that when collecting information, universities need to be transparent around why they are collecting this information, and how it will be treated. The findings in this review found that this is seldom the case, with students unsure as to what universities will do with information relating to their mental health (Eccles et al., 2018), feeling like disclosing will cause them to lose control of their personal information (Venville, 2010), and not trusting that their information will remain confidential (National Alliance on Mental Illness, 2012).

If students accept all these concerns and do disclose, there are further communication and process issues. Multiple studies noted the issues with processes for communicating accommodations and adjustments (Redpath et al., 2013; Osborne, 2019; National Alliance on Mental Illness, 2012; Institute for Employment Studies, 2019; McAllister et al., 2014). When students disclose, it is imperative that accommodations are followed through on, and students do not have to continually re-disclose or self-advocate. Communication failures also affect staff who may be supporting students, who feel unaware of disclosure processes and unable to signpost students (Sniatecki et al., 2015; Osborne, 2019), and are often unsure around confidentiality and data protection if students choose to disclose to them (Institute for Employment Studies, 2019).

The grey area of what happens to disclosed information causes anxiety in students concerned that disclosures may lead to them losing their place at university, their disclosure following them to their future workplace or career journey (Martin, 2010), or enact fitness to practice boards or disciplinary procedures (Winter et al., 2018). It was noted in several papers that accessibility and availability of information on disclosure, disability services and information sharing processes needs to be improved (Redpath et al., 2013; Bathurst and Grove, 2000; Osborne, 2019; Ramluggun et al., 2018; Institute for Employment Studies, 2019).

5. Supporting mental health and wellbeing

One way that the evidence suggests that disclosure can be supported, is by universities critically examining their environment and how they more broadly support mental health and wellbeing. As discussed earlier, stigma and fear of judgement or ill-treatment has a significant effect on disclosure and non-disclosure carries an emotional toll for students (Brown et al., 2017). Recommendations from the research in this review highlighted the importance of a culture of trust and openness about mental health (Vitae, 2018), the need for clearer information sharing policies around mental health (Equality Challenge Unit, 2014) and acknowledging the tension between wellbeing rhetoric and institutional practice that staff feel, and working to reduce this (Woloshyn et al., 2019).

There was discussion in the literature reviewed around universal design and how this can reduce the need for disclosure, removing burden (Kent et al., 2018). Many helpful adjustments such as lecture breaks, recording of lectures, mindfulness around contact hours can be applied universally regardless of disclosure (Osborne, 2019), with universal design principles and wider accessibility adjustments felt to benefit students who have not disclosed, and reduce the necessity of disclosure for other students (Kent et al., 2018). Alongside improving processes, communication, and policies to encourage disclosure, there is an argument that could be made that the need for disclosure could be reduced if universities promoted a more supportive environment to mental health, wellbeing, disability, and accessibility.

Risk of bias across studies

To assess the risk of bias within the studies included in the evidence map, a number of tools were used dependent on the methodology of individual studies, which are detailed below.

Quantitative

For the survey based quantitative studies, bias was assessed using the Appraisal for Cross-Sectional Studies (AXIS) tool (Downes et al*.,* 2016), which is an interdisciplinary tool consisting of 20 components examining study aims, design, methodology, findings, and reporting. Across the studies, aims and objectives were clearly presented, and study designs were appropriate for the research purpose. The studies varied in methodological quality, with only one reporting a sample size calculation, and a minority of studies (3) gave no information on non-responders, or how they were addressed. As the studies were focused on university students and faculty, the target populations were consistently defined, however methods of sampling varied. It is noted that a number of studies aimed to investigate the experiences of disclosure, and disabled student disclosure, but recruited through the university or college disability office, meaning that students who had not registered with the disability unit (or disclosed to the university) may have been missed in the sample.

Whilst some studies utilised validated measures and reported the psychometric properties of these measures (such as the Symptom Checklist-90-R), over a third of the studies used measures they had developed and had not been previously trialled. One study utilised vignettes within their method, but description of this was limited and would not allow reproduction based upon the reporting. Statistical significance tended to be defined either at <.05, <.01 or <.001, with 95% confidence intervals. Limitations acknowledged by the authors were primarily the cross-sectional nature of their studies and single institution sampling, affecting the representativeness of their dataset. Nine of the fourteen studies explicitly stated ethical approval by the relevant institutional board. Of the five studies that did not report ethical approval, three sampled university faculty, so this may have affected the authors consideration of ethics and ethical review board involvement in study design, as one did mention the recruitment was based upon a publicly available database of residency directors. Across the studies, conclusions and recommendations for practice or future research were justified and referred back to both study findings, and the literature reviewed, however two studies did not explore the possible limitations of their research design and findings.

Table 4: Risk of Bias by Aims, Design and Methods, Results and Interpretation as assessed by the AXIS tool.

	Aims	Design and Method			Results	Interpretation	
Author	Aims	Sample	Measures	Clarity	Results	Discussion	Conflicts
Armiento (2014)	Low	Medium	Low	Low	Low	Low	Low
Grimes (2017)	Low	Medium	Medium	Low	Medium	Low	Medium
Grimes (2019)	Low	Medium	Low	Low	Medium	Low	Low
Hampole (2019)	Low	Medium	Low	Low	Low	Low	Medium
Mamboleo (2019)	Low	Medium	Low	Low	Medium	Low	Low
Mitchell (2018)	Low	Low	Low	Low	Low	Low	Low
Pheister (2020)	Low	Medium	Medium	Medium	Low	Low	Low
Sniatecki (2015)	Low	Medium	Medium	Low	Low	Low	High
Martin (2010)	Low	Medium	Medium	Medium	Medium	Low	High
Brown (2017)	Low	Medium	Low	Low	Low	Low	Low
Becker (2002)	Low	Medium	Medium	Low	Low	Low	High
Osborne (2019)	Low	Medium	Medium	Medium	Medium	Medium	High
Corrigan (2016)	Low	Medium	Medium	Low	Low	Low	Low
Kent (2018)	Low	Medium	Low	Low	Low	Medium	Low
Busch (2023)	Low	Medium	Low	Low	Low	Low	Low
Abraham (2022)	Low	Medium	Low	Low	Low	Low	Medium

Qualitative

The qualitative literature was assessed using the Johanna Briggs Institute Critical Appraisal Tool for Qualitative Studies (Lockwood et al., 2015), assessing the methodological quality of studies and if possibility of bias in design, conduct and analysis has been addressed. Across the 13 pieces of qualitative work, there was good congruity between research methodology and objectives, and the presentation of data and analysis gave sufficient detail and was justified. The amount of detail provided on analytic approach varied between studies, dependent on overall article length, but all studies stated their analytic approach, and how themes or narratives were developed. Participants and their voices were also adequately represented, with all studies providing direct participant quotations throughout their interpretation of the results, and one study (Ramluggun, 2018) explicitly stating that transcripts of the interviews were sent to participants to review accuracy.

The conclusions of the studies flowed logically and soundly from the data and interpretation. The risk of biases present within some of the qualitative work came from the lack of positioning of the researchers themselves, be that culturally or theoretically and over half of the qualitative studies gave no insight into the possible influence of the researcher on the research, or the results. This may be due to the scope of the journals which the studies were published in, as the majority (9) of the qualitative studies were published in education focused publications, with none of the studies coming from qualitative focused journals. Although these studies did not reflect on the role of the researcher, they did discuss the strengths and limitations of the methodological choices, which suggests that the role and / or position of the researcher was considered (if not explicitly discussed). Two of the studies provided no explicit detail on ethical approval but did appear to consider ethical issues and discussed issues of confidentiality, and anonymising participant information so that participants could not be identified from the publication. The majority of studies within this evidence map did not locate themselves within a theoretical or cultural framework, regardless of methodological choice. Studies that did locate themselves varied in the presentation of this, from a dedicated conceptual framework subsection within the literature review and rationale, to stating the adopted definitions and concepts referenced within the paper.

Table 5: Risk of Bias by study design, analysis and conduct assessed by the JBI Critical Appraisal Tool for Qualitative Studies

Author (date)	Risk of bias in Design Congruity between philosophical perspective and method, methodology and research questions, methodology and methods used?	Risk of bias in Analysis Congruity between research methodology and representation of data, research methodology and interpretation of results, conclusions flow from the analysis.	Risk of bias in Conduct Statement locating researcher culturally or theoretically, influence of the researcher on the research acknowledged, ethical approval, representation of participant voices
Woloshyn et al. (2019)	Low	Medium	High
Venville (2010)	Low	Low	Medium
Bathurst et al. (2000)	Low	Low	Medium
Vergunst et al. (2020)	Low	Low	Medium
Kranke et al. (2013)	Low	Low	Low
Ramluggun 2018	Low	Low	Medium
Redpath et al. (2013)	Low	Low	Medium
Rocco (2000)	Low	Low	High
McAllister et al. (2014)	Low	Low	Low
Fossey et al. (2017)	Low	Low	Low
Stanley et al. (2011)	Low	Low	Medium
Eccles et al. (2018)	Low	Low	Low

Grey literature

The included grey literature was assessed by the AACODS (Tyndall, 2010) tool, assessing authority, accuracy, coverage, objectivity, date, and significance. Risk of bias was generally quite low across all publications. All grey literature came from reputable authorities, acknowledging other work done within the field, and reports either explicitly referenced a steering group, advisory panel, and / or multiple authors from a multidisciplinary background who had input in the development of research, findings drawn and production of the reports within the introductory pages, or at the conclusions. Overall, methodological choices were appropriate for the research topic and participant groups, however the amount of detail provided on how these choices were made was mixed. Development of materials and specific questions asked within surveys or qualitative investigations were detailed within the majority of the reports, and where questions were not explicitly stated, they were interpretable from the reporting of findings. Limitations and biases were acknowledged where present, and findings were balanced with statistical information from other sources, or additional research from the organisation(s) authoring the report. Many of the grey literature reports were dual organisations working together, which reduced biases and possibility of ignoring relevant material.

Table 6: Risk of bias by Authority, Accuracy, Coverage and Objectivity, Date and Significance assessed by the AACODS tool

Author (Year)	Authority Reputable source, references other work in field	Accuracy Clearly stated aims, method, representative of work, appropriate data	Coverage and Objectivity Limits stated, biases and balances assessed or stated	Date and Significance Contemporary material referenced; date published related to content
Dig-In (2020)	Low	Low	Low	Low
Equality Challenge Unit (2014)	Low	Low	Medium	Low
Student Minds (2018)	Low	Low	Low	Low
Association for Young People's Health (2019)	Low	Medium	Medium	Low
Vitae and IES (2018)	Low	Low	Low	Low
Institute for Employment Studies (2019)	Low	Low	Medium	Low
Student Minds (2014)	Low	Low	Medium	Low
Institute for Public Policy Research (2017)	Low	Low	Low	Low
National Alliance on Mental Illness (2012)	Low	Medium	Low	Medium

Discussion

Returning to the key questions that this evidence map aimed to investigate, there is a mixture of evidence cataloguing the experiences of university student disclosure of mental health challenges. The majority of the evidence has been from the last ten years, and varied in its quality, with limited reference to theoretical frameworks, examinations of policies and limited distinction drawn between informal and formal disclosure. Research suggests that PGRs differ from other students in their disclosure experiences, partially due to the differences in application to study (as discussed in Chapter 1), but also due to their relationship with their supervisory team and other faculty members (which will be discussed in Chapters 3 & 4). The evidence suggests that professional students (such as medicine and nursing) may be less likely to disclose, and that staff have mixed levels of awareness and experience supporting disclosures.

Summary

A key barrier to disclosing or discussing mental health challenges was stigma; students feared being treated differently, judged, or denied accommodations if they spoke about their mental health. Staff needs were highlighted within several studies, showing the gaps in staff knowledge and ability to support students when deciding to disclose, or following disclosing their mental health. Both students and staff were unclear about what happens to information they disclose about their mental health, how it might be shared within their university, and how much control they had over any information they disclosed. There were several overlapping themes that most studies explored, as depicted in Figure 4.

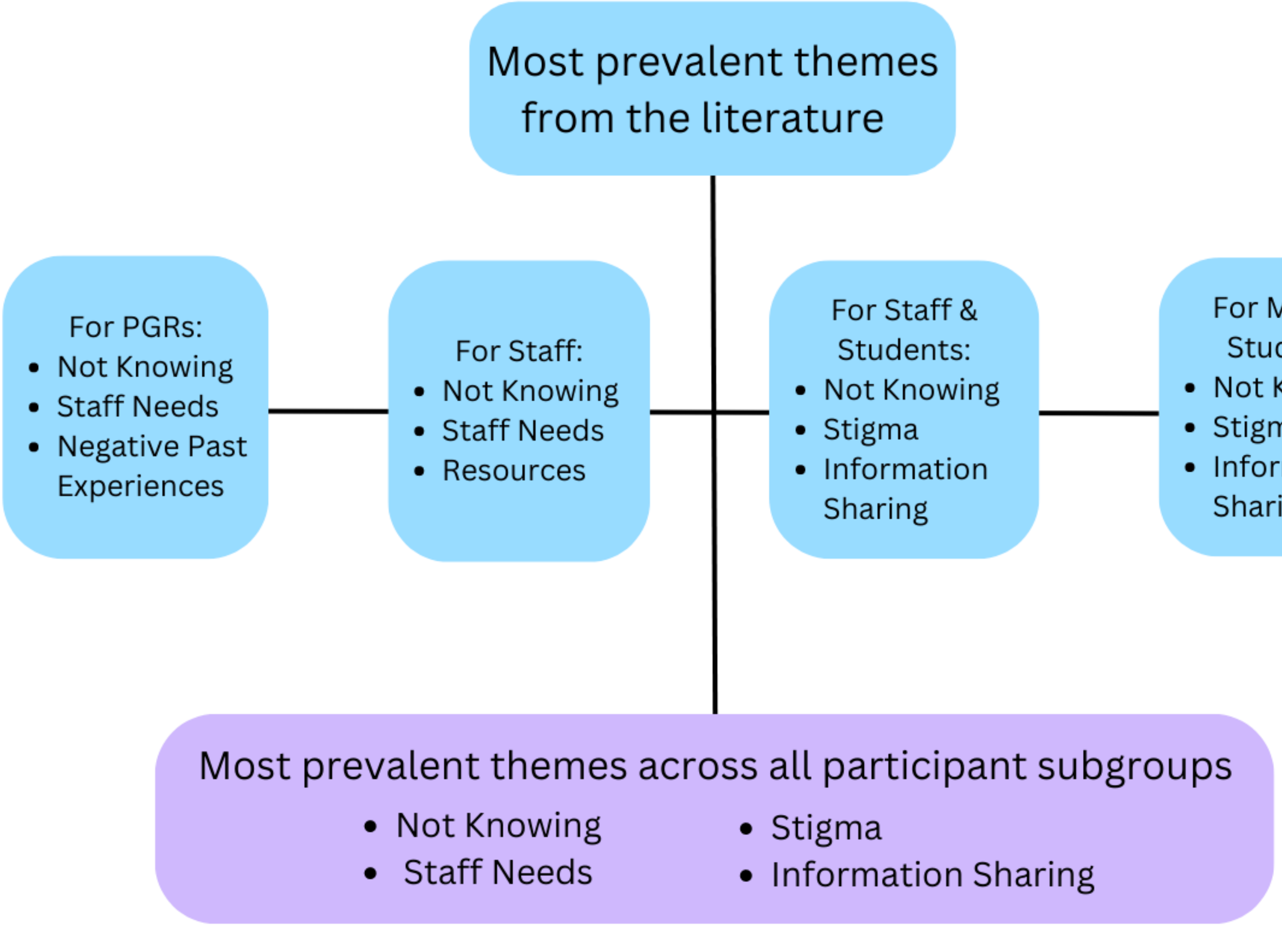


Figure 4: Top 3 issues for subgroups in the literature

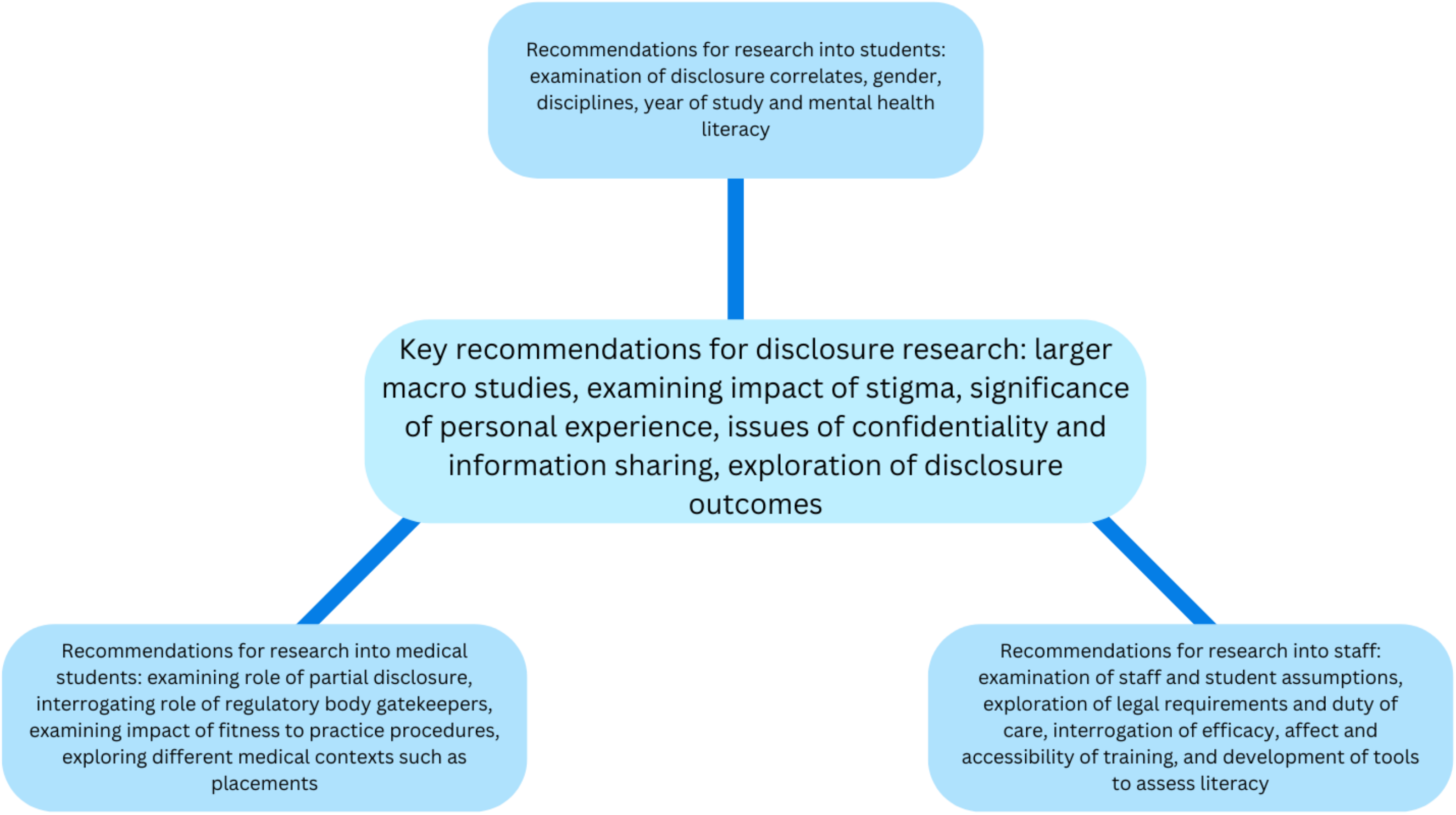
Alongside consideration of theoretical frameworks and positionality in the development of policies, and the creation of knowledge (research), it appears sensible to assert, from the research reviewed, that the impact of institutional approaches is often underacknowledged when examining disclosure. Studies tended to frame disclosure it as an individualised decision that requires intervention (or its outcome being an individual choice), negating the systems and processes that students must navigate and how that can impact on their identity, comfort, and play into existing fears of stigma and detrimental consequences.

Research often did not explicitly discuss impacts of demographic factors and emotional burdens of disclosure particularly among medical or professional students, due to their accountability to Fitness to Practice boards and governing bodies. Whilst discussions alluded to the emotional after-effects of disclosing, emotional burdens of disclosure and disclosure decisions were not explored. Similarly, research involving university staff did not discuss impacts of student demographics on mental health challenges, accessing support, or disclosure. This area is critical for future research, given the evidence around diagnosis and help-seeking (and difficulties in access) for certain demographic groups (such as non-white students (NUS, 2019), LGBTQ+ students (Kerr, Santurri & Peters, 2013), and part-time students (Office for Students, 2019).

There was a lack of literature examining disclosure timing, with only one study looking at the role of disclosure prior to enrolment. This could be due to the geographical spread of the literature, and whether international universities use systems such as UCAS where students can disclose on their application. For many postgraduates, applications are made directly to individual institutions, so opportunity to disclose may vary by institution. When literature examined the timing of disclosure, it was predominantly to highlight the reluctance of students to disclose until they have reached a crisis or extremely trying time with their mental health. Staff perceptions echoed this, stressing the efficacy of early disclosure to allow them to support, make adjustments and promote student mental health. There was also a lack of literature examining specific types of staff that students disclose to, or how relationships with staff affected disclosure decisions.

Future directions

Sixteen studies provided recommendations for future studies. There was some clear overlap between recommendations among the subgroups of literature, which are detailed below in Figure 5. As there was only one study specifically focused on PGRs, recommendations from this study have not been included in the figure, but all appeared in the key recommendations in line with recommendations from other subgroups. These recommendations mirror the gaps identified within the evidence map here, as examination of outcomes, demographic impact through larger populations, and confidentiality were identified as key factors influencing disclosure, that are often unexamined within the literature.



Recommendations for research into students: examination of disclosure correlates, gender, disciplines, year of study and mental health literacy

Key recommendations for disclosure research: larger macro studies, examining impact of stigma, significance of personal experience, issues of confidentiality and information sharing, exploration of disclosure outcomes

Recommendations for research into medical students: examining role of partial disclosure, interrogating role of regulatory body gatekeepers, examining impact of fitness to practice procedures, exploring different medical contexts such as placements

Recommendations for research into staff: examination of staff and student assumptions, exploration of legal requirements and duty of care, interrogation of efficacy, affect and accessibility of training, and development of tools to assess literacy

Figure 5: Depiction of overlapping key themes across the literature, and subgroup specific recommendations for future investigation

Additionally, there are some policies and practice-based changes that can be recommended following the disparities between research findings and official guidance and policies. A number of studies identified that students feared negative responses from disclosing, despite Universities UK (2015) Good Practice Guide recommending that students who disclose information about their mental health should not be viewed or responded to negatively, and that inductions for both staff and students should include information on disclosing, available support, and how to provide and signpost mental health support. The findings of the research reviewed here suggest that universities may not be following this guidance, despite it being five years old, and that there is more to be done in creating an open and safe space for mental health discussions and disclosures on campus. The Good Practice Guide also stresses that admissions processes should encourage disclosure, however the literature suggests that students are either; not encouraged to disclose in admissions, or do not feel comfortable doing so. With the findings that students are concerned about stigma, information sharing, and are often unaware of available support and how to disclose, this practice guidance does not seem to have been implemented in a way that encourages and allows for disclosure during the admissions process.

Within the literature on medical students, the issue of fitness to practice and disclosure was mentioned frequently, with students reluctant to share information about their mental health for fear of stigma, being seen as unfit to practice, and disclosures initiating fitness to practice committees and affecting their place at university. This is in direct contradiction with the guidance from the General Medical Council and the Medical Schools Council (2015), which states that the Councils will never remove doctors, or student doctors from the register solely because they have a mental health challenge. Clearly, this information and its implications have not been communicated to students adequately. Additionally, they stress that if students engage with their tutors and ask for support, there will be no need for fitness to practice committees to be involved. This does not reflect the feelings of medical students and student nurses, again suggesting that universities and medical schools have more to do in terms of communicating the meaning of fitness to practice committees, and reassuring students that there is nothing wrong with needing and/or seeking support for their mental health and dissuading their fears that struggling with their mental health will end their career in medicine.

Limitations

There are a number of limitations to this evidence map study. There are a lot of terms used to describe and discuss mental health within higher education, and research literature. Whilst the search strategy was developed systematically and with aid, there may be research that discussed disclosure in the context of disability, with reference to (but without explicit focus upon) mental health, and thus did not meet inclusion criteria. There is also the discussion point of the overlap between disclosing to one’s university or supervisor and disclosing one’s mental health status anonymously during a quantitative research study, or to a qualitative researcher. Whilst it was outside of the scope of this evidence map, there may be an interaction between those willing to disclose in a research study (or are attracted to participate in a study investigating disclosure) and those who disclose at university. As the focus of this evidence map was formal and informal disclosure to HEIs, studies that purely examined prevalence of mental health challenges were not included, however these are important to consider when looking at the landscape of student mental health and disclosure, as many of the prevalence statistics come from self-report data, which may or may not have examined disclosure within the university context. Additionally, the grey literature search may have been affected by the regional focus of Google search engine, and typically UK based reports cited other UK focused reports, meaning there may be more evidence internationally that was not captured in this searching.

Conclusions

This evidence map review has explored the existing literature around student and postgraduate disclosure perceptions and experiences. Students, PGRs and staff, across all disciplines and backgrounds appeared uncertain of the disclosure processes, outcomes, and impacts. There was a notable lack of studies examining postgraduate taught and postgraduate research students. Future research should examine postgraduate, and other specific student cohorts' perceptions and experiences of disclosing and discussing their mental health. Demographic factors and timings of disclosures are also under explored within the current research, however the interest in disclosure is growing within the research landscape, and this may improve in the future. The findings suggest there is a mismatch between official guidance and policies, and how they are communicated and advertised to students and faculty, and that there is more important work for universities to do to adequately support student mental health, the knowledge and understanding of both students and staff, and sufficiently training, resourcing, and supporting staff in their important pastoral role in encouraging students to thrive, despite experiencing mental health challenges.

In regard to the key questions that this evidence map was investigating, it is clear that whilst there is some evidence cataloguing the experiences of university student disclosure, this evidence is very limited in reference to PGR understandings and experiences. The evidence has primarily been focused on undergraduate populations, and the perceptions of PGRs requires further inquiry. The evidence catalogued here suggests that data about formal and informal modes of disclosure can be difficult to collect without a carefully considered sampling strategy; studies utilising university disability service information may miss non-disclosed students, and demographic information should be collected wherever possible, due to the links between demographic characteristics such as racial or ethnic backgrounds, disability identification, mental health identification and student cohort information and disclosure perceptions and behaviours.

The existing evidence suggests key barriers to student disclosure are stigma (from both peers and staff), not knowing how to disclose or who to disclose to, the availability of resources to enable disclosure and support students following disclosure, and levels of staff knowledge and understanding of university processes, and how to handle student disclosures. Enablers of disclosure are primarily information and understanding based; as a lack of resources and information hinders disclosure, accessible, open, and clear guidance can enable disclosure, alongside a university culture (and staff behaviour) of acceptance of mental health challenges, and acknowledgement that there is nothing wrong with seeking help.

Given the limited evidence, it is unclear whether PGRs differ from other taught students in disclosure perceptions, and this is an important area for further investigation. The current evidence suggests the supervisory role, and the difference in learning modes may have a large effect on PGR disclosure decisions. There has not been adequate research to state that disclosure perceptions definitely differ by subject or student group, but the evidence from medical and professional students highlights the challenges of disclosures in tandem with fitness to study or fitness to practice procedures, and the departmental responsibilities in educating students about these processes. Again, future research should carefully consider the demographic information they collect from student participants and be wary of over-representation; a number of studies utilised specific disciplines (primarily social sciences and psychology) for recruitment, which does not give a representative picture of students from other disciplines.

The evidence reviewed here suggests that staff are supporting disclosures, both informally and formally, but that on the whole, they do not feel supported and/or knowledgeable enough to do this well, and that the processes behind the scenes do not value this contribution or provide them with adequate resources to deal with the emotional effect of working with students who may be highly distressed. Staff knowledge of disclosure processes was mixed within this evidence, with uncertainty around legal obligations of staff, information sharing processes, signposting, and knowledge of the existing university services.

There are a number of gaps in the knowledge that this evidence map study uncovered, and some questions that are still left unanswered:

- We do not yet understand if student mental knowledge about mental health, disclosure processes, or help-seeking affects their willingness to disclose a mental health challenge to their university
- We do not yet understand the full range of student perspectives on formal and informal modes of disclosing or discussing a mental health challenge
- We do not yet fully understand the best ways that student understanding of disclosure processes can be improved
- We do not yet have sufficient exploration of the PGR disclosure experience, including the impact of the supervisory role, and dual teaching and student roles that many PGRs have

As such, a series of sequential research studies are presented within the following Chapters, with the aims of:

- Understanding the role that student mental health literacy, perceptions of help seeking and help seeking behaviours play in disclosure decisions (Chapter 3)
- Gaining insight into the reasons that students may choose institutional non-disclosure, or choose informal disclosure (Chapter 3 & 4)
- Understanding the student groups that may be more likely to choose institutional non-disclosure, and any interventions that may benefit them (Chapter 3)
- Identifying any differences between PGR perceptions of disclosure and perceptions of other student groups (Chapter 3 & 4)
- Gaining insight into the role that the supervisory relationship plays in PGRs perceptions of discussing or disclosing mental health challenges to their supervisors (Chapter 4)
- Understanding the experiences of PGRs who also work as staff members, and how this may impact their perceptions and understanding of disclosure and help-seeking processes (Chapter 4)

- Understanding the PGR supervisor perspective on discussion and disclosure of mental health challenges, and strategies HEIs can put in place to mitigate any issues of knowledge deficit, emotional impact, and acknowledgement of this role in terms of career development (Chapter 5).

These aims will help to fill the identified gaps and enhance our ability to answer questions about student and PGR mental health disclosure and provide important data in light of the considerations raised by this evidence map around participant characteristics, sampling and measures utilised. Additionally, meeting these aims will allow development of a model theory of change for encouraging disclosure and clear disclosure processes, which can be disseminated to inform university policy and practice, working to ensure that staff and students have accessible, clear, and well understood information on disclosure processes, the benefits and challenges of disclosure, and the rules which universities must follow in regard to data protection and information sharing. This will provide information and guidance to make an informed decision about the choices, outputs, and outcomes of disclosure, and help make disclosure decision making more understood and less burdensome.

Chapter 3: Student Mental Health Challenges: Support, Disclosure and Perceptions

Structure

The systematic review of literature surrounding disclosure identified a number of gaps in our current knowledge and understanding. The particular focus of this Chapter is on the distinction between formal and informal disclosure, and the impact of mental health literacy and knowledge about mental health, as well as general help-seeking intentions of students explored by a quantitative survey.

Introduction

Universities have a duty of care to all students, including students with mental health difficulties. In the UK, this protection is outlined in the Disability Discrimination Act (1995) and the Special Educational Needs and Disability Act (2001). However, for students to access many forms of support including specialist mentors, access to technology hardware and software, and extensions or accommodations to their work, students must disclose their challenges to their university as explored further in Chapter 1.

Disclosure is a complex decision for an individual to make, as potential benefits must be weighed against potential harms. Disclosure can facilitate support, both social and academic and is associated with increased use of health services and treatment adherence, however it also exposes the individual to potential experiences of prejudice and discrimination (Camacho, Reinka & Quinn, 2020). In the UK, the University and College Admission Service (UCAS) found that misinformation and misunderstanding surrounding disclosure affects the number of students that disclose their difficulties in their application (UCAS, 2021). This is in line with existing research showing that the majority of students will disclose when they first arrive at university (not on application) or at some stage during their study (Grimes, Southgate, Scevak, & Buchanan, 2019).

Research has shown many students are reluctant to make requests for accommodations and support whilst studying (Langørgen, Kermit & Magnus, 2018;

Corrigan et al., 2016). Previous work in this area has found that students fear negative outcomes and find institutional processes for formal disclosure difficult (Grimes et al., 2019). Students report feeling uncertain about how institutional processes work, how they should disclose, financial costs and access to resources (Student Minds, 2014, Metcalfe, Wilson, and Leveque, 2018, Aquino and Bittinger, 2019). As such, disclosure will now be examined in relation to this Chapter.

Disclosure

As described in Chapter 1, within this Thesis, formal disclosure refers to a student disclosing to the university Disability or Student Support service (or similar structure), where they must present evidence of their diagnosis and study needs, fill out forms, and (ideally) work with the services to gain access to support and have their needs disseminated to the relevant teaching and support staff. Informal disclosure refers to a student disclosing to a member of staff in any role at the university, without going through the formal process of presenting evidence, filling in forms or presenting directly to Student Services. Non-disclosure refers to a student choosing not to disclose formally or informally, despite the benefits that disclosure could bring. There is a need to understand the reasons that behind student disclosure choices; formal, informal, or non-disclosure, and identify potential predictors or factors that may affect disclosure choices.

Disclosure is the telling, revealing, or declaring of something about the individual, such as mental health. Literature focused on disclosure within the workplace (which one can argue the university context falls under, particularly for PGRs) has identified a number of disclosure dimensions, such as full or partial disclosure, voluntary or involuntary disclosure and triggering incidents (Brohan et al., 2012, Toth & Dewa, 2014). As identified within the previous Chapter, information sharing, and privacy concerns were consistently reported as barriers to disclosure across the studies included in the systematic review. It was thus deemed important to examine an individual’s tendency to disclose information to others and how that may then impact their likelihood to disclose their mental health challenge either formally or informally whilst at university.

Mental health literacy

Mental health literacy is commonly defined as understanding how to obtain and maintain positive mental health; this includes understanding mental health challenges and their potential treatments, knowledge and understanding of how to seek help for one's mental health and decreasing stigma relating to mental health challenges (Jorm, 2012). Previous research has shown significant correlations between student mental health literacy and help seeking behaviours (Gorczynski, Sims-Schouten and Wilson, 2020; O'Connor and Casey, 2015), suggesting that to understand help seeking around mental health, the mental health literacy (knowledge) of students should be considered. As mental health literacy is modifiable, the role of campus anti stigma campaigns and awareness campaigns may have an impact on student disclosure intentions and behaviours.

Stigma

Students' level of self-stigma and perceived stigma from others may affect their willingness to disclose and/or seek help. Corrigan (2004) writes that stigma can be seen as four social-cognitive processes, cues, stereotypes, prejudice, and discrimination. Avoidance can be a significant way that stigma impedes help seeking. Stigma has previously been identified as a key barrier to help seeking and disclosure within university students (Student Minds, 2014). Stigma can be split into self-stigma (the negative feelings an individual may have about themselves if they were to experience difficulties or seek help for their mental health) and stigma from others (the negative feelings an individual thinks others around them would have about them if they were to experience difficulties or seek help for their mental health). Stigma from others has been shown to be associated with help seeking behaviours (Vogel 2019), with those who fear stigma from others less likely to seek help, and reluctance to access counselling services in student populations (Vogel, Wade and Haake 2019; Pedersen and Paves, 2014), and self-stigma has been shown to affect student willingness to seek help (Larrahondo et al., 2020) and attitudes to counselling (Bathjie and Pryor, 2011).

Help seeking

Help seeking for mental health challenges is defined by Rickwood and Thomas (2012) as ‘an adaptive coping process that is the attempt to obtain external assistance to deal with mental health concerns’ (p 180). Help seeking can be both formal and informal. Formal help seeking includes methods such as visiting a G.P. or doctor, presenting to mental health services, or seeking support from a mental health charity. Informal help seeking involves seeking support from family, friends, peers, or casual support groups such as online forums. In order to capture the barriers and facilitators to help seeking, it is important to consider both formal and informal sources. Help seeking intentions have been shown to be related to previous experiences of mental health care (Wilson, Deane, Ciarrochi et al., 2005) and help seeking intentions are significantly correlated with actual help seeking behaviour in university students (Clough, Nazareth, Day et al., 2018). Research with students utilising the Theory of Planned Behaviour and viewing intention as the strongest predictor of actual behaviour has shown that demographic factors (such as age and gender) predicted help seeking intentions for seeking help from sources such as friends and family, a GP, or a helpline (Cage, Stock, Sharpington et al., 2018). Help seeking and disclosure are often intertwined due to university processes and procedures and thus it is necessary to understand student perceptions of help seeking as a potential moderating factor influencing their disclosure intentions and experiences.

Demographic and student characteristics

Literature has identified potential interactions between demographic characteristics and experiencing mental health challenges; in particular surrounding gender and ethnicity, with work suggesting young women may be more likely to experience common mental health problems than young men (Adult Psychiatric Morbidity Survey, 2014), and differences in willingness to talk about and seek help for mental health between ethnic groups (APMS, 2014, Time to Change, 2009; Pedersen and Paves, 2014). Evidence suggests that STEM students have been shown to be less aware of warning signs and support that exists for mental health (Kalkbrenner, James & Pérez-Rojas, 2020), and systematic review identifies postgraduate students experiencing high levels of depression, anxiety, and suicidal ideation (Satinsky et al., 2021). Therefore, any investigation into why students may or may not disclose should consider demographic and student characteristics.

Disclosure pathways

Disclosure is a complex decision for individuals. Students' disclosure pathways (i.e., formal, or informal disclosure), can have salient implications for their academic success and attrition, given the necessity of formal disclosure to access a lot of specialist support. Disclosure pathways can also lead to partial disclosure, where a student may disclose part of their challenges, and omit others; this can be seen in students disclosing a physical disability but not their mental health status, in order to access support (Student Minds, 2014, Brohan et al., 2012). Data from the UK Higher Education Statistics Agency shows that students tend to disclose through application or at enrolment, and if they do not, they will tend to only disclose when their mental health begins to deteriorate significantly or is having a substantive negative impact on their studies. Understanding the different pathways students may travel in their disclosure journey, and the factors that may affect disclosure decisions such as mental health literacy, stigma (or fear of) and perceptions of support is crucial to: a) interpretation of data around prevalence of student mental health challenges; b) effectively resourcing support; c) ensuring that university systems and staff are suitably equipped to support disclosure decisions; and d) work towards the principles of a whole university approach to supporting mental health and wellbeing.

As mental health literacy, stigma and help seeking behaviours have been shown to influence student decisions to access support, and accessing formal support necessitates disclosure, an investigation into the factors affecting disclosure is necessary. Given the lack of evidence surrounding disclosure pathways, both formal and informal disclosure of mental health challenges were investigated. Therefore, the objectives of this study were as follows.

Objectives

1. To understand if student mental health literacy and perceptions of help-seeking for mental health challenges affects their willingness to disclose a mental health challenge to their university.
    a. To identify if different student groups have different levels of mental health literacy
    b. To identify if student mental health literacy levels affect disclosure willingness and perceptions of disclosure
2. To explore student perspectives on formal and informal modes of disclosing or discussing a mental health challenge.
    a. To explore student perspectives on formally disclosing mental health challenges to their university
    b. To explore student perspectives on informally disclosing mental health challenges to a staff member or their supervisor
    c. To explore student willingness to potentially disclose a mental health challenge formally
    d. To explore student willingness to potentially disclose a mental health challenge informally
    e. To gain insight into the reasons students may choose institutional non-disclosure, or informal disclosure
3. To explore student understanding and experiences of disclosure processes in UK universities.
    a. To identify if PGR perceptions are different from other student groups
    b. To gain insight into the role the supervisory relationship of PGR students plays in their perceptions of discussing or disclosing mental health challenges

Hypotheses

Hypothesis 1a: Student mental health literacy and general help seeking attitudes will affect their perceptions of disclosure (Objectives 1, 1a, 1b, 2e)

Hypothesis 1b: Student mental health literacy and general help seeking attitudes will vary by demographic details, specifically gender, age, and level of study (Objective 1, 1a, 2a, 2b, 2c, 2d, 2e, 3, 3a)

Hypothesis 1c: Student demographic details will affect their perceptions of disclosure (Objectives 1 and 2)

Hypothesis 2a: Student mental health literacy and general help seeking attitudes will affect their perceptions of formal and informal disclosure (Objectives 1 and 2)

Hypothesis 2b: PGR students will have different perceptions of informal disclosure due to the supervisory relationship (Objective 3)

Methods

Design

An online cross-sectional survey was designed utilising the Microsoft Forms platform.

Sampling

Eligibility criteria

Any current university students studying at a UK Higher Education Institution were eligible. Participants were not excluded based on type of qualification (BSc/BA, MSc, PhD, PGCE, etc.) as long as they were enrolled at a UK HEI. No restrictions were placed on participation based on respondents' mental health or disability status. Students with and without experience of mental health challenges were eligible to participate. Screening questions allowed the separation of postgraduate research students for relevant questions.

Sample size

Assuming a medium-size relationship (effect size) between the dependent variable (disclosure) and independent variables (demographic and / or student characteristics and help-seeking measures), a model with 18 independent variables requires a sample size of at least n=194 for testing the significance of the multiple correlation at $\alpha=0.05$ and $\beta=20$, and at least n=122 for testing the significance of individual variables. The estimated sample size to give sufficient power for this study requires a sample size of at least n=194 for significance of the overall R^2 and individual predictors (Tabachnik and Fidell, 1996).

Data collection

The survey was conducted through Microsoft Forms (UEA licensed software which meets GDPR requirements). The survey was open for 8 weeks from 14th April 2021 to 23rd June 2021 to allow sufficient time for responses.

The survey was advertised through social media (Twitter) and the researcher's personal networks such as SMaRteN (the student mental health research network) and the McPin Foundation. Access to advertising was gained following successful ethical approval, in line with the group's guidelines for advertising research studies.

Measures

Demographic information

A number of demographic details were collected from participants, based on previous literature surrounding interactions between demographic characteristics and mental health challenges. These are detailed below.

Age. Many mental health challenges emerge between adolescence and early adulthood. Studies utilising the World Health Organisation World Mental Health Survey have found that half of all lifetime mental health disorders (defined by the DSM-IV) emerged before age 14, and three quarters by age 24 (Kessler et al., 2005). Evidence from the British Birth Cohort study found that in over 5,000 participants born in 1946, the presence of a common mental health concern in their teenage years was highly associated with the presence of mental health disorders in middle life (ages 36, 43, 53), and similar longitudinal work from New Zealand reported that over 78% of adults with a diagnosed mental health disorder were diagnosed before they turned 18, and 58% before they were 15 years old (Jones, 2018).

Gender identification. The Adult Psychiatric Morbidity Survey (AMPS, 2014) found that women between 1 and 24 were three times as likely to experience common mental health problems. Suicidal thoughts in men have been shown to be rising over the last 10 years, and men are a high-risk group for suicide completion (Mind, 2020). More than a third of Trans students surveyed have faced negative comments or conduct from university staff (Stonewall, 2018). Trans students have been shown to indicate significantly higher levels of distress than cisgender students in a UK wide study (Gorczynski, Sims-Schouten & Wilson, 2020), and data from the National Union of Students (NUS, 2015) found that trans students were more likely to consider dropping out of university.

Ethnicity/ Race. The APMS (2014) found that Black women were the most likely group of women to experience common mental health problems. It also found that

Black adults had the lowest treatment rate of any ethnic group. Students race and ethnicity can significantly affect their degree outcomes and hate incidents can result in mental health problems (NUS, 2019). In 2009, Time to Change found only a fifth of BME people feel able to talk about their mental health, and women of colour have higher rates of mental illness than more privileged groups. NUS (2019) reported a 13% attainment gap between Black, Asian, and Minority Ethnic students compared to their White counterparts in the 2017/18 graduating year.

Mode and level of study. Full time and part-time students have been shown to have different continuation and attrition if they experience mental health challenges. Data from the Office for Students (2019) found that there was around 10 percentage points difference in the continuation rate of part time students with a mental health challenge compared to the whole part-time student cohort. Systematic reviews have also identified postgraduate students experience high levels of depression, anxiety, and suicidal ideation (Satinsky et al., 2021).

Primary subject / study area. STEM students have been shown to be less aware of warning signs and resources for mental health and less likely to engage with counselling services than students in nursing, human services, and psychology (Kalkbrenner, James & Pérez-Rojas, 2020). Lipson et al. (2015) found that students in art and design subjects were more likely to screen positive for depression and anxiety or meet the criteria for at least one mental health problem at undergraduate, masters and doctoral levels than students in business and public health subjects.

Primary study environment. Medical students have been shown to have a higher prevalence of mental ill-health (Royal Medical Benevolent Fund, 2018) and high emotional demanding workplaces like hospitals have been shown to impact student mental health in nurses and other professional disciplines (Royal College of Nurses, 2018).

First generation academic identification. Parental education qualification and occupational group have been shown to be strong predictors of mental health problems (Mental Health Foundation, 2016). First generation students have also been shown to be more likely to experience symptoms of depression and lower use of university services (Stebleton, Soria, Huesman, 2014).

LGBTQ+ identification. Half of the LGBTQ+ students surveyed by YouGov and Stonewall had experienced depression (Stonewall, 2018). Bisexual and lesbian undergraduate college students have been found to have a greater likelihood of experiencing mental health challenges than their heterosexual counterparts (Kerr, Santurri & Peters, 2013). Heterosexual students in a UK wide study have also been shown to exhibit greater help-seeking intentions than their LGBTQ+ peers (Gorczynski, Sims-Schouten & Wilson, 2020).

Disability identification. There is a attainment gap of around 2.8 percentage points between disabled and non-disabled students, and students who report disability have both lower overall degree results and lower rates of employment following graduation (Office for Students, 2019). The AMPS (2014) found that symptoms of mental health conditions were more likely in those with long term conditions than without, and wellbeing scores on the WEMWBS were lower for individuals with physical disability than those without disability.

Mental health identification. Continuation rates of students with mental health challenges are lower than the progression rates of students without mental health challenges, with students less likely to receive a First Class or Upper Second degree if they experienced a mental health condition. In 2016-2017, students with a mental health condition were 4 percentage points less likely to enter skilled work or further study following graduation (Office for Students, 2019). As previous research has identified that utilising lists of categories can make it problematic for students to fit themselves into specific categories (Lister et al., 2021), both disability and mental health identification questions were type-in answers for if students wished to define their struggles, rather than presenting them with the HESA categories or other list of diagnoses or challenges.

Caring responsibility identification. Carers UK (2015) found that over half of carers suffered from depression as a result of their caring role (55%). Student parents have also been shown to be an at-risk group for student retention (NUS, 2009). There can often be a tension between parental or care-work and study-work, with study-work commonly having to be relegated and squeezed in around or after caring (Burford and Hook, 2019).

Current disclosure status. Systematic reviews of mental health stigma and help-seeking have identified disclosure issues as a particular concern emerging from over 144 studies (21% of which were conducted with university students) between 1980-2011, with over a third of studies noting disclosure concerns as a key barrier, higher than stigma itself (Clement et al, 2015).

As discussed in Chapter 1, there are a number of barriers to gaining evidence for mental health challenges, and disability categorisation. This, alongside the highly personal nature of mental health challenges, disability, sexuality, or gender identity, racial or ethnic background, generational academic status and caring responsibilities led to the choice to frame these demographic characteristics as identity based. As it is not within the researchers remit morally, or in terms of resources, to judge group belonging status, it was felt that identity-based framing of these was most appropriate. This, it is also hoped, will allow the participants agency in their responses, and provide better insight into respondent perceptions of these issues, especially around disclosure, mental health challenges, and disability.

Mental health literacy

The concept of mental health literacy has arisen from the concept of health literacy. Mental health literacy is commonly defined as understanding how to obtain and maintain positive mental health; this includes understanding mental health challenges and their potential treatments, knowledge and understanding of how to seek help for one’s mental health and decreasing stigma relating to mental health challenges (Jorm, 2012). Mental health literacy has previously been shown to be significantly positively correlated with help-seeking behaviour among university students. In light of the findings from Chapter 2, the concept of mental health literacy, including knowledge about support was measured as this was a key theme across the studies included in the systematic review.

The Mental Health Literacy Scale

The Mental Health Literacy Scale (O'Connor and Casey, 2015) is a scale-based measure designed to assess mental health literacy. The Mental Health Literacy Scale (MHLS) short form consists of 13 items about perceptions of mental illness, understanding of mental ill health, knowledge and understanding of gaining support for mental health, and how to access support.

Items and Scoring

Items are scored 1-5 (1= strongly disagree, 5= strongly agree), 8 items are reverse scored, and the sum of the items provides a numerical value of participants mental health literacy. The MHLS is a free to use scale (ensuring author citation). An example item of the MHLS is *"If I had a mental illness, I would not seek help from a mental health professional".*

Previous use

The MHLS has been used in a number of populations.

- O'Connor and Casey (2015) used the scale in a population of 378 undergraduate university students, finding that MHLS scores were significantly correlated with help seeking scores. They found the scale to have good internal and test-retest validity, with a reliability alpha of α =.87.
- Clough (2018) also utilised the scale in a population of Australian university students, both domestic (n= 148) and international (n= 209). They found that male students, and international students had lower levels of mental health literacy than their female and domestic counterparts, and levels of mental health literacy were lowest in newer students. They also reported good internal consistency of the measure α =.92.
- Gorczynski et al. (2017) measured 380 students mental health literacy and behaviours, with higher mental health literacy observed within women, and postgraduate students, compared to men and undergraduate students, and significant positive correlations between mental health literacy and help-seeking behaviours.
- Yun Lee (2020) utilised the MHLS in a general adult population (n= 732). They found that females had higher levels of mental health literacy than

males, and older adults had lower levels than younger adults. They found that increases in health literacy were linked to an increase in mental health literacy, and that increases in social support contributed to increases in mental health literacy. They also reported good consistency of the measure (α =.87).

- Korhonen (2019) utilised the MHLS in a population of primary care workers in South Africa and Zambia (n= 21). Individual item rankings ranged from 0.82-1.00 from professional research experts (n= 11) and .91-1.00 among clinical experts (n= 10). They found the average content validity index of all items was =.95.

Stigma

Corrigan (2004) writes that stigma can be seen as four social-cognitive processes, cues, stereotypes, prejudice, and discrimination. Avoidance can be a significant way that stigma impedes help seeking. Stigma has previously been identified as a key barrier to help seeking and disclosure within university students (Student Minds, 2014). Stigma was a prevalent theme across all studies within the systematic review reported on in Chapter 2, with a common recommendation from existing studies being for disclosure research to examine stigma.

Perception of Stigmatisation by Others for Seeking Help Scale

The Perception of Stigmatisation by Others for Seeking Help scale (PSOSH, Vogel et al., 2009) is a scale-based measure designed to assess perceived stigma from others if one was to seek psychological help. The PSOSH consists of 5 items about how respondents think people they know would react to them seeking professional help. The fear of stigmatising responses from staff was noted to be a barrier for student disclosure within the systematic review.

Items and scoring

Items are scored 1-5 (1= not at all, 5 = a great deal), and a sum of the items gives the PSOSH score. The PSOSH scale is free to use for research purposes (with author citation). An example item of the PSOSH is "*Imagine that you had an emotional or* *personal issue that you could not solve on your own. If you sought professional help for this issue, to what degree do you believe that the people you interact with would react negatively to you?”*.

Previous use

The PSOSH has previously been used in student and general adult populations.

- Vogel et al. (2009) utilised the scale with US college students (n= 985). PSOSH scores were associated with help seeking and predicted self-stigma scores (α =.91). In a further sample of students (n= 506), they found concurrent validity with self-stigma (r=.37), public stigma of mental illness (r=.20), public stigma for counselling (r=.31). In a sample of 144, test-retest validity was reported at =.82, and reliability of the PSOSH was reported at =.78.
- Vogel et al. (2019) utilised the scale in an international student sample to assess validity. Within Australian university students α =.90, Brazilian students α =.85, Canadian students α =.91, students from Hong Kong α =.90, Portuguese students α =.88, Romanian students α =.89, Taiwanese students α =.90, Turkish students α =.89, students from the UEA α =.86, students from the UK α =.89 and students from the USA α =.83. They reported full metric invariance of the scale for Australian, Canadian, Portuguese, Romanian, Turkish, UEA and UK students. Partial metric invariance was reported from Brazilian, Taiwanese, USA, and Hong Kong populations, suggesting that the PSOSH items largely measure the constructs equivalently across countries.
- Khairudin (2017) utilised the scale in a sample of Malaysian community college students (n= 353) where it demonstrated valid psychometric properties, with internal consistency reported at =.84 and test-retest validity reported at =.72.
- Swan (2016) utilised the PSOSH in a general adult population form the USA (n= 293), reporting consistency of α =.92.

Self-Stigma of Seeking Psychology Help scale

The Self-Stigma of Seeking Psychology Help (SSOSH) scale (Vogel et al., 2006) is a scale-based measure designed to assess the self-stigma of seeking psychological help. The SSOSH consists of 10 items about self-stigma, feelings about seeking help, and how seeking psychological help may affect one's self esteem and self-worth.

Items and scoring

Items are scored 1-5 (1= strongly disagree, 5= strongly agree), 5 items are reverse scored, and the sum of the items provides a numerical value of participants self-stigma for seeking psychological help. The SSOSH scale is free to use for research purposes (with author citation). An example item of the SSOSH is "*I would feel inadequate if I went to a professional for psychological help".*

Previous use

The SSOSH has been used in a number of student populations

- Vogel et al. (2006) utilised the SSOSH in a sample of US college students (n= 583), reporting reliability α =.91. In a follow up sample at three timepoints (n= 470; 546; 212), validity ranged between α =.86-.90, with test-retest validity at =.72. They found strong internal consistency, reliability, and 2-month test-retest validity.
- Larrahondo et al. (2020) used the SSOSH in a population of Columbian medical students (n= 384). They found differences in SSOSH scores between those willing to seek help for their mental health, and those not willing, with consistency α =.80 (95% CI), and test-retest CCI at =.77.
- Vogel et al. (2013) tested the SSOSH in a number of international student groups from England, Greece, Israel, Taiwan, Turkey, and the USA. Overall reliability of the SSOSH was reported at α =.85 (95% CI). 80-100% of the items showed invariance. The configural invariance of the items was significant at p<.001, showing the SSOSH largely maintained its accuracy of measurement across cultural groups.
- Sezer et al. (2013) used the SSOSH in a sample of Turkish university students (n= 503), reporting consistency α =.90, a stability coefficient of =.82, and

concurrent validity =.71. They found the SSOSH a reliable and valid measure of self-stigma for seeking help in university students.

- Bathjie et al. (2011) utilised the SSOSH in a sample of US college students (n= 211) reporting internal consistency of =.83. They found endorsement of self-stigma beliefs were directly related to attitudes toward seeking counselling.
- Shepherd et al. (2012) used the SSOSH in a sample of US college students (n= 176), finding that self-stigma of help seeking was a mediating factor between gender role conflict and intentions to seek help, reporting a reliability α =.89.
- Brenner et al. (2020) used the SSOSH with US college students (n= 661) and reported the internal consistency of the measure at =.90.

Help Seeking

Help seeking for mental health challenges is defined by Rickwood and Thomas (2012) as ‘an adaptive coping process that is the attempt to obtain external assistance to deal with mental health concerns’ (page 180). Help seeking can be both formal and informal. Formal help seeking includes methods such as visiting a GP or doctor, presenting to mental health services, or seeking support from a mental health charity. Informal help seeking involves seeking support from family, friends, peers, or casual support groups such as online forums. In order to capture the barriers and facilitators to help seeking, it is important to consider both formal and informal sources.

General Help Seeking Questionnaire

The General Help Seeking Questionnaire (GHSQ, Wilson et al., 2005) is a scale-based measure designed to assess respondent intentions to seek help from different sources and for different problems. The GHSQ consists of 11 items about whether preferred sources of help are related to disclosure decisions.

Items and Scoring

Items are scored 1-5 (1 = extremely unlikely, 5 = extremely likely) with scores being reported for each individual potential help source, including formal and informal sources; intimate partner, friend, parent, family member, university tutor, mental health professional, telephone/online resource, GP, religious leader, no-one, or another source. The GHSQ is a free to use measure. An example item of the GHSQ is "*If you were having a personal or emotional problem, how likely is it that you would seek help from your university tutor or supervisor?".*

In order to capture all possible help sources for those who selected they would seek help from another source, an open ended response was offered to respondents; *"If you indicated that you would seek help from another source which was not listed, please use this space to indicate what that source would be, if you are comfortable sharing this information".* Respondents were allocated up to 200 words to report where they would seek help for a personal or emotional problem that was not one of the listed options.

Previous Use

The GHSQ has been utilised within a range of student and adult populations:

- Wilson et al. (2005) utilised the GHSQ in Canadian high school students (n= 218) finding significant positive correlations between intentions to seek mental health care and actually seeking help. They found perceptions of quality in previously accessed mental health care was positively related to help seeking intentions. They found good test-retest validity at =.92 and good reliability α= .85.
- Clough et al. (2018) utilised the GHSQ in a sample of domestic (n= 148) and international (n= 209) Australian university students, reporting it to be a flexible and sensible format for assessing help seeking intentions, with acceptable internal consistency of α= .72.
- Coral et al. (2011) utilised the GHSQ in a sample of university students (n = 150) finding GHSQ scores were significantly corelated with actual help seeking behaviour (rs=.17, p<0.05), good test-retest reliability (r= .92) and good internal consistency of α= .83.

- Hammer et al. (2018) used the GHSQ within a population of community dwelling adults who identified as experiencing mental health problems (n = 405). They found the GHSQ a good scale for comparing intention to seek help from formal versus informal sources, with validity and predictive evidence reported at 64.6% ($r2= .11$). internal consistency was reported at $\alpha= .66$.

Disclosure

Disclosure is the telling, revealing, or declaring of something about the individual, such as mental health. Disclosure can take multiple forms and be classified as both formal and informal, as explored in detail in Chapter 1 of the Thesis. As individuals differ in their comfort and openness around disclosure and privacy, it was deemed important to examine an individual's tendency to disclose information to others and how that may then impact their likelihood to disclose their mental health challenge either formally or informally whilst at university.

Distress Disclosure Index

The Distress Disclosure Index (DDI, Kahn et al., 2001) is a scale-based measure designed to assess respondents' tendency to disclose distressing information to others. The DDI consists of 12 items about whether people are likely to talk about their emotions, if they feel doing so is distressing, and how they might go about getting help or support for their wellbeing and mental health.

Items and Scoring

Items are scored on a scale 1-5 (1= strongly disagree, 5= strongly agree), 6 items are reverse scored, and the sum of the items provides a numerical value of respondents' disclosure distress. The DDI is a free to use measure for students and members of the scientific community (with citation). An example item of the DDI is *"When something unpleasant happens to me, I often look for someone to talk to".*

Previous Use

The DDI has been used in a number of settings:

- Kahn et al. (2011) used the DDI in a sample of US college students and non-student peers (n= 306). They found distress disclosure was predictive of respondents' naturalistic disclosure to support networks, with good test-retest reliability of =.80 and high internal consistency of α= .93.
- Kahn et al. (2011) examined the DDI scales international reliability and consistency, with samples of college students from 30 countries. They found it was a reliable measure across samples, with reliability ranging from =.89-.95 and good mean internal consistency of α= .82.
- Wei et al. (2005) utilised the DDI at two time points with college students (n= 208), finding that comfort with self-disclosure serves as a mediator for attachment avoidance and feelings of loneliness. Consistency was good at both timepoints; α= .94 at time 1 and α=. 93 at time 2.
- Van Harreveld et al. (2007) used the DDI in a population of adult prison inmates (n = 30). They found DDI scores were negatively corelated with psychological stress, depressed mood, and physical wellbeing. The DDI had lower internal consistency within this population of α=.52.

Disclosure experiences, willingness, and intentions

In addition to the measures reported above, a number of questions were created based upon the findings of the systematic review evidence map. These questions were about disclosing mental health challenges, and how universities approach this with students. Based upon the findings of the evidence map (Chapter 2) and overall literature review (Chapter 1) questions were posed surrounding;

- <u>Formal disclosure:</u> This question asked if students had formally disclosed through Student Support, Disability Support, or UCAS applications.
- <u>Informal disclosure:</u> This question asked if students had informally discussed or disclosed information about their mental health to a member of university staff.
- <u>Disclosure intentions:</u> These questions asked about if students were to experience a mental health challenge during their studies, if they thought they would disclose this to the university formally. Students were then asked, if they were to experience a mental health challenge during their

studies, if they would discuss or disclose this informally to a member of staff. Examples of staff provided were lecturers, tutors, and laboratory technicians, based upon recent literature of the main faculty recipients of student disclosures. Students were asked if they were to experience a mental health challenge during their studies, if they thought they would benefit from the ability to disclose this at any point following their enrolment. Examples of this included the start of studies, the middle of 2nd or 3rd semesters, or around the examination periods.

- Information and resources: These questions asked about the information and resources available around disclosure and mental health. Students were asked if they were made aware of any information on disclosing a mental health challenge before applying to their course or during their course induction, and whether they felt information being available to them would have influenced their decision to disclose or not disclose a possible mental health challenge.

Free text questions

As noted by Rich, Chojenta and Loxton (2013), the detail provided by free text comments can offer both important context when interpreting participant responses and reveal issues that purely quantitative measures may be unable to capture (or make difficult to do so). As such, in addition to the demographic and study characteristic questions, and the standardised measures, respondents were given a number of free text response boxes, described here in the order they appeared in the survey. In line with Braun and Clarke (2013) suggestion, the free text topic data was positioned in the survey before questions relating to demographics as they highlight the likelihood of engagement with demographic or personal detail related questions being answered is higher when participants have finished answering the topic questions.

- Help seeking sources. Following completion of the GHSQ, participants were presented with an optional free text response box asking, "*If you indicated you would seek help from another sources which was not listed, please use this space to indicate what that source would be, if you are comfortable with* *sharing this information"* and 200 words to describe any other help source they might be likely to seek help from.

- Formal disclosure. Following the Yes/No/PNTS question about formally disclosing a mental health challenge or disability to their university, respondents were presented with a series of optional free text response boxes asking:
    - *"If Yes, how would you describe this experience?"*
    - *"If Yes, did you receive accommodations or adjustments following disclosure?"*
    - *"If Yes, how long ago was this?"*
    - *"If no, would you be willing to briefly explain why? (Possible reasons could be not knowing that you could get support whilst studying, not wanting others to treat you differently, not knowing what would happen to this information, etc.)"*

  Respondents were provided with up to 50 words to detail how long ago their disclosure was, and up to 200 words for all the other questions to describe their experiences, accommodations gained, or why they did not disclose.

- Informal disclosure. Following the Yes/ No/ Unsure / PNTS question about informally disclosing a mental health challenge to a member of university staff, respondents were presented with a series of optional free text responses asking:
    - *"If Yes, could you describe who you disclosed to?"*
    - *"If Yes, how would you describe this experience?"*
    - *"If Yes, would you encourage other students to do so if they are having difficulties?"*

  Respondents were provided with up to 200 words to describe their experiences, who they disclosed to, and any thoughts relating to why they would or would not encourage other students to informally disclose if they were experiencing difficulties with their mental health.

Potential formal disclosure: Following the Yes/ No/ Unsure question relating to whether they would formally disclose a mental health challenge in the future, respondents were asked the optional question "*What factors do you think would influence this decision?"* Participants were provided with up to 200 words to describe the factors they thought might influence their decision to formally disclose in the future.

- Potential informal disclosure: Following the Yes/ No/ Unsure question relating to whether they would informally disclose a mental health challenge to a member of staff (examples given were; a lecturer, tutor, laboratory technician, etc.), respondents were again presented with an optional question "*What factors do you think would influence this decision?",* and provided with up to 200 words to describe the factors they thought might influence their decision to informally disclose in the future

- Additions: Following the completion of the survey, respondents were presented with the optional question *"Do you have any other thoughts or views on these topics that you would like to share?".* Respondents were provided with up to 500 words for this question due to the range of thoughts and views that participation in the survey may have elicited.

A full copy of the survey can be found in Appendix 7.

Analytic plan

Statistical analysis

Data was analysed utilising IBM SPSS statistics (version 25.0)

Descriptive analyses

Demographic characteristics of participants were described. This allowed for appropriate selection of further analyses based upon sample size and the data characteristics. Demographic and cohort information also allowed analysis of associations between groups such as medical students, undergraduate students, PGRs, with additional correlates of gender, age, and other demographic factors. A series of correlations were calculated, looking for example at; PGR student mental health literacy, undergraduate student mental health literacy, home or international student status and general help seeking attitudes etc. Correlations were calculated for all demographic variables to see any underlying associations between student study characteristics, student demographics, and survey measures to address Hypothesis 2a and 2b.

- To see the significance of any group differences, there a series of t-tests were conducted assessing the significance of demographic and study characteristics on mental health literacy, general help seeking attitudes, perceived stigma from others, disclosure distress, self-stigma for seeking help, and willingness to disclose formally and informally (addressing Hypothesis 1c).

Multivariable analyses

A multivariable linear regression was used. Multivariable statistical models aim to determine how well a pre-selected set of predictor variables (e.g. demographic characteristics, GHSQ, and mental health literacy) predict values of outcome variables (e.g. disclosure distress, disclosure willingness and help-seeking). The models tested how the variables (e.g. mental health literacy, age, gender, SSOSH, etc) predicted or explained students' scores on the outcome variables (e.g. disclosure questions). The models assessed all of the predictors, and which of them (or which combination) best explained variation in disclosure willingness and help-seeking. A series of sequential logistic regressions were conducted to create a linear combination of the log of the odds of being in the formal/informal disclosure selection or rejection group, predicting the likelihood of students disclosing or not disclosing. This allowed examination of the usefulness of mental health literacy, help seeking attitudes and demographic factors in predicting if a student will choose to disclose or not (Hypothesis 1a, 1b, 1c).

Additional analyses

Free-text responses

Responses to the free text boxes within the survey will be analysed utilising Braun and Clarke (2013) thematic analysis. Following the guidance provided in Ryan & Bernard (2003) and Braun and Clarke (2013), the first stages of analysis will consist of identifying anything that seemed interesting. Preliminary coding would then begin, where hunches are followed and tentative interpretative schemes are developed, which are systematically revised or abandoned following repeated reading and coding of transcripts. This stage of the analysis could be described as open coding, where the text is focused on to define concepts and categories talked about. This leads into axial coding, where the text responses will be re-read in light of these concepts and categories, in order to both confirm they accurately represent responses, and to explore any relation or interaction between the concepts and categories.

Once the researcher is satisfied that their coding accurately represented the data, the codes will begin to be grouped into preliminary themes. This allows multiple codes and topics to be grouped together and expose to the researcher the broader constructions within the data. This process again will be iterative and repeated to ensure that themes are not too broad, too narrow or did not accurately capture the data. In order to follow a data thread throughout the work packages, the free text responses will be quantified where appropriate, and incorporated into the descriptive analyses and the conclusions of the study. They will also allow for reflexivity and reflection on the design of the survey and will feed heavily into the development of the qualitative interview schedule for Study 3.

If anything, concerning arises from free text responses, the researcher will report any adverse events or unintended consequences to the FMH Ethics Board. All information given in the free text boxes will also be anonymised, so if a participant references another student or member of staff by name, refers to specific locations or services, these will be anonymised and not identifiable. Additionally, protection for the researcher’s mental health is in place and explored within the Researcher Safety Checklist submitted as part of ethical approval.

Data integration

As this study forms part of a larger sequential research piece, the thread of the method (O'Cathain, Murphy & Nichol, 2010) is important. This study has been developed in light of the findings of an evidence mapping study (Chapter 2) and wider literature review (Chapter 1), and the measures selected (and free text questions) have been focused around areas where evidence is limited or unclear. To this end, the statistical models predicting disclosure, and associations between demographic factors and disclosure intentions/willingness will be combined with the free text responses to understand factors influencing disclosure, and perceptions of disclosure experiences within a student cohort with a range of characteristics. These findings will be imperative in the development of materials and planning for qualitative work, which will also feed into further studies on this topic in the future. The free text responses particularly allow students to share thoughts and experiences that may be unable to be quantified through existing survey measures, allowing rich data for the development of qualitative tools to further investigate factors that this survey finds are statistically significant. A key point of having both quantitative, standardised measures, and free text responses is to allow reflection and integration of data, with pertinent findings being taken forward to allow further exploration of the survey findings, and evaluation of the statistical models and factors identified as key to student disclosure intentions.

Pilot

To ensure suitability, accessibility, proposed time of completion and ease of completion of the survey, a small pilot was conducted. Twelve participants took part, 10 of whom completed the survey in full. Piloting was conducted using iOS (Apple iPhones), Android (Android phones), Windows 10, Windows 7, and Mac operating systems, to ensure cross operating system display. Following pilot completion using mobile phones, information was added to the participant information prior to survey commencement, recommending that the survey displayed best in 'landscape' orientation. Mean completion time of the survey was

8.7 minutes, in line with study advertisement time estimates. The pilot sample was encouraged to fill in the optional free text questions to ensure they were working, with a number of responses of ‘Test’, or ‘Has this worked?’ responses to these questions.

Sample demographics: 3 PGRS, 7 undergraduates. Eight of 10 participants were home students. One pilot participant was a first generation academic. All pilot participants were full time students, and none undertook placements as part of their degree. Three identified as male, 6 identified as female, 1 identified their gender as other. The mean age of pilot participants was 22.2 years (SD: 2.86). 6 of the participants identified their racial identity as White, 3 Asian, and one identified as Black. Five participants identified as heterosexual, 2 as gay / lesbian, 1 as bisexual and 3 preferred not to share their sexuality.

Three participants identified as disabled, and 5 identified as experiencing mental health challenges. No pilot participant had disclosed via UCAS, nor did any formally disclose their mental health challenge or disability to their university, however 3 reported informally disclosing their mental health challenges.

Measures: the sample mean score for Mental Health Literacy was 41.7 (SD: 8.04) with scores ranging from 35-63. Mean score for Disclosure Distress was 30.9 (SD: 3.9), with scores ranging from 23-35. Mean score for Self-Stigma of Seeking Help was 31.2 (SD: 3.46) range 27-37. Mean score for Perception of Stigmatisation by Others for Seeking Help was 15.5 (SD: 2.27) ranging from 14-21. The pilot sample scored intimate or romantic partner the mean highest rated source of support within the GHSQ (3.9), with their GP having the lowest mean score (2.4) and their university tutor or supervisor mean score in the middle (3).

The pilot survey indicated that the survey was able to be completed on a range of operating systems and hardware. The pilot testing of the measures around formal and informal disclosure was successful, as no participant raised concerns about the definitions, and provided (where appropriate) free text responses allowing further exploration.

Results

Descriptive analyses

The survey was completed by 228 participants. Demographic and study characteristic results are depicted in Table 7 below. Participants came from all levels of study, with 45% postgraduate taught, 32% postgraduate research and 23% undergraduates. The age of participants ranged from 18 to 63 years old. Fifty percent of participants indicated that they experienced a mental health challenge. Nineteen percent of participants self-identified as disabled. When given the opportunity to share how they defined their disability, the most common conditions reported were autism (37%), ADHD (17%) and dyslexia (17%). 50% of students self-identified as experiencing a mental health challenge. When given the opportunity to share how they defined their mental health challenge, anxiety (59%) and depression (45%) were the most reported.

Table 7: Demographic and study characteristics of participants organised by level of study (undergraduate, postgraduate taught, postgraduate research).

	UG (N = 53)	**PGT (N = 102)**	**PGR (N = 73)**
Year			
1	22 (41.5%)	77 (75.5%)	29 (39.7%)
2	15 (28.3%)	9 (8.8%)	27 (37%)
3	10 (18.9%)	6 (5.9%)	7 (9.6%)
4+	6 (11.3%)	9 (8.8%)	10 (13.7%)
International Status			
Home Student	44 (83%)	70 (68.6%)	61 (83.6%)
EU International	3 (5.7%)	20 (19.6%)	5 (6.8%)
Non-EU International	6 (11.3%)	12 (11.8%)	7 (9.6%)
Generation Status			
First Generation	21 (39.6%)	30 (29.4%)	28 (38.4%)
Non-First Generation	32 (60.4%)	72 (69.6%)	45 (61.6%)
Placement			
Yes	12 (22.6%)	18 (17.6%)	4 (5.5%)
No	41 (77.4%)	84 (82.4%)	69 (94.5%)
Funding Source			
Student Finance	40 (75.5%)	75 (73.5%)	21 (28.8%)
NHS or DoE	0	0	3 (4.1%)
Research Council	3 (5.7%)	2 (2%)	21 (28.8%)
Other	10 (18.9%)	25 (24.5%)	28 (38.4%)
Mode of Study			
Full Time	46 (86.8%)	89 (87.3%)	62 (84.9%)
Part Time / Modular	7 (13.2%)	13 (12.7%)	11 (15.1%)
Area of Study			
STEM	8 (15.12%)	8 (8.82%)	16 (21.91%)
Medicine & Allied	8 (15.12%)	10 (9.80%)	6 (8.22%)
Social Sciences	13 (24.5%)	55 (53.92%)	30 (41.1%)
Arts & Humanities	15 (28.3%)	4 (3.92%)	3 (4.11%)
Education	2 (3.77%)	2 (1.96%)	6 (8.22%)

	UG (N = 53)	**PGT (N = 102)**	**PGR (N = 73)**
Law & Business	4 (7.55%)	17 (16.68%)	9 (12.33%)
Combination	3 (5.66%)	5 (4.90%)	3 (4.11%)
Gender			
Male	9 (17%)	17 (16.7%)	9 (12.3%)
Female	37 (69.8%)	83 (81.4%)	58 (79.5%)
Non Binary	6 (11.3%)	2 (2%)	4 (5.5%)
PNTS	1 (1.9%)	0	2 (2.7%)
Age			
21 and Under	25 (47.2%)	7 (6.9%)	5 (5.5%)
22-25	19 (35.8%)	65 (63.7%)	23 (31.5%)
26-35	5 (9.4%)	24 (23.5%)	31 (42.5%)
36 and Above	3 (5.7%)	5 (4.9%)	11 (15.1%)
Overall Mean (SD)	23.73	25.57 (5.13)	28.42 (7.47)
Range (Minimum – Maximum)	35 (18 – 53)	29 (18 – 47)	44 (19 – 63)
Ethnicity *			
White	36 (67.9%)	66 (64.7%)	57 (78.1%)
Mixed / Multiple	3 (5.7%)	11 (10.8%)	7 (9.6%)
Asian	8 (15.1%)	19 (18.6%)	5 (6.8%)
Black	6 (11.3%)	5 (4.9%)	2 (2.7%)
Other	0	1 (1%)	2 (2.7%)
Sexuality **			
Heterosexual	27 (51.9%)	82 (80.4%)	38 (52.1%)
Bisexual	15 (28.8%)	9 (8.8%)	23 (31.5%)
Lesbian / Gay	5 (9.6%)	5 (4.9%)	3 (4.1%)
PNTS	2 (3.8%)	5 (4.9%)	6 (8.2%)
Other	3 (5.8%)	1 (1%)	3 (4.1%)
Identified as Disabled			
Yes	11 (20.8%)	11 (10.8%	23 (31.9%)
No	34 (642%)	89 (87.3%)	43 (59.7%)
Unsure	7 (13.2%)	1 (1%)	3 (4.2%)

	UG (N = 53)	**PGT (N = 102)**	**PGR (N = 73)**
PNTS	1 (1.9%)	1 (1%)	3 (4.2%)
Identified as experiencing Mental Health Challenge	35 (66%)	34 (33.3%)	45 (62.5%)
Yes	13 (24.5%)	51 (50%)	19 (26.4%)
No	5 (9.4%)	12 (11.8%)	7 (9.7%)
Unsure	0	5 (4.9%)	1 (1.4%)
PNTS			
Identified as having caring responsibilities			
Yes	3 (5.7%)	11 (10.8%)	9 (12.3%)
No	48 (90.6%)	89 (87.3%)	61 (83.6%)
PNTS	2 (3.8%)	2 (2%)	3 (4.1%)

**it is acknowledged that ethnicity categories treat a multi-dimensional and contextually specific concept as if it were uni-dimensional and fixed. Given the participant numbers, a standardised categorical ethnicity measure was used for the analyses conducted as it was the best way to represent the demographic categories (Connelly, Gayle & Lambert, 2016).*

***it is acknowledged that the gendering of the responses 'lesbian' and 'gay' might mean that respondents who do not exclusively identify with the terms man or woman were unable to answer this question as they may have wished.*

Measures

To address Hypothesis 1b (Student mental health literacy and general help seeking attitudes will vary by demographic details, specifically gender, age, and level of study), descriptive statistics for each measure, and relevant demographic differences are presented. Table 8 illustrates the mean scores for measures stratified by level of study, where differences in mean scores were most apparent.

Mental health literacy (MHL). Participants generally had high levels of mental health literacy and there was little variation in the MHL scores between undergraduates (52, SD = 6.88), PGT (53.23, SD = 5.88) and PGR (53.68, SD = 5.38). Nearly all (93.4%) felt a mental illness was a real medical illness, 92.1% felt mental illness was not a sign of personal weakness, 89.5% did not feel people with mental illness could snap out of it if they wanted and 94.7% disagreed with the idea of avoiding individuals with mental illness so that you do not develop this problem. Most (71.1%) disagreed or strongly disagreed with the idea that people with a mental illness were dangerous (however, 6.6% agreed with this idea).. There were no substantial differences in means between age groups, or gender.

In terms of help seeking attitudes and mental health literacy, 61% felt if they experienced a mental illness, they would tell someone; only 18.8% reported they would not tell anyone. Over 90% felt that seeing a mental health professional did not mean you were not strong enough to manage problems on your own, and 75% reported if they experienced a mental illness, they would seek help from a mental health professional; 77.6% felt treatment provided by a mental health professional would be effective. 85.1% felt confident they knew where to seek information about mental illness; 89.5% felt confident using the internet, 66.6% felt confident attending face to face appointments and 86.4% felt confident they had access to resources to use in order to seek information about mental illness.

Help seeking (GHSQ). There was relatively high support for help seeking across the sample, with only 4% of participants reporting it was ‘strongly likely’ for them to not seek help from anyone, and 16% reporting this was ‘likely’, with free-text comments reporting it would depend on what the specific problem was. The most common source of support that students would be likely to turn to was their intimate partner (3.95, SD = 1.21), followed by their friends (3.74, SD = 1.07). Students least likely source of support was a religious leader (1.41, SD = 0.81). These remained consistent across age and gender. The responses that were not reflective of any help source listed within the GHSQ were charities, support groups, and the individual themselves (utilising self-care and self-compassion strategies).

Disclosure distress (DDI). Overall levels of disclosure distress were varied, with the sample mean of 36.45 (SD = 9.02), however scores ranged from 16 (very low levels of disclosure distress) to 56 (very high levels). PGT students reported the highest mean levels of disclosure distress (38.09, SD= 8.80) compared to PGR (36.90, SD= 8.68) and undergraduates (32.66, SD= 8.96). Disclosure distress scores were consistent across age groups, with some differences between genders, with female identified students having the higher mean levels of disclosure distress (37.34, SD= 8.99; male 34.03, SD= 8.09).

Students' views on disclosing and talking about issues varied. Whilst 52.7% reported confiding in their friends when upset, and 55.7% look for someone to talk to when something unpleasant happens, 42.1% preferred not to talk about their problems with others, 38.1% typically do not discuss things that upset them, and 50.9% reported keeping feelings of depression or sadness to themselves.

Stigma from others (PSOSH). Overall, concerns about stigma from others could be considered medium, as scores ranged from very low (2) to very high (25 – the maximum of the scale) and a mean of 9.34 (SD = 4.92). Undergraduates reported the highest levels of perceived stigma from others (11.23, SD= 5.70) compared to PGT (8.53, SD= 4.50) and PGR (9.10, SD= 4.59) students. Almost half of students did not feel those around them would react negatively to them if they experienced a mental health challenge (47.8%) and did not think those around them would think bad things about them or think of them in a less favourable way (48.2%). Over half the students did not think those around them would see them as seriously disturbed (55.3%), or think they posed a risk to others (66.2%).

Self-stigma (SSOSH). Rates of self-stigma were relatively low, with scores clustering towards the top of the scale (48), and an overall sample mean of 22.89 (SD = 7.38). Male students reported higher rates of self stigma with a mean of 25.34 (SD= 7.17) than females (21.99, SD= 6.92). The undergraduate student cohort reported the highest mean levels of self-stigmatisation (25.96, SD= 8.77) compared to PGT (21.78, SD= 5.84) and PGR (22.21, SD= 7.68) students. This is reflected in the individual items, where 75.9% of students reported that they would not feel inadequate about seeking professional help, 68% felt their self-confidence would not be threatened by doing so, and 84.2% felt they would not feel less intelligent. Over seventy percent (71.1%) felt seeking professional help would not make them feel inferior, 77.2% would feel okay about themselves seeking help, and 76.8% would not feel any less satisfied with themselves for seeking professional help. Whilst 55.7% reported seeking help would not change their view of themselves, and 50.4% would not feel worse about themselves for seeking help, however 31.1% felt that doing so would make them feel worse about themselves as not being able to solve their own problems.

Table 8: Mean participant scores for each measure by study type

Measure	**UG (N = 53)**	**PGT (N = 102)**	**PGR (N = 73)**
MHL Score			
Mean (SD)	52 (6.88)	53.23 (5.88)	53.68 (5.38)
Median	53	54	55
Range (Minimum-Maximum)	31 (30 – 61)	29 (32 – 61)	29 (32 – 61)
DDI Score			
Mean (SD)	32.66 (8.96)	21.78 (8.80)	36.90 (8.68)
Median	32	37	39
Range	32 (18 – 50)	38 (18 – 56)	38 (16 – 54)
SSOSH Score			
Mean (SD)	25.96 (8.77)	21.78 (5.84)	22.21 (7.68)
Median	24	22	21
Range	38 (10 – 48)	29 (10 – 39)	30 (10 – 40)
PSOSH Score			
Mean (SD)	11.23 (5.70)	8.53 (4.50)	9.10 (4.59)
Median	10	6.5	8
Range	20 (5 – 25)	19 (5 – 24)	19 (5 – 24)

Disclosure

Half of the students (50%) reported experiencing a mental health challenge, meaning 109 students had something they *could* choose to disclose. However, disclosure choices varied with some students disclosing both formally and informally, some opting for either formal or informal, and some opting not to disclose in any form.

Formal disclosure

57 students (52.2%) reported disclosing both formally and informally, and 16 students reported only disclosing formally (16%). For these students, the primary outcome was extensions on deadlines (21%), extra time in examinations (14%) or access to assistive technology (hardware and software) (10%). Based on their experience of formal disclosure, 58% of the students would recommend a peer or other student formally disclosed their mental health challenge if they were struggling. Of the 65 students who had formally disclosed; 38% (n= 25) reported a bad experience of disclosing, 31% a mixed experience and 31% an overall positive experience.

Informal disclosure

As noted above, some students chose to disclose formally and informally, and 36 students (33%) reported only disclosing informally. When asked who they informally disclosed to, the most common sources were their supervisor (48%) or personal tutor (28%). Based on their experience of informal disclosure, 41% of the students would recommend a peer or other student to informally disclose their mental health challenge if they were struggling. Of the 93 students who had informally disclosed, 26% reported a bad experience, 20% a mixed experience and 54% an overall good experience.

Non-disclosure

Fifty-five percent of students (n= 67) reported they had not disclosed, despite experiencing a mental health challenge. When asked to elaborate on their decision, the primary reasons for non-disclosure were fear of stigma/ negative responses

(38%), lack of a formal diagnosis (36%), feeling there were not the resources to support them following a disclosure (17%), feeling their mental health was not bad enough to warrant disclosing (8%), didn't know they could disclose (0.5%), or feeling their mental health was a private issue (0.5%).

Correlations

To address Hypothesis 1b (Student mental health literacy and general help seeking attitudes will vary by demographic details, specifically gender, age, and level of study) and Hypothesis 1c (Student demographic details will affect their perceptions of disclosure), a series of correlations were conducted to further explore the relationships between demographics and the study measures. The significant correlations are displayed below and in Table 9.

General help seeking attitudes

If a student was not heterosexual, they were less likely to report seeking support from a parent or other family member; there was a negative correlation between sexuality and likelihood of seeking support from a parent (rho = -.179, .007) or another family member (rho = =.173, .009).

Disabled students were less likely to report seeking support from friends, or parents; there was a negative correlation between disability identification and likelihood of seeking support from friends (rho = -.132, .047) and likelihood of seeking support from a parent (rho = -.181, p = .006).

The older the student, the less likely they reported seeking support from a parent; there was a negative correlation between age and likelihood of seeking support from a parent (rho = -.166, p = .045). The older the student, the more likely they reported seeking support from their GP or doctor; there was a positive correlation between age and likelihood of seeking support from a GP or doctor (rho = .133, p =.048).

The higher level of study a student was enrolled in, the more likely they were to report seeking support from a university tutor or supervisor; there was a positive correlation between level of study and likelihood of seeking support from a university tutor or supervisor (rho = .145, p = .029). If a student goes on placement as part of their course, the higher their MHL literacy score was, there was a positive correlation between student placement identification and MHL score (r = .132, p = .047).

Mental health literacy:

If a student identified as male their MHL score was lower; there was a negative correlation (r = -.532, .041). If a student identified their ethnicity as white, their scores on the MHL scale were higher; there was a negative correlation between ethnicity and MHL score (r = .223, p = .001).

Table 9: Significant correlations between mental health literacy, general help seeking attitudes and student demographic and study characteristics.

Measure	**r**	**p**
Gender & Mental Health Literacy	r = -.532	p = .041
Ethnicity & Mental Health Literacy	r = .223	p = .001
Placement & Mental Health Literacy	r = .132	p = .047
Sexuality & GHSQ Parent	rho = -.179	p = .007
Sexuality & GHSQ Family	rho = -.173	p = .009
Disability & GHSQ Friends	rho = -.132	p = .047
Disability & GHSQ Parent	rho = -.181	p = .006
Age & GHSQ Parent	rho = -1.66	p = .045
Age & GHSQ Doctor	rho = .133	p = .048
Level of study & GHSQ Tutor	rho = .145	p = .029

T-tests

To address Hypothesis 1a (student mental health literacy and general help seeking attitudes will affect their perceptions of disclosure), 1c (student demographic details will affect their perceptions of disclosure), a series of correlations were conducted to further explore the relationships between demographics and disclosures. The significant and non-significant correlations are displayed below and in Table 10. The t-tests suggest that demographic characteristics such as disability and experiencing a mental health challenge are significantly associated with having formally and informally disclosed. Sexuality and ethnicity were significantly correlated with informal disclosure (but not formal disclosure), supporting the notion discussed in Chapter 1 that specific barriers to disclosure exist for these minoritized groups. Study characteristics such as funding source, year of study and level of study were significantly associated with informal disclosure.

Table 10: t-tests of student characteristics and formal and informal disclosure status

Demographic	**Disclosure**	**df**	**T**	**P**	**CI**
Mental Health	Formal	195	5.164	.006	.504, 1.127
Disability	Formal	158	3.794	.000	3.77, .020
Level of study	Formal	227	2.761	.077	1.991, 2.298
Funding	Formal	217	2.581	.067	.632, 1.902
Ethnicity	Formal	217	1.596	.066	.222, 2.699
Sexuality	Formal	216	6.582	.065	.463, 1.533
Level of study	Informal	173	3.169	.002	.449, .104
Mental Health	Informal	195	6.036	.000	.575, .290
Year of study	Informal	217	2.203	.022	.646, .598
Funding	Informal	217	2.482	.014	.126, 1.09
Ethnicity	Informal	217	2.312	.022	-.577, -.046
Disability	Informal	216	4.730	.000	.222, .239
Sexuality	Informal	216	3.258	.001	.219, .891

Regression

Multiple linear regression was used to test if demographic and study characteristics significantly predicted general help seeking attitudes. Student ethnicity, disability identification and level of study explained a significant amount of variance in help seeking attitudes (F = 37.231, p=.000, R2= .772, R2 adjusted = .751). There was a linear relationship between mental health literacy and demographic and study characteristics. This was confirmed with a Pearson's correlation coefficient of r = .951 p = .000. Demographic and study characteristics did explain a significant amount of variance in MHL: F = (2, 12) 16.579, p =.001., R^2= .847 R^2 adjusted= .796.

As depicted in Figure 6, there was a moderate linear relationship between formal disclosure and demographic, study characteristics and measures. This was confirmed with a Pearson's correlation coefficient of p = .783 p = 0.03. Demographic and study characteristics did explain a moderate amount of variance in disclosure; F (7, 12) = 9.372, p =.059., R^2= .753 R^2 adjusted= .567. however demographic and study characteristics did not explain a significant amount of variance in informal disclosure as can be seen in Figure 7; F (7, 12) = 8.00, p = .712, R2 = .898, R^2 adjusted = .224.

This suggests that student characteristics of level of study, ethnicity and sexuality identifications, their mental health literacy and general help seeking behaviours can be used to predict the likelihood of opting to formally disclose information about their mental health.

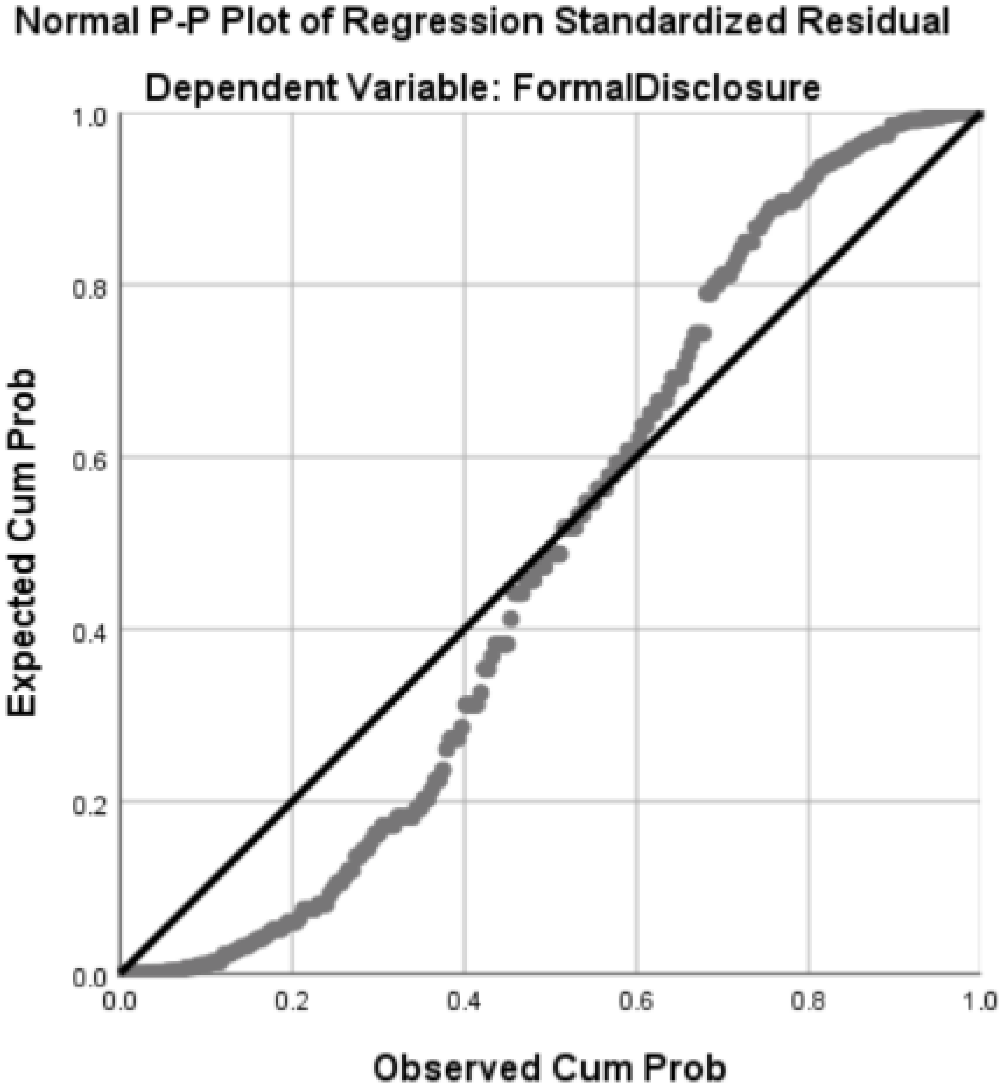


Figure 6: Linear regression P-Plot of student demographic & study characteristics, mental health literacy and general help seeking attitudes and formal disclosure.

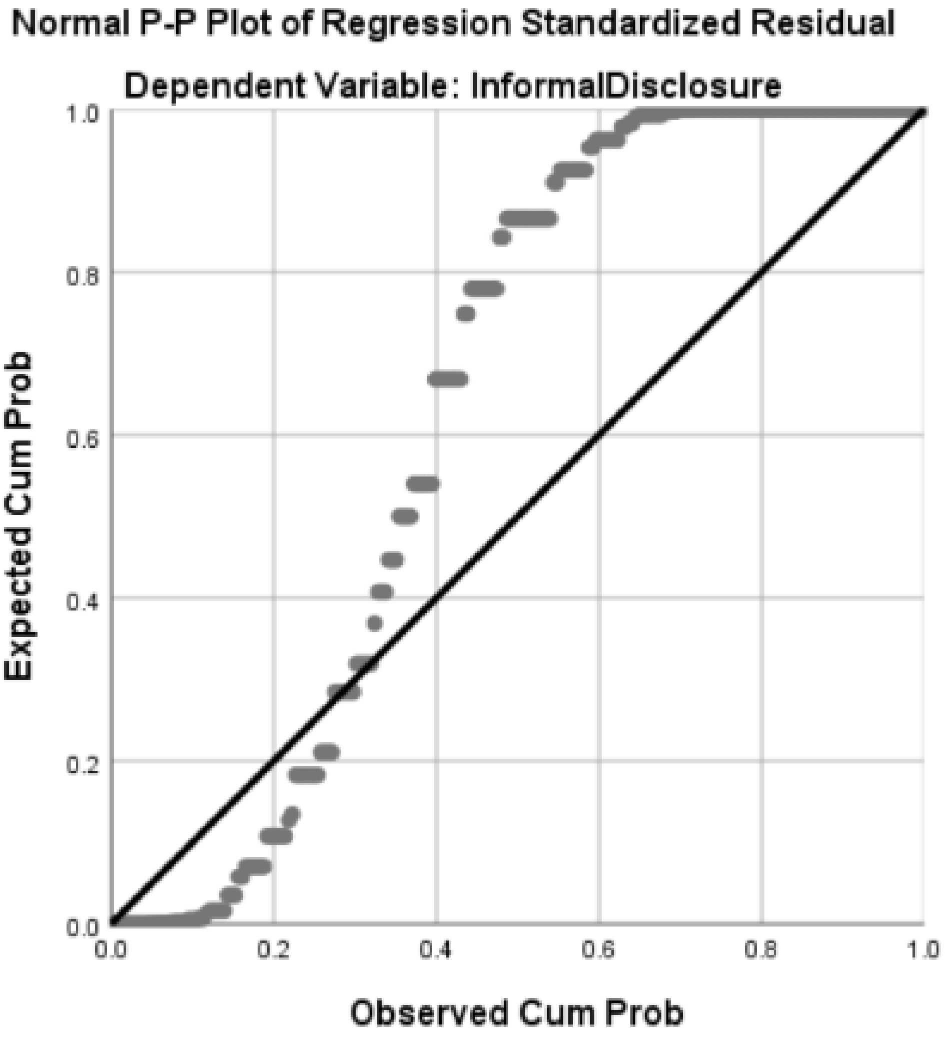


Figure 7: Linear regression P-Plot of student demographic & study characteristics, mental health literacy and general help seeking attitudes and informal disclosure.

Formal and informal disclosure

Formal disclosure

32% of participants had formally disclosed information about their mental health to their university. Of these, the primary outcome was extensions on deadlines (21%), extra time in examinations (14%) or access to assistive technology (hardware and software) (10%). Based on their experience of formal disclosure, 58% of the students would recommend a peer or other student formally disclosed their mental health challenge if they were struggling. Twenty students reported an overall good experience (31%), 20 reported a mixed experience (31%), 25 reported a bad experience (38%).

Informal disclosure

40.6% of participants reported informally disclosing information about their mental health. When asked who they informally disclosed to, the most common sources were their supervisor (48%) or personal tutor (28%). Based on their experience of informal disclosure, 41% of the students would recommend a peer or other student to informally disclose their mental health challenge if they were struggling. Forty-nine students reported an overall good experience (54%), 18 reported a mixed experience (20%) and 23 reported a bad experience (26%)

Non-Disclosure

55% of students reported they had not disclosed, despite experiencing a mental health challenge. When asked to elaborate on their decision, the primary reasons for non-disclosure were fear of stigma/ negative responses (38%), lack of a formal diagnosis (36%), and feeling there were not the resources to support them following a disclosure (17%).

Potential future disclosing

Students were asked if they were to experience a mental health challenge in the future if they would consider formal or informal disclosure. As can be seen in Figure 8, the reasons that students may or may not disclose in the future were different for formal and informal disclosure, but the most common reasons for choosing any form of disclosure was to gain support, and fears of stigma were frequently cited as reasons students would not disclose if they began struggling with their mental health in the future. For informal disclosure, the person who would be receiving the disclosure and how they would react was paramount in future disclosure decisions. A full table of responses to the factors that may influence future disclosure can be found in Appendix 9.

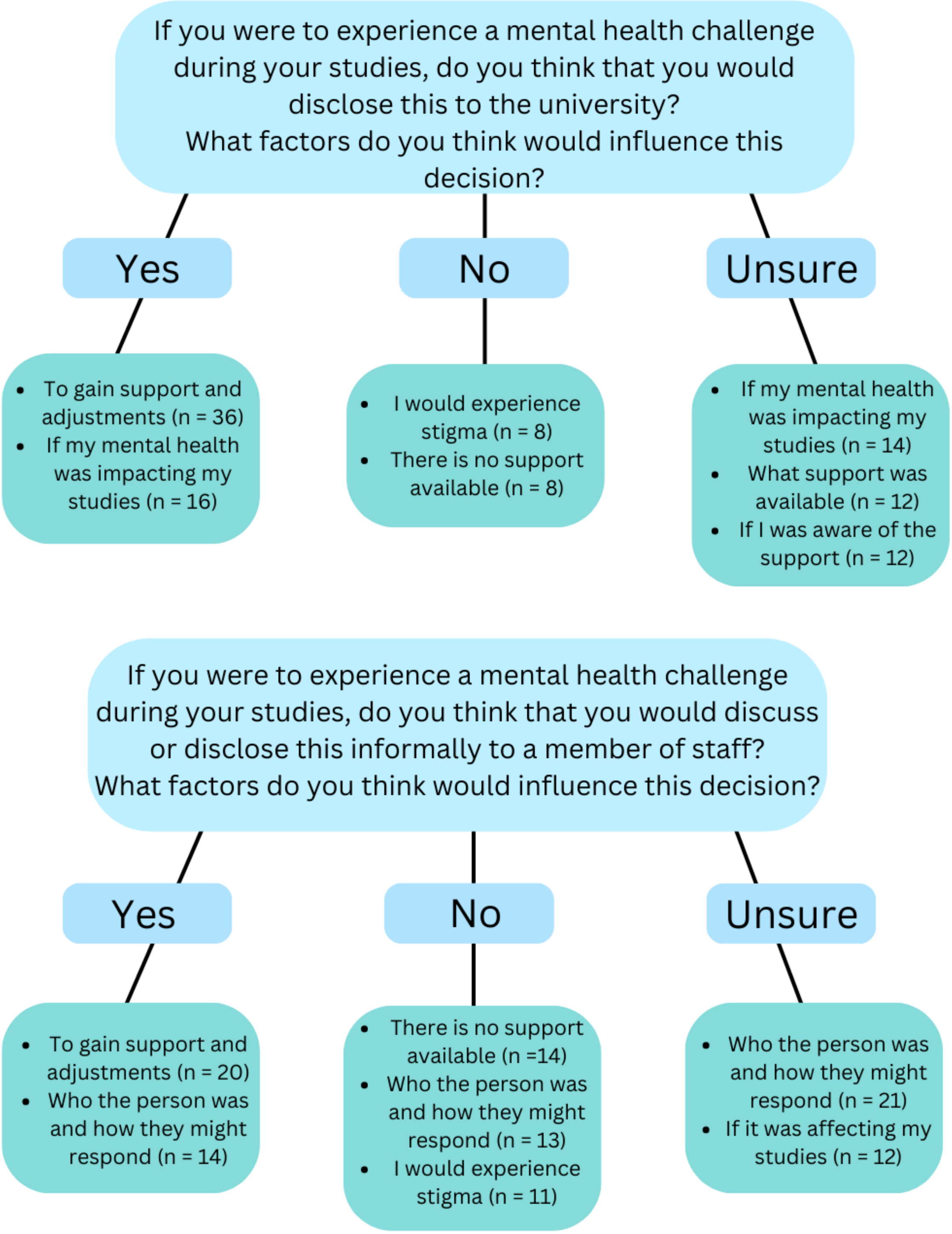


Figure 8: Reasons why students may choose to disclose (or not disclose) formally, or informally in the future

Free text analysis

All of the students who formally disclosed gave some comment on their experience (n = 73).

Undergraduate students generally had more positive experiences of formal disclosure, primarily due to the effectiveness and suitability of accommodations offered. The bureaucracy and burden of disclosing was a prevalent theme among undergraduates, with a number finding the experience complex, stressful, and unsupportive. The undergraduate students in this sample would mostly recommend formal disclosure to a peer, primarily at the start of their course, however a number noted the need for students to self-advocate and the differences between support for physical health versus mental health.

Similarly to undergraduate students, PGT students felt that accommodations offered were appropriate and useful, and the majority reported positive experiences. A number of PGT students on courses with placements involved highlighted the issue with disclosure on practical placements, where supervision is often separate from the university and thus processes and allowances are more complicated. There was a distinction made between disability support services and tutor / staff responses to accommodations and disclosure. The majority of PGT students in this sample would recommend formal disclosure to a peer based on their experience.

PGRs generally felt that the process was geared towards undergraduate students. Offered accommodations were often felt to be unsuitable or irrelevant to the nature of PGR study, with PGRs being offered extra time in exams. A number of PGR’s noted that they only disclosed at PhD level because they had disclosed at undergraduate and felt familiar with the processes and evidence production. Due to the nature of PhD study, some PGRs felt their departments and supervisors were unhappy about the accommodations granted by disability support. PGRs in particular noted the disconnect between disability support services and their supervisors, and how universities should be doing more to bridge this gap in communications and take the onus off the student. Whilst around half of PGRs would recommend formal disclosure to a peer, many added caveats around not expecting meaningful support, knowing your rights, being strong self-advocates and talking to supervisors first.

Thematic analysis of experiences: formal

Five main themes were identified within participant experiences and thoughts surrounding formal disclosure

Stigma

Stigma was the most frequently cited reason not to disclose, or to consider disclosure very carefully. Students elaborated on their experiences of stigma in response to disclosing, utilising a lot of negative language (fight, war, trauma, battle). Students frequently reported feeling belittled, infantilised, treated with suspicion or derision, or being treated as incompetent or less capable following their disclosure.

> *"It depends; some humans are really empathetic when discussing mental health issues, and other humans are bastards"* – Participant 75, Undergraduate student, disclosed to supervisor and student support services

> *"They either seemed disturbed by my level of disability or minimised my suffering. They* clearly *did not know much about what being mentally ill and/or disabled is actually like"* – Participant 111, Undergraduate student, disclosed to personal tutor and academic staff

Students spoke of judgement from staff, and lack of understanding, and lack of follow through on accommodations (despite doing things the 'correct' way and evidencing their needs). There were some distressing responses detailed from staff, with students reporting offensive language and concepts being openly stated by staff in response to disclosure.

Support

The role of support; either gaining it, or feeling it, was a prevalent theme in the experiences of formally disclosing. Some students felt supported by their institution, and others reported the direct support they were able to receive following their disclosure:

> *"I felt well supported and was triaged effectively with different sources of support"* - Participant 16, Postgraduate Research student, disclosed to PhD supervisor and student support services

Other students spoke of the opposite; not feeling supported, or not being able to access the support they needed and were entitled to following disclosure, with descriptions of 'exasperated' and 'complaining' lecturers. Some students found the process of disclosure a way to access support, but this was then questioned and not followed through upon, with departments or lecturers ignoring their support needs, or information not being passed between student services and their tutors:

> "*Be aware the department might sulk over your adjustments*" - Participant 39, Postgraduate Research student, disclosed to PhD supervisor and student support services

> *"Don't expect meaningful support"* – Participant 53, Postgraduate Research student, disclosed to PhD supervisor and graduate school

Expectations vs reality

Participants discussed their expectations following disclosure (often relating to gaining support), and the reality of the disclosure outcome (often not gaining said support). Some participants explained they had put off disclosure (some for 'a long time', others until it reached 'crisis') due to their expectations of negative responses, or not being able to receive help; some regretted this decision, and reported 'wishing' they had disclosed earlier, whilst others wished they had not disclosed at all. A common sub-theme was the expectation that they would be supported, but in reality, there was no support there for them:

> "*Manage your expectations as to what support might be offered, and be prepared to have to work hard to access the support that does not exist*" – Participant 57, Postgraduate Taught student, disclosed to dissertation supervisor and department embedded support team

Participants spoke of the expectation that their adjustments would be implemented and the act of disclosing itself would be sufficient, when the reality was that the student themselves needed to a) know what they needed, b) be a strong self-advocate (or prepared to 'fight' for it), and c) continuously chase up departments, or have all communication regarding accommodations also involve the disability or student support service, to ensure that there was pressure on their department to follow through. There was discussion of the need for students to know the university policies, and their legal rights in order to access support in reality.

Inequities

A number of inequities were discussed by participants. Some discussed the parity between physical and mental health support, often feeling that universities were able to accommodate students with physical health needs but were not able or willing to do so with students with mental health challenges. Students also explored the differing responses between types of mental health challenges and the inherent hierarchy they felt existed within university support provision and responses to disclosure:

> *"For 'regular' mental health difficulties, the university knows that accommodations they should give but for anything more 'obscure' like bipolar or ADHD they are extremely ill-informed and the suspicion and infantilisation can outweigh the benefits of accommodations"* – Participant 5, Postgraduate Research Student, disclosed to PhD supervisory team and university student support

There was exploration of the responses to 'mild' difficulties compared to 'severe' difficulties, and the inequity of treatment following disclosure. This is linked to experiences of stigma, with students explaining how they were treated differently than their peers. There was further discussion of inequities between course types. Students also spoke of the inequity surrounding evidence gathering and 'proof' of need when disclosing, with a number of international students highlighting the difficulty in procuring evidence when living in a different country or having evidence that met the standard set by the institution.

Burden

Students spoke of the difficult emotional burden involved with disclosing. The process was defined by many as stressful, difficult, not worth the hassle. One student scored the experience a “0/10”. Students reported feeling like a burden, feeling anxious, and made to feel stupid for asking for help:

> “*The admin of doing this was incredibly stressful and I often think the support I got as a result wasn’t worth all the hassle of going through the poorly managed systems”* – Participant 54, Undergraduate student, disclosed to academic advisor, dissertation supervisor and student services

A number of students spoke of the burden on them of gaining the correct evidence, both financially and emotionally

> *“Finding medical evidence was hard as I had to get hold of old and kinda traumatic forms*” – Participant 42, Postgraduate Research student, disclosed to PhD supervisor and graduate school

> *“I think I’m not alone in fearing to come forwards due to not having any professional diagnosis*” – Participant 65, Undergraduate student, did not provide disclosure recipient

Students reported feeling burdened by the ‘long’, ‘complex’ ‘bureaucratic’ process and paperwork, with some explaining they had to tell many people private information in order to receive accommodations and support, with a number reporting the process was not truly anonymous or confidential, adding to the emotional burden. Some students felt disclosing itself was a burden that they were ‘obligated’ to do.

Thematic analysis of experiences: informal

90 students provided commentary on their experience of informally disclosing.

Empathy and understanding

A key theme from informal disclosure experiences was that of empathy and understanding. Students who spoke of their experience positively reported feeling empathy or empathised with, or feeling understood (or that the individual they spoke to was understanding):

> *"I didn't know how this would be perceived and want others to think I am capable. But they were understanding, and I felt better for disclosing"* – Participant 126, Postgraduate Researcher, disclosed to supervisors

Students appreciated empathetic, understanding, and sympathetic responses, reporting positively on these experiences. A number of students found the empathy and understanding from staff meant the informal disclosure went better than they expected, or their perception of empathy and understanding allowed the disclosure to be initiated by the staff (removing the burden from the student), or to naturally come up in conversation, making it easier to talk about their mental health. Students also shared positive experiences of staff signposting, whilst not feeling like they were being pushed away or shrugged off, and made the student feel appreciated and understood; believing the staff had their interests and wellbeing as a priority, not just their academic success.

Ignorance and judgement

The students who reported negative or unsatisfactory experiences of informal disclosure often had the inverse of those with positive experiences; instead of feeling empathised with and understood, they felt judged and that the staff member was ignorant to their challenges:

> *"Any times I have discussed my mental health I have felt judgement and unpleasantness with my practice tutor and supervisor. I have been told I'm not taking responsibility for or prioritising my own mental health. It feels patronising."* – Participant 116, Postgraduate Taught student, disclosed to supervisor and practice tutor

Students reported 'condescending', 'judgemental', 'tone deaf', 'borderline offensive', 'embarrassing' and 'awful' experiences with informally disclosing, and a large number of students with these experiences reported regretting their decision to disclose:

> *"Awful. Should never have done it. Sick of having my illness used against me"* – Participant 39, Postgraduate Research student, disclosed to supervisor

A number of students discussed the lack of training and education that staff have, feeling like the staff member didn't know how to respond (or in some cases, just did not respond at all). Students acknowledged that some people aren't sure how to talk about mental health or support students who are experiencing mental health challenges:

> *"He clearly isn't trained to supervise people. Projects yes, but not people"* – Participant 69, Postgraduate Research student, disclosed to supervisor

Students also reported feeling useless following disclosure, that staff minimised their issues and suffering, that they didn't know how to react, and that often nothing changed following disclosure, putting them off from disclosing in the future (or recommending others to do so).

Emotional impact

The act of informally disclosing had a mostly negative affect on the participants who shared their experiences. Students spoke of feeling more isolated or feeling worse following the disclosure. Language was used around 'hating' the experience, 'dreading' the outcome, feeling 'useless' and 'incapable'. This only exacerbated the challenges that students were experiencing, and many regretted their decisions.

Students who discussed ways to lessen the emotional affect spoke of knowing the university policies around disability, mental health, and discriminatory language. Students felt they should have brought others into the fray to advocate for them or have a backup form of support. Students who did not possess a formal diagnosis felt this was a detriment and reported the emotional impact of this, from feeling not 'bad' enough to 'deserve' support, to being scared to have the conversation again without a diagnosis.

> *"Very poor, extremely brief, felt bad after, they never followed up or checked in to see if I was doing ok"* – Participant 215, Postgraduate Taught student, disclosed to personal tutor

Students who had a positive experience reported feeling like a burden had been lifted, that it was a helpful experience, that the support allowed them to feel confident enough to present to the university wellbeing service or seek further help. clearly, the emotional impact of informal disclosure can be positive and negative, and impact on student functioning and help seeking intentions in the future.

> *"Very supportive! My supervisor did not reject or underestimate my feelings at all. On the other hand, she supported me in every way - we used to talk more and be more open to each other. She was one of the reasons I did not give up studies"* – Participant 203, Postgraduate Taught student, disclosed to personal tutor

Institutional responsibilities and actions

Within the space participants were provided to share any other thoughts they had on the research topic, 20% of participants gave responses. Over half of these responses referenced the responsibilities of universities, or the actions that universities could take to improve student mental health and disclosure. There was a distinction made between the 'institution' and the 'individual':

> *"I feel like individuals at universities are usually great when dealing with mental health however organisations and institutions provide what they feel is sufficient help and then don't consider you again, even though they campaign for how important mental health is"* - Participant 100, Postgraduate Research student, disclosed to PhD supervisor

Participants had a range of ideas about how universities should act and enact their responsibilities, from providing information about mental health support and disclosures at induction, to actively enquiring at the start of term(s) as to whether students have identified issues they feel they need support with. There were comments relating to the universities responsibility to properly educate students, not just on the mental health support available, but the likelihood of developing mental health challenges whilst at university; with reference to the age of onset for many mental health challenges (18-25 years) overlapping with a large percentage of the student population.

Other participants noted that universities should lead by example, and clearly demonstrate to students that they take the issue of mental health, disclosure, and disability seriously. There was, however, a number of participants that were more cynical:

> *"Wellbeing and looking after mental health are just buzzwords to universities. It's all token gestures."* - Participant 69, Postgraduate Research student, disclosed to PhD supervisor

Participants shared thoughts surrounding the insufficient resources provided by universities, both surrounding disclosure processes but also the amount of trained mental health support staff. There were comments about the university narrative compared to the actual levels of support, and the role of policy in showing the 'right' approach to mental health, even if that policy was not enacted or was unsuitable.

Disparities and inequities

The second theme arising from participant comments was disparities and inequities. Primary areas for inequity to emerge were in regard to different types of conditions; physical and mental health, or within the realm of mental health, different diagnoses:

> "*Many universities seem uninterested in mental health disclosures and do not have the capacity to help students with these issues. They tend to focus on physical disabilities and learning difficulties in accommodations and this makes it more difficult to approach them about mental health issues."* - Participant 106, Postgraduate Research student, disclosed to PhD supervisors

Participants spoke of the difference between university approaches and responses to physical health conditions when compared to mental health conditions. Other participants picked up on the tricky issue of whether students will consider mental health to fall under the label of ‘disability’ and the impact that this has on engagement with support and disclosure if these are institutionally considered part of Disability Support Services. One participant elaborated that the only reason they were able to disclose their mental health challenges was because they were familiar with disclosure processes due to having to disclose their physical disability, and that otherwise they would not have disclosed.

There was also discussion of the disparities between different courses, with mention of the culture around experiencing mental health problems on practitioner based courses, compared to other courses, and students attributing their willingness to disclose or consider disclosing stemming from their particular course (such as psychology, or counselling students feeling they would receive a better response to informal disclosure due to the nature of the staff and topics covered). Some participants spoke of the differences between institutions, and the impact of College systems at Oxbridge universities, and the inequitable experiences they had. A number of participants also highlighted their experience of interventions and mental health support being ‘focused’ or ‘geared towards’ undergraduate students, and thus not meeting the needs of Postgraduate (taught and research) or mature students.

The free text responses allowed exploration of Objectives 2 (to explore student perspectives on formal and informal modes of disclosing or discussing a mental health challenge) and Objective 3 (to explore student understanding and experiences of disclosure processes in UK universities).

Discussion

The first aim of this study was to 1) understand if student mental health literacy and perceptions of help-seeking for mental health challenges affects their willingness to disclose a mental health challenge to their university. Within this cross-sectional survey, it was found that perceptions of disclosure did vary depending on students' attitudes towards help seeking, with students who reported lower levels of general distress associated with disclosing personal information, and higher levels of general help seeking more likely to choose disclosure. In addition, there was evidence that student mental health literacy and general help seeking attitudes did vary by demographic characteristics, particularly relating to students' level of study, ethnicity, and identification of experiencing mental health challenges. It was observed that there was a significant relationship between student demographic characteristics and their mental health literacy, with demographic characteristics predicting levels of mental health literacy within this sample.

The second aim of this study was to explore student perspectives on formal and informal modes of disclosing or discussing mental health challenges. It was found that student perspectives on the differing modes of disclosure varied, and the sample ranged from students who had disclosed both formally and informally, to those who only disclosed through one means, to students who did not disclose at all (despite indicating that they could have). Regression analyses showed that student demographic characteristics, help seeking attitudes and mental health literacy were correlated with formal or informal disclosure, with significant interactions between chosen measures and students current (and potential future) disclosure status (Hypothesis 1b).

Formal disclosure

As documented in other research (Zhang et al., 2010), students acknowledged the difference in staff perceptions and willingness to accommodate students with noticeable disabilities, compared to students who may be struggling with their mental health or other invisible conditions. The findings of this study are also in line with previous work suggesting that a lot of the reasons that students struggle to formally disclose overlap with documented issues within university processes; the lengthy forms that often require one to fit into an institutional list of categories (leaving little room for explanation or co-morbidities), and the focus on a deficit model (Lister et al., 2021).

Informal disclosure

The number of students who reported disclosing only informally was more than double the amount who disclosed only formally. This may be linked to the issues with formal disclosure processes discussed above, however in their free text responses students stressed the role of relationship quality as a key factor in their decision to informally disclose, in line with previous investigations (Shahaf-Oren, Madan & Henderson, 2021).

Non-disclosing students: The findings of this study are in accordance with other research into non-disclosing students (Grimes et al., 2015), with many of the reasons for non-disclosure decisions aligning with previous identified reasons such as privacy concerns, stigma, and previous negative experiences. Within non-disclosing students, the idea of potentially disclosing (through either mode) was highly dependent on how difficult they were finding university life whilst dealing with their mental health, with the majority of non-disclosing students reporting they would only disclose if they were experiencing a mental health crisis or their academic future was at risk (a minority would still not disclose in these circumstances), suggesting the role that disclosure plays in universities is very much a remedial decision for many.

Limitations: Whilst the sample size was sufficient for the analyses conducted, it is not appropriate to view the sample as representative of the whole student body. Despite representation from undergraduate, postgraduate taught and postgraduate research students, when disaggregated by other demographic characteristics, the samples were often too small to draw meaningful conclusions about interactions, reflecting the over-representation of white and female students. As the survey administered was anonymous and thus did not collect information about the institution that participants studied at, it was not possible to understand the range of different disclosure processes that exist within different institutions and offer any recommendations or process specific findings (although the finding that processes are confusing, difficult and different depending on university does support the idea that there should be a streamlined, UK wide process, rather than each institution having its own procedures).

Additionally, it is important to note that some students may never feel that they would benefit from disclosure, and whilst some responses to this survey explored the reasons behind this (feeling they enough mechanisms to successfully navigate university life without requiring support for their mental health), it was not possible to distinguish these students from those who did not disclose for other reasons. It is also acknowledged that whilst the use of the term 'mental health challenges' was chosen to promote the recovery model of mental health without using a deficit model (Grimes et al. 2019), this may have affected participants identification with the term, or willingness to take part in the study if they had not heard mental health being discussed through this lens before.

Future directions: There are a number of findings from this study that warrant further investigation. Students described experiencing stigma and negative responses from staff, however it was not known what (if any) training the students were aware that the staff had. Future research should examine the perspectives of students who disclose and the staff recipients of these disclosures.

The findings reported here are also pertinent when considering early intervention in the university setting, as informal disclosure has previously been found to act as a stepping stone to formal disclosure (Armiento et al., 2014). Further work examining in depth the role of informal disclosure as a pathway to formal disclosure (and thus formal means of support) would be a valuable resource for universities when considering potential disclosure recipients and how to encourage an environment of safe and open discussion of mental health and a mentally healthy university (Universities UK, 2015)

Additionally, a minority of the sample received information relating to disclosure before applying to university or at their course induction. Further work examining disclosure perceptions and experiences in a sample of students who had been provided this information may show different perceptions and attitudes towards disclosure.

Conclusion: This Chapter reports on a quantitative survey with a sample of 228 students (of all levels) at UK universities. The validated measures allowed exploration of disclosure distress, mental health literacy, stigma, and help-seeking, and how they related to formal and informal disclosure. It was found that mental health literacy, general help seeking attitudes in particular varied by demographic and study characteristics, particularly ethnicity and level of study. These were able to predict a relationship with formally disclosing a mental health challenge. Questioning around the factors that may affect disclosure and exploration of student experiences further explored the differences between the modes of disclosing. Key ideas such as stigma, who the recipient of disclosure is, and student knowledge of mental health (and university processes) were found within the quantitative and qualitative data. The differences observed between levels of study, and the frequency that supervisors were the source of disclosure for PGRs further strengthened the rationale to investigate PGR specific experiences of disclosure, and this is explored in the next Chapter.

Chapter 4: Postgraduate Research Student Mental Health Challenges: Support, Disclosure and Perceptions

As discussed throughout the Thesis, PGR students are a diverse cohort, with differing relationships with academic faculty and the institution itself. The highlighting of lack of evidence on PGR experiences within the systematic review (Chapter 2), and the nuances of PGR study when compared to other levels of study (Chapters 1 & 3), necessitate an in-depth exploration of the PGR experience in isolation from students at other levels of study. As touched upon within the quantitative work, the supervisory relationship is unique to the PGR experience, and the individual nuances and niches of PhD topics merit examination. As such, this Chapter reports on a qualitative study with PGRs from across the UK.

Introduction

Postgraduate Research Students / Doctoral Researchers (hereafter referred to as PGRs) are the general terms used in the UK to refer to those undertaking their PhD or Professional Doctorate. In the 2017-2018 academic year, there were over 100,000 doctoral researchers studying in the UK, a figure that has consistently grown since 2013 (Higher Education Statistics Agency). Whilst disclosure rates amongst university students for any health condition are going up (Institute for Public Policy Research, 2017); only 1,605 PGRs disclosed they had a mental health condition in 2017-18, a very small percentage. This is in accordance with findings from the Postgraduate Research Experience Survey (PRES) (2017) where 3.3 % of PGRs reported mental health challenges, despite only 0.9% officially disclosing in previous academic years (Metcalfe, Wilson and Levecque, 2018).

The UK Equality Challenge Unit Equality in Higher Education report (2016) found within the 2014-15 academic year, only 7% of PGR students disclosed as disabled, and reports support the idea that postgraduate students are less likely to disclose mental health challenges than undergraduates (IPPR, 2017), despite previous findings that over a quarter of PGRs meet the criteria for at least one mental health problem (Lipson, Zhou, Beck & Eisenberg, 2016), and the specific stressors of the doctoral environment.

PGRs have been found to have higher levels of attrition than undergraduate students (Pearson, 2012), with an estimated 30-50% of PGRs dropping out of their programmes (Satinsky, et al., 2021, Blanchard and Haccoun, 2020. Of the over 1000 PGRs surveyed by Larcombe, Ryan and Baik (2021), over 25% had thought seriously about discontinuing their PhD or withdrawing from their studies that year, with mental health being a key factor into why they were considering withdrawing. It has been found that the supervisory relationship is statistically related to wellbeing and mental health (Blanchard and Haccoun, 2020, Berry, Niven, and Hazell, 2021).

The doctoral environment and mental health

PGR mental health is a growing concern to the sector (Evans, 2018), with systematic reviews of PGR mental health showing isolation, identity and systemic issues impacting negatively on PGR mental health (Hazell, Chapman, Valeix, et al., 2020). The issue of PGR mental health is an international problem with evidence showing high rates of mental health challenges across graduate schools. The prevalence of clinical depression was found to be 23% (with 41% of PGRs experiencing moderate clinical depression) in sample of 325 Chinese PGRs (Liu et al., 2019), a study of 528 doctoral students in Poland found 20% experiencing symptoms of anxiety and insomnia, with 6% ruminating on suicide (Kowalczyk, 2021) and a sample of 161 French first year PhD students found 28% met clinical threshold for mild depression and 15% mild anxiety disorder (Ahalli, Fort and Bridai, 2022). For PGRs with existing depression, interviews have shown the PhD tends to affect their depression more negatively than positively, primarily by interfering with motivation, productivity, focus and concentration, leading to knock-on effects on confidence and heightened self-criticism (Gin, Wiesenthal, Ferreria & Cooper, 2021).

The doctoral environment also has its own specific stressors, such as high levels of independent working, balancing training needs, professional development, and project management, with teaching, employment, and personal development (Hargreaves, De Wilde, Juniper, and Walsh, 2017). A Wellcome Trust survey found that PGRs work on average 47 hours per week, 50% more than the average undergraduate time commitment and only three hours less than general academics (2020). Additionally, there is the financial pressure for PGRs. Estimates from Vitae

(2018) suggest around two thirds of PhD projects are funded, meaning that the PGR is expected to deliver on the project not just for their own development, but the financial support provided (by a Research Council, institution, charity, government etc). This adds an additional stressor to the doctorate for funded PGRs and may mean that self-funded PGRs have to work to support their doctoral studies, itself a difficult balance. A UK wide study of PGRs (n = 3033) found that it was generally agreed by PGRs that developing mental health challenges during the PhD is ‘the norm’, and most of the participants peers (or themselves) had experienced mental health challenges. It was found in a small sample of French PGRs that the risk of clinically significant anxiety was 4.9 times higher for PGRs who also taught when compared to those who did not teach alongside their studies (Ahalli, Fort & Bridai, 2022). PGRs also may have additional stressors such as caring responsibilities (Metcalfe, Wilson and Levecque, 2018), often study part-time or remotely, and because of their involvement in academic and teaching communities, PGRs often fall into a ‘grey’ area between students and staff, with work life balance identified as an issue (Sverdlik, McAlpine & Hall, 2021).

This means data and interventions should not merely be extrapolated from undergraduate or general student populations and expected to improve PGR mental health (Waight and Giordano, 2018). Research has shown that many PGRs are ill-informed about mental health disclosure processes within university systems and what happens to any information that they disclose (Mackie and Bates, 2019, Higher Education Policy Institute, 2019). Despite often being the first port of call for PGRs, supervisors appear to be ill-informed about disclosure processes (Hughes et al., 2018). PGRs have also reported feeling unclear about the extent to which the supervisor role is pastoral, and when they should seek alternative resources such as the university student support service (Metcalfe et al., 2018).

PGR disclosure

There are a number of complex factors that may influence PGR mental health, help-seeking and decisions around disclosing or discussing their mental health with their supervisors. Issues with the supervisory relationship and university processes are a key impact on PGR mental health due to the importance of the supervisory relationship (Barry, Woods, Warnecke et al., 2018). Systematic review evidence suggests PGRs feel supervisors and the institutional systems associated with doing a PhD promote an expectation of suffering (Hazell et al., 2020) with challenges in supervision identified by a quarter of participants as affecting their mental health (Barry, Woods, Warnecke, Stirling & Martin, 2018) and PGRs may be uncertain on the appropriateness of discussing mental health challenges with their supervisors (Berry et al., 2020). In their analysis of 607 comments left on a large-scale study (N=3170) of PGR motivations and wellbeing, Sverdlik et al. (2021) found the majority of comments relating to supervision were negative in tone, with positive comments on supervision arising from when students had switched to a different supervisor and left difficult situations. A below average quality doctoral-supervisor relationship has been found to be significantly associated with greater risk of stressful working conditions (Ahalli, Fort & Bridai, 2022).

The term 'imposter syndrome' (or phenomenon) describes individuals who have persistent self-doubt, and fear being outed as a fraud or imposter, despite being high-achieving and having objective successes (Bravata, Watts, Keefer et al., 2020). Rates of imposter syndrome are noted to be high among PGRs; PGRs have reported feeling like imposters as they progressed through their PhD, and feelings of imposter syndrome are a barrier to asking for help (Chakraverty, 2020). It has been found in a sample of 325 PGRs that those further in the PhD process had worse mental health than those earlier in the doctorate (Liu, Wang, Qi, et al., 2019). The impact of developing an identity as an academic researcher has also been discussed, with Barry et al. (2018) finding that developing an identity as a researcher has been identified by PGRs as a challenge for their mental health. Social support has been found to be robustly related to reduced stress among PGRs, however social isolation is often viewed as a key and salient aspect of completing a PhD, with loneliness a strong predictor of anxiety, depression, and suicidality symptoms (Berry, Niven & Hazell, 2021).

This study

Much research into PGR mental health has been aimed at understanding the prevalence of mental health challenges within this population utilising large-scale quantitative studies, as discussed in Chapter 1. Whilst qualitative data does exist, this rarely focuses on disclosure specifically. This can be seen within the findings from the systematic review (Chapter 2), with only five papers identified that included PGRs in their sample. Only one piece of literature (Vergunst & Swartz, 2020) examining PGR disclosure of 'diagnosed psychological disabilities' and was not conducted in the UK. It is also worth noting that 'diagnosed psychological disabilities' is not the theoretical standpoint that this Thesis adopts, with the complex intersections and identities associated with disability, diagnosis and disclosure explored in more depth previously (Chapter 1). The findings discussed in Chapter 3 from the quantitative survey also identified the different experience of disclosure for PGRs, with free-text responses detailing the supervisor as a more likely source of disclosure. This, in combination with the existing literature on potential stressors for PGR mental health, risks of isolation and complexity of the supervisory relationship necessitated an in-depth exploration of PGR experiences of disclosure. As such, the aims of this qualitative study were as follows.

Objectives

- To explore PGR perspectives and experiences with formal and informal modes of disclosure to their university or their supervisor
- To understand PGR perspectives on the supervisory relationship and how it may impact on their mental health and wellbeing
- To gain insight into the role the supervisory relationship plays in PGR perceptions of discussing or disclosing mental health
- To explore the impact of the supervisory relationship on PGRs mental health and wellbeing
- To gain insight into the role the supervisory relationship of PGR students plays in their perceptions of discussing or disclosing mental health challenges
- To explore the impact of the COVID-19 pandemic on PhD experiences

Methods

Design

A series of semi-structured qualitative interviews were undertaken with PGRs.

Eligibility criteria

Any current PGR students studying at a UK HEI were eligible to participate in the interviews. PGRs with and without experience of mental health challenges were eligible to participate and there were no restrictions placed on participation based upon mental health or disability identification.

Sample size

In line with Mason (2010), issues of saturation, heterogeneity of population and multiple sampling within mixed methods studies were considered. 20 PGRs were interviewed to ensure richness and saturation of the research topic, and to ensure a heterogenous sample of participants.

Data collection

Data was collected from a series of audio-recorded semi-structured interviews. Interviews took place over Microsoft Teams, utilising the built-in recording software for audio recording, and a Dictaphone recording as back up.

Opportunities to participate in the interviews were advertised through social media (Twitter) and the researchers' personal networks such as SMaRteN (the student mental health research network), Student Minds (the UK's student mental health charity) the McPin Foundation, and Headucate University of East Anglia (UEA's student mental health campaigning and awareness society), following ethical approval.

Data collection was given a four-to-eight-week period allowing adequate time to recruit participants and run the interviews online. Data collection took place over a six-week period in February and March 2022.

Measures

Demographic characteristics

Demographic details were collected from participants. These included their age, ethnicity/race, mode and level of study, primary study environment, first-generation academic identification, LGBTQ+ identification, disability identification, caring status, and current disclosure status.

Interview schedule

Broad topics for discussion were identified from a systematic review evidence map of student disclosure of mental health and a quantitative study examining student disclosure experiences. The interview schedule focused on exploring a series of topics, participant background and motivations for PhD, experiences of support and peer support, research culture, mental health and wellbeing, and the supervisory relationship.

Social support was an area of questioning as this was previously identified as integral but tough to engage with and balance (Berry, et al, 2020). Support from online sources has been identified as a way for PGRs to connect with each other, share experiences and seek advice (Guha & Pande, 2021), so the interview schedule asked about online forms of social support also. Issues of work life balance and relaxation activities were included in the interview schedule as it has been found that these are difficult for PGRs to manage (Berry et al., 2020; Sverdlik et al., 2021).

As research has shown that depression, anxiety, and stress heightened during the lockdown periods (Jackman, Sanderson, Haughey, Brett, White, Zile, Tyrell & Byrom, 2022; Paucsik, Leys, Marias, Baeyens & Shankland, 2022) the impact of the pandemic on PGRs projects and mental health was included in the interview schedule.

The questions were designed to be value neutral and as open ended as possible, incorporating descriptive questions; asking for accounts of experiences, such as "*If you have had an experience seeking support for your mental health during your PhD, could you tell me about that?*": and structured questions; asking about knowledge of concepts and meanings “*Could you tell me a bit about how you personally understand mental health?”*.

When developing the interview schedule, anticipated problems were considered, and suitable solutions devised. Participants being reluctant to contribute or straying the discussion away from relevant topics were all identified as potential problems that could occur. As such, follow up prompts were developed to encourage contribution, and the researcher acknowledges their responsibility to invite participants to comment on a question or topic point. Unexpected tangents in the discussion were considered to be unpredictable in that the researcher will assess their relevance to the discussion before pursuing with the topic or trying to refocus the discussion to the scheduled questions. As it has been asserted that notetaking can be distracting for both the researcher and the participant and may inhibit the researcher’s ability to engage and actively listen to the participants (Banner, 2002) short notes and reflections on the interviews will be recorded after the discussion was finished, and no notes were taken within the interview to allow the researchers full attention to be on the content. A full copy of the interview schedule can be found in Appendix 10B.

Analytic plan

Transcription

The interviews were audio recorded using Microsoft Teams, utilising the built-in recording software for audio recording, and a Dictaphone recording as back up and transcribed using orthographic notation using Microsoft Word and Audacity computer programme.

A transcription method called Simplified Jeffersonian was used. Any abbreviations participants used were kept but words were not abbreviated unless the participant did. Non-verbal phonetic utterances such as ‘erm’ ‘err’ ‘umm’ and ‘mhmm’ were transcribed, as were pauses longer than .5 of a second (Braun and Clarke, 2013). Repeated words were not removed, and notions such as sighing or hand motions where pertinent were recorded. As swear words are thought to function as rhetoric tools used by the person in order to identify the discourse (Wajnryb, 2005) and for emotional connotation that many non-taboo words cannot capture (Jay, 2009), instances of swearing were transcribed and uncensored. Emphasis on words was indicated in the transcripts through bolding, extended syllables with italics and reported speech with inverted commas (‘__’) as adapted from Braun and Clarke (2013).

Thematic analysis

Following Potter and Wetherall’s (1994) suggestions, the thematic analysis was an iterative process beginning with all transcripts being read a number of times. Once the researcher was familiar with the transcripts, the analysis and interpretation of the data began.

Following the guidance provided in Ryan & Bernard (2003) and Braun and Clarke (2013), the first stages of analysis consisted of identifying anything that seemed interesting. This included word repetitions, use of metaphors or analogies, transitions, and connectors; both causal (‘because’, ‘since’) and logical (‘implies’, ‘means’). Statements and justifications used together were highlighted as of interest, alongside expressions of disagreement, extreme case formulations, idioms, contrasting and superlatives that are identified. Variability and consistency in what was said was noted and exaggeration, reported speech and accountability of statements were identified.

Coding

Preliminary coding then began. This is where hunches are followed and tentative interpretative schemes are developed, which are systematically revised or abandoned following repeated reading and coding of transcripts. This stage of the analysis could be described as open coding, where focus on the text defines concepts and categories. This leads into axial coding, where the transcript is re-read in light of these concepts and categories, in order to both confirm they accurately represent responses, and to explore any relation or interaction between the concepts and categories.

When re-visiting the transcripts and engaging in the iterative analytic process, micro and macro aspects of the data was explored in relation to the research question, whilst being systematic and rigorous, avoiding cherry-picking data aspects. Quality criteria reviewing is part of the analysis process, and reflexivity was practiced throughout the research project, meaning the researcher examined their subjective involvement in the research process. Audit trails are suggested to show a transparent and trustworthy analysis (Tong, Sainsbury, and Craig, 2007) so these were used, and all decisions and actions taken throughout the project and their outcomes were recorded.

Theme generation

Once the transcripts were coded, revisited and the researcher was satisfied that their coding accurately represented the data, the codes began to be grouped into preliminary themes. This allowed multiple codes and topics to be grouped together and expose to the researcher the broader constructions drawn upon during the interviews. This process again was iterative and repeated to ensure that themes are not too broad, too narrow or did not accurately capture the data. In order to demonstrate the themes to the reader, two participants’ stories were drawn out into case studies to illustrate the interaction between themes and the narratives captured.

Ethical considerations

It is acknowledged that the interview method is not a dominance-free dialogue between equal partners; it is asymmetric in its power relations (Brinkmann and Kvale, 2005). This is because the moderator defines the topic, questions, follow up questions and ends the discussion. Both micro-ethics and macro-ethics were considered within this research, and the knowledge produced which will exist in the wider culture is not deemed to be ethically problematic on a macro level (Brinkmann and Kvale, 2005).

This research posed no particular risks, no risks of physical harm and did not use deception in any way. The potential risk for participation was distress through the topic in question (for example if questions reminded participants of an upsetting personal experience), although the questions were not designed to illicit distress or reference particular experiences. Participant information sheets detailed support services such as Student Minds and Student Space, and following the interview, participants were reminded of these services, in case of any emotional distress. As per the researchers Mental Health First Aid qualification, if a participant became distressed within or following the interview, the researcher signposted participants to national crisis support such as the Samaritans help-line and e-mail services and recommended that the participant contact their local university crisis and student support if they are concerned about their wellbeing or call 999 / present to A&E if there is substantiate risk to self or others.

The issue of confidentiality was addressed at the beginning of each interview and participants were assured of the measures described to protect confidentiality. The intended use of the interview data was also described to the participants so that each participant could make an informed decision regarding participation and level of disclosure. It was highlighted at the beginning of each discussion that there are circumstances in which confidentiality cannot be maintained such as if a participant discloses that they are at risk of harm, or others are at risk of harm. Disclosures of this nature, if they occurred, were discussed with the participant and they were be encouraged to discuss this with a relevant professional. In the event of distress arising from participation in the interview, the participants were reminded that they are under no obligation to continue with the discussion, and if necessary, the researcher could utilise Mental Health First Aid crisis assessment. The researcher signposted to support numbers such as the Samaritans, and organisations such as Student Space, and participants were reminded of the available mental health crisis support as detailed in the debrief form. This information was also repeated following the interview completion.

Participants were given a participant number, and the interview questions did not require disclosure of any personal information that could be used to identify them by name, email, or student number. Data was kept anonymous, and if quotations are used within reports, these were given a pseudonym. Participant responses were kept confidential and specific responses would only be shared within the research team in the analysis process. Data, including audio recordings and transcripts were stored on a password protected external hard drive that only the researcher has access to, and the password protected UEA system One Drive, with any paper documents being stored securely in a locked file cabinet in the researcher’s office. Data management followed the 2018 General Data Protection Regulation Act and the University Data Management Policy (2019). Participants were provided the opportunity to review their unidentified transcript if they wished, in order to make any corrections or delete any information they wished not to enter into the analysis.

Additionally, strategies were put in place to protect the wellbeing of the researcher, including breaks from analysis, utilising personal and university support networks, and debriefing with the supervisory team, with the Primary Supervisor agreeing to act as emergency contact where the researcher could contact on mobile telephone at any hour if disclosures or discussions affect the researcher’s wellbeing.

Findings

20 PGR students participated in individual interviews. Participants spanned the PhD journey, from first year to sixth year, both part time and full time and were from a range of subject background. As can be seen in Table 16 below, there was a range of demographic characteristics represented, including non-binary PGRs and PGRs who disclosed caring responsibilities. The interviews ranged between 40-110 minutes.

Table 11: Participant demographic information

	N = 20		N = 20
Year of Study		**Student Status**	
1	6	*Home*	10
2	4	*EU*	3
3	4	*Non-Eu International*	7
4+	6		
Mode of Study		**First generation**	
Full Time	14	*No*	10
Part Time	6	*Yes*	10
Subject Area		**Ethnicity / Race**	
STEM	6	*White British / English*	8
Medicine & Allied	1	*White (non-specified)*	4
Social Sciences	5	*White Non-British*	2
Art & Humanities	2	*Black British*	2
Education	2	*British Asian*	1
Law & Business	1	*Asian*	1
Combination	3	*Indian*	1
		Mixed	1
Gender		**Funding Source**	
Male	8	*Student Loan*	3
Female	9	*Research Council*	7
Non-Binary	3	*Non-UK Government*	2
		Other	8
Sexuality		**Identified as disabled?**	
Heterosexual	12	*No*	7
Gay	4	*Yes*	5
Bisexual	2	*Unsure*	8
Queer	1	*Declared on application?*	6
Asexual	1		

Mental health challenge?		**Caring responsibilities?**	
No	3	*No*	17
Yes	15	*Yes*	2
Unsure	2	*Unsure*	1

Disabilities disclosed: Mental Health (3), Dyslexia (3) BPD (2), ADHD (2), Anxiety (2), OCD (2), Chronic Disorders (2), Chronic Pain and Fatigue conditions (1), Diabetes (1), Autism (1), Physical disability, Sensory Processing Difficulties (1).

Mental health challenges disclosed: Depression and Anxiety (6), Anxiety (4), Generalised Anxiety Disorder (2), Bipolar (2), CPTSD (2), Eating Disorder (2), BPD (2), Sensory Processing Difficulties (1), Personality Disorder (1), Major Depression (1).

Disclosure status: 3 participants felt they had nothing to disclose in relation to their mental health. 3 participants spoke of disclosing both formally and informally. 3 participants chose to disclose formally but not informally, whilst 5 participants disclosed informally but not formally. 6 participants chose not to disclose either formally or informally.

Analysis

Six main themes were identified:

1. Discourses of Mental Health: the ideas that the university and other PGRs propagated and how PGR expectations clashed with their experiences
2. The Emotional PhD: the emotional impact *of* doing a PhD, and the emotional impact *from* doing a PhD
3. Support Provisions: experiences and impact of support provisions, knowledge, and barriers
4. PGR Identities: the range of identities that PGRs are balancing and how they affect their mental health
5. Supervision and Supervisors: the impact of supervision and supervisors
6. Environment and Processes: the environment PGRs exist in and how university processes affect them

Theme 1: Discourses of Mental Health

One of the themes from this data was the discourses that exist around mental health and how that affected what PGRs expected: of the PhD, the university, and their mental health. A distinction was drawn between discourses and ideas perpetuated by the university as an institution, those from other PGRs, and those relating to mental health (although those relating to mental health were also upheld by universities and peers).

The Wellbeing Umbrella

PGRs felt that their university pushed a discourse of conflating mental health with mental wellbeing

> *"There's less in the way of actual mental health advice geared towards people who have mental health difficulties or like mental illnesses, and not just kind of issues with their wellbeing" – Kevin*

University-provided interventions for mental health were felt to focus on stress and wellbeing, rather than mental health, and participants felt that PGR with mental illness or a mental health condition were ignored by universities. PGRs were generally quite cynical about the discourses that the universities engaged in regarding mental health, with comments relating to being ‘tick box exercises’ or paying ‘lip-service’ to mental health when they are actually focusing on wellbeing (or not focusing on either):

> *“I think they’re all too quick to fly the flag publicly and say, you know, we, we look after our students and all this, but I think if they were honest with themselves…and actually reviewed what they’ve done… I’m not convinced they care.” - Will*

There was a disconnect between what PGRs expected: open, inclusive discussions of mental health and discourses acknowledging mental illness and severe mental health challenges, and the reality of ‘low impact’ interventions, conceptualising all mental health as stress or wellbeing, and some PGRs felt their universities were disingenuous and dishonest in their discussions of mental health.

> *“I get very frustrated personally, when... I see the university, kind of like patting themselves on the back for how great they've, they’ve, you know all the great stuff they've been doing when it's actually not - it doesn't take into account people with disabilities it doesn't take into account people with mental health issues and or international researchers” - Cat*

Problematic Discourses from other PGRs

Participants also observed and commented upon prevalent discourses they observed from other PGRs. These were on the whole, negative, and most participants spoke of hearing ‘horror stories’ of the PhD, having ideas of overworking and the expectation of mental health concerns normalised and presented as a natural part of the PhD. For participants with existing concerns around their mental health, this was troubling:

> *"Like it scares me. Everything everyone talks about on Twitter like it's like - like I don't want to be unwell again and I and I I know how I* ***know*** *how bad it gets and I can't go there…" - Niamh*

PGRs felt that other PGRs both online and at their institution generally felt that doing a PhD was difficult and problems with mental health were normal and to be expected. This led to feelings of isolation and self-deprecation when they did experience difficulties. These collective mindsets were viewed as continuing to perpetuate the idea that a PhD is 'supposed' to be difficult and affect your mental health, which was acknowledged as both problematic, but experientially correct:

> *"The messages that I was getting from people is that this is a very intense hard process which I think it's it's good to be kind of explicit about that is challenging but I think the risk is there creates this expectation that kind of like to to be doing it well, you've got to be kind of really unhappy and worn out all the time" - Scott*

This meant that a number of PGRs felt unable to distinguish between the normalised distress of doing a PhD, and when they were really struggling. A common thread in discourses from other PGRs was the use of jokes, sarcasm, and satire to describe their experiences to peers, further complicating the ability to identify when one might be at risk, or really need support. There is discussion to be had about what the longer-term effects on issues such as burnout these types of attitudes and beliefs can have on people who are (largely) just beginning their careers in academia.

The discourses from other PGRs also naturally involved supervision and supervisory practices, leading to the downplaying of seriously concerning behaviours:

> "[after reporting discrimination from supervisor] *And my situation is not even like the worst. I feel like my situation is like super mild compared to like how bad it could be like… I feel like for my situation I'm I'm not at like best case scenario, but I'm like just below best case scenario because it could be* ***so*** *much worse" - Cat*

Discourses of mental health

There was a distinction made between mental health and mental wellbeing; and mental health and mental illness. Some participants felt that the terms were used interchangeably and inappropriately. Participants felt that this distinction was upheld by both universities and wider society, and affected provision of support, interventions and how seriously mental health was taken:

> *“They're like ‘PhD's are hard, they're stressful, don't burn out take care of yourself’. But then it's like the people that are, like, legitimately, like, mentally ill and struggling, we're like, we're more than stressed. I mean, so it's like they're like ‘we recognize it's a hard time’. It's like, yeah, but like, do you recognize like, yes, it's a hard time for everyone and everyone deserves that support, but then there are people where it's like a bath won't solve the issue” - Max*

There was much discussion of mental health support and the discourses that exist around that at universities and outside. Participants universally agreed that services (both university and NHS funded) are overwhelmed, under resourced and potentially ineffective.

> *“And I'm just like, you know, mentally ill enough for it to be taking taken seriously, but like stable enough to like not be treated apparently” - Connor*

Wait lists were a common thread of discussion, and a number of PGRs said this put them off seeking support; despite not knowing what the waiting lists at their specific institutions were. There was a prevailing idea that university services are so oversubscribed that presenting to them was fruitless, and thus they did not bother seeking support. The PGRs in this sample also seemed acutely aware of the risks to mental health of doing a PhD, with over half referencing the fact that ‘literature’ ‘evidence’ and ‘knowledge’ shows that their mental health is more at risk, unstable and of concern than the mental health of undergraduate students. Whilst they are not *incorrect* in this assertion, it is unclear if they were aware of the limitations of some of this evidence, where they got this knowledge from, and how it may continue to contribute to the idea that they *should* be struggling mentally, and that it is *normal* to experience clinical levels of distress.

> *"It's so almost normalized that at some point you're gonna have a tough time mentally. And everyone's like, oh yeah, ok, you're having a tough time… that's like it's almost like a check box and yeah, and that's, definitely comes in with part of the the whole experience" – Jen*

Within the discourses surrounding mental health, whilst the PGRs were frustrated at their institutions for conflating mental health and wellbeing, there was some conflation of, and potential misuse of terminology such as burnout and imposter syndrome. A few PGRs spoke of experiencing burnout and stress interchangeably, and those who reported burnout and imposter syndrome did not provide definitions for these phenomena. Whilst it is acknowledged that these phenomena exist within academia, it is unclear how the participants conceptualised these terms and from where they based their definitions.

Theme 2: The Emotional PhD

Participants varied in how their PhD had affected them emotionally (or impacted on their mental health), some participants felt the impact of a distressing PhD topic, others felt the emotional impact of doing the PhD itself and some experienced both. It is important to note that the emotional impact from research topics, or the PhD itself was not a straight or linear thing; it fluctuated over time, where they were in their research, and the support they were getting.

PhD Related Distress

Participants reported a lot of emotional impacts of doing a PhD, with burnout being commonly discussed as a key impact:

> *"I remember feeling a little bit like there was a bit of a competition about who was working the hardest or doing the most or kind of um… and that you know, people would would kind of talk about like being really worn out or burnt out as if it was kind of like a badge of honour that they were doing their PhD right kind of thing" - Scott*

As noted in Discourses of Mental Health, participants' definitions of phenomena like burnout may not be in reference to clinical levels of distress, or long term stress. Language used to describe the emotional impact of doing a PhD often referred to 'battles' and 'fights' or 'boiling over' or metaphors around 'sink or swim'. PGRs described feelings of loneliness and isolation, which obviously had a negative impact on their emotional health. Participants felt that the emotional impact of doing their PhD was often ignored by the institution or in contradiction with messaging:

> *"'Now you must take your annual leave, you must make sure you look after yourself – unless we send you an email and say that we need something'" - Will*

Participants reported finding it difficult to look after themselves and balance the emotional drain that the PhD caused, with a number reporting feeling miserable, depressed, demoralised, and overwhelmed by the PhD. PGRs reported crying in their offices, and even in front of their supervisors, due to the stress of the PhD:

> *"I would never go into my supervisor's office and cry like I just couldn't do it… and I know that so many people do" - Owen*

The emotional impact of the PhD often led to ignoring struggles, downplaying experiences, and self-deprecation

> *"Like in my mind, I'm just like stop being a piece of shit!" - Ellen*

Topic Related Distress

A number of participants who research emotionally challenging topics discussed the emotional impact from their data and area of study. These participants often struggled to detach from their research area:

> *"Especially doing a topic like mine, which can be quite miserable, and you know, you're looking at kind of the worst thing that has happened to a person, it's it's hard to get something to take that off your mind when you're just in your own lounge" - Nancy*

The emotional impact of research didn’t stop after literature reviewing or data collection, with emotional affects being felt throughout the research process

> *“For a month, I just couldn't bring myself to read the transcripts. I just couldn't do it, I I was getting like teary eyed when I was like, I was like, stop being melodramatic and stuff, it's just the transcript” - Maria*

The amount of support given to those undertaking emotionally challenging research seemed to vary by their supervisor, but no participant referenced undergoing training or access to specific support for any mental health concerns arising from their topic area. The PGRs who were undertaking emotionally challenging research felt there should be more support for them, and support for their supervisors to allow them to effectively guide them through the process and help manage the emotional effects of this research.

Theme 3: Support Provisions

Participants had a range of interactions with and knowledge about university and non-university support provisions. Experiences were mixed and rhetoric about university services was generally not positive.

Services at the institution

Institutions varied in terms of what they provided, all participants acknowledged a counselling or wellbeing service, but access to training, peer support, and early intervention was not universal. All participants referenced services being underfunded, understaffed and under resourced, especially to meet the needs of a diverse student population.

> *“When it comes to the students need, they are pretty um diverse, and the university literally* ***cannot*** *provide them, and they do not have the resources. I am* ***sure*** *about that.” - Reuben*

Participants spoke about the lack of cultural knowledge of some support staff, and how difficult it can be as an international student to access services and feel like they understand your background. For PGRs for whom English was not their first language, accessing support and articulating their emotional and mental health concerns was challenging:

> *"Yeah, it's all about the I guess all of the connotations that go with certain expressions, which are also really related to shared experiences or at least to culture with and - so they don't really translate" - Joel*

Participants felt that services, where they did exist, had extremely long waiting lists, even for students in crisis:

> *"It's just so ironic cause it's like a crisis support and I'm sure I had to book it like 2 weeks in advance [laughs]" - Fran*

PGRs were aware that many services offered short term, limited support, and this was a contentious issue. There was discussion of the 'sticking plaster' notion of mental health support, or 'palming off' students to other services or the NHS, which was felt to be inappropriate. A number of PGRs highlighted that their university services did not signpost to local or national services/charities/support, meaning that either they had to do the work and research to find support, or they remained in the dark about support that was not university based.

PGRs were acutely aware of the structuring of support services as primarily tailored to undergraduate students:

> *"It always felt so much, undergraduate focused, partly because of the lack of year round support, um and partly cause so many of the sort of events that they put on the things to do that would either basically give you a space to just relax or you know the things that you could perhaps do… Workshops and things were built around someone who would have an undergraduate timetable. Which you know it never felt like you were being deliberately excluded, but you were sort of… it was less available to you" - Jen*

Some participants reported being turned away from services as they were not set up to 'deal' with PGRs, others reported that they had no recognition of PGRs as a unique group.

> *“I contacted the student well-being office because I was really struggling and really having a hard time and basically like they have no support - like they don't know how to deal with postgraduate students at all, like it's basically all of their stuff is for undergraduates on on taught courses and you know you can get a uhm, you know a note taker or recording devices and or you can get more time on exams and that sort of thing, but they have essentially no accommodations for research students, or uhm yeah, any any like postgraduate stuff” - Cat*

Suitability of services was a sticking point for a number of participants, who felt that the services were not suitable to meet their needs, and thus it was pointless to try and engage with them

> *“The student mental health discourses and frameworks do not recognise the specific needs of PhD students which I think is quite different often rather rather than the general mental health um support and provisions that we do for say undergrads or taught programs broadly” - Lawrence*

Issues of suitability also extended to accommodations for PGRs who required them. The summer period was noted as particularly challenging as due to institutional and governmental processes, Disabled Student Allowance based supports were often suspended, or severely limited. PGRs were often not informed of this in advance and felt overwhelmed by having their specialist support suddenly removed. There was also perception that accommodations offered by universities were again, only developed and implemented with undergraduates in mind; there was frustration expressed that they often only covered things like notetakers for lectures, or extensions on examination times, and did not reflect the reality of PGR study.

Knowledge

Knowledge of services and provisions varied between participants. Some participants felt they knew where to look, having been made aware of support services, but it was noted that information needed to be clearer and more easily accessible, removing the burden from the student (especially if they were really struggling):

> *"I would **love** it if all of that information was – you know, all the information about the support that was out there was presented to everybody and not just presented to the people who are struggling and need to search for help themselves […] I wish that stuff was readily available like that everybody knew about it kind of from the get go and not just when you're at crisis point and you're searching for help" - Kevin*

Other PGRs did not know where to look, with one saying they only found support by typing in their university name and 'mental health support' into Google. The PGRs felt their supervisors varied in terms of knowledge about support, with a number feeling if they raised concerns with their supervisor they would be told to 'go to Student Support', with no real knowledge or acknowledgement from the supervisor of what that would entail or what the outcomes might be. Participants felt that the induction can be a key place to get the message out about available support, but none recalled having this information given to them as part of induction. There was a distinction made between PGR knowledge of support for physical health and disability, and that of mental health support:

> *"Maybe for physical disabilities you could find that stuff out a little bit um more I feel like they're quite open about that sort of thing um but not for mental health things I found" - Maria*

There were a number of PGRs who expressed that they were only aware of services because they had done their undergraduate at the same institution – they felt that if they only had their PGR-based knowledge and experiences, they would not know where to go to get support. The notion of 'carrying over' knowledge was frequently brought up, and this was similar for the PGRs who also worked as Associate Tutors / teaching staff; they felt they knew about the services because they needed to for their students, not as part of their PhD experiences.

Access to and forms of support

PGRs felt that there were a number of barriers to accessing support, including lengthy bureaucratic processes which they felt didn't make much sense

> *"It's about some procedures students are not aware of, too many complicated bureaucracy" - Lawrence*

Participants felt their access to support was limited due to their PhD, particularly for lab-based students or students in large, spread-out institutions, where finding the time and availability to access 9-5 support services was tricky. A number of students found the disability support services easier to access than the wellbeing or mental health services, however the impact of evidence production complicated their interactions. PGRs who remained at the same institution found accessing support easier as they were already 'on the books', suggesting some inequities in accessibility of support.

A number of PGRs spoke of informal peer support being incredibly beneficial for their mental health, however there were concerns and some cynicism about peer support being a way for universities to shift responsibility; the notion of 'students supporting students' came up a number of times. PGRs were concerned that informal peer support meant there was no oversight, no training given to allow structured and useful peer support, and no-one to support the PGRs if the peer(s) they were supporting were in crisis, or if the support they were providing was having a detrimental impact on their own mental health. PGRs who had a positive experience of peer support said they felt 'lucky' to have it, and PGRs who had no experience 'wished' they could have had that support. It is important to note that some PGRs had no idea if their institution operated formal or informal peer support networks due to lack of communication.

> *"I don't even know if they exist" - Will*

For most PGRs, their friends and partner were the primary form of support that they relied on, with some sympathising with their 'poor' partner or friends for having to deal with them. A number of PGRs sought support online, primarily through Twitter, and this was especially useful for part-time PGRs who did not appear to have a sense of belonging to their cohort or university. PGRs who had experienced mental health crises and suicidality referenced seeking support from the Samaritans or the local mental health crisis team, with only one PGR presenting to university support in crisis (and this did not go well).

Whilst some participants found their supervisor to be a form of support, others did not (explored in more detail below), however all acknowledged that their supervisor should at least have some knowledge of available support for signposting, and to remove any emotional burden from the supervisor

Seeking support can often come with a number of processes such as referral, documentation, and disclosure. The processes that enable or hinder this were discussed by a number of PGRs:

> *"It is wrong, that disclosing mental health condition would or could negatively impact you, but it's also like you're aware that… like if there is anything which is slightly wrong, it can be used against you, even if that is like…illegal." – Niamh*

As mentioned previously, issues of wait times were also brought up when discussing the possibility of utilising NHS support.

Theme 4: PGR Identities

There were a number of identities that PGRs had to balance; that of themselves as a PGR, of themselves existing within a university system, as a burgeoning researcher, and that as an individual. The ways they experienced these identities and their effect on their mental health varied across and within the PhD journey.

PhD identity

Participants often felt that their identity as a PhD student was tied to their motivations for studying, and how they related to other students and friends' experiences. PGRs tended to enter their PhD because they were passionate about their topic, or for professional development, but this identity often interacted with their individual identity to create competition, uncertainty, and self-doubt:

> *"As a mature student going back, I did feel quite vulnerable because I was meeting these very bright uh, articulate people who knew loads […] and I uh,*

> *sometimes you get that sort of impostor syndrome feeling. And I kept thinking. Well, I'm not – this is too difficult. I I can't do it" - Kyle*

For PGRs who had returned to academia after a period of work, this identity could be quite difficult to manage, as they were used to being seen as an equal, not as a student to be supervised. For PGRs who taught or worked alongside their PhD, this complicated their identity as a PGR and often meant they fell between identities; not quite feeling like a PGR, not quite feeling like a staff member.

> *"I think with the role that I have, um they they, there are points where you are sort of balance. You're trying to make about five plates spin at one period in time" - Joel*

The PhD identity was also assumed by the university and supervisors to come with a certain set of knowledge and skills, such as knowing about publishing, academic language, how to finish their PhD, how to research independently. This was particularly difficult to balance for first generation students:

> *"I suppose because I don't come from a very academic background - personally, I was the I was the first person in my family to go to uni, so I feel like I have a lot of stupid questions and I have a lot of questions that I wouldn't necessarily want to ask my supervisors, even though they're lovely. And I'm sure that they would give me a nice answer, but I don't want to seem stupid" - Nancy*

Individual identity

Participants individual identity was often felt to be at odds with their identity as a PhD student:

> *"I feel like a PhD has put my life on hold a little bit in terms of some of my other goals, so I'm I'm saving for a house, but I yeah, I gave up a full time job to do the Masters and then the PhD, so that's that's pushed back a bit, it's going to be harder for me to get a mortgage with my partner because I'm a PhD student, pushing back marriage, pushing back kids. …. it does feel like a*

> *PhD - it just kind of wormed its way directly in the middle of all of my life plans, and I'm kind of picking up the pieces a little bit" - Jen*

A number of participants shared Jen's sentiment, feeling that the PhD had put their life on hold or put them further behind their friends who knew what they were doing with their lives or were more financially stable or were settling down.

Individual identities were also felt to be ignored by supervisors and the institutions, particularly for LGBTQ+ PGRs, who were trying to deal with past experiences of discrimination, their self-discovery of who they were, and their identity as a PhD student. The LGBTQ+ PGRs in this sample were not aware of how or who to report any instances of discrimination to, which suggests a worrying lack of information sharing and awareness.

When discussing their identities, many PGRs were very self-critical and self-deprecating, comparing themselves to others, or feeling that their demographic characteristics meant they had to fulfil a certain role as a PGR.

PGRs had to balance their identity as a staff member and student at the same time (often as prescribed by their university), and the fluctuating nature of their relationship with others moving from being an equal to being 'below' them in the hierarchy

> *"[Talking about working as a lecturer] Oh, we're not equal [laughs]" - Fran*

Identity and International Students

For international PGRs, their identity as a PGR was often uncertain, with visa issues being extensively discussed:

> *"Cause it's really stressful when you get something in writing saying your visa is at stake and when you go to the, when you when you want to go visit your family. They have to contact the university and show them your copies of your plane tickets copies of your passport. Feels that you're doing something wrong. It's it's terrible. You just went to visit your family during Christmas time, and you're treated like you are illegal. I can be perfectly legal*

> *I'm here doing everything I'm supposed to do, and that was one of my stressors, um being on the visa" - Maria*

International PGRs also spoke of the cultural differences and the impact of managing those whilst studying and being away from friends, family, and familiarity.

> *"*[Talking about impact on mental health] *Being an international PhD researcher is also like a huge part of that because I have no support system to speak of um here" - Sara*

International PGRs also highlighted how their identity as an international student further complicated accessing university and NHS services due to the mandatory processes:

> "[Talking about accommodations] *At the time I didn't have like the proper documentation that you needed to submit to get all this stuff because you also have to have like - I had to get it from like a GP on the NHS or GP like in the UK, which I didn't have at all, like all of my records were from the US" - Fran*

Theme 5: Supervisors and Supervision

Participants experience of supervision varied greatly, with frequency and type of supervisory meetings being drastically different between PGRs. PGRs felt that supervision could have a substantial impact on their mental health, and the power of the supervisor could make or break their experience and their mental health.

Supervisor priorities

A key discussion point was supervisor priorities. Most PGRs felt their supervisors were overworked and did not have adequate support however this did not excuse them from bad practice, nor stop the participants from questioning their priorities:

> *"At the end of the day he's just sort of over worked like the system - so he's got like family and a family that keeps him busy because there's kids also have special needs and so I I do understand his priorities, it's just they don't work out in a great way for his PhD students" - Joel*

It was felt that supervisors often did not have their PGRs as a priority; let alone their mental health, and for some they felt their supervisor just viewed them as a means to an end (publications, grants, labour) rather than having a responsibility to guide them:

> *"I think if supervisors understood the person rather than the project, I think mental health – peoples experience with the PhD I think would be a lot lot **lot** better" – Will*

A number of PGRs felt their supervisor was completely absent, and would not support them by reading work, or making time for them. Understandably, this led to those PGRs feeling the supervisory relationship had a detrimental effect on their mental health, and unfortunately led to a lot of self-blame and self-criticism, feeling that they were not a 'good' enough student to deserve acceptable supervision. Supervisors were seen to have inordinate amounts of power over their students and how they chose to 'use' this power was integral to PGR success.

A number of PGRs felt their supervisors were 'workaholics' and expected the same from them, with supervisors not respecting candidates' physical health, let alone their mental health:

> "[about not preparing for a meeting due to being physically ill] *I thought they'd sort of tear me to shreds" - Owen*

Supervisors were felt to uphold and propagate the same discourses that existed within other PGRs around mental health challenges to be expected and 'normal':

> *"Yeah, I remember kind of, I think bringing… bringing it up in certain supervisions with varying kind of levels of of success in terms of how it went and I do remember one time being told that kind of – that was just normal for PhD students and uh I came away feeling like there's something wrong with me and I couldn't kind of handle it and this was just what was expected of me" - Scott*

It is arguably unsurprising that these discourses exist among PGRs if these are the messages they are receiving from supervisors. The majority of PGRs felt that supervisors should have training and support around PGR mental health and felt that getting a good supervisor was often ‘potluck’ and there were inequities in how much supervisors knew about mental health and the support available, which was felt to be unacceptable.

Supervision experiences

There were some positive experiences of supervision reported, these mostly related to supervisors checking in on their candidate’s wellbeing and acknowledging any struggles that they were having.

> *“They’ll never come across as though they are perfect and every single piece of work that they have done is gold standard – they have gone through the same processes that I’ve gone though and they’re able to empathise with some of the experiences that I have had, and I will have in the future. So now I will definitely be able to go to them and they will be able to support me throughout that process” - Owen*

Candidates who did not receive this acknowledgement felt rejection and challenges affected their mental health more negatively:

> *“And of course, the paper got rejected and my supervisors’ comment was something like, ‘well, that that was to be expected’ and of course all that I wanted to hear was like, ‘well, that sucks let's move on’, didn't get that comment…” - Joel*

It seemed that positive experiences of supervision stemmed from their supervisor viewing them as a ‘whole person’ rather than just a project to be supervised, and negotiating or advocating on their behalf, especially when this involved acknowledgement of their position in the academic hierarchy:

> *“They would frequently bring up the emotional toll it had with the university, and there was one point where my supervisor said it was having an emotional toll on him too, because he knew that they would care more about that than about the toll on me and it did - it started escalating things” - Theo*

Negative experiences of supervision were acknowledged to have a substantial negative impact on mental health:

> *"Let's say in both cases it was disruptive and the supervisor who basically left because they didn't agree with me, and rather than dealing with that like professional, decided the best thing to do is not talk to me. That was definitely a negative on the mental health experience…" - Sara*

There was much discussion about how much pastoral support supervisors were meant to be giving – if any. Participants who had disclosed information about their mental health often regretted this decision, feeling it could have ramifications in their career and future:

> *"But I think I won't tell them the extent of how low I feel because I feel like I already have kinda hindered any potential possibility of working on further projects with them because I feel like I've made myself appear unable to cope with work and academia in general so I think I don't wanna like say or do anything that can further compromise that…" – Ellen*

Theme 6: Environment and processes

There was much discussion about the environment PGRs exist in and how that can impact their mental health; this related to the physical environment, cultural environment and PGRs position in these environments.

Physical environment

The physical environment that PGRs exist in was noted to have a real effect on their mental health. Access to a desk varied between PGRs, with some having a set desk in a set office, allowing for development of relationships with peers, and feeling belonging to research culture. For other PGRs they did not have access to this and thus felt more isolated.

> *"I didn't really have a great living space or working space, and at home I immediately felt quite kind of detached from the university" - Scott*

The role of working from home was discussed at length relating to environment, with a number of PGRs having inadequate home working environments but having to adjust to working in their bedrooms, sharing computers with partners or children, dealing with animals and bad internet connections. Some PGRs felt unable to focus at home, and others who were lab-based were unable to work at all on their projects. Isolation from working from home, frustration at inadequate set up, and inability to concentrate at home understandably had a negative impact on their mental health. There were some regrets from PGRs who started during the pandemic wishing that they could have had the in person, on-site experience from the start of their PhD.

> *"Working at home and and isolating – well not isolating - but you know, lockdown and things, how do you have that contact with other PGR students?" – Fran*

Cultural environment

Experiences of research culture and academic environment was frequently brought up. Some PGRs were unsure what research culture was meant to be. PGRs who felt they knew what research culture was, varied in how much they felt they were a part of institutional research culture.

> *"Mixed…To be honest, I don't really know what it means research culture… to be part of it" - Theo*

PGRs felt that there was a real distinction between the wider academic culture – one that they were not a part of – and the research culture among doctoral candidates. All participants felt that research culture was very important (for PGRs who did not meet with their supervisor often, it was viewed on par with supervision in terms of importance). They felt that they had to make their own research culture because wider academic research culture was not available to them

> *"I really do think there has to be more like intervention and reaching out rather than reaching up" - Max*

Many discussed that this could be due to covid lockdowns and not physically being at their university, but many felt that universities were using covid as a reason for not putting in the work to connect candidates with one another and ensure that they had an experience of research culture or peer support. Most felt universities and supervisors could be doing more to allow candidates to meet one another and connect, but this was a real issue for cross-disciplinary candidates who felt they didn't 'fit' neatly into school or faculty culture where one existed.

A number of PGRs felt that when they did make their own research culture through setting up things like peer support groups, their institutions then took credit for this labour, and boasted that they had peer support programmes – despite not being involved in their creation or management.

Position in the environments

PGRs were very aware of their status in the academic hierarchy. A number spoke of poor treatment by their department and institutions. One candidate described research culture and academia as only serving 'cis, white men'. There was discussion of the structure of the university environment and how having good mental health and taking care of yourself are antithetical to the environment that PhD's create:

> *"There's only so much that well-being days and therapy can do, and student campus services can do when the structures of the institution are* ***completely*** *oppositional to actually looking after yourself, they just don't - like the way that you can look after yourself and how a PhD operates, or how an institution operates they clash. They can't - they can't go together" - Theo*

Unfortunately, participants did report of experiences of racism, sexism and gender discrimination, homophobia, and ableism. When reporting these issues, there were mixed responses from institutions, especially when the candidate was viewed as much lower in the power structure than those who had been discriminatory.

> *"Maybe they don't feel as comfortable like coming forward because you're, kind of uhm you know, coming from a lesser position of power in a variety of ways, you know as a PhD researcher, as an international student, you know as a migrant, you know all of these kinds of things" - Maria*

As well as feeling at the bottom of the hierarchy through treatment from others, PGRs also felt that institutional environments around finances and pay put them in a nebulous and unstable position in regard to their security and ability to support themselves whilst doing a PhD:

> *"These are supposed to be the brightest minds in this field with novel ideas that have never been discussed before, never been researched – that's the whole point of a PhD – and yet you pay them peanuts,* ***if*** *you pay them" – Will*

Case study examples

As noted in the methods section, the following case studies are anonymised re-telling of the narratives around the PhD that two participants shared. All of the information contained within was discussed explicitly within the interview and has been reformatted as a narrative for the reader to see how the themes distribute, intersect, and affect the PGR experience.

1. Fran

"Fran is a final year student with a 3-month extension due to covid-19, as the pandemic meant there was much smaller capacity in the lab which made working difficult. Working from home led to demotivation due to lack of structure and no social interaction, meaning the pandemic took more of a toll on their mental health, as they were not able to engage in their usual coping mechanisms like socialising with friends and going out. They found the extension process easier than expected and appreciated that the university specified that the mental health impact of the pandemic was an acceptable reason to apply. She never registered with the disability service during her undergraduate but did at PGR level because she worried her mental health was getting worse and anticipated a situation where having a paper trail would be useful. Found the university websites and information very unclear relating to the evidence PhD students needed to produce and research council funding made it even more complicated. Being a PGR also meant that her support suddenly ended at the end of the undergraduate summer term, and the services were unaware of what information she needed to provide to continue receiving support over the summer 'holidays'. Her university sends out some regular wellbeing focused emails, but they are aligned to general wellbeing, not things that need more specialist care than yoga or Pilates at lunch time, and she would not engage with university counselling services again after being told her issues were 'too complex'. Disclosed to her supervisor during the second year of her PhD because she was really struggling and initially, he was very supportive, but there was no conversation if anything needed to change or if she was coping okay. During covid she became more unwell and the conversation with her supervisor was incredibly different and culminated in him telling her to take a leave of absence because her

project wasn't moving forward. He told her to go onto benefits as she would lose her funding by having an interruption. She felt it was clear that she was inconveniencing him by not being able to do what she needed; not that he was concerned for her wellbeing or safety. Her supervisor seemed to expect her to frequently work weekends and long hours, meaning she struggled with work life balance. She feels universities need to be more upfront about the support that is available and giving out the information so that students in crisis don't need to search for it themselves. She also feels that supervisors should have training and knowledge about what they can do to support their students and how things like interruptions to study work and should be a lot more compassionate."

Fran's experiences explore the themes and ideas expressed across the interviews. Fran was exposed to the expectations and discourses of her supervisor in regard to work life balance, and her own expectations around the process of accessing extensions. Support provisions were also a key part of her experience, with on-site services not meeting her needs and the university support provisions incorporating discourses of mental health, with processes meaning her support stopped and the evidence and application processes were unclear due to her identity as a PGR. Her identity as a PGR and its interaction with her supervisory experiences meant that she felt an inconvenience to her supervisor and the lab because she was struggling with her mental health and work output. Her working environment was heavily impacted by the pandemic and her experience from doing a PhD had a negative impact on her emotions.

2. Abbie

"Abbie is a second year PhD student. She has only recently begun to feel like she is happy with how her project is progressing. Her PhD has impacted her engagement with her hobbies and things that keep her well, and the pandemic amplified that because she was unable to get into the office where she benefits from socialising with other PGRs. She found her mental health got quite bad during the isolation of the pandemic and trying to work on her PhD, and felt she was getting burnt out, wanted to drop out and felt suicidal. She absolutely would never speak to her supervisor about her mental health, as her supervisor doesn't have time for her;

when she had emergency surgery her supervisor didn't check in with her at all. She feels thankful she has a supportive partner and family, but as a first-generation student they don't really understand what doing a PhD entail and she experiences a lot of imposter syndrome. She thinks the culture of academia doesn't help those with mental health challenges because it's very toxic, and is critical of anything that makes you weaker, including mental health. She reached out to the university services in crisis and had to wait two weeks for an appointment, and then found the advice so vague because they didn't know what to do with PhD students and they were not well versed in the PGR experience. She felt the services were tailored to undergraduates and there was an expectation that what helped undergraduates would apply to the PhD journey. She feels her university is quite good at correspondence about academic support, but not mental health support so she had to find the information herself. She feels that universities give supervisors training as a check box exercise and staff don't really have much pastoral training and don't have good understanding or awareness. She feels there's a lot of reasons why PhD students might struggle with their mental health, being treated like a student with all the downsides but also treated like staff with all of those downsides."

Abbie's experiences also show the interactions between themes expressed in the interviews. Abbie talked a lot about supervision and her experiences with her supervisor, and her supervisors' priorities and treatment of her. She explored how her identity as a first-generation student affects her experience of doing a PhD and the support she has from those around her. As with Fran, Abbie found the work environment difficult to navigate through the pandemic, and also referenced her position in the environment and her experience of the downsides of being a student but also treatment as a staff member. Abbie felt there were many reasons why doing a PhD would have a negative emotional impact, and the issues of knowledge about support services and expectations around the support they would offer to PGRs.

Sub-themes and context

Underlying all of the themes were the ideas of 'The University' as an entity, the role of power and privilege, and conceptions of stigma.

‘The University’ was personified as a ‘thing’ of its own with personality and traits throughout the interviews, with participants separating staff and cultures from ‘The University’ and what ‘The University’ does and says. ‘The University’ was felt to be a dehumanising force to both PGRs and staff, impacting self-worth, experiences, and finances. There was assertion that ‘The University’ needed to hire more staff and stop overworking existing staff, that PGRs felt affected a lot of their experiences.

There was widespread acknowledgement of power and privilege and how that affects the PGR experience and individual PGRs mental health. There was discussion about privileges and power structures throughout academia and within individual institutions, and how experiences could vary based upon characteristics such as international student status, being a woman, being a first gen, being a PGR and the power (or lack of) associated with all of these statuses. Privilege was referenced a lot in regard to positive experiences; PGRs felt lucky to know about services, privileged to have support systems they could access, lucky to have okay supervisors, privileged that their supervisor was aware of where to sign post them.

Conceptions of stigma understandably featured across all themes and had a substantiative impact on PGR mental health. Stigma could (and unfortunately did) come from supervisors, student support services, and PGRs themselves. Instances of past stigma affected PGR willingness to disclose information relating to their mental health or if they were struggling, and fear of future stigma also had this affect. PGRs also felt stigma was always potentially likely, and that this was upsetting.

> *“It is actually amazing what happens when students are supported, but like they aren’t and I know like what I've experienced, is in incredibly privileged like, like I know, not every student will get the same as what I’ve been given, and that's really, really sad” – Niamh, disclosed to student support and supervisor.*

Interactions

As can be observed, the PGR experience is a nebulous, variable phenomena. Individual PGRs can have vastly different experiences even within the same research team or having the same supervisor. However, the themes identified overlapped within all participants, regardless of topic, previous experiences, age, and personal identities. As such, a visual depiction of themes and how they interact with each other, the environment PGRs exist within, the University subtheme and stigma subtheme has been developed, seen below in Figure 9. Ideas of the University and Stigma encompass the other themes, and so the visual depiction has been designed to account for the variance in stigma perceptions and experiences that exist within The University. For the main themes and to account for the varying experiences that PGRs may have, a series of linear scales have formed part of the theme, as PGRs may fall at different points on the scale (e.g. experiencing negative discourses).

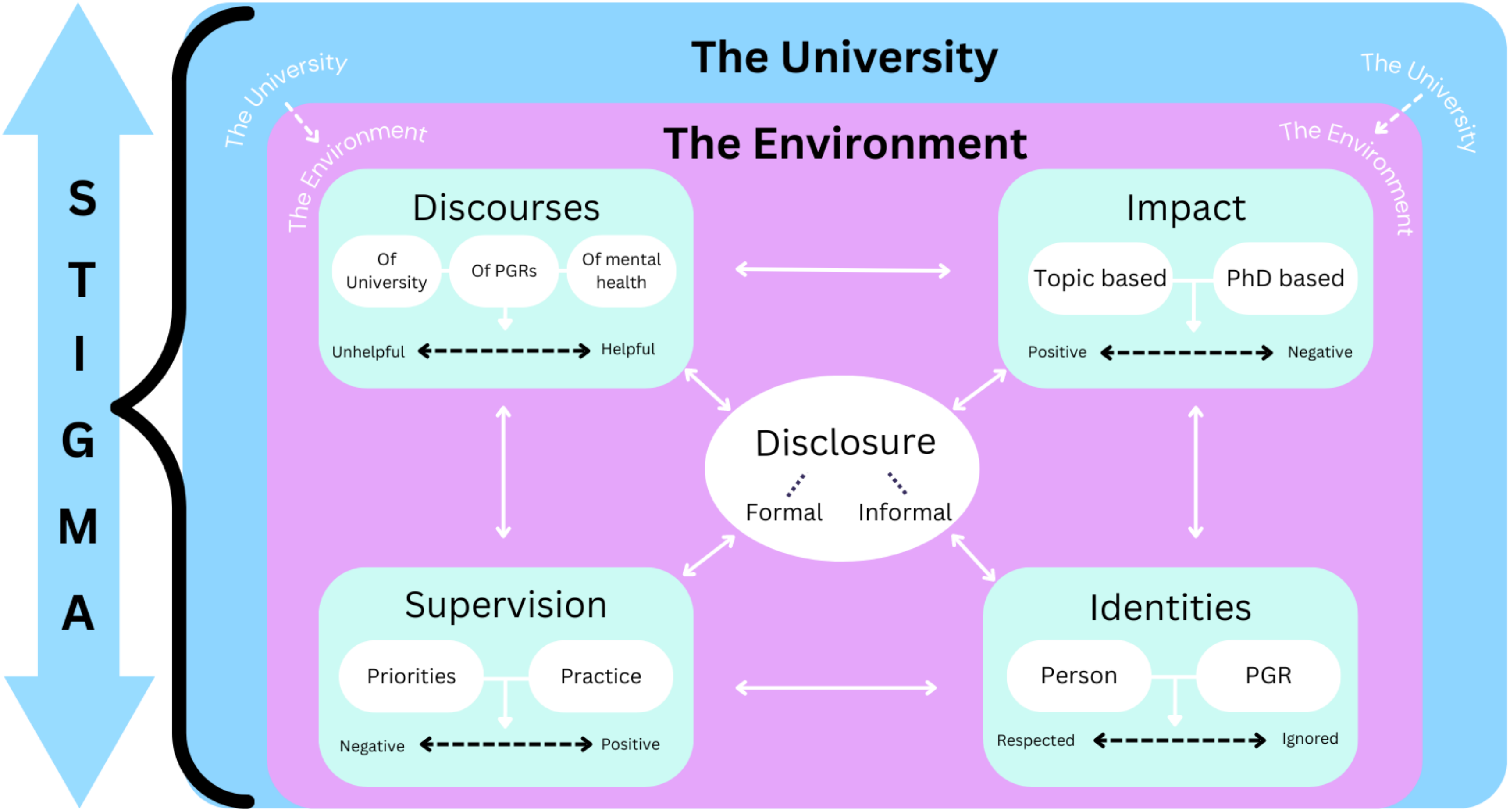


Figure 9: Visual depiction of themes and subthemes

Language

Within the interviews, participants frequently used self-deprecating language to describe themselves and their PhD progress. All participants expressed self-criticism, which whilst healthy in moderation, routinely crossed into unhealthy and unsettling ideas. Nine of the twenty participants used terms like “bitch”, “piece of shit”, “stupid”, “bad students”, to refer to themselves. This suggests the internalising of some worrying ideas about what a ‘good’ student entails, and issues of low self-esteem or self-worth. Whilst it is inappropriate to assign blame for these views onto their supervisors, it is worth considering what supervisors and universities can do to show PGRs that experiencing challenges with your PhD research (or your mental health) does not make one a bad student, and that self-deprecation can be dangerous, especially for those with existing mental health challenges and previous experiences of suicidality or self-harming behaviour (which a number of participants referenced).

Participants also mentioned use of dark humour as a coping mechanism, or self-deprecation as a way of dealing with struggles within their PhD, often enacting this with peers. This can have implications for how the discourses and expectations expressed by PGRs might affect others and have a knock-on-effect on the ideas of having to work all of the time or expecting to struggle with your mental health that they also reported encountering.

There was a lot of use of metaphors and language around “fighting” the PhD being a “battle”, having to “soldier on”, using war analogies and the idea of “sink or swim”.

External factors

Whilst there was much discussion about the mental health impact of the PhD and supervision, it is important to note the ideas about external factors and the impact of *life* on the PhD experience, mental health and how external and or life factors might have a knock-on-effect on the PhD, thus having further effect on mental health. With the interviews taking place in 2022, a large external factor was of course the pandemic, and unsurprisingly the health of PGRs parents and their own fears about contracting the virus was discussed. Additionally, the impact of other world situations such as the invasion of Ukraine and climate change were talked about.

The participants in this sample were incredibly open with their experiences, and it should be acknowledged that a number of these participants were dealing with a lot of external stressors, some of which they felt were acknowledged by their university and supervisors, others felt they were expected to continue just focusing on the PhD as if nothing else in their life was going on. Some PGRs were dealing with the aftereffects of physical and emotional abuse in childhood, or other childhood trauma such as bullying or poverty. Unfortunately, some PGRs reported ongoing experiences of trauma and discrimination whilst undertaking their PhD, with instances of racism, sexism, transphobia, homophobia, and gender violence all being disclosed within the interviews. Some PGRs were dealing with addiction and substance misuse recovery, processing the suicide of a peer, their own suicidality and self-harming behaviour, had experienced sexual assault, going through the process of transitioning, or questioning their sexuality. A number of PGRs were open about being on medication for their mental health, including the effects of changing medications and the impact of health emergencies such as emergency surgery, having an abortion, and experiencing mental health crises. Issues of financial struggles were also discussed, such as having to utilise foodbanks.

Discussion

Overall, the PGRs in this sample explored a wide range of factors that influenced their mental health whilst doing a PhD. It is important to note that whilst there were some examples of good supervisory practice and institutional policies, there is a lot for universities to learn and implement about how to better support their PGR students. The main objective of this study was to explore the PGR experience, including disclosure and the supervisory relationship. Unsurprisingly, the supervisory relationship was noted as having a tricky impact on mental health.

Participants' comments echoed previous findings that below average quality doctoral-supervisor relationship has been found to be significantly associated with greater risk of stressful working conditions and stress (Ahalli, Fort & Bridai, 2022). A number of participants felt their supervisor was inaccessible both in terms of academic support, and pastoral support, with effects on their stress levels as a result; in line with the work on stress in the doctoral journey by Barnes, Williams, and Archer (2010). Additionally, PGRs in this sample varied in their comfort and perceptions of appropriateness of discussing their mental health with their supervisors. This is an important consideration identified in previous work (Berry et al., 2020), and for universities to consider when providing training and guidelines to supervisors, and for supervisors to consider when beginning the supervisory relationship with new candidates.

Discourses around mental health and the conflation of mental health and wellbeing were identified as prevalent barriers to help-seeking, self-identification of studying and are in line with previously identified expectations of suffering whilst doing a PhD (Hazell et al., 2020). It is concerning that PGRs reported experiences of discrimination and harassment and did not know the processes for reporting this, however data from the Wellcome Trust found that over 45% had witnessed bullying and harassment, with 25% feeling raising concerns about discrimination or harassment would be damaging to their carer, suggesting that more needs to be done to ensure that not only do PGRs know *how* to report harassment, but that universities look at *tackling* these issues proactively.

The emotional impact of completing a PhD, involving managing projects, training needs, professional development and external life events has been identified previously as a stressor (Hargreaves et al., 2017) and were highlighted by PGRs in this study. Further complicating the emotional impact of conducting a PhD is the type of research a candidate is undertaking, and further work in understanding the impact of researching emotionally challenging topics needs to be done to understand how to better support PGRs (and their supervisors) doing this work. Participant comments about experiencing imposter syndrome are in line with previous work showing PGRs reported frequently experiencing imposter syndrome (Usher & McCormack, 2021; Sverdlik et al., 2021) and that this can make it difficult to ask for help (Chakraverty, 2020).

Previous work with Masters' students has suggested that Peer Assisted Support can positively impact on confidence, social inclusion and belonging (Hayes & Fulton, 2019). The participants in this study expressed a want for Peer Support, and further work on the impact of peer support or peer mentoring is needed to understand if these benefits will translate to PGRs as opposed to taught Masters' students. It has also been noted by those who have completed their PhD that peer group support can mitigate some of the negative effects of poor supervisory dynamics or low quality supervision (Bryan and Guccioine, 2018). In research with those who had finished their PhD up to 15 years ago, social networks were also found to endure years after the completion of studies (Bryan and Guccioine, 2018).

The impact of developing an identity as an academic researcher has also been discussed, with Barry et al. (2018) finding that developing an identity as a researcher has been identified by PGRs as a challenge for their mental health. The PGRs in this sample were balancing multiple identities and felt these could often negatively impact their mental health. The stressors specific to international doctoral students are also in line with previous research on international PGR mental health, particularly for those early in their journey (Cornwall, Mayland, van der Meer et al., 2019). For PGRs who taught, their identity in the academic system was often in flux, echoing the 'grey area' identified by Sverdlik et al. (2021) as a potential negative impact on mental health. The doctoral identity has been found to be liminal and confusing (Berry et al., 2020) and the findings from this study support this notion, with participants finding the various identities that they balance difficult and nebulous. Issues of privilege and power came up a number of times in discussions with PGRs, and this is something that affects research culture across the institution (and may also exist between other academic levels such as for Early Career Researchers, or those on temporary contracts).

It is not surprising that some PGRs mentioned financial concerns, as previous work has identified financial concerns as a stressor for doctoral students in the US (National Association of Graduate Professional Students) and the UK (Sverdlik et al., 2021).

When combining all of these potential stressors on mental health, and the opportunity to discuss PhD and mental health experiences with the researcher, unfortunately the disclosure of suicidality and self-harm to the researcher is not surprising and is in line with previous findings that graduate students may struggle with self-harming behaviours or suicidal thoughts (Garcia-Williams, Moffit & Kaslow 2014; Kowalczyk et al., 2021).

Practice implications

There are a number of findings that have implications for both practice and policy for institutions, doctoral colleges, and supervisors; presented here in top-down order, as is important to enable systemic changes:

- Universities should be aware of the messaging they are upholding about mental health and carefully consider the evidence base surrounding conflations of mental health and wellbeing, and potential impact on student perceptions of these discourses and influences on support structures and help-seeking. Universities should think critically about the knowledge and understanding that support structures and services (including student-facing staff) have about the PGR experience and ensuring services are accessible to PGRs.
- Doctoral colleges should ensure that training provided to supervisors acknowledges the stressors that PGRs may face, and is receptive and sensitive to issues of PGR mental health, including ensuring that supervisors are able to adequately signpost to support resources, have knowledge about interruption of studies, allow them space to understand and reflect upon their positionality and power within the supervisory relationship, and support supervisors to protect their own mental health whilst supervising candidates. They should also carefully examine information provided to PGRs around their mental health, equity of information given, and co-creation.
- Supervisors should reflect on their pedagogical practice and supervisory style, acknowledging power differentials and the impact that external events and factors can have on their candidates. Supervisors should take an active

role in signposting and not assume that all candidates will be confident and comfortable asking them for support and open those doors for them.

Future directions

A number of findings from this research would benefit from further investigation. Limited work around the experiences of LGBTQ+ PGRs exists, and the findings that they may not be aware of how to report discrimination is concerning, and further work will illuminate the gaps in university advertising and processes for reporting harassment and discrimination (this will also benefit students of other minoritized backgrounds, though experiences of racial discrimination were not explicitly reported within this sample).

There is much work to be done around PGR identities, particularly for PGRs who teach, and part-time PGRs who also have other jobs – especially if these jobs are at a more senior level. The power-play within supervisory relationships can be difficult to navigate, and these findings suggest this may be additionally complicated for PGRs who have other employment, or have had a period out of education, perhaps in a more senior level.

The impact and efficacy of peer mentoring or peer assisted support within the doctoral student population should be investigated, as it was found that social support from peers can be invaluable to PGR mental health, with the caveat from participants that training and support should be available if these will be formalised schemes, co-created with PGRs. Highlighting sources of support that friends, peers, and colleagues utilise when supporting friends doing a PhD that are struggling with their mental health will also benefit development of interventions and understanding the varied roles that PGRs may play, especially how they may balance supporting other PGRs mental health with managing their own mental health.

Reflexivity

As a PGR student myself, I feel that the relationship between myself and the participants was on quite an equal footing, with participants frequently commenting things like “I’m sure you’ll know”, “You know when” etc. when I presented participants an opportunity to ask me any questions they had at the end of the interview, a number asked further questions about how my PhD was going (as I had explained a little about my journey in my introduction to the interview). I am someone with lived experience of mental health challenges, and this was something I had to decide on if I was going to share with participants if or when they asked about my motivations for my research. A number of participants already seemed to have assumed I had experience of mental health challenges just by virtue of my topic area, and I was not surprised by this (or questions relating to my own experiences of disclosure or talking to my supervisors about my mental health).

My participants shared a lot of experiences with me, including distressing content. As an empathetic person, with my own lived experience of some of these issues, this did become difficult. In one particular interview, the participant began to cry, and I cried with them, despite it being a virtual interview. It was difficult for me to separate participant experiences from my own sometimes, and a number of the interviews did have an effect on my own mental health. As Kiyimba and O'Reilly (2016) reflect upon, the emotional impact of interviews can be confounded further through repeated listening. And it didn't stop when the transcripts were done, reading them, and re-reading them to code, and then to check coding, and to generate themes. In order to manage this, I kept a reflective research diary which was updated when I was working or had feelings about the research. I also had regular debriefs with a member of my supervisory team which were invaluable. This allowed me to reflect on my views directly after collecting, transcribing, and analysing the data and facilitated examining the accuracy and evidence for my analysis.

In order to ensure I was accurately representing participant voices; I gave each participant the opportunity to review the transcript of their interview (once de-identified) and remove or amend any information that they felt they did not want included or did not articulate in the manner they wished.

Another point to reflect on was the overwhelming response to the call for participants and note that the recruitment process was a significant challenge for me. Whilst I had expected the interviews to potentially be challenging, I was not prepared for the number of responses from PGRs who wanted to take part. As well as PGRs who wanted to take part in this study, I also received a number of distressing disclosures from PGRs on my social media and my university emails. It was often unclear whether these PGRs *wanted* to take part in my interviews or were just relieved to seemingly have a space to share their experiences. I had prepared myself for disclosures within the interview context and had set up de-briefing sessions for this, but I was not expecting disclosures in recruitment, nor having to formulate a signposting response to those who appeared in active distress.

Limitations

As the interviews were designed to be de-identified, even if mentioned, the institution that participants studied at was not included in the analysis and thus it was not possible to understand the range of different disclosure processes that exist within different institutions and offer any recommendations or process specific findings (although the finding that processes are confusing, difficult and different depending on university does support the idea that there should be a streamlined, UK wide process, rather than each institution having its own procedures).

Whilst the sample was reflective of major disciplines, modes, and years of study, and broadly representative of the doctoral landscape in the UK with representation from men, LGBTQ+ students, disabled students, and international students, including those with and without experience of mental health challenges, the sample was self-selecting and thus may have missed some hidden voices. The aim of this study was not to produce 'generalisable' accounts of what PGR study will be like for all candidates, and whilst the capture of varied experiences shows that the participants were willing to openly share their perspectives, thoughts, critiques, and recommendations for institutions, these may not be appropriate for all PGRs or universities and do exist within the UK specific context.

Conclusions

The PGRs in this sample shared a range of experiences relating to their mental health during their PhD. The University as an idea, and as an institution were pervasive areas of discussion; participants identified 'The University' as enacting various policies, procedures, hurdles, and enablers to good mental health, but also felt that the discourses that existed within institutions had the potential to negatively impact mental health, through inadequate, inaccessible, or ill-informed interventions, support structures and definitions of mental health.

Alongside acknowledgement of training (or lack of) that supervisors may have, PGRs felt the power that supervisors have, and how they use it, has substantial ramifications on their mental health. PGRs felt supervision was less likely to have negative effects on their mental health if supervisors used their power to advocate, share experiences and recognise candidates' identity as a PGR, with mental health being negatively impacted by non-acknowledgement of mental health, PGR identity, struggles and discriminatory practices.

Due to the observed complexity and importance of the supervisory relationship for PGR disclosure, and the acknowledgments of PGRs that supervisors are also under pressure from institutions, it was felt necessary to explore the supervisory perspective. This will allow identification of commonly agreed barriers and facilitators to effective supervision, provide the supervisory viewpoint on some of the topics identified by PGRs as effecting their mental health, and provide recommendations that meet the needs of both groups. The exploration of PGR experiences of mental health and disclosure, combined with the supervisory perspective on encouraging and/or receiving disclosures, will allow understanding of the relational nuances between PGR and supervisor when it comes to discussing and disclosing mental health challenges.

Chapter 5: Supervision of PhD Students: Challenges, Support and Perceptions

This Chapter reports on a qualitative study with doctoral supervisors from across the UK. It builds on the literature around staff perceptions of mental health and the PGR-supervisor relationship (Chapters 1, & 2), findings from PGRs within the survey (Chapter 3), and the in-depth interviews with PGRs where the supervisory relationship was explored (Chapter 4). It aims to explore the supervisory perspective on PGR mental health challenges and disclosure, including understanding of university processes, training and support available to supervisors and experiences of initiating or receiving mental health disclosures from supervisees. The findings are then discussed in light of the rest of the Thesis. Following a discussion of the findings, researcher reflexivity is discussed, along with the limitations to this study and how fits into the Thesis and links to earlier findings, which will be further explored in Chapter 6.

Introduction

The role of the supervisor in the PhD journey should not be understated or undervalued. Consistently research has shown that PhD students view the supervisory relationship as paramount (Metcalfe et al., 2018) and successful supervision is often a prerequisite for career progression for the supervisor (UKCGE, 2018).

Policy reviews in the UK have suggested that typically, research supervisors need to be members of staff, complete a professional development programme, and should either have previous experience of supervision, or if not, form part of a supervisory team with more experienced supervisors. The majority (96%) of the 142 institutions provided regulatory training to their supervisors but only 27% provided training on supporting students in a more pastoral role (UKCGE, 2015). It has since been noted by UKCGE that support for supervisors around pastoral care and mental health awareness is good practice (2019).

PGRs and their supervisors

The supervisory relationship is unique, variable and often personalised. It is an intimate engagement with demands on both parties; the supervisor to guide and advise, and the PGR to absorb, reflect and deliver. As explored in Chapter 1, PGRs often have the most contact time with their supervisors, in contrast to undergraduate students who have multiple lecturers, seminar leaders and will have a personal tutor. This means that supervisory teams are often the first port of call for the PGR student when they require support, both academic and pastoral. Staff knowledge on support structures is varied, with evidence suggesting that whilst staff may be mostly aware of reasonable adjustments and support for students, their confidence in supporting students who fall into the HESA categories of disability is lower (Lister, Pearson, Collins & Davies, 2020). Evidence is mixed about how much supervisors are supporting their PGRs, with studies involving supervisors identifying high levels of pastoral support (Byrom et al., 2018). However, work with over 1000 UK PGRs suggests the amount of PGRs receiving support for wellbeing or personal issues is between 30-40% (Cornell, 2020).

Supervisors have an essential role in the success and attrition of PGRs, and the importance of their skill set as supervisors cannot be understated. The type of supervision provided – desirable; instrumental and effective versus undesirable; micromanaging and ineffective – have been shown to affect PGRs intentions to quit their studies, with affective supervision being related to wellbeing (Blanchard & Haccoun, 2020). In terms of disclosure, the experience of disclosing to a supervisor might have implications for their working relationship going forward, in a way that disclosure to a lecturer would not, i.e. they must continue to work closely with the supervisor (or supervisory team) for a minimum of three years, rather than the undergraduate timetable that changes term by term and year by year.

As discussed in Chapter 1, the UK context of the PhD itself can be different to that of other countries (e.g. necessitation of Viva examination, lack of elective upgrades), but even within the UK system, practices, training, and expectations may differ by institution – and arguably by subject area. Despite institutional or subject differences, there are of course shared elements in the general procedures relating to supervision, such as allocation of a primary and secondary supervisor, along with any tertiary or external (not based at the PGRs institution) members of the supervisory team. Research by Vitae (2018) which surveyed university support service staff found that PGRs who formally disclose to their institution can be reluctant to have that information shared with their supervisors due to the complexity and importance of the relationship.

Supervisors in Higher Education

It has been argued that more scrutiny is being placed on institutions and supervisors to deliver doctorates that are completed in a timely manner and equip candidates with transferable skills and meet their training needs (Henderson, 2018). As such, the amount of monitoring that institutions and supervisors engage with to ensure candidate progression and success has also increased over the previous decades. Evidence from Australia suggests that progression reports are often seen as a banal administrative document by supervisors, and not an effective means to capture progress or signal concerns (Mewburn, Tokareva, Cuthbert et al., 2013). PGRs also feel that spaces such as their annual progression reviews are not an adequate place to raise concerns about their mental health or their experience of supervision (Metcalfe et al., 2018).

In their commentary on stigma in higher education, Rudick and Dannels (2018) discuss the disparity between what academics are hired to do; teach content, evaluate student academic progress, and conduct research (and are evaluated and appraised on their ability to do this), and the issue of mental health; staff evaluation metrics likely do not include the ways that staff support student mental health, provide advice on pastoral issues, or success in dealing with mental health crises. Evidence suggests that staff may not feel adequately equipped to support their candidate’s mental health and wellbeing with Brockelman et al., (2006) finding the most frequent source of staff information on mental health was overwhelmingly previous experience of supporting students, followed by the media. Formal training was the lowest rated information source; staff did not feel adequately equipped to work with students with mental health challenges and expressed the need for more resources.

The Equality Challenge Unit (2009) recommended specific mental health related support for staff, including the Mindful Employer scheme, and production and dissemination of guidance for line managers and colleagues around mental health and promoting healthy working practices. However, more recent research such as reports from UKCGE, Student Minds, Vitae and Universities UK suggest that support for supervisors is varied, can be limited or inappropriate and can add further time constraints to an already difficult workload.

Salimzadeh, Saroyan and Hall (2017) note the fundamental changes that academia and higher education systems have undergone in the last few decades such as globalisation, competition, political and economic disturbance, and the expansion of technology and learning technologies. This unsurprisingly has an impact on the wellbeing of academics. Research conducted by Student Minds in 2018 with academics from across the UK found that responding to student mental health challenges is felt to now be an inevitable part of the academic role but is not properly recognised and has a substantiate negative impact on their own wellbeing; particularly for those academics who have their own lived experience of mental health challenges.

Data from a UK wide survey of over 3,000 PGR supervisors in the UK from the UKCGE (2021) identified that over 90% enjoyed being a supervisor, but also identified a number of challenges. Whilst 76% felt it was their role to respond, only 56% felt adequately supported by their institution in responding to the mental health and wellbeing of candidates. Issues such as lack of time, high workload, difficulties in managing their own mental health and personal issues were also identified. Supervisors' awareness of the limitations of support services at their own institution has been noted, affecting their comfort with and willingness to discuss mental health with their candidates (Woloshyn et al., 2019, Student Minds, 2018).

Imposter syndrome and burnout appear to be common experiences among academics (Jaremka, Ackerman, Gawronski et al., 2020). A review of 46 studies between 1991-2015 found that academics’ psychological wellbeing is impacted by numerous factors related to their job as academics, including workload, work-life balance, resources, and effort-reward imbalance (Salimzadeh et al., 2017). Literature findings suggest that specific aspects of the academic work experience such as work-life-conflict, resourcing and management can make academics vulnerable to psychological distress, burnout, and negative emotions (and the subsequent negative consequences). It can be difficult for supervisors to balance their role as an educator, supervisor, and evaluator (Langørgen, Kermit & Magnus, 2018).

This study

Due to the integral role of the relationship between PGRs and their supervisor, understanding the complexity of the relationship and its impact on supervisors is critical for universities and graduate schools/doctoral colleges. Current data on the supervisory experience is primarily from quantitative surveys – whilst large-scale studies like the UKCGE Supervisor Report incorporating qualitative free text responses in the questions, limited UK based qualitative data exists. In Chapter 2, systematic review methodology aimed at exploring literature related to disclosure identified papers that included staff, however only one explicitly included supervisors (Woloshyn et al., 2019) and this was based in Canada, where graduate education is structured differently to the UK. The sequential nature of the Thesis allowed the development of a qualitative exploration of supervisory experiences, that allowed discussion of PGR mental health, the supervisors mental health, training (and training needs), and the impact of the pandemic, as these were highlighted by PGRs themselves in Chapter 4. Therefore, it was felt a qualitative investigation into UK supervisors of PGR students would fill the gap identified by the systematic review evidence map and provide insight into any overlap between PGR and supervisor experiences, needs and perceptions.

Objectives

- To explore supervisor experiences of supporting PhD candidates in UK universities
- To identify levels of training in supporting the mental health of candidates (and if supervisors wish to have more support available to them)
- To gain insight into the role the supervisory relationship plays in supervisor perceptions of their role
- To identify perceived barriers to effective supervision of candidates
- To explore supervisor willingness to discuss mental health challenges with their candidates

Methods

Design

A series of semi-structured qualitative interviews were undertaken with supervisors of PhD students.

Eligibility criteria

Any current PhD supervisor from a UK HEI were eligible to participate in the interviews. No restrictions were placed in terms of number of PGRs supervised, length of time they had been supervising PGRs or subject area. Additionally, whilst supervisory experience of Professional Doctorates was not the focus of this work (due to the different structure of these doctorates), participants were eligible if they had supervised both PGRs and Professional Doctorates but were not eligible if their only supervisory experience was with Professional Doctorates.

Sample size

In line with Mason (2010), consideration of heterogeneity of population and saturation were considered. Supervisor time and the potential for this to be a challenging population to recruit from due to time constraints (UKCGE, 2022) was also considered when estimating saturation and realistic recruitment, which was set between ten and twenty interviews.

Data collection

Data was collected from a series of audio-recorded semi-structured interviews. Interviews took place over Microsoft Teams, utilising the built-in recording software for audio recording, and a Dictaphone recording as back up.

Opportunities to participate in the interviews were advertised through SMaRteN (the student mental health research network), and the researchers Twitter. Advertisements were also sent to UK Doctoral Colleges / Graduate Schools with a generic email address listed on the UK Council for Graduate Education ‘Supervisory Network’, where supervisors could then contact the researcher. When showing interest in the study, five participants mentioned they had seen information about the research in a university bulletin following these emails to institutions contacted.

Data collection took place over a twelve-week period between October and December 2022. Data was collected from a series of audio-recorded semi-structured interviews. Interviews took place over Microsoft Teams, utilising the built-in recording software for audio recording, and a Dictaphone recording as back up.

Measures

Supervisory and demographic characteristics

Participants were asked to indicate how many PGRs they currently supervised as primary supervisor, as secondary or third supervisor. Following this, they were asked to identify how many PGRs they had previously supervised, and how long they had been involved with supervision, and what subject area they were based in. Demographic details were then collected, these were gender, age, ethnicity, sexuality, if they identified as disabled, experiencing mental health challenges, and if they had caring responsibilities.

Interview schedule

Broad topics for discussion were identified from in depth interviews with PGR students (Chapter 4), where the supervisory relationship was heavily discussed and the literature review. The topics were also guided by the findings of the quantitative survey (Chapter 3) and systematic review (Chapter 2). The interview schedule focused on exploring a series of topics; the participants journey to being involved with supervision, training and support for supervisors, barriers to effective supervision, potential stressors for PGR students, and the mental health and wellbeing of candidates.

The questions were designed to be value neutral and as open ended as possible, incorporating descriptive questions; asking for accounts of experiences, such as *"Have you had experience accessing training or support to aid you in supervising your candidates*?*"*: and structured questions; asking about knowledge of processes *"Do you feel comfortable with the processes for if a candidate is not progressing?"*.

The full interview schedule can be found in Appendix 13.

Analytic plan

As the analytic approach was repeated from the approach used in Chapter 4, a brief summary will be provided. For further detail on the transcription, coding, theme generation and ethical considerations please see Chapter 4, as the process was repeated here.

Transcription

The interviews were audio recorded using Microsoft Teams and a Dictaphone recording. Transcription was completed using Simplified Jeffersonian. This meant that abbreviations participants used were kept (but not added by the researcher), instances of swearwords were transcribed uncensored for emotional connotation, and emphasis on words was indicated through bolding, italics and pauses longer than .5 of a second were recorded.

Theme generation

Following Potter and Wetherall’s (1994) suggestions, the thematic analysis was an iterative process beginning with all transcripts being read a number of times. Once the researcher was familiar with the transcripts, the analysis and interpretation of the data began.

Statements and justifications were highlighted, along with consistency, variability, and points of interest. Metaphors or analogies used, were noted. Following the familiarisation with transcripts and identification of potential areas of interest, preliminary coding began. Here, tentative interpretative schemes were developed through open axial coding with re-reading of the transcript to ensure accurate categorisation and examine micro and macro aspects of the data.

Once the transcripts were coded, re-coded and revisited and the codes were felt to be a satisfactory representation of the data, codes began to be grouped into preliminary themes. This process again was repeated to ensure the themes represented the data and were not too broad or too narrow.

Ethical considerations

This research involved no risk of physical harm and did not use deception in anyway. Potential risk to participation was that of distress through the topic in question (e.g.

if questions reminded participants of an emotionally challenging experience), although the questions were not designed to illicit distress. Participant information and debrief sheets detailed services such as the UKCGE Supervisor Network, their institutions Employee Assistance Programme, and the Samaritans. The issue of confidentiality was addressed at the beginning of each interview and participants were assured of the measures described to protect confidentiality. The participants were provided the opportunity to review their unidentified transcript if they wished, in order to make any corrections or delete any information they wished not to enter into the analysis. Data was anonymised with participants being provided a unique participant number, and where they disclosed information that could be identifiable (such as institutional affiliation), these were anonymised.

Findings

Interviews were conducted with 15 supervisors from a range of subject backgrounds and demographic characteristics. The interviews ranged between 50-90 minutes. As can be seen in Table 17 below, the sample was majority female, but participants ranged across subject and experience level. The majority of participants did not identify as having mental health challenges, and none disclosed a disability. Table 17 depicts the demographic details of the participants as a group. Table 18 depicts their supervisory characteristics individually, including previous completions and years involved with supervision.

Table 12: Participant demographic information

	N = 15		**N = 15**
Age		**Ethnicity**	
20-29	1	*White (not specified)*	4
30-39	6	*White British/Irish/ Scottish*	5
40-49	3	*Black British*	2
50-59	3	*Turkish*	1
60+	2	*Indian*	1
		Russian	1
Gender		**Sexuality**	
Male	5	*Heterosexual*	11
Female	10	*Gay*	1
		Bisexual	1
		Prefer not to say	2
Identified as disabled?		**Mental health challenges?**	
No	15	*No*	12
Yes	0	*Yes*	3

Caring Responsibilities?		**Primary Subject**	
No	12	Social Sciences	6
Yes	3	Medicine & Allied	1
		Law & Business	3
		Art & Humanities	3
		Combination	2

Table 13: Participant supervisory characteristics

Currently Primary Supervisor	Currently Secondary or Third Supervisor	Number of Completions	Time as Supervisor	Prof-Doc Supervisor	Took Over or Brought onto Projects
1	2	1	4 years		Yes
0	2	0	7 months	Yes	Yes
0	1	0	1 year		Yes
0	5	3	10 years	Yes	
2	1	0	4 years	Yes	
0	2	1	1 year		
4	5	25	28 years		
3	2	12	15 years		
2	2	10	14 years		Yes
0	1	1	1 year		
0	3	1	6 years	Yes	
3	2	2	11 years		Yes
2	2	15	12 years		Yes
1	3	7	7 years	Yes	
1	1	2	4 years		

Analysis

Six themes were generated from the data, as detailed below.

Theme 1: Supervisors and Academia

All participants explored the various ways that existing within academia impacted their experience as a supervisor. Unsurprisingly, criticisms of university processes and workloading were expressed, and were felt to impact their own, and their PGRs experiences, affecting their work-life balance, career progression, capacity, and time management.

The University and Processes

It was recognised by all participants that supervision was important for meeting wider departmental or institutional goals, along with their own career progressions. Supervision was highlighted as a necessary criterion for promotions, with references to colleagues who were denied promotions due to their lack of supervision to completion. There were concerns expressed by some about the way that universities can utilise supervision as a 'tick box' exercise for progression, rather than a developmental experience for the supervisor (and the detrimental impact this model would then have on the PGRs experience):

> *"They would say things like can you put this person on that person's supervision team so they can get a completion… so somebody who was near the end of their PhD - who maybe was not even working on a relevant topic, they would stick somebody on their team so that next time, that somebody could become an 'experienced' supervisor and lead a team"- Adrian, 7 years supervising*

It was widely acknowledged that universities were unaware or ignorant of the complexity of supervision when it came to supervisors' appraisals and evaluations; it was felt that only completions mattered, not PGR experience, or their own personal and professional development and experience:

> *"I think they value you when you get a completion, and it ticks their box for the REF environment statement. Um, do they value your role for PhD supervision though… I would say no"- Martin, 28 years supervising*

> *“So I had my appraisal last week. Umm was doctoral supervision on there?... I discussed it, but I don't think it's actually - I don't recall a specific place where it says doctoral supervision.”- Ellie, 4 years supervising*

Acknowledgement of their role as supervisors within the context of appraisals and management was often felt to be self-driven – if they did not bring it up, it would not be brought up. This extended to seeking out support and development opportunities as supervisors, whilst a number of participants were aware of (and had either completed or were working towards) the UK Council for Graduate Education Research Supervisor Recognition Programme, this again was self-directed, self-sought and self-completed, with no institutional support (and aside from one participant, no institutional awareness of such a scheme existing).

Supervisors were also acutely aware of the structural issues with the academic system, and felt conflicted about how that affected their interactions with their PGRs and the supervision they provided:

> *“I guess the tension is with supervisors, is that you're trying to support somebody to be able to do well in this system - but it's a horrible system so you also like you wanna protect them from it”- Roz, 11 years supervising*

Participants felt they had to balance being honest with their PGRs about the reality of academic hierarchies, publishing, job stability etc, whilst also wanting to shield them from the ‘war stories’ as one supervisor described it. One of the inherent criticisms of academia and university process was that of workloads and time management (or lack of).

The Fallacy of Workloading

Institutional approaches to where supervision of PGRs was located in the ‘teaching’ or ‘research’ split varied, with some institutions viewing PGR supervision as research, others viewing it as teaching. Supervisors themselves varied in terms of where they identified supervision as sitting, but many felt trying to force fit PGR supervision into either research or teaching was inappropriate, as it straddled both groups, or was in a different undefined category of its own:

> *"If you won a PhD studentship, for example, or bench fees, they - that funding doesn't count as research income on our central database which umm which... personally has disincentivized me from prioritizing PhD studentships over grant applications" – Theresa, 6 years supervising*

This distinction between teaching and research inevitably impacted upon workloading, which was felt to be a fallacy; both for supervision and anything in academic life:

> *"I would say it is 1000% not acknowledged in the workload and I think with very, very damaging results so where I work - now I know all these workloads are kind of nonsense anyway"- Keeley, 10 years supervising*

It was felt by all participants that supervision was not adequately workloaded, and the complexity of supervision was not appreciated by institutions. All criticised the concept of workloading, with a number feeling that teaching was pushed as the priority for their workloads:

> *[in response to acknowledgement of supervision in workload models] "I would say no quite simply. [laughs] Umm, I don't think there's any real consideration for, to supervision in my case, it's very much teaching comes first"- Ellie, 4 years supervising*

All supervisors in this study went above their allocated hours for supervision, with most talking about doing emails or reading drafts in the evenings or weekends:

> *"What they give you is enough hours if you have an outstanding PGR who's doing really well and you do exactly what the university says in terms of meetings – what they don't consider is that PGRs are human" – Victoria, 1 year supervising*

It was felt that supervisors who stuck rigidly to workload models and only provided what they were workloaded for were inherently providing inadequate supervision because it takes more time than is allocated:

> *“Some people very strictly adhere to this is the supervision you're getting from me and that might not be right for a particular student at a particular time point in their PhD so I think it kind of allows some colleagues to have their PhD student and maybe not give them all of the support that they need because they're they're adhering to guidelines”- Nadia, 10 years supervising*

It is worth noting that whilst many referenced supervisors who stuck rigidly to their workload models, none of the supervisors in this study did stick to their workload modelling, and it is unclear if these are colleagues who have been directly observed sticking to workload models and not going above allocated hours, or if it is a pervasive discourse that ‘*those’* supervisors or academics exist and adhere strictly to their workload as prescribed.

Theme 2: Training, Knowledge, and Resources

There was much discussion about the training experiences and needs of supervisors, and where the knowledge they currently have comes from. Resources for supervisors were also discussed.

Knowledge

Whilst all supervisors had undertaken training to supervise, the training was different institution to institution. Some supervisors had mandatory training every two years, for others the intervals where it needed to be repeated were different or were ad hoc if any regulations changed. Method of delivery of training also varied, with a mixture of face to face, online modules, and documentation, but only one supervisor had any specific mental health or wellbeing related training (and this was not mandatory). Training was felt to be focused on processes and regulations only:

> “[when asked if the training touched on anything pastoral] *No, I think it's been like… I think that's been really difficult and I don't feel we've gotten much guidance because I feel very responsible for their general wellbeing” – Anna, 15 years supervising*

It was felt that training could be greatly improved. Whilst supervisors felt (mostly) comfortable with the processes and regulations – or at least knew *where* to find them if they didn't know them, very little training addressed their day to day needs as a supervisor, particularly for those less experienced:

> *"It never covered that as a supervisor that you're not just there to give academic guidance that you… you've gotta get to know that person's personality, learning styles and the way they react and and for me personally, I believe that that this as much of a job to facilitate and manage that as it is to give them academic guidance"- Roz, 11 years supervising*

For those who also supervised Professional Doctorates, it was felt to be far less structured and supported to supervise PhD's:

> *"So I think if I didn't supervise on the [professional doctorate] program as well, I probably would find PhD supervision a lot harder and a lot more isolating and nerve wracking"- Theresa, 6 years supervising*

Supervisors were consistently feeling like training did not cover enough of how to provide pastoral support – and that universities rarely if ever acknowledged the requirement of pastoral support in any documentation or training:

> *"I think the university does have... it comes into play in the university when things go wrong and all of a sudden you do have a huge pastoral role" – Carrie, 4 years supervising*

Supervisors were also unsure how much guidance they were expected to be providing on career development, or how to effectively give feedback to PGRs, with one remarking that PGRs might cry based on feedback given. It was also felt that resources that did exist were not adequately catalogued and signposted to, nor were they easily accessible:

> *"Within the all the policy documentation and all the rest of it I think it would be lovely to have a kind of a resource centre of some description that both students and supervisors can access that everything in the same place and it's nice and joined up"- Nadia, 10 years supervising*

Utilising Expertise

It was felt that the resources and training that did exist was missing a lot of expertise. There was widespread acknowledgement that there are many experienced supervisors who could be drawn upon to adequately train and resource newer supervisors, in the form of testimonials, frequently encountered situation flowcharts, or some form of supervisor-peer support networks:

> *"It would have been nice to have heard like almost like little testimonials or something from experienced PhD supervisors umm who'd worked with different students to say, you know, this is this is how I do things and this works and just to get some ideas about what works and what doesn't" – Asim, 7 months supervising*

It was also felt that the PGR expertise was missing from training and resources that existed:

> *"I think there's probably you know plenty of experienced supervisors who will be able to give, you know the common things that do occur, but equally, you know, if we look at from a doctoral researcher perspective, what do they want from supervisors? What would they like to know? What are maybe some of the the hidden things that they wish they'd known" – Nadia, 10 years supervising*

PGRs are Not Undergraduates

There was acknowledgement that the experience of supervising PhD's was inherently different to any other responsibility that participants had. It was felt that most knowledge of university-based supports and services such as wellbeing support came from their interactions with and responsibilities to undergraduate or postgraduate taught students. This meant that, if PGR specific resources existed, supervisors were not aware of them:

> *"The things that I've been able to tell PGR students about has just being by knowing about them through my role as being, you know, personal tutor*

> *with undergraduates and postgraduate taught students umm and there's probably a lot that I'm not aware of actually" – Kanti, 1 year supervising*

It was recognised that university support services are set up to accommodate and support undergraduate students, and that meant that often the services would not meet the needs of PGRs, and some supervisors were therefore hesitant to signpost their PGRs there:

> *"I'm not sure that when referred, when they get there, they're gonna get an understanding of the program and that's an ongoing challenge…" – Ellie, 4 years supervising*

> *"I filled in a form the other day and it was like - the questions were about why are you referring the student are they missing lectures, are they not, did they not give a presentation, do they - there was a list of about 6 things they had no relevance whatsoever to a doctoral program" – Adrian, 7 years supervising*

Alongside the knowledge and resources being undergraduate focused, it was also felt that some of the things that exist for undergraduates would be *helpful* for PGR supervisors in terms of organisation, with supervisors referencing the importance of thorough inductions, signposting information & flowcharts, resource banks and Blackboard pages:

> *"Undergrads get a full on induction and kind of transition and I mean we'll - we know that this is just as important for PGR students as well umm and a kind of setting expectations" – Keeley, 10 years supervising*

The lack of knowledge and resources often led to supervisors holding distress for PGRs or feeling guilty for not being able to advise them the way they might want to or feel capable to.

Theme 3: The Emotional Impact of Supervision

There was much discussion about the emotional impact of providing supervision, with unclear boundaries and expectations about how much pastoral care should be provided, whether PGRs should be treated as students or colleagues, and when given the space in the interview to reflect on this, a number of supervisors did experience strong emotions during the interview:

Guilt

A number of supervisors expressed holding guilt about past experiences with PGRs, particularly those who had students withdraw

> *“Yeah, I carry guilt for that student still… you can hear it when I'm talking to you…”- Anna, 15 years supervising*

Supervisors who had had students withdraw often wondered if they could, or *should* have done more to support them, and felt completely unsupported by the university in these situations. It was expressed that whilst as individuals they had people who they could go to for support in difficult situations, there was nothing formally in place from the university to support them, or acknowledge the stress and challenges that can come from a PGR withdrawing or struggling:

> *“Did we get support for that - no, not really… that's one thing where the university doesn't do very well, but had I, as a personal individual, if I’d found it really hard, is there somebody I could have gone and talked to? Yes.” – Martin, 28 years supervising*

Guilt was also present when talking about how PGRs were easy to bump down the to-do-list or become a lower priority than other students or responsibilities. Part of this was described as due to the day-to-day nature of their other responsibilities:

> *“OK, so I carry a lot of guilt that I don't always prioritize my PGR... I would prioritize my students who are in day-to-day, if that makes sense” – Nadia, 10 years supervising*

It was also noted that due to the structure of a PhD, if an email or a meeting is missed, this increases the likelihood of ‘forgetting’ about their PGR or them slipping down their to-do-list, even if they don’t *want* this to be the case, due to the difficulties of doing a PhD:

> *“So I want, you know, certainly my PGR I I want at the top of my To Do List rather than the bottom of my To Do List because they're the ones I think need the most cuddles really” – Carrie, 4 years supervising*

This guilt around PGRs also extended to giving feedback or raising issues if the student was not progressing at the rate they needed to be; due to lack of effective training on giving feedback and being assertive around progress, and lack of sufficient workloading, it was felt it was easy for PGRs to fall behind without supervisors realising, and supervisors expressed feeling guilty about having to have difficult conversations about progression and work quality with PGRs when not adequately prepared to do so:

> *“I'm very much, like a, softly, softly I'm not very good at actually, you know, maybe you should be doing this a bit quicker, or you know at - so I think that having more honest conversations sometimes would’ve been a good skill for me to be able to have those conversations without feeling like I was being critical of someone and then feeling bad about it afterward” – Victoria, 1 year supervising*

Guilt and the emotional impact of supervising was particularly tricky for supervisors who disclosed existing mental health challenges, with three explicitly mentioning the importance of going to therapy:

> *“I think if I hadn't gone to therapy, it would have been a disaster, yeah” – Anna, 15 years supervising*

Satisfaction

Despite the challenges, there were positive emotions associated with supervising PGRs. In acknowledging the differences between supervising PGRs and other teaching or supervision responsibilities, supervisors gained a sense of personal satisfaction from watching their PGR develop and grow, particularly compared to working with other student groups:

> *“With undergraduates you just see them write one essay and don't don't really get to see the progression - it's already - I've just supervised these*

> *people for around a year now, and even then, or less than that, and even in that time, the way you see their writing progress and the way you see how you've given them feedback on a piece of work and next piece of work actually incorporates that feedback and their writing is really developing and their thinking is developing and that is quite gratifying" – Kanti, 1 year supervising*

More experienced supervisors also expressed satisfaction from seeing their candidates career progression and often maintained a relationship with them following their PhD. As well as the personal satisfaction that can be gained from supervising, there was a number of discussions around professional satisfaction:

> *"One of the things is as well is that's nice as a researcher is working with them on papers, getting papers out and being on there on the paper and and you know in in some ways it's quite – umm an easy way for you to get papers out is to be on on there because you're their supervisor and you're helping to write it"- Keeley, 14 years supervising*

Supervision was felt to be a way to help PGRs become more independent, whilst growing their own career progression:

> *"This is a way to survive as a teaching slash researching member of staff"- Sylvia, 4 years supervising*

Supervision could also be emotionally satisfying when they felt they were able to be a changemaker through their supervising of underrepresented students:

> *"I wasn't having this specific thought when I was joining the team however, the thing is that the PhD student is a female – a foreign female and two other supervisors are uh the UK males with like really high positions, so I was thinking that having me… in this respect this is also kind of an additional support for her" – Liza, 1 year supervising*

However, the personal and professional satisfaction and progression that came with supervising did not come without feelings of imposterism.

Imposterism

Around half of the supervisors expressed their own experiences with (or past experiences of) imposter syndrome as a supervisor, compounded by the lack of training, resources, and support they were able to access:

> *"I am constantly feeling like I would love to be a very confident and knowledgeable supervisor and feel like I have the headspace and the knowledge to be able to provide perfect supervision, hold in mind the different perspectives and needs of my supervisees but in reality I still umm, I still feel a bit of an impostor, so umm I think that for me is the big thing that kind of just feeling confident enough to be a supervisor and not constantly thinking, gosh, you know you don't know enough to be supervising this aspect" – Carrie, 4 years supervising*

> *"I would say that supervisors often will have their own imposter syndrome, which probably kind of can affect supervision about ohh like who am I to like supervise this other person to do research and to become a researcher?" – Asim, 7 months supervising*

Whilst for some, this imposter syndrome was limited to their role as a supervisor, others expressed it in their ability to teach and publish as well. Experiences of imposter syndrome were heightened when the PGR they were supervising was also a colleague:

> *"We supervise some staff members, and I can remember the first one of those I did thinking, **Oh my God**, I've got impostor syndrome myself! They're gonna find me out and all that and and and I think that that potentially can be a little bit awkward, particularly if you're in the same department as them" – Adrian, 7 years supervising*

Again, it was felt that institutions gave little guidance and support on how to supervise colleagues and deal with power balances and changing dynamics, which will be further explored in Theme 4. It was felt to be a difficult balancing act to be experiencing their own feelings of imposter syndrome whilst having to act as a knowledgeable, authority figure for their PGR. It was important to supervisors that their PGRs respected their expertise and opinions, but complex when they themselves felt they didn’t possess the required expertise to *give* those opinions, particularly within their first couple of supervisory relationships – which one supervisor compared to how they felt at the start of their own PhD:

> *“It's almost like starting a PhD, isn't it? You don't know what it is until you're in it I am thinking about that. I've never thought of those two parallels, but it is, isn't it? And all those things like, gosh, it's this big thing, there’s imposter syndrome” – Liza, 1 year supervising*

Unsurprisingly, the topic of relationships and dynamics between supervisors, PGRs and other members of the supervisory team was explored in great detail by participants.

Theme 4: Supervisory Team Dynamics

There was much discussion of the way that supervisory teams work, should (or should not) work, and processes and experiences of supervisors leaving, being replaced, or being brought on to an existing team. It was felt that there was very little support for negotiating power dynamics and workload within the supervisory team, and a lack of acknowledgement that this may change over the course of the PhD.

Inter-team dynamics

Inter-team dynamics were often difficult to balance, particularly if it was felt that a primary supervisor was doing less than the secondary supervisor:

> *“What's been the most challenging, I think is, is when you are working in teams where the dynamics are - or where you don't perceive the dynamics as equal or when you feel that somebody is doing something that's problematic” – Reece, 12 years supervising*

Approaches to primary and secondary supervision varied in terms of split of workload, responsibility, and pastoral support. Sometimes discussions were explicitly had between supervisors on who would be more responsible for the pastoral side of supervising, and who would be responsible for the more academic side of supervising, but often these came down to personality and was felt to naturally ‘slot’ into one supervisor’s role. The issue of workloading pervaded inter-team dynamics, particularly when supervisors were not workloaded 50/50 for supervision, but it was expected by the primary supervisor that the secondary would take on 50% of the role. One participant was a third supervisor managing the tension between a primary and secondary supervisor and their expectations of each other:

> *“It was sort of about dealing between… between – mediating is the word, isn't it - between the two of them” – Anna, 15 years supervising*

There was also much discussion on how many supervisors is appropriate, and how many becomes unmanageable for both the student and the other supervisors:

> *“I found myself with five students, each of whom all have three supervisors, I think there's something to be said for too many cooks for many of them” – Nadia, 10 years supervising*

It was generally agreed that more than three supervisors could become difficult, particularly when supervisors were based in different time zones or different institutions. Supervisory team dynamics were also complicated when the PGR was also a member of staff, and the power dynamics were in flux depending on day of the week or time of day. For those supervisors, it was important to make supervision a ‘PhD only’ type space, where all involved could get into the right mindset and their respective roles:

> *“PGR supervision is sacrosanct we don't talk about anything that's work related in those” – Adrian, 7 years supervising*

Personality conflicts were a difficult thing to manage, particularly due to the way that supervisory teams were brought together being based on subject expertise, experience, and research interests, rather than personalities. This was felt to affect the team dynamics in a number of ways, affecting the relationship the PGR had with the team as a whole, their relationship with individual members of the team, and supervisors’ relationships with the other members of the team, and was felt by some supervisors to be very under-considered when putting together supervisory teams:

> *"And I think one of the things about supervision is matching not just matching the student to the supervisor through the the subject matter, but also through the personality wherever possible" – Martin, 28 years supervising*

These team dynamics became even more complicated when the personalities or external circumstances lead to a supervisor (or supervisory team) stepping down from supervision, leaving the institution, a change in responsibilities or being brought in to a team later down the line.

Doctoral Orphans and Adopting

As six of the fifteen supervisors interviewed had either taken on a doctoral 'orphan', or adopted a project, the issue of transitions between supporting PGRs if taking over supervisory duties or being brought onto existing projects was discussed.

Despite the experience of taking on PGRs who's supervisor had left the institution or the project, there was little to no guidance on managing these transitions themselves, or how they should be supporting the PGR:

> *"I wouldn't say they also have clear guidance in terms of supporting a student to transition when a supervisor is left" – Ellie, 4 years supervising*

It was also felt to be difficult to come into an existing supervisory team due to their expertise being needed. Not only did the relationships between the supervisors and PGR already exist and have been developed, the way of working, commenting on drafts, author order on papers and so on had already been decided. This was especially challenging when their expertise conflicted with the existing status quo of the project:

> *"Joining the supervisory team after the fact - that's been challenging for a number of reasons, especially maybe some of the decisions that were made by the kind of more primary supervision team earlier on I would not have made [laughs]" – Keeley, 14 years supervising*

It was felt to be incredibly challenging to take over a project when the supervisory relationship had broken down, particularly if they had an ongoing working relationship with the ex-supervisor:

> *"You don't want to piss off a prof but it's like, well, is it the the lab that you think it is?" – Victoria, 1 year supervising*

Universities were generally felt to be quite secretive about the fact that often supervisory relationships can break down and PGRs are left as doctoral 'orphans' needing to be adopted by other supervisors, and totally ignorant (whether this was for appearances sake or not was unclear) on the impact that this could have on supervisors themselves:

> *"His supervisory team stepped down the whole -all of them, you know, not just one going, it's a, it's a clash of personality. So I do think it can have a toll and I think the university… I don't think I've ever seen anybody talk about that at this university openly, that actually it can happen…" – Anna, 15 years supervising*

The idea of doctoral 'orphans' and the 'adopting' of projects and PGRs echoes the consistent references to supervision being akin to parenting, or familial dynamics.

Theme 5: Supervision, Parenting and Boundaries

As acknowledged, the supervisory relationship is a long-term, private relationship that can be difficult to manage emotionally and demands a lot of time and thought. Supervisors made frequent references to the similarities between being a PGR supervisor and their experience of parent*ing*, or their own experience of their PhD affecting their supervisory style, akin to being parent*ed.* Supervisors were very reflective on their practice, what helped them learn how to supervise effectively and the things that might be missing from effective supervision.

Supervisor or Parent?

There was a lot of analogies drawn between being a PhD supervisor and being a parent. This ranged from fear of modelling bad behaviours based on their own experiences for those who did not disclose having children:

> *"I was afraid that I would take some of the bad practice that, you know, that thing about if your parents have been terrible - so I was really afraid that I would somehow model bad practices even though I kind of was aware that they were bad" – Nadia, 10 years supervising*

For those who had children, direct comparisons were often drawn, by both male and female supervisors. These could be around independence and how to tell versus guide, and how that might change over the course of supervising a PGR:

> *"I always relate umm parenting and supervision, because there are common elements in like, you know for instance if you, you know umm keep telling your child what to do they can't be independent - same thing applies to PhD supervision" – Kanti, 1 year supervising*

To fears of emulating a 'helicopter' parent model and becoming a 'helicopter' supervisor, which would not be helpful for the PGR:

> *"We've got this helicopter parents term like that they hand held or intervene every step of their children's actions so I mean it's not appropriate because they can't be independent. But same applies to PhD students because when you graduate from your program, you're going to be an independent researcher"- Roz, 11 years supervising*

It was felt by a number of supervisors that they were unsure where the boundary lines were, and that:

> *"You can get too friendly if you're not careful" – Carrie, 4 years supervising*

> *"I feel like their mother sometimes, you know" – Anna, 15 years supervising*

Little guidance existed from the institution on where boundaries should be drawn, and how the boundary line is often drawn at a different point for different supervisors:

> *"I don't really I don't like the idea that you only see them in your office, and you never can have a social interaction because I just think it's a different kind of a relationship, it's a - so I have done things like go to the cinema or*

> *like, have dinner with my students and things like that" – Keeley, 14 years supervising*

Some supervisors viewed their relationships with their PGRs – and the inter-PGR relationships to be like a family, with the PGRs they were supervising akin to being siblings:

> *"And I try to like I say things like she's your younger sister you better help her… I see it as a family, these people, we were in an academic family we - we have to kind of support each other" – Theresa, 6 years supervising*

Supervisors were unsure if it was healthy to promote a familial relationship with their PGRs, but also felt who they were as individuals and their subject area meant that they often could not help but mother them or want to rescue them:

> *"I think that's probably something that I've always done - certainly something that I do as a mum, so it sort of carries on into umm professional life"- Ellie, 4 years supervising*

> *"I'm in a social work team, Amy, we can't but help rescue, it's what we do." – Nadia, 10 years supervising*

As well as their experiences relating to parenting, every supervisor interviewed reflected upon their own PhD experience.

PhD Reflections and Absorptions

When discussing their practice as a supervisor, much reflection was done upon their own experience of doing a PhD. Many commented things their supervisors did that they didn't want to model, or for those who had a good relationship with their own PhD supervisor, how they used that to approach supervision:

> *"I'm now kind of trying to apply the same scheme that I had with my own PhD supervisor so yeah, just to say that since I had this really satisfying experience, I'm eager to replicate it with my own PhD student" – Liza, 1 year supervising*

> *"I feel like I've provided more feedback on you know, various little bits of work that they've done than my supervisor did in the whole time [laughs] so so yeah, it's it's yeah, it's - I guess you sort of learn from like who, who you wanna be as a supervisor"- Reece, 12 years supervising*

There was some acknowledgement that this way of approaching supervision misses the individual context but – particularly for those with limited training – this was the only experience they were able to draw upon when supervising.

A number of supervisors were highly critical of the way that they were supervised, appreciating the more structured processes that exist within universities now in terms of monitoring and reporting. It was felt by those who had completed their PhD more recently, that that improved their approach to supervision because they could relate to the PGR a lot, and remember and reflect on what it was like for them:

> *"I recently finished my PhD then I still feel [laughs] um you know remember those days how difficult those days are so it's it's really important to remember those days" – Asim, 7 months supervising*

It was also felt that being on the other side of the table, as a supervisor, that they understand a lot more about *why* their supervisory experience was the way it was when they were doing their PhD:

> *"I was quite critical about the way that I was supervised, but then recognizing umm why umm… there wasn't that much support, but I understand why there why there wasn't that much support, if that makes sense now I'm more appreciative of some of the umm constraints and different incentives and stuff in in academia" – Kanti, 1 year supervising*

The interviews provided a space for reflection on their own PhD and their supervisory practices, which many supervisors had not really had before:

> *"One of the things you're doing here, which we don't do here formally, which actually might be a really interesting thing to do is you've given me a chance*

> *to reflect on my supervisory relationship - I've never done that with anybody else" – Carrie, 4 years supervising*

This ability and space to reflect appeared to be appreciated by the supervisors, with two commenting that they were going to take this idea of reflection and almost (due to the role of the interviewer) peer support for supervisors back to their institutions, to plug some of the gaps discussed in their training, resources and support structured.

When reflecting on their PhDs and supervisory experiences, many supervisors reflected on the importance of humanity and kindness being there (and therefore modelled) or missing (and therefore created) in their own journey. There was a feeling that the humanity of them as supervisors who might forget things, or make mistakes should be remembered and acknowledged:

> *"But we're only human too" – Adrian, 7 years supervising*

> *"My own supervision experience has taught me to treat a doctoral researcher as a person first and a researcher second" – Ellie, 4 years supervising*

Alongside that of their PGRs:

> *"A lot of academic supervisors just focus on the academics and forget there's a human being there and that they need a relationship" – Victoria, 1 year supervising*

This importance of humanity and reflection on their own experiences lead into the final theme, supervisors' perceptions of PGRs themselves.

Theme 6: Perspectives on PGRs

As expected, many supervisors talked about the challenges, pitfalls, and experiences they had observed in their students. There were varied perspectives on the challenges that PGRs faced, and what themselves as a supervisor, and the university should be doing to support PGRs

The PGR identity

Supervisors felt PGRs often tied their identity to their PhD, making it more difficult when they struggled. Criticism or negative feedback was felt to be an emotionally charged topic because the PGR often internalised it as a criticism of themselves, rather than of their work and their work alone:

> *"They identify far too much with their work, and that becomes them, and their identity is almost trapped within their PhD, it's* ***always*** *there it's on their shoulder, it defines who they are it defines their self-worth, and when there are those troughs that can be very difficult for people and they can feel quite low"- Nadia, 10 years supervising*

When asked if there were common stressors that had affected their PGRs, all supervisors made reference to imposter syndrome. Institutional approaches and support for dealing with this were extremely limited (if they existed) with more PGR led seminars or workshops looking at imposter syndrome than university based – one supervisor commented their institution now had a session on dealing with imposter syndrome as a PGR because *she* set it up when she was a PGR:

> *"I think that most people experience this feeling of they're not good enough and they they don't belong, and everyone seems to know things or whatever, so for some people, that's just a case of reassurance"- Reece, 12 years supervising*

Tied to the idea of belonging and imposter syndrome was the feeling that PGRs were often missing intercommunity events and a positive research culture. This was viewed as detrimentally affecting their confidence and socialisation. This tied into previous concerns about boundaries, as supervisors felt responsible for ensuring that PGRs had some sense of connection and community:

Challenges for PGRs

Supervisors acknowledged the PhD as being very isolating by design, further compounding the concerns around socialisation and community, which were only heightened by the pandemic:

> *"I think that institutions would do well to implement more stuff like that community building I think as well umm proper events for PhD students, including at the very start" - Ellie, 4 years supervising*

PGRs were felt to be balancing a lot, with work-life balance a concern, particularly for PGRs who had other characteristics such as caring responsibilities or who experienced difficulties in their personal life during their PhD:

> *"So I think imposter syndrome is definitely a recurring theme that comes up work life balance like I say, especially when people have got care giving responsibilities or additional work alongside the PhD and that becomes very tricky" – Nadia, 10 years supervising*

There were also concerns raised about the challenges of completing a PhD whilst balancing teaching, particularly in light of the cost of living crisis. Supervisors had mixed views on teaching, with some encouraging their students to get any teaching experience they could to help their future career, others highlighting the importance of not losing focus on the PhD (whilst supporting the notion of developing teaching skills in theory) and others felt PGRs teaching often didn't benefit the PGR or them as a supervisor:

> *"So that student was on a graduate teaching assistant role - they had to do teaching and I felt that, well, first of all, it didn't - it wasn't any of my teaching they were doing [laughs] so it wasn't helping me" - Reece, 12 years supervising*

It was felt that often putting what was best for the PGR first conflicted with what was best for other parties involved:

> *"For some students the best outcome is to withdraw with them for the university that might not be the best outcome or for the funding body, so that that's something that as well I think to be aware of that" - Martin, 28 years supervising*

The acknowledgment of these challenges for PGRs was affected by, but also affected the other key themes from this data; the supervisors' role within academia and its processes, their knowledge and resources, past expertise and emotional ties to the PGR, their own guilt or satisfaction, and the inter-team and internal relationships between themselves and their own PhD alongside their PGRs projects.

These themes can be organised into levels: structural factors, interpersonal factors, and personal factors. Within levels the themes intersect and interact; for example, a supervisor’s knowledge can impact on their workloading, which can impact on their resources etc. The themes and subthemes, their interactions and how the structural factors feed down to the PGR supervisor relationship and the experience of supervision are demonstrated in Figure 10.

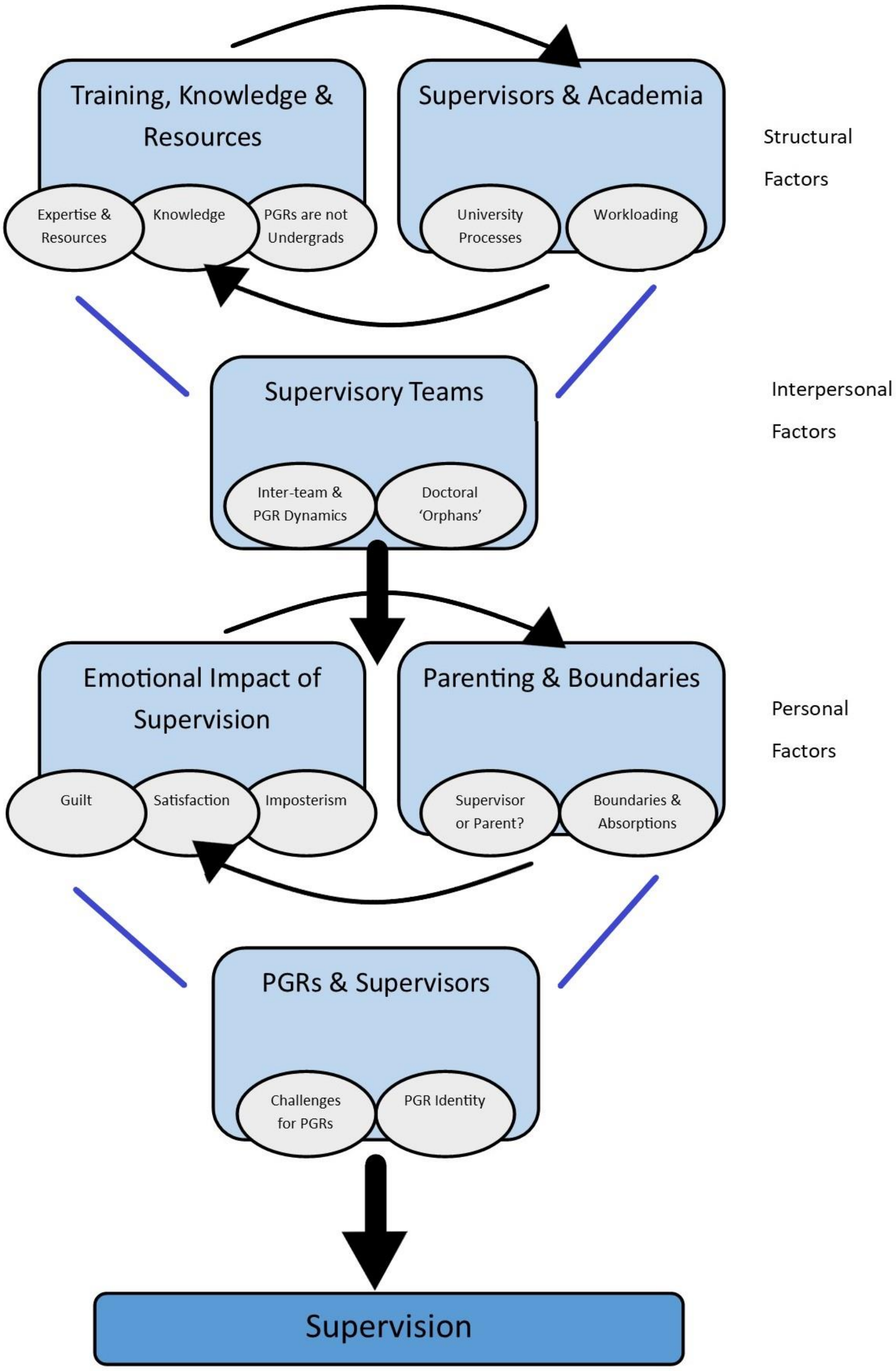


Figure 10: Visual depiction of themes and subthemes from interviews with supervisors and how they lead to the supervision experience.

Discussion

The supervisors in this sample discussed a wide range of factors that influenced their supervisory style, relationship with their candidates and their own work life balance and mental health. One of the objectives of this study was to explore supervisor experiences of supporting PGRs, particularly around barriers and facilitators of effective supervision and their role (perceived or prescribed) in supporting the mental health of their PGRs.

Most supervisors had undertaken some form of training before supervising, although the method, time commitment and perceived quality of this training varied. It is concerning that despite UKCGE explicitly deeming that institutions should support supervisors around pastoral care, and that mental health awareness for supervisors is good practice (2019), only one supervisor had any form of training relating to mental health awareness, and supervisors felt compelled but often unskilled in pastoral care. These findings are in line with evidence from UKCGE in 2021, finding that only half of supervisors surveyed felt adequately supported by their institution to support the mental health and wellbeing of candidates.

It is important to note that all supervisors felt that supervision necessitated a pastoral element, and that universities expected pastoral care to be provided by supervisors (although this was felt to be implicit, and only explicit when things went wrong), but little (if any) guidance was given on how to do this. This meant that supervisors' main source of knowledge for providing pastoral care was either based on what they model with their undergraduate students, despite widespread acknowledgement that PGRs are not like undergraduates and thus approaches should differ, or their own PhD. This is particularly concerning given the number of supervisors who felt their own supervisory experience was subpar (or the relationship virtually non-existent), with understandable worries expressed about modelling poor practice despite not wanting to.

It is also worrying that no supervisor felt that there were processes or support structures at their institution to support them if they witnessed a PGR in acute distress or were the recipient of a distressing disclosure from their candidate. Whilst all acknowledged some form of personal network or support that they could access, from friends and colleagues to therapy, the lack of acknowledgement of the emotional impact of supervision is arguably a failure of institutional duty of care to its employees. This is exacerbated by the pre-existing stresses on wellbeing and mental health identified within academics relating to workloads and effort-reward imbalances (Salimzadeh et al., 2017, Student Minds, 2018) and is dissonant from recommendations from organisations such as the Equality Challenge Unit (2009).

The supervisors interviewed expressed imposter syndrome relating to supervising, but also noted that PGRs are prone to struggling with feelings of imposterism, which is in line with previous research into academics and PGRs (Usher and McCormack, 2021), and poses and interesting dualism that supervisors must balance – that of feeling an imposter themselves, whilst also guiding a developing researcher through their own feelings of imposterism, and being unsure how much to disclose to their PGRs about their own feelings (and for some, the reality of working in academia). It is interesting to note that supervisors were concerned about the imposterism they saw their PGRs grappling with, however, again universities and doctoral colleges were not providing support to the PGR (or them) when faced with this widely acknowledged stressor for mental health.

There was much discussion and reference to the idea of parenting expressed by supervisors, which was not expected – nor had been widely considered in the literature. Previous literature had referenced the parallels between supervisor changes and divorce (Strandler, Johansson, Wiskher, Claesson, 2014), and the adoption of doctoral orphans (Wisker and Robinson, 2012), the idea of parenthood described by supervisors here was more related to emotions, than processes. It was relating to feelings of uncertainty around when to step back and embolden independence, fear of ‘helicoptering’, pride in watching growth and achievement, and learning from own experiences – rather than being provided with ‘training’. It is noteworthy that the parallels to parenting expressed were not just from those who spoke of being a parent or having children but reflect the complexity and emotionality of the supervisory relationship.

The complexity of the supervisory relationship was unsurprisingly a thoroughly discussed area, and the inter-team dynamics and the way that supervisory teams are built was criticised quite heavily by a number of participants. It is predictable, but potentially not pragmatic that supervisory teams are often brought together purely on the basis of topic area, with little to any consideration of personalities and working relationships. This is in line with critiques of team construction from workplace literature, where the concept of teamwork in health and social care may create contradictory ideas about what working as a team entails and the best structures for teams (Leathard and McLaren, 2007).

Given the wealth of literature from PGRs, academics and workplaces about the importance of interpersonal relationships, personalities, and styles of working and supervision, it is arguably an anachronistic way of bringing together teams that are expected to work together for long periods of time in an intense relationship that has significant implications for all members. That careful consideration is not given to the dynamics of supervisory teams is potentially catastrophic for both supervisor and PGR. The fact that there is, as this study suggests, not explicit recognition of the concept of doctoral 'orphans' or adopting candidates - that processes and systems are not in place to support the candidate and their supervisors through changes in the supervisory team (an undeniably a turbulent process) shows clear remiss in the way that PhD's and supervision is conceptualised by the sector and by institutions.

Practice implications

Based on the findings of this study, there are clear implications for both practice and policy, for institutions and doctoral colleges:

- Institutions need to consider what they are expecting of their supervisors and ensure that they provide adequate training, support, and acknowledgment of this. This includes consideration of the pastoral side of supervision – if this is expected to be a part of the supervisors' role, it must be made explicit and achievable through professional development, training opportunities and clear recognition in appraisals and university processes.

- Doctoral colleges need to evaluate the method of bringing together supervisory teams, and whether current approaches need to be more flexible, consider more personalised factors, and reflect on whether teams should be built around topic, methodology, personality, or a combination of these
- Following from the creation of teams, doctoral colleges need to carefully consider the implications on the mental health of supervisors and of PGRs when it comes to changes in the supervisory relationship. Due to a range of factors both internal and external to the institution, introduction of new supervisors to an existing team, or movement of a PGR to alternative supervisors may be inevitable, but the detrimental impact on those involved does not have to be inevitable. Careful thought must be given to the time, resources, and support needs of all involved to mitigate the impact as much as possible.
- Time and space for supervisors to reflect on their own PhD, their supervisory style and the needs of their candidates should be provided by doctoral colleges and institutions. The response from participants when reflecting on their own doctorate and their supervisory journey appeared to be incredibly beneficial, and a number of supervisors referenced the potential merit of such space with peers (other supervisors) at their own institutions.
- When beginning the supervisory relationship, supervisory teams and PGRs should, wherever possible, establish clear expectations around boundaries, support structures, submission, and feedback of work, and how the relationship will develop over the course of the candidature.

Whilst further recommendations for supervisors themselves could be made, given the widespread discussion of issues of lack of training, resources, time, and workload acknowledgement throughout the interviews, it is potentially ill-conceived to increase the workload of supervisors without acknowledgement and support in this from their institutions. This issue will be further discussed in depth in Chapter 6.

Future directions

A number of findings from this research would benefit from further investigation. More research to understand the specific training needs for those who are new to supervising and tracking their identified training needs as they become more experienced at supervising will allow training to become more tailored to supervisor needs.

The impact of differing models of bringing together supervisory teams on the members of the supervisory team and the PGR will highlight ways that institutions can alleviate some of the inter-personal challenges that supervisors may experience. This will also allow for more careful consideration of the development and implementation of standardised processes and support structures for when a PGR changes supervisors, or additional supervisors are brought into an existing team.

Further exploration of the experiences of supervisors who also supervise Professional Doctorates can enable good practice to be shared and adapted for each type of doctorate.

Limitations

Whilst the aim of this study was not to produce ‘generalisable’ accounts of what being a supervisor is like, the focus was on supervision of PhDs – whilst some participants supervised (and compared their experiences of PhD supervision to) Professional Doctorates, it was difficult to separate the experiences and ensure that reporting here is only related to PhD supervision.

The self-selecting sample may also have meant that the interest that the supervisors showed in their candidate’s progression, pastoral needs, and willingness to go beyond workload is not representative of all supervisors (as suggested in the interviews with PGRs in Chapter 4). Additionally, the demographic information collected did not ask for institutional affiliation, and whilst some explicitly named their institution and department, due to the variability within and between departments and institutions, recommendations may not be appropriate for all institutions or departments.

Reflexivity

As a PGR student, I was slightly apprehensive about how receptive to being interviewed supervisors would be and feared that less would be shared due to my position as a PGR. However, these apprehensions were unfounded, and all participants were incredibly open and honest about their forays into and through supervising. All seemed appreciative that I was doing work in this space, feeling that their experiences would be valuable for my research and that more discussion around what supervising was like should take place. At no point did I feel disempowered as an interviewer by the interviewees, and all were understanding of my lines of questioning and keen to share.

As explored in Chapter 4, there were some interviews (or aspects of interviews) that had an emotional impact on me. Whilst there were no outwardly distressing disclosures during the recruitment or data collection process, there was naturally discussion of the emotional toll that having a PGR disclose distress, or suicide attempts had on those supervisors. This made me reflect on how I might have impacted on my own supervisors and if I should have shared my own lived experiences with them, and the apparent lack of support structures in place for supervisors did make me feel guilty that I had potentially caused my own supervisors' distress (despite not talking as openly as it was apparent some of the candidates these supervisors were referencing did).

Conclusions

The supervisors in this sample shared a range of experiences related to supporting their candidates, and perspectives on what institutions should provide to enhance their ability to provide high quality supervision. It was agreed that universities are not adequately recognising, rewarding or workloading the complex and valuable role that supervisors play in supporting their PGRs. Policies and processes were fairly well understood; however it was noted that the training and guidance on these often did not reflect the reality of supervision day-to-day, nor prepare supervisors for supporting their PGRs mental health or pastoral needs.

Alongside acknowledgement of the problems with current training and workload modelling, supervisors reflected a lot on their own PhD journey, often drawing comparisons to the parenting journey, and the risks associated with their current knowledge sources. Boundaries were felt to be ill-prescribed and ill-defined by institutions which heightened feelings of imposterism and doubts about supervisory capability, coupled with the challenges that can come from managing inter-team dynamics.

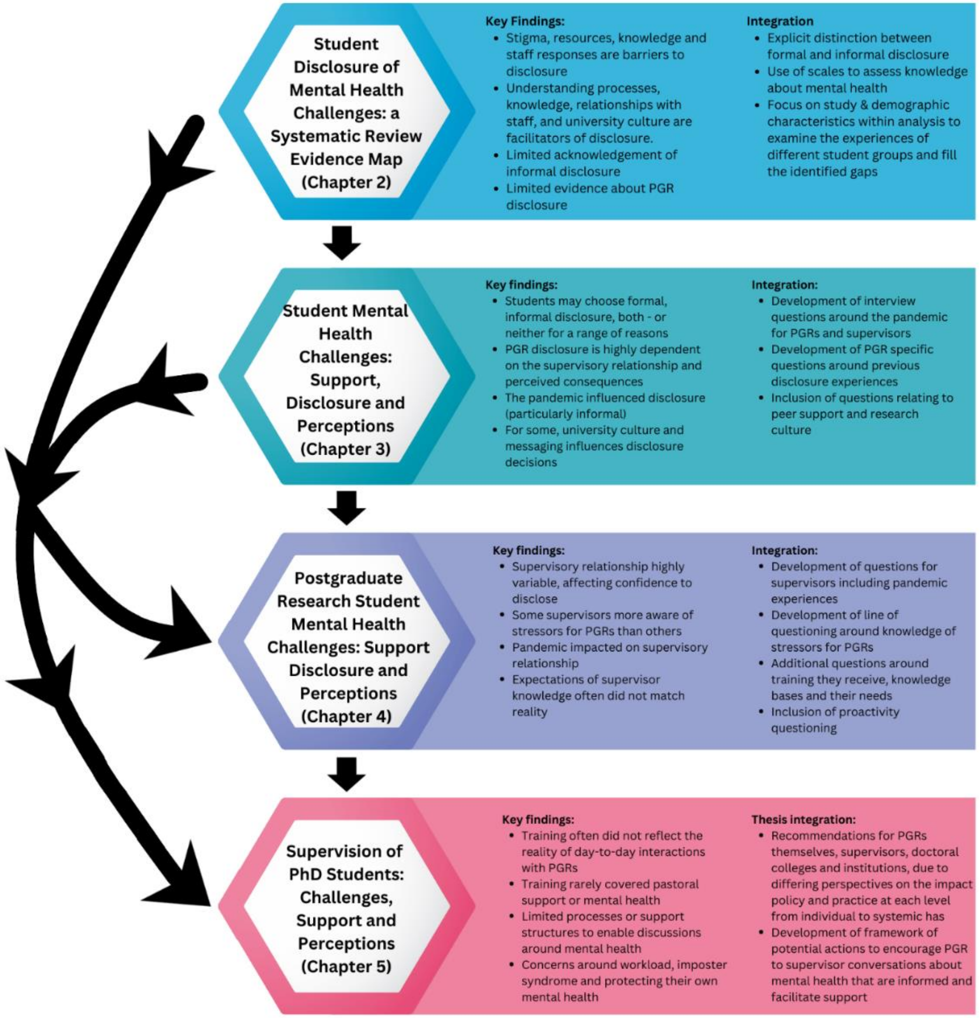
Chapter 6: Discussion

Structure

The preceding Chapters presented the studies undertaken as part of the PhD. This Chapter intends to draw the studies together and demonstrate the value of the Thesis to the existing research landscape, the novel findings within the work, and highlight policy and practice recommendations that the sector, universities and individuals can implement to improve disclosure of mental health challenges. This Chapter will examine the intersections between the individual study findings, and the broader evidence base. Reflections on the importance of this work and the strengths of the studies will be given, and the limitations of the work considered. Recommendations for the application of this research will be described in light of the examined novelty, strengths, and limitations.

The Thesis

The aim of this Thesis was to explore perceptions and experiences of disclosing a mental health challenge within the university context, particularly for PGRs. This Thesis reports on a series of sequential research studies, each with their own aims, designed to build on the knowledge gained from the previous study and / or studies. As such, reflection on this process and data integration is helpful to allow consideration of the Thesis in context, and its novelty.



Student Disclosure of Mental Health Challenges: a Systematic Review Evidence Map (Chapter 2)

Key Findings:

- Stigma, resources, knowledge and staff responses are barriers to disclosure
- Understanding processes, knowledge, relationships with staff, and university culture are facilitators of disclosure.
- Limited acknowledgement of informal disclosure
- Limited evidence about PGR disclosure

Integration

- Explicit distinction between formal and informal disclosure
- Use of scales to assess knowledge about mental health
- Focus on study & demographic characteristics within analysis to examine the experiences of different student groups and fill the identified gaps

Student Mental Health Challenges: Support, Disclosure and Perceptions (Chapter 3)

Key findings:

- Students may choose formal, informal disclosure, both - or neither for a range of reasons
- PGR disclosure is highly dependent on the supervisory relationship and perceived consequences
- The pandemic influenced disclosure (particularly informal)
- For some, university culture and messaging influences disclosure decisions

Integration:

- Development of interview questions around the pandemic for PGRs and supervisors
- Development of PGR specific questions around previous disclosure experiences
- Inclusion of questions relating to peer support and research culture

Postgraduate Research Student Mental Health Challenges: Support Disclosure and Perceptions (Chapter 4)

Key findings:

- Supervisory relationship highly variable, affecting confidence to disclose
- Some supervisors more aware of stressors for PGRs than others
- Pandemic impacted on supervisory relationship
- Expectations of supervisor knowledge often did not match reality

Integration:

- Development of questions for supervisors including pandemic experiences
- Development of line of questioning around knowledge of stressors for PGRs
- Additional questions around training they receive, knowledge bases and their needs
- Inclusion of proactivity questioning

Supervision of PhD Students: Challenges, Support and Perceptions (Chapter 5)

Key findings:

- Training often did not reflect the reality of day-to-day interactions with PGRs
- Training rarely covered pastoral support or mental health
- Limited processes or support structures to enable discussions around mental health
- Concerns around workload, imposter syndrome and protecting their own mental health

Thesis integration:

- Recommendations for PGRs themselves, supervisors, doctoral colleges and institutions, due to differing perspectives on the impact policy and practice at each level from individual to systemic has
- Development of framework of potential actions to encourage PGR to supervisor conversations about mental health that are informed and facilitate support

Figure 11: Diagram representing sequential nature of studies

It should be noted that the synthesis of learning from each study did not end at the following study, and the sequential nature of the project design meant that Study 4 (Chapter 5) was informed by all previous studies. The data from each study fed into all of the following studies. This was integral to the findings of the later work, as much of the existing literature focused on deficit perceptions of supervision and supervisors. The qualitative free-text responses from Study 2 and the in-depth qualitative interview data from Study 3 allowed a more considered line of questioning for supervisors, allowing the acknowledgment of wider contextual circumstances into supervisory practice. The learning from the qualitative interviews informed the recommendations that will be provided from this Thesis, moving from a potentially individualised and surface level perspective to a deeper exploration of the wider frameworks that supervisors and PGRs work within, and the constraints and challenges this puts on their practice.

The synthesis of learning present throughout the sequential studies allowed the novel exploration of both PGR and supervisor experiences, highlighting the ways that both groups may be constrained or challenged, and recontextualising the individualised critiques of supervisors. Whilst it is not inappropriate for PGRs to critique supervisory practice, insight into the experiences of supervisors provides rationale for some of the potentially problematic practices (often acknowledged by both groups), which if more widely understood by PGRs may alleviate some of the concerns about their experiences.

As Figure 11 demonstrates, each Study did have specific aims to address, in service of the broader Thesis aims of exploring perceptions and experiences of disclosing a mental health challenge within the university context, particularly for PGRs. As such findings relating to the conceptualisation, operationalisation and experiences of disclosure will be discussed, before exploring other findings in context.

Disclosure

As noted in Chapter 1, deciding to disclose a mental health challenge can provide a starting point for both accessing professional support, and informal support and validation from others (Simone and Hamza, 2021). When examining the literature in Chapter 2, a third of the studies referenced the processes (or policies) around disclosure. The literature suggested that students were unsure what would happen to information they disclosed around their mental health (Eccles et al., 2018; Venville, 2010, Osborne, 2019; Student Minds, 2014).

These concerns were echoed from students within Studies 3 and 4, with some feeling that the potential for disclosures being inappropriately shared was a reason to not disclose, despite acknowledgement that disclosure may benefit them. In practice, disclosure processes appeared unclear, difficult, and bureaucratic. The Higher Education Commission (2020) highlighted the paperwork and bureaucratic loopholes that students must jump through to access support, and the findings from this Thesis support that assertion, with students discussing the difficulty in accessing records. This was particularly the case for international students, who may have documentation in their native language.

Importantly, this Thesis found that even when students and PGRs followed the institutional disclosure processes and should then have had access to the support and adjustments required, in practice this often was not the case. Non-disclosing students often cited lack of resources and support as a reason for not disclosing, and students who had disclosed commented on the need for repeat disclosures, frequent self-advocacy and for some, consistent non-compliance with reasonable accommodation requests, despite having followed the correct processes and procedures.

The work contained within this Thesis found that aside from problematic conceptualisations of disability within the HESA categories, in practice, disclosure requires a lot of work from students and making the decision to disclose (and following processes) is often not sufficient to allow support and accommodations. This was disappointing and frustrating for students, many of whom would not recommend a friend or peer disclose if they were struggling based on their own experience. The already complex process of disclosure was more complicated for particular student groups, such as international students, students studying on a professional course with placements, and PGRs.

Disclosure for PGRs was perceived as more nebulous in terms of processes, due to the perceived inaccessibility of student disability support, and the often lack of understanding from these services as to what a PhD entails. For PGRs, disclosures were more likely to be made directly to supervisors, due to the nature of the PhD and the power and control that supervisors could have over working conditions. PGRs who did formally disclose the way that a taught student would often find accommodations to be inappropriate such as offers of extra time in exams, and the potentially already difficult-to-discern policies around disclosure were even more vague for PGRs. There was much discussion within the interviews with PGRs and supervisors about the role of partial disclosure, i.e. sharing small details about mental health and gauging response before disclosing further (Shahaf-Oren et al., 2011). Whilst partial disclosure has been explored within the context of medical students in particular, the majority of PGRs and supervisors engaged with this Thesis' work described partial, informal disclosure as the most common disclosure decision. This was used by PGRs to protect themselves, and by supervisors to encourage disclosure by asking smaller questions around the PGRs general wellbeing, rather than jumping straight to asking about their mental health. Additionally, some supervisors described using partial disclosure as an encouragement tool by sharing some of their own experiences during their PhD, then gauging the response from their candidate.

Due to the findings surrounding disclosure and disclosure decisions, it is worth consideration of the use of disclosure data as currently conceptualised and operationalised. As discussed in Chapter 1, it is the view of this Thesis that current disclosure data collection within HESA categories is inefficient and this is further highlighted within the recommendations below. Particularly for PGRs where it was found to be the most common, consideration of the role of informal disclosure is pertinent for institutions to consider when they are examining disclosure related data. Whilst no current method exists to capture informal disclosure, and it could be argued that doing so would inhibit informal disclosures (for the same reasons one may choose to not formally disclose), awareness of informal disclosure should be embedded in the examination of disclosure rates. Due to the finding from the quantitative work that students often do not disclose on their application, or upon arrival at university (despite entering HE with a mental health challenge), consideration for when information on disclosure should be collected should also be given.

It is also worth examination of the integration, or tension between mental health as a disability identity, and how the way that universities conceptualise mental health as falling within or outside of the disability umbrella may facilitate or inhibit disclosure decisions. Previous literature has explored the potential problematic language of disability within the university context (Lister et al., 2021), which appears to hold true in the students and PGRs sampled within this Thesis. Not all those who identified as experiencing mental health challenges identified as disabled, and a number of those explicitly discussed not seeing their mental health challenges as a disability. This lends further credence to the recommendation noted below surrounding the positioning of mental health within the context of disability, and the risks of ostracising students from accessing support depending on labelling.

Students echoed the critique raised by Cox and Brewster (2021) about the framing of wellbeing as an individualised issue that can be solved by the individual engaging with self-care or treatment, rather than poor mental health or wellbeing being affected (and potentially caused) by structural reasons. PGRs, in particular felt that universities talk about wellbeing without acknowledging mental health, and there was much cynical rhetoric about the idea of self-care (taking a bath, doing yoga, etc) as a magical cure for mental distress. The findings of this Thesis support the notion from the UK's Equality Challenge Unit (2009) encouraging the HE sector to embrace alternative models of disability, in order to account for those with mental health challenges, and chronic illnesses that can fluctuate.

It is the view of this Thesis that disclosure rates should not be a baseline for service provision and funding, however it is acknowledged that the higher education sector has limited resources and funding to support mental health. Due to the range of facilitators, barriers, knowledge (or lack thereof) and potential consequences of disclosure, formal data on disclosure of mental health should not be wholly disregarded but should be viewed in light of the wider contexts surrounding disclosure, disability, knowledge, processes, and individual autonomy of choice.

As one of the key aims of this Thesis was to understand and explore the disclosure perceptions of PGRs, findings relating to PGR experiences and the supervisory perspective will now be discussed.

PGR disclosures and supervisors

As considered in Chapter 1, an important aspect of disclosure is the ability to recognise when support is needed. The problematic discourses surrounding mental health and doing a PhD observed in the qualitative studies within the Thesis have troubling implications in this respect, and are, unfortunately not unexpected (Byrom et al., 2020). If it is expected that the PhD will be emotionally challenging, isolating and that it is an accepted part of a doctorate to be constantly feeling stressed and overwhelmed, and that struggling with mental health is an *inherent part* of doing a PhD, of course PGRs are less likely to recognise when they need support. This feeds into the wider issues of accessibility and suitability of support services for PGRs which is discussed later in this Chapter, but even if services were accessible, the problematic discourses around what PGR mental health should be – and how doing a PhD *will* impact on your mental health has the potential to negate any benefit of accessible services. The findings from the interviews with PGRs (Chapter 4) also show that it is not only undergraduate students who fear disclosure for being viewed as 'lesser' or it impacting on their future career (Student Minds, 2014; Grimes et al., 2019). Given the close working relationship with supervisors, and the perceived (and arguably tangible) impact that supervisors can have on career progression and post-PhD success, their concerns are understandable. This is further evidence that universities must create the best environment to facilitate discussion of mental health and continue working to reduce stigma wherever possible.

When considering PGR disclosure and the previously discussed primarily informal nature of their disclosure, the resources and support for supervisors and PGRs should be examined. Across both Study 2 and 3, some PGRs appeared versed in the constraints placed on supervisors by the academic system and their workloads, and the notion that the supervisory relationship can impact on mental health was shared by PGRs and supervisors. PGRs were acutely aware of how they could impact on their supervisor's mental health, and supervisors were generally aware of how their style of supervision, and feedback given could impact on their PGRs. PGRs were also conscious of how the supervisory relationship could impact on their own mental health, along with how the PhD itself had the potential to affect their mental health positively or negatively. This was heightened for PGRs who disclosed entering their studies with pre-existing mental health challenges within the interviews, however as discussed in Chapter 4, their openness about this with their supervisors varied.

On the topic of mental health, both groups felt that supervisors were ill-equipped to support PGR mental health, despite it seeming to be an unwritten rule that they would. PGRs discussed being very aware of the pressure that their supervisors were under, and felt they were probably not supported adequately by their institution. This awareness prevented some PGRs from wanting to discuss their mental health with their supervisors. These perceptions were echoed by supervisors who remarked on the little (if any) support provided by their institution in regard to supporting PGR mental health. As discussed in Chapter 5, supervisors were not provided with training or resources on supporting mental health needs of their candidates, aside from one individual, and those who had sought it out themselves.

Findings from the interviews with supervisors found that they unfortunately, but predictably, given previous literature, felt ill-equipped to support their PGRs mental health if they did disclose (Hughes et al., 2018), and had little in the way of formal training or support to aid them in supporting the pastoral and mental health needs of their PGRs. Supervisors also echoed concerns raised by Rudick and Dannels (2018) around the lack of acknowledgement of (or inclusion of) the ways they support PGRs within their evaluation metrics. This lack of support and acknowledgement was not limited to the support they provide to PGRs but also to their own mental health needs, with no formal structures for a supervisor who became distressed following a disclosure from a PGR identified and all sources of support noted to be either informal (friends, family, colleagues) or external (private therapy) to the university. Supervisors' experiences suggest that universities are not following the recommendations from organisations such as Universities UK (2020) and Vitae (2018) around recognising the workload issues with regard to supervision and appraisal processes not recognising the work involved with supervision. This matter is reflected upon in the recommendations generated from this Thesis.

PGR and supervisors' experiences

The supervisory relationship and the idea of supervisory 'fit' was prevalent across the qualitative work contained within this Thesis, which builds on existing scoping review work identifying supervisory fit key to PGR satisfaction and success (Sverdlik et al., 2018). PGRs also commented on the matter of power within the supervisory relationship, and how if they are involved in teaching this interplay of power becomes more complex, in line with previous work with PGRs who also taught (Hargreaves et al., 2017). Whilst supervisors had concerns about PGRs who took on teaching responsibilities, this was not examined in relation to the power dynamics inherent in the supervisory relationship, but more relating to progression of the PhD research.

Doctoral studies have been noted to be intensive, with stressors, energisers, and variable structure (Kusukar et al., 2021). The experiences of PGRs and supervisors interviewed for this Thesis concur with this. PGRs reported a number of ups and downs within their studies, such as issues with data collection, failed experiments, writers block; and supervisors highlighted the external stressors that can affect the progression of the PhD such as relationship breakdowns, bereavements, family difficulties and personal struggles. The combination of the two – academic and personal – challenges substantiate the arguments posed throughout the Thesis that PGRs require both nuanced and adequate support whilst doing their doctorates. This notion of academic and personal challenges and the need for nuanced and adequate support contributes to the understanding of the role of informal disclosure for PGRs and the need for supervisors to be adequately supported themselves.

PGRs expressed doubts that their supervisors were adequately supported by their institution to take care of their own mental health and in some cases, to keep afloat with all of their responsibilities, and supervisors reflected this view, on the whole feeling that their workload and time allocations were wholly insufficient for their academic role, let alone to provide high quality supervision. It is pertinent to note that despite what some supervisors felt, PGRs are extremely aware of the pressures that supervisors are under, and despite expressing feelings of frustration about unavailability of supervisors, long turn around on feedback, or emails and meetings being missed, were generally on the side of supervisors, acknowledging the structural issues in academia such as cuts to funding, redundancies, and lack of resourcing. Whilst acknowledging that their PhD is not their supervisors' number one priority, as they have many other responsibilities, it was strongly felt that, understandably, the PhD was the PGRs number one priority, and this was a source of friction and frustration.

A number of supervisors recognised the potential impact of supervision on PGRs mental health when the PGR had pre-existing mental health challenges, however there was mixed feelings about how the supervisory relationship could impact on the supervisor's mental health. Generally, it was only acknowledged as potentially having a detrimental effect on their mental health when things were going wrong, such as one of their candidates withdrawing, or the stress of entering an already established supervisory relationship when their expertise was required, or a colleague left the institution. It is interesting to note that a number of supervisors separated the concept of feeling guilt from that of being a supervisor having an effect on their mental health.

PGRs who engaged in teaching alongside their PhD found this difficult to balance with keeping their doctorate on track, and this was also an area of concern for supervisors. However, a number of supervisors did acknowledge the wider academic context of stipends not rising in line with inflation, the current cost of living crisis in the UK and the exorbitant fees that international PGRs have to pay, so they understood *why* PGRs were taking on (sometimes excessive) work outside of their PhD, whether or not it would be their own preference for them to do this.

The matter of pastoral support was one where big divergence in viewpoints surfaced between PGRs and their supervisors. Generally, PGRs felt that their supervisors often did not provide pastoral support to them and were not available to do so. Some felt they were totally inaccessible in this regard, others felt they had enough on their plate and so it was understandable to keep it ‘academic business only’. However, every supervisor felt pastoral care was an integral part of their role and something they engaged in frequently. It may be that there is a discordance in how PGRs perceive pastoral support and how supervisors do, and there are a number of factors that could influence that such as past educational experience, the PGRs personal circumstances, and a mismatch in expectations. It is also possible that supervisors *think* they are providing pastoral care, but what the PGR considers pastoral support is not what the supervisor thinks it is. As discussed in Chapter 5, it may be that the self-selecting nature of the supervisors interviewed, they may have come forward due to their view of pastoral care being integral. It should also be noted that PGRs who sought out pastoral support from sources that were not their supervisor reported insufficient understanding of the PhD journey. As touched on above, accommodations and adjustments offered by university support services were often unsuitable (e.g. extra times on exams) and did not reflect the reality of PhD study (e.g. suspension of support over the summer).

As discussed in Chapter 5, supervisors made many analogies between supervision and parenting, and the notion of being a parent or carer to their PGR, however none of the PGRs interviewed seemed to share this view. It could be that, as all supervisors acknowledged they went over their allocated workload, this led to those feelings of parenting, rather than supervising or teaching, but this was not clear. Previous work has identified the pastoral aspect of the supervisory relationship as often a very personal experience (Crook, Gooding, Whittaker et al., 2021), which highlights the potential for feelings of parenting or guardianship to develop. It could also be that due to the nature of being a supervisor; that is, taking an (often inexperienced) student and helping them grow and develop whilst guiding their research feels inherently akin to parenting, whereas for the PGR they do not realise they are *being parented* – much like many children may not feel – instead viewing their parent as someone that tells them what to do (or what not to do). It’s an interesting dichotomy that supervisors feel like parents, and PGRs can feel abandoned, for which this Thesis has no concrete answer.

Supervisors themselves identified accessibility and unscheduled communications as something PGRs can be reluctant to engage with in the way that taught students can. Comments about undergraduates never hesitating to send a Teams message late at night, or turn up at their office, when compared to PGRs who they felt were hesitant to ask questions outside of the supervisory meeting. Some supervisors appeared to be a little frustrated by the fact they would tell their PGR to email them whenever they had an issue, or pop into their office, but felt their candidates would not do this – whereas PGRs felt their supervisors had too much going on and didn’t want to bother them with silly questions or be annoying, suggesting there are issues in expectation setting at the start of the relationship.

Within the PGR interviews (Chapter 4), PGRs discussed how the PhD can impact on their self-worth, and balancing their identity as an individual, researcher, PGR, etc can be a challenge. It is somewhat reassuring that supervisors appeared aware of these identity-balancing challenges, and how it can be concerning just how wrapped up in their research PGRs (and their self-worth) can become. This makes sense given the supervisors objective ‘distance’ from the project, but may contribute to the feelings of abandonment, or the supervisor being focused on the project and not the person when interacting with the PGR.

Imposterism was a recurrent theme for both PGRs and their supervisors but in quite different ways. Many of the PGRs expressed feelings of imposterism and fear around not being good enough – but felt their supervisor was the authority, and clearly knew what they were doing, because they were an established academic, a supervisor, someone who had published, someone who had been through the PhD process. Many supervisors *didn’t* feel like this and felt like an imposter themselves – walking a tricky line between being honest with their PGR about their own failures and experiences and potentially undermining the respect that the PGR had for them and their knowledge and ability to guide. It is doubtful this would be the case however, as when PGRs spoke of what helped them with their imposterism feelings or dealing with the challenges that came with doing a PhD, a number spoke of their supervisor’s openness about how they had been rejected, or they had struggled. There is also of course the point to be made that it is near impossible for *everyone* to be an imposter, despite the prevalence of feelings of imposterism.

Another comparison that can be drawn between PGRs and supervisors that diverges from expectations perhaps, is that of peer support. PGRs expressed a need for peer support to help them deal with feelings of imposterism, to ask the ‘silly’ questions they deemed embarrassing or inappropriate to ask their supervisors, to learn from peers and to find a sense of community. Supervisors expressed a need for peer support to help them deal with feelings of imposterism, to ask the ’silly’ questions they deemed embarrassing to ask more senior colleagues (or more senior members of the supervisory team), to learn from other supervisors and to find a sense of community with supervisors. This highlights the importance of community with peers – supervisors did not express a want just to network or gain support from colleagues, but from other supervisors specifically. This goes back to the notion of learning from more experienced supervisors, and the subtheme of ‘*Utilising Expertise’* discussed in Chapter 5.

Novelty of the Thesis

This Thesis contributes to the changing landscape of research into the mental health of students and PGRs and presents a number of novel findings which will now be discussed.

Informal disclosure

Whilst the literature around student mental health has acknowledged the conversations that students have with staff members about their mental health, and disclosures that may be made directly to staff, this Thesis takes the novel approach of delineating this form of disclosure as a separate mode of disclosure. This conceptualisation has been applied to workplace disclosures but is seldom seen within student mental health work. The distinction between formal and informal disclosure has been illuminating when examining student perceptions and experiences. It has allowed understanding of why students may opt for informal disclosure instead of formal disclosure, which they might recommend to a peer, and the multifaceted dimensions of deciding to disclose. This distinction has allowed further examination of the experiences of PGRs and further illustrated the conceptual issues with current HESA disability categories and university processes and allowed for considered recommendations to support staff who may receive these disclosures. It has highlighted the frequency and preferences for informal disclosure as a facilitating factor for both accessing support and deciding to formally disclose. It is the view of this Thesis that future work should acknowledge the pivotal role of informal disclosure.

PGRs and supervisors

A key strength of this Thesis is the engagement with PGRs and supervisors. Whilst much work has been done with PGRs, and with supervisors, limited work exists that brings together *both* perspectives and examines the topics of agreement, dissent, and variability. Integrating the PGR and supervisor perspectives allows some of the underlying factors to be brought to light, and the systemic challenges that confine and predetermine to be brought to the fore. The areas of overlapping concern also recognise the material experiences of both PGRs and supervisors, and that the issues faced are not necessarily individualised, but acknowledged by both parties. The integration of voices also allows for considered recommendations to be made that take into account both voices (particularly considering the power differentials) and enable a nuanced examination of perspectives.

Conceptualisations and discourse examinations

The conceptual basis of this Thesis and its consistent examination of discourses allows a novel perspective to be gained. Examining the way the sector, institutions and students talk about and conceptualise mental health provides necessary insight into some of the systemic issues that literature focuses on but often neglects to interrogate. Data around levels of students who present to student services is, of course, of use, but examining how universities are *conceptualising* mental health, where it might fit within discourses of disability, and how the language that students, staff, and the sector use to talk about mental health can provide context and nuance to this data. Particularly around PGRs, the importance of discourse should not be underestimated. Acknowledgment of the notions of PhD's being, by nature, emotionally and mentally challenging, and the idea that mental health challenges are a *necessary* part of doctoral study may go some way reframe some of the concerning data around rates of drop out, mental distress and help-seeking (or lack thereof). Identification and acknowledgment of the way that doctoral study and mental health are conceptualised and discussed can allow the sector to critically examine how PhD's are perceived, the dominant narratives about doctoral study, and enable myth busting around mental health, stigma and open up opportunities for discussion and reflection.

Power examination

Within both qualitative studies, the idea of power and privilege was brought up by PGRs and supervisors. Whilst the notion of power (particularly over information) echoes concerns from students more generally about the potential consequences of disclosure in terms of career prospects and job references, the qualitative work delved deeper into the intersections of power and changing nature of privilege for PGRs and supervisors. As discussed in Chapter 4, the discussion of positive supervision experiences (or experiences of accessing appropriate support) being framed in language referencing luck and privilege is concerning. There will be, particularly at the start, a power differential between PGRs and supervisors, and this was acknowledged from both parties, with supervisor comparisons to parenting reflecting this idea of power. The responsibility that came from this power (perceived, or material) played into the supervisory experiences of imposterism and guilt, and PGRs were also aware of the intersecting nature of power and positionality within academia and society along the lines of race, gender and sexuality, and a number commented on their supervisors' power relative to them, but also relative to their position in academia or personal identities. Research has acknowledged the role of the supervisor as that of one coming with inherent power, (Byrom et al., 2021; Hargreaves et al., 2017) but the elicited reflections shown from PGRs and supervisors on power, privilege and the intersecting and fluctuating nature of power is a strength of this Thesis work.

Limitations of the Thesis

Whilst all Chapters have a discussion of the limitations of the research contained within, there are some limitations to the Thesis that will now be discussed. In all studies, there was an over-representation of white females. Scoping literature has revealed that women of colour remain underrepresented in UK academic spaces (AdvanceHE, 2019), and the lack of incentive for participation in the research studies could have reduced the attractiveness of participation for participants from minoritized backgrounds (Salmon, 2022). Additionally, the findings throughout the studies that PGRs and academics are generally time-poor with insufficient workload allocation may have affected recruitment, particularly for interviews with supervisors. Whilst it can be argued that overall participant profiles were representative of the current state of academia, it is acknowledged that historical gatekeeping, prejudice, and structures of privilege (of race, gender, class, and disability) have tangible effects on the profile of those working within (and accessing) academia, and it would have been preferable to have a more diverse sample, and it is hoped that academia will become more inclusive and accommodating and less exclusive.

All studies within this Thesis used self-selecting samples, and although acknowledged throughout that the aim of the qualitative studies were not to provide generalisable accounts of experiences applicable to all, this does mean that those who participated were a) more likely to have reflections relating to mental health and their PhD they wished to share (for PGRs) or b) more likely to have reflections relating to supervisory experiences or training needs and mental health (for supervisors) and thus this may have influenced the research findings. However, given the topic of the Thesis, and the recognition that talking about mental health can be emotionally challenging, with or without lived experience of mental health challenges, it would have been inappropriate to not be upfront about the discussions relating to mental health.

As all information about interview participants was de-identified, and the survey was designed to be anonymous, no information about specific institutions was collected throughout the Thesis. This potentially places a limitation on the findings of the Thesis, as an examination of the range of different disclosure processes that students, PGRs and supervisors are engaging with was unattainable. The findings throughout the Thesis that processes are unclear, confusing, and complicated suggests that an institutional based approach to improving disclosure processes may be less appropriate than a streamlined sector wide approach to disclosure procedures and does not diminish the potential applications of the findings contained within the Thesis.

It is acknowledged that all participants throughout this Thesis are those who made it: students who were currently studying, current PGRs and current supervisors. There is work that can be done with students who did not complete, PGRs who left their PhDs and supervisors who left academia. However, it cannot be ignored that there will be a subsection of all of these groups who left more than academia; for whom their mental health challenges were too severe to continue, who’s voices can thus never be heard, and for whom any recommendations and changes to policy and practice from this Thesis will come too late. Whilst this is not an oft considered limitation of work done in the landscape of mental health in HE, it is necessary to acknowledge. It is possible that the HE sector could learn from this survivorship bias and more critically examine how research is positioned. Other workplace literature has examined the ‘healthy worker effect’ (Agerbo, 2005) and it was noted within research into the mental health effects of the pandemic (Elston, 2021; Czeisler, Wiley, Czeisler et al., 2021).

Although there are some limitations to the research contained within this Thesis, there are recommendations and applications of the findings that will now be discussed.

Recommendations for Policy and Practice

There are numerous ways the findings from this Thesis can inform policy and practice within the HE sector. These will be discussed distinguishing different levels of potential change, filtering from the sector, to institutions, to doctoral colleges, to supervisors, to PGRs. This will build to a model of recommendations for change presented in a public health framework pyramid for ease of understanding the structural levels involved in creating an environment where PGRs feel able to disclose their mental health if they wish to do so.

The sector

The HE sector needs to critically examine the way it is conceptualising mental health and if it is conflating mental health and wellbeing. The HEPI (2019) has highlighted to problematic nature of using the terms mental health and wellbeing interchangeably, and the findings from this Thesis support this recommendation. The impact of these conceptualisations and definitions, including on the quality and applicability of research needs to be considered by the sector. The development and trial of interventions surrounding student mental health need to clearly define mental health or wellbeing, and justify their alignment with these concepts, otherwise the scope for change is limited.

The sector needs to critically examine its conceptualisation of disability and how identity intersects with the concept of disability. Whilst it is not the view of this Thesis that disability is inherently deficit-based and thus negative, this idea is pervasive and has often been the basis for adjustments and creation of support structures. Rather than putting the onus on the individual, more attention should be paid to the structural issues with academia and how it pushes out disabled students and scholars – even if they themselves do not identify as such. Additionally, the positioning of mental health needs to be considered in light of this, given the complexity – and fluctuation – of identities and the growing whole university approach to mental health.

The sector needs to reform and adjust the way that disclosure currently works and the narrow categories that students can identify their challenges within. It is unacceptable that we cannot have accurate information on the numbers of students who are studying with a disclosed disability or mental health challenge due to inappropriate boxes that students are forced to fit into – nor has the sector critically examined how limiting these boxed in definitions can be for students who have chronic illness that can fluctuate, who become unwell during their period of study, or who have ‘two or more conditions’. This latter category is not usable for either practice or policy, and it means even for students who *do* have the courage to disclose, we – researchers, institutions, charitable organisations, etc – still do not have actually helpful information and insights on the types of challenges they face and what supports they might benefit from.

The sector needs to rethink how data around student mental health is collected, particularly for PGRs. As they do not typically apply via a centralised system such as UCAS, the risk for perceived stigma to prevent formal disclosure is heightened. Given how competitive getting a PhD place is, it is unsurprising that PGRs feel that disclosure would harm their chances of getting to interview or successfully securing a place. As discussed above, considerations about how and when information about disclosure is collected should be made. It is, as explained, the view of this Thesis that resourcing of services and support and understanding of the prevalence of mental health within the student population should not be based upon formal disclosure rates alone. Acknowledgement of informal disclosure, non-disclosing students and the method of data collection must be made.

The sector needs to balance from PhD completions to incorporate a focus on the experience of doing a PhD. Given that many PGRs will wish to stay working in academia post-completion, it is the responsibility of the sector to ensure that they are able to thrive and not just complete for completions sake. The PGRs of today are the academics and supervisors of tomorrow, and whilst some PGRs will enter PhD study with no intent to stay in academia, the sector is losing valuable talent to industry, to burnout and to mental health. There has been some movement on this within the sector, as PGR training quality is assessed through the UK Quality Code for Higher Education (QAA, 2014) and within the environment statements for the Research Excellence Framework, and the PGR experience is measured through the Postgraduate Research Experience Survey. An integration of these considerations of PGR experience, or promotion of *both* experience and completions is needed.

Institutions

Institutions need to carefully review their disclosure processes, and ensure that when PGRs are applying to them, it is clear why information about their mental health is being asked about, who will have access to the information disclosed and what it will be used for. This recommendation is also appliable to taught students who may disclose through Student Services (or similar). Information on data protection, what happens to mental health related information, and channels of communication must be properly disseminated to students and staff to ensure that decisions about disclosure can be as informed as possible. Clear information on chains of communication and sharing of mental health related information will also be invaluable when thinking about informal disclosure.

Institutions need to better recognise the occurrence and frequency of informal disclosure and ensure that all student facing staff are aware of how to effectively signpost – this skill cannot be assumed. Given the evidence that all staff, not just academic staff may deal with informal disclosures, it is imperative that they are aware of the support that exists and how students can access this support.

Institutions should also reflect upon their mental health and wellbeing strategies and whether they are also conflating mental health and wellbeing, as again this has implications for the development, deployment, and efficacy of interventions. Information should also be given to students and staff on warning signs that themselves (or someone else) may be struggling and how to identify a student in crisis. However, awareness days are not a substitute for adequately resourced and signposted to services that are accessible and meet need.

Institutions need to think critically about whether their services are suitable for PGRs to access. Are PGRs unintentionally excluded from the perceived target population for services, and if they were to access them, would the services truly be accessible for them? Support service staff should be knowledgeable about the differences between PGR study and taught studies and be mindful of the language and terminologies used. Institutions should also ensure that their services are sensitive to privacy concerns for PGRs who may also be teaching and offer alternate means of engagement.

The issue of workloading (or lack of appropriate workloading) is a sector wide issue, however institutions deal with it individually and thus is an institutional recommendation. It is acknowledged that institutions need to seriously consider the workloading for all academic staff, however due to the focus of this Thesis, they must consider the workload for supervisors. Both PGRs and supervisors feel that current workload models (if they even exist) are inappropriate, inaccurate, and ineffective. They do not recognise the depth and breadth of the work involved with supervision and have the potential to harm PGR progression and mental health if strictly adhered to. The HE Quality Assurance Agency (2018) states that supervisors require sufficient time to develop and maintain their supervisory practices, and UKCGE (2022) has called for UK Research and Innovation (UKRI) a key research funder to renew this expectation. UKCGE (2022) has also called for mandatory allocated development opportunities and development time for supervisors within workload allocations.

Institutions need to improve recognition of the role of supervision when it comes to appraisals and progression, not just as a tick-box exercise. Effective supervision requires a multitude of skills that cannot be adequately valued by a number of completions provided in assessment paperwork. This recognition goes beyond adequate workloading but also into access to professional development such as the UKCGE Supervisor Recognition Programme, training, and resources. Where possible, institutions should encourage their supervisors to achieve this recognition.

Institutions need to ensure that training that they are providing to supervisors is not solely focused on regulations and processes, but actually prepares them for what supervision is like day to day. It is not the view of this Thesis that there is a perfect model of supervision that will work for all, however the perceptions of supervisors both within the reported study, and wider literature is that current training often does not acknowledge the reality of what supervising is like. One can have all the knowledge of processes available, but without training in project management, people management, interpersonal relations, providing effective feedback, identifying, and resourcing training needs of candidates, and constructive troubleshooting, the supervision provided will arguably be subpar – or at least not as good as it could be. Institutions should also consider the role of pedagogy in their training, as none of the supervisors involved in this research made any reference to pedagogy when thinking about their supervisory style, training, and knowledge. Given the finding that supervisors learn supervision from how they were supervised, and the clear gap in pedagogical consideration, this is imperative.

Institutions need to consider what they are expecting of their supervisors, and ensure they are adequately resourced to deliver this. If pastoral care is expected of supervisors, which evidence from Chapter 5, existing literature, and sector wide data from UKCGE (2022) suggests it is – but covertly, this needs to be made explicit, achievable and supervisors need to be adequately trained and resourced to do so. It is unacceptable that a key aspect of universities duty of care appears to exist in a grey area, with no clear delineation of responsibilities and thus no accountability for any involved. Given the clear challenges to PGR mental health, attrition rates and reported suicidality, there is, it is felt, a moral requirement for universities to be explicit about any pastoral responsibility and that supervisors are informed, equipped, and appreciated for this. If it is the expectation of institutions that supervisors are providing pastoral support, this must be made clear – if it is not, alternative methods must be employed such as an equivalent to the personal tutor role for undergraduate students (which again, must be adequately trained and resourced), and this must be clearly communicated to all.

Institutions need to ensure that supervisors' own mental health is supported – whether or not they take the stance that supervisors should be the source of pastoral support for PGRs or are responsible for their mental health. It is concerning that the supervisors interviewed felt their institution did not have support in place in case the emotional impact of supervision was having an impact on their mental health. It is reasonable to assume that all universities will have some form of employee support scheme, but whether this is adequately highlighted for supervisors in relation to their role is not clear.

Doctoral colleges

Doctoral colleges (or equivalent PGR administrative bodies) need to evaluate their current methods for bringing supervisory teams together, and if their current approaches are flexible enough and meet the needs of all involved. As identified, inter-team dynamics can be crucial for the environment that teams work in and PGRs are supported by. Consideration of topic and methodology can be alongside more personalised factors and how these can combine to form the most effective inter-team dynamics. Additionally, doctoral colleges must be more attentive to the mental health needs of supervisors and PGRs if the supervisory relationship breaks down, a supervisor enters an existing team, or supervisors take over a project. Whilst not all of the circumstances that require a change in supervisory team are necessarily difficult, it is understandably a potentially turbulent process and thus clear processes for the changes – and support – must be provided.

Doctoral colleges should provide supervisors with up-to-date training that informs them about common stressors for PGRs and allows them to be aware of warning signs that a PGR might be struggling with their mental health. They should also be provided with adequate signposting information, as discussed in relation to the institutional recommendations above.

Doctoral colleges should review the training and professional development opportunities that they are offering their PGRs and if it meets their non-academic needs. Whilst training in methodologies, literature reviewing and writing are incredibly beneficial, there are aspects of the training and development activities that could be considered ‘non-academic’ that have the potential to positively impact PGR mental health. Given the acknowledgement of imposter syndrome among PGRs identified by themselves and their supervisors, workshops, or training sessions on dealing with imposter syndrome, building professional and social networks, and managing work life balance and stress are just a few ways that doctoral colleges can improve the mental health of their PGRs – or at least normalise the conversation around these issues.

Doctoral colleges when reviewing their training and development activities should be aware of the impact of doing emotionally challenging research and find ways to support their PGRs and supervisors around this. Providing teaching and learning around how to conduct and interview and create a transcript is, of course, useful. However, drawing attention to the potential impact on mental health of doing emotionally challenging research – particularly when it involves human participants – is a substantial gap in current provisions. Including research safety planning in ethics applications, allocating time and space for debriefing, introducing the subject of self-care, boundaries, and awareness of the impact of doing emotionally challenging work once data collection is collected would all be advantageous. Some institutions have adopted a peer support type model for doctoral students conducting emotionally challenging research such as the University of Hull, and there are broader networks such as the Emotionally Demanding Research Network Scotland, and it is the view of this Thesis that these initiatives should become embedded.

Doctoral colleges should carefully examine the information given to PGRs at a more localised (e.g. School, Departmental or Supervisory) level, and ensure equity of information distribution. Attention should be given to where resources are sourced, and wherever possible PGRs should be involved in co-creation of materials, rather than making assumptions about what would be helpful and how it should be made, distributed and what it should contain. Institutions and doctoral colleges also need to work in tandem to ensure that information on issues like interruption to studies, sick leave, change in supervisory team configuration are easily accessible and provided to all.

Supervisors

It is the view of this Thesis, that any recommendations for supervisors must be preceded by improvements to their working conditions, the training they receive, respect for their time and establishment of stronger, accessible support structures. Whilst it is acknowledged that providing supervisors with adequate support, training, time allocation and recognition will not ‘fix’ bad supervisory practices, or magically improve the mental health of PGRs, it is disingenuous to present recommendations for supervisors without acknowledging the pressures they are under and provide potential alleviations for those pressures beforehand. In light of this, a number the following recommendations for supervisors are given with the caveats of ‘wherever possible’.

When beginning to work with a candidate, supervisors and PGRs should be clear about expectations and responsibilities. Due to the individualised nature of many PhDs, and PGRs varied backgrounds, clarity around what is expected in terms of meetings, submitting work and feedback should be established at the start. This is also a point where a conversation around pastoral support and signposting can happen pre-emptively of any challenges the PGR might experience, allowing clear delineation of boundaries for all parties, including clarity around responsibilities for secondary and tertiary supervisors. There are tools that exist to aid this process, such as the Expectations in Supervision Questionnaire (Kiley and Cadman, 1997) which can help facilitate discussion between the supervisor(s) and PGRs. Establishing the expectations and responsibilities can also be beneficial for PGRs who have previously studied outside of the UK or in other academic contexts where roles and behaviours may differ.

Supervisors should appreciate and respect the range of identities that PGRs are balancing and be aware of the common challenges that they may face. The supervisors interviewed acknowledged the prevalence of imposterism among their PGRs, so having upfront discussions about the phenomena (complementing institutional provisions to support the PGR) can benefit both. For some, acknowledgment of identities might start with a discussion about work life balance and how factors such as having caring responsibilities, teaching alongside the research, or having deliverables for a funder or visa processing might impact on the candidates’ course of study.

Supervisors should take time and space to reflect on the power dynamic within the supervisory relationship, and how this might affect their candidates, particularly at the start of the PhD. Whilst it is expected that the PhD is a learning journey to becoming an independent researcher, the previous educational and cultural environment that candidates have come from may influence how they interact within the supervisory relationship. The changes in relationship style and structure have been noted (Benmore, 2016; Brown, 2009) as the PGR and supervisor develop their relationship and the PGR begins to be a more independent researcher.

Supervisors should be proactive in temperature checking with their candidates and be aware of common signs that a candidate might be struggling with their mental health. This could be things like missing multiple meetings, emails at unsociable hours (unless previously discussed around work life balance), or a change of behaviour in supervisory meetings or other interactions. Wherever possible, supervisors should be upfront about asking candidates how they are doing, ensuring empathetic approaches and acknowledgement that the PhD itself can be challenging, but also that life happens outside of the PhD, and emphasising that the candidate *themselves* not the project is the most important thing. Given the often isolated working within doctoral studies, the supervisory team is in a unique position to pick up on early warning signs of distress and as a primary point of contact, their intervention – even if it is just asking if the PGR is *really* okay – can be invaluable in supporting their candidates.

Supervisors should be aware of the university processes and systems around candidates accessing support, leaves of absences and how the candidate is funded. Whilst it should not be expected that supervisors will have an encyclopaedic knowledge of the intricate behind-the-scenes processes (Student Minds, 2018; UKCGE, 2022), at least a tangible knowledge of systems – or where to find the needed information – is important for signposting PGRs. This might be to the Doctoral College or PGR Office, to a webpage, or student support. Again, this is something that universities and doctoral colleges need to equip supervisors with wherever possible, to reduce a burden being put onto supervisors to find the information themselves.

When navigating a change in supervisory structure, either taking on a doctoral ‘orphan’, or moving into a pre-existing supervisory team, the supervisor(s) need to put the work in to establish the relationships, get up to date with progress and plans, and ensure an open dialogue with all involved to remediate any turbulence experienced. It is impossible to prevent changes in supervisory structures for PGRs due to supervisors’ health, personal circumstances and career circumstances being liable to change, however acknowledgement of supervisor neglect (Wisker and Robinson, 2012) can create doctoral ‘orphans’ unnecessarily. As Wisker and Robinson (2012) note, changes in supervisory team structure can limit PGRs doctoral-level work, progress, and achievement. Support from existing and/or new supervisor(s) and sound institutional processes can ease the possible turbulence.

Arguably most importantly, supervisors should treat their PGRs like multifaceted humans. Every individual will have differing opinions on where boundaries should lie, what conversations should look like, and what they expect from interactions, but remembering the *person* at the heart of the PhD cannot be emphasised enough. As a supervisor, an individual has chosen you to work with for a significant portion of their career, may have uprooted family, moved country, taken loans, put other life goals on hold, and are clearly a passionate, capable, and valuable individual. Supervision can be incredibly rewarding for all parties, but the trust that PGRs put in their supervisors to guide, advise, and nurture them is such a huge predictor of success, that valuing the person is absolutely fundamental.

PGRs

As mentioned in the supervisor recommendations, it is important that when beginning to work with a supervisor, PGRs are upfront about their expectations and responsibilities. Ideally, some of these discussions can happen before the PhD starts (e.g. a PGR who is studying part time may share their usual working pattern with the supervisor, or a PGR with caring responsibilities may describe their typical response times for emails). If not possible prior to commencement, PGRs should have a conversation about their personal circumstances and preferences at the start of the PhD. Again, this is also a point where a conversation about pastoral support can happen pre-emptively.

PGRs should try and be honest and upfront with their supervisors about any challenges they face. Whilst it is not the view of this Thesis that PGRs should feel forced to share intimate details about their personal life with their supervisors, if there is a big change in circumstance, PGRs should feel able to discuss this with their supervisors. If they do not wish to, PGRs should wherever possible familiarise themselves with the support structures at their institution and how to access things like student support services, submit sickness reports etc. Being honest and upfront about things is likely to be a two-way stream between supervisor and PGR, and it may aid PGRs for their supervisors to initiate check-ins, as discussed above.

PGRs may benefit from spending some time looking into both university and non-university support structures, when familiarising themselves with the campus and local area (if they are new to the institution). Best practice would be for PGRs, supervisors, doctoral colleges, and institutions to all seek out this knowledge and equip themselves, but it is acknowledged that this may be challenging. In informing themselves, PGRs would take some of this responsibility and any effects of ‘falling down the cracks’ of information dissemination within institutions mitigated.

Just as supervisors should acknowledge and respect the humanity of their PGRs, PGRs should do the same and treat their supervisors as multifaceted humans. Naturally, PGRs will put their project at the top of their priority list, but understanding that supervisors will have other PGRs, students, teaching, research, and responsibilities is important. Whilst this should not prevent PGRs from seeking feedback, reassurance or asking for support, it is relevant to contextualise the supervisory relationship as part of a larger academic role. PGRs will clearly put a lot of trust in their supervisor’s guidance (particularly at the start), but appreciating the boundaries supervisors have, that they may become unwell, have entitlement to annual leave, or just have a bad day or week may prevent some frustration or feelings of imposterism within PGRs if their supervisors are unable to meet their expectations.

Finally, PGRs should keep in mind the longevity of the PhD and ensure that they too are taking time off if they are unwell and require it, that they take breaks, and find a work-life balance that suits them. Although this can feel challenging, particularly around pressure points, all universities should provide PGRs with allocated time off (and university closure dates) and supervisors and doctoral colleges should be encouraging PGRs to use this time.

The recommendations above are presented in Figure 12 using a framework pyramid for ease of understanding the different structural levels involved in creating an environment where PGRs feel able to disclose their mental health if they wish to do so. Additionally, a visual representation of how the recommendations can come together to achieve the goal of PGR disclosure is presented in Figure 13 as a ‘target’ to be achieved through changes in practices at each structural level.

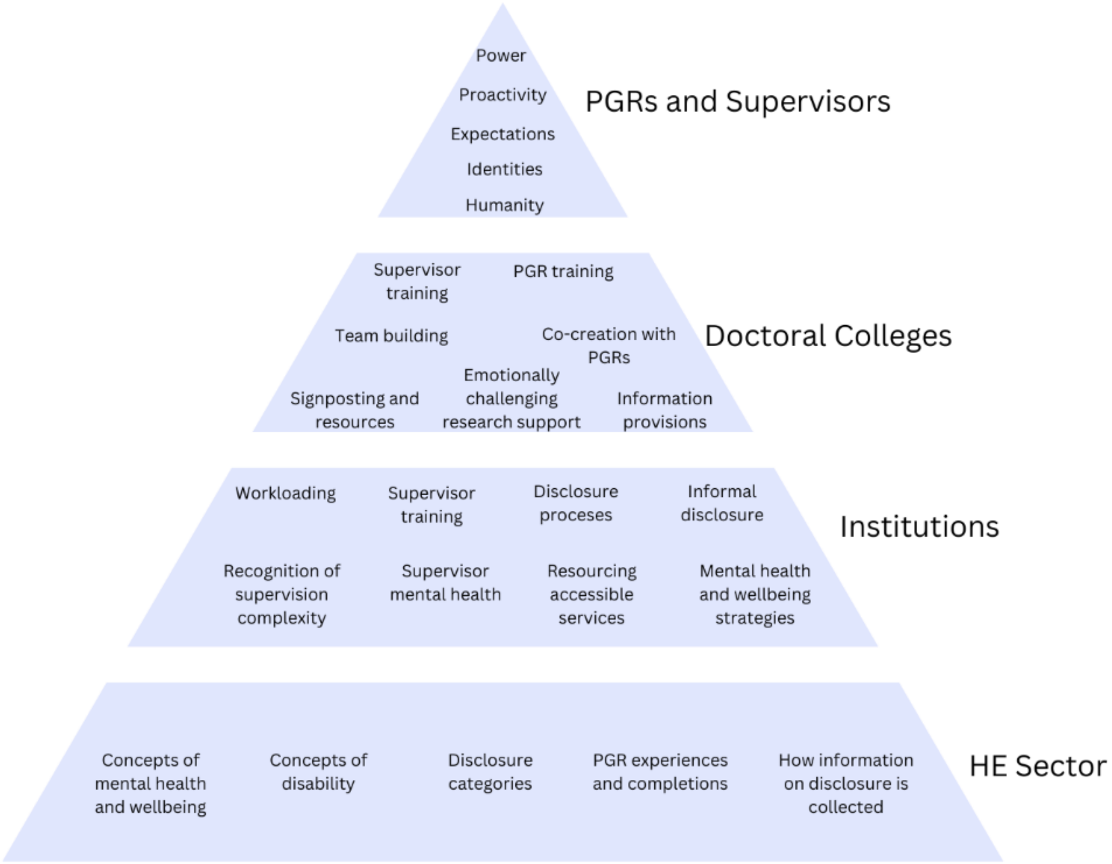


Figure 12: Framework depicting the areas of consideration that should be made from an individual level to the sector wide level

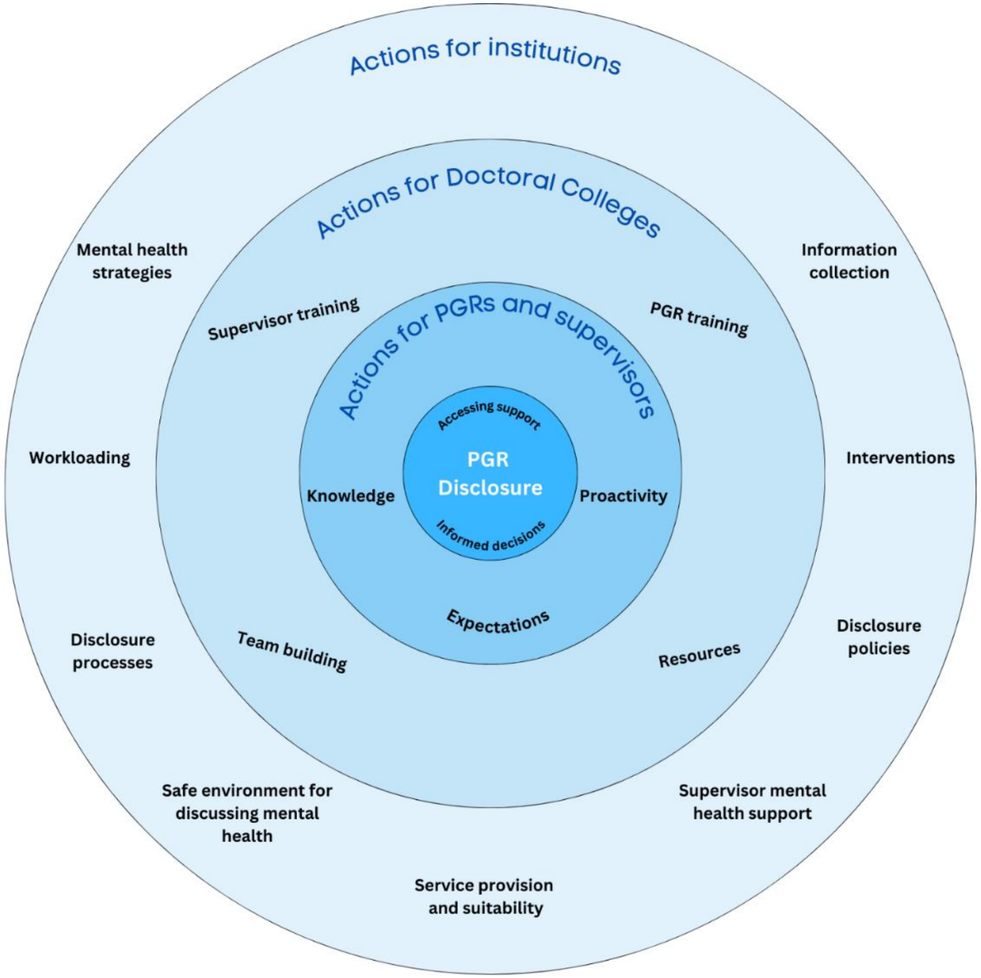


Figure 13: Visual demonstration of actions that can be taken at each structural level to achieve the 'target' of PGRs making an informed decision to disclose in order to receive support

Areas for Future Research

There are a number of areas identified within this Thesis that would benefit from further research. In terms of furthering our understanding of disclosure, there are numerous avenues of investigation that the sector would benefit from.

Given the commonality of informal disclosure and the likelihood of students and PGRs opting for informal disclosure, more exploration of *why* this is would lead to better understanding and the ability to equip and support staff better. Further work with staff on receiving informal disclosures should be delineated by staff group; as the needs of personal tutors (who hopefully would have a more concrete understanding of the support structures at an institution) will likely be different to the needs of a laboratory technician being disclosed to, or a cleaner in university-based accommodation. The perspectives of the recipients of disclosure can help to understand potential impact on staff mental health, understanding of support structures, ability (and comfort in) signposting, and issues of information sharing and communication. These will then enable better support for student facing staff of all areas of the university community.

As there is evidence that informal disclosure can play a role as a pathway to formal disclosure, this should be explored further. It is currently unclear if the informal disclosure pathway is due to positive experiences disclosing which then leads to less fear about formal disclosure, or if the pathway is down to recommendations from the recipient of the informal disclosure. Additionally, the role of peer to peer disclosure was not examined in detail within this Thesis and may be an enabling factor to formal disclosure.

Whilst some students received information relating to disclosure at application or induction stages, this was a minority of students. More work should be done to explore the type of information that is useful, the timing of information given and how this affects intention to disclose and disclosure behaviours.

As PGRs and supervisors may have differing understandings of pastoral support (and the responsibility of supervisors versus institutions to provide this), a paired supervisor-PGR study may address this potential misunderstanding.

In light of the pandemic, the changing nature of disclosure and help-seeking should also be further examined. This could be around the role of technology in aiding disclosure decisions, for example use of online forms or emails as a route of disclosure. Factors such as the ability to edit wording, pause before responding and potentially reduce unconscious stigma through body language, alongside removing the barrier of physically presenting to Student Services or equivalent could be explored.

From the interview studies with PGRs there was concerning evidence that there are gaps in university processes and advertising around how to report harassment for LGBTQ+ PGRs, so further research into this area and how students perceive the reporting procedures can benefit minoritized students (not just LGBTQ+ PGRs).

Future research can also examine the efficacy and impact of peer mentoring within PGR populations, as this was something expressed by PGRs in the interviews but also would potentially assuage some of the supervisors' concerns around socialisation and research culture.

Understanding the experiences of PGRs who also teach and how they balance the shifting roles and responsibilities is also an area of further investigation, particularly during the cost of living crisis and potential impact on progression and mental health.

Finally, the impact of doing emotionally challenging research should be examined further. Whilst evidence does exist around this, it typically comes from more established academics, rather than PGRs who may be doing independent research for the first time and so understanding their training needs and experiences will help to develop improved training and support for future PGRs.

Reflexivity on the research journey and the Thesis

It is acknowledged that reflexivity is an ongoing process throughout the research journey, not an add-on paragraph during qualitative work, and that when unifying multiple research studies and years of development into one Thesis, the development and experience of the project should be reflected upon. As it felt inappropriate to write the Thesis without acknowledgment of the pandemic (having begun the PhD journey in January 2020), it also feels inappropriate to conclude the Thesis without reflection, particularly around the qualitative work.

As was noted in Chapters 4 and 5, being a PGR doing research into PGR mental health put myself in both the ‘peer researcher’ and ‘lived experience’ researcher identities. As in Johnston’s (2019) impactful piece on insider reflections on doing mental health research, I will not be reporting results from the Thesis in this section. Instead, I will be reflecting on the experience of conducting a PhD in this area and creating this Thesis, and how it changed me as a researcher, as noted in Hastings (2010). As such, this section will take a semi-autoethnographical approach.

Autoethnography is an approach to research, and writing, that aims to describe and analyse to understand experience (Ellis, Adams and Bochner, 2011). As noted by Liggins, Kearns, and Adams (2013), the focus of autoethnographic research is often topics that are kept private. Keeping these topics, and their inherent emotionality private poses risks for researchers, particularly those beginning their career journeys. Writing on traumatic stress, Kiyimba and O’Reilly (2016) urge researchers to be more proactive in reporting or publishing their experiences and creating a culture of sharing and transparency; raising the profile of researcher wellbeing through openness, so this is being written as a junior (doctoral level) researcher to play a small role in that culture and raising that profile. Autoethnographies are typically written in the first person and may be evocative. I will be writing openly about my experiences, including providing quotations from my personal research journal. For posterity, I will be transcribing my journal quotes verbatim, ignoring punctuation conventions.

Chapters 1, 2 and 3

As contextual information, I have been heavily involved in the landscape of student mental health advocacy for many years now, which was a major driver in my pursuit of a PhD. I was aware the evidence base was varied in quality, ignored underrepresented and minoritized groups, and my experience of disclosure and help-seeking throughout my studies (both undergraduate and taught postgraduate) did not have a positive effect on my mental health.

Conducting the literature and systematic review was frustrating, particularly when extracting the data from studies with staff who were (in some cases, but not all) stigmatising in their viewpoints, and from studies with students who had poor experiences with disclosure. I feel very strongly that disclosure is an underexplored area within help-seeking and student mental health and have given multiple presentations across the course of my PhD trying to raise the profile of what is assumed to be an individual choice but is actually affected by a multitude of factors and *can* be critically examined.

> *"gave a talk today, asked the attendees if they knew their institutions disclosure policies… not one hand raised." – November 2022.*

In terms of the survey data, it was pleasantly surprising the levels of mental health literacy that most students had, which made me feel like the growing advocacy and awareness work in the sector was paying off. It was interesting that despite the survey being totally anonymous, and not asking for institutional affiliation, a number of students named their institution – and even some staff members – directly in their free text responses. This suggested to me that students *want* to tell their stories, and *want* to, to some extent name and shame – particularly as a few who named their institution did so in the context of 'I would not tell a peer to disclose because of the experience I had with university X'.

It was through my own PhD and observing the distinct differences to taught programmes, along with the survey data that I felt the issue of PGR disclosure was particularly of interest to me, and how PGRs and their supervisors balance this. I was (if I remember correctly) quite upfront about my own lived experience in my

PhD interview and throughout the project and have always felt particularly well supported by my supervisors around mental health disclosures, given their own areas of research interest, but I observed from the literature, survey and my peers and informal networks that this is *not* commonplace.

Chapters 4 and 5

To be transparent – the emotional and psychological labour began before the interviews with PGRs were even organised. I put a call for participants out on Twitter, mentioning I was recruiting for interviews with PhD students on help-seeking, mental health, the supervisory relationship, and the doctoral experience. Within a week it had over 200,000 impressions. Within two weeks, I had to delete the tweet and 'pin' a tweet to my page with crisis support. Usually, as researchers, we prepare ourselves for not being able to meet recruitment goals, we rarely think about the opposite. Some of the respondents expressed no interest in participating in my research, they just needed someone, *anyone* to hear them. I had students in crisis in my twitter direct messages and emailing my university account. I was signposting to crisis support in between meeting requests and my general email inbox. I was honestly, scared to look at my phone sometimes. The journey had begun, before I thought it was going to.

I was never expecting to see as much of myself in my PGR participants as I did – or vice vera. In hindsight, this was short sighted – I am a PhD student with a history of, and ongoing mental health struggles, interviewing other PhD students about their PhD experience, talking to their supervisors about mental health and accessing support, and placing myself in a (potentially) vulnerable position by interviewing supervisors. I thought it might be difficult to find willing students to share their experiences with me. I was wrong about that! My participants were *so* giving, *so* honest, *so* frank, *so* insightful and thoughtful and they shared so much of themselves and their experience with me. My position as a PhD student meant my participants treated me as an 'insider'; that I would be able to understand their experiences (even if we did not share other aspects in common), leaving sentences and thoughts unfinished as they acted on the assumption that 'you [I] know how it is'.

But it has been incredibly difficult. As privileged as it has made me feel to be the person they share things with – a few even noting they told me things they'd *never* told anyone before, it would be dishonest to say there haven't been times where I wish they *hadn't* told me as much as they did, they *hadn't* been so honest, so giving. And that made me feel like a bad interviewer, a bad researcher, someone who doesn't deserve to have such giving participants. The writings of Boden (Gibson, Owen, and Benson, 2016) about feeling like a "bad" researcher; feeling empty, resonated with me deeply when I read them, and it was as if I had written them myself (I had, but not as eloquently)

> *"I cant do this. i cant even be empathetic anymore. how can i be a good researcher if I cant be a good person?" – February 2022.*

When you are learning about research methods, you get taught how to build rapport, how to active listen, how to transcribe, how to code (or use whatever analytic method you are planning on). In none of my education, from undergraduate to PhD was I taught what to do when a participant starts crying because of what they've just shared with you, or they talk to you about intensely traumatic experiences of harassment and discrimination, about being suicidal, about self-harming – or on the flip side, when they express xenophobic and offensive viewpoints. That just wasn't in any of the textbooks or lectures I have come across.

> *"they just wouldn't stop crying. so then i cried. and cried. how do you transcribe crying" – March 2022*
>
> *"listening back i cant believe he said it and i didnt challenge it it went by so quickly how can i have missed it and not have called it out how can i even analyse this" – February 2022*

I wasn't taught how to decompress after a participant shared information that triggered my own mental health, how to stop myself from crying along with them in a room alone on Teams, how to keep calm when they are describing experiences of harassment and things no student should ever have to go through. Now I'm not meaning to place blame on specific lecturers or resources, but I think we need to think about how we prepare researchers – especially younger or newer ones – on how to keep themselves well and safe and supported while delving into these potentially devastating topics. Especially when those topics can hit so 'close to home' for you personally.

> *"I had to transcribe that interview today. it needed to be done. but.. i'd buried how much it got to me. and i had to listen to it again. and ill have to listen to it again tomorrow. and maybe the day after. how am i meant to do that????" – April 2022*

I was not prepared for how difficult transcription and analysis would be. The reality of constantly listening back to the recordings just intensified the response. As Kiyimba and O'Reilly (2016) reflect upon, the emotional impact of interviews can be compounded further through repeated listening. And it didn't stop when the transcripts were done, reading them, and re-reading them to code, and then to check coding, and to generate themes – I was naïve in my thought that interviews might be difficult, but then it would be fine somehow.

> *"she felt like i did at 21 and i know how that ended up and what am i meant to do i cant call her i cant email her what if she doesnt call someone what if she doesnt get help and i brought all this to the front of her mind and now i just cant do anything what am i meant to do" – February 2022*

I feel lucky that I had previously identified with my supervisors that people *might* share some difficult experiences with me (given the topic), so we intentionally kept my questions broad, didn't have follow-ups or probes that touched on specific behaviours, conditions etc, we did a researcher risk assessment as part of the ethics process, we even set up debriefing meetings for when I was interviewing. But I had no idea **how** difficult I would find it. How angry I would come away from interviews feeling – how dare other supervisors treat their students in the ways I heard about? Why didn't universities *do* anything when students reported harassment? Why were students just left to suffer alone? Why were universities removing infrastructure to support students? Why did some students just not even have any support infrastructure to start with?

> *"I know i need to talk about this. But how do i even find the words – how do i put this knowledge on someone else????? Its enough that i have to sit with it…" – May 2022*

How could services just ignore students in crisis? None of this is okay! None of it! Why are we ***still*** having to fight for these things? Why are students *still* suicidal and wanting to harm themselves due to their PhD?? How can this be okay? And what is one PhD student hearing all of this meant to do?

> *"i just feel so helpless. yeah ill write a thesis maybe publish things but what if nothing changes what am i meant to do then" – April 2022*

Yes, I can write my Thesis and write some papers and **hope** they end up on the right desk of the right person. But what do I do with that anger, that frustration, that burden and those emotions? The thing that kept me motivated however, was the amount of PGRs and supervisors who thanked me for doing research in this area, who stressed how *important* the work was, and those who acknowledged that doing this research would be difficult for me, despite how important it was.

One of the reasons that such a strong recommendation was written around supporting PGRs (and their supervisors) who are doing emotionally challenging research was in part due to my research findings, and in part due to my own research experience. Dickinson-Swift, James, Kippen and Liamputtong (2008) recommend that institutions and doctoral colleges engage in the development of structured mentoring programmes for novice researchers who are researching sensitive or emotionally challenging topics, to ensure that they are provided with support in a timely and ongoing fashion, and I cannot agree more.

The research journey

Having started the PhD in January 2020, the impact of the pandemic cannot be ignored, both for my participants and myself. Whilst the overall trajectory of the PhD was not derailed, it did affect certain directions and was necessary to dedicate time to in the two interview based studies, as well as being brought up by survey participants.

Throughout my PhD I feel I have used my lived experience to the project and my professional developments benefit. My experiences throughout the research journey have led to my involvement with the Student Mental Health Research Network (SMaRteN), allowing both personal and professional networks to develop with others in the sector, grow my organisational skills and have led to work on two additional research projects. The first examined the impact of the first UK lockdown on PGRs and early career research, and my PhD project was a direct reason for my involvement in that work. The second was a successfully funded project through SMaRteN with colleagues at the University of Lincoln who felt my consideration of the role of disclosure was also applicable to students with caring responsibilities and I worked as a research assistant on the project throughout the second and third year of my PhD.

My identification of the challenges with disclosure has also allowed me to make direct changes at my own institution, through working with Student Support Services to develop resources on what being a PGR is like, common evidence-based challenges they may face, and hopefully improve the experience of PGRs presenting to the wellbeing service. This also allowed me to provide an evidence-based approach to developing case studies for supervisory training with the PGR Service at my institution. Through the course of my PhD I have continued to volunteer with Student Minds and undertake paid work as a University Mental Health Charter Assessor due to my knowledge of university processes and the PGR experience, alongside being invited to form a PGR Panel for the UKCGE 2nd International Conference on the Mental Health and Wellbeing of PGRs and deliver a paid and invited workshop for UKCGE on belonging and mental health for PGRs.

Concluding summary

This Thesis reports on a series of sequential research studies exploring disclosure processes in UK universities for mental health, particularly focusing on PGR students and the supervisory relationship. A number of challenges for PGRs and students were identified, with recommendations for policy and practice for the sector, institutions, and doctoral colleges. Institutions should pay attention to their conceptualisation of mental health, wellbeing, and disability and how this may affect student willingness to disclose. Supervisor training and support must be improved if they are expected to provide pastoral support to their PGRs, who have been identified as a group at risk regarding mental health. PGRs require different support to undergraduates and there are changes that can be made to their working environment, training pathways and guidance that can benefit their mental health.

Glossary of Terms

Adult Psychiatric Morbidity Report: The Adult Psychiatric Morbidity Survey (APMS) series provides data on the prevalence of both treated and untreated psychiatric disorder in the English adult population (aged 16 and over).

Advance HE: A sector agency formed from merging the Equality Challenge Unit, Higher Education Academy and the Leadership Foundation for Higher Education, their objective is to support strategic change and continuous improvement thorough the development of individuals and organisations of Higher Education.

AMOSSHE: Association of Managers of Student Services in Higher Education, a non-profit professional association.

COVID-19: An infectious disease caused by a newly discovered coronavirus which was declared a pandemic in March 2020 by the World Health Organisation.

DSA: Disabled Students Allowance, a form of financial support from Student Finance England and universities for students with a disability that affects their ability to study.

DSM-IV: The Diagnostic and Statistical Manual of Mental Disorders or DSM-IV is the standard classification of mental disorders used by health care professionals in the USA and much of the world to guide diagnoses of mental health disorders.

ECRs: Early Career researchers or ECRs are individuals within 8 years of being awarded their PhD. Some institutions and research consider PhD students as ECRs.

ECU: Now part of Advance HE, the Equality Challenge Unit was a charity organisation working to further and support equality and diversity for staff and students in Higher Education across the UK.

Formal Disclosure: Formal disclosure is defined here as going through the formal university processes of declaring a disability or mental health condition to gain adjustments, often requiring the production of evidence to support this.

GAD: is a screening measure for Generalised Anxiety Disorder (GAD). The GAD-7 contains 7 questions, the GAD-2 contains 2 questions.

GHQ: The GHQ (General Health Questionnaire is a 12-item measure of mental health or distress.

HE: The Higher Education sector.

HE Commission: the HE commission is an independent body that examines HE policies.

HEIs: Higher Education Institutions or HEIs are universities, colleges, or professional schools.

HEPI: The Higher Education Policy Institute or HEPI is a UK independent think tank devoted to Higher Education.

HESA: The Higher Education Statistics Agency, the designated data body for England.

Informal Disclosure: Informal disclosure is defined here as not going through the formal university process of declaring a disability or mental health condition but disclosing or declaring them to a member (or members) of staff, or peers.

Invisible Disability: A disability or health condition which does not have physical signs.

IPPR: The Institute for Public Policy Research is an independent think tank in the UK.

LGBTQ+: Lesbian, Gay, Bisexual, Transgender and Queer or Questioning communities, and includes those who are two-spirit, intersex, asexual, pansexual, agender, bigender and genderqueer.

Medical Model of Disability: The Medical model of disability looks at what is ‘wrong’ with a person; people are disabled by their impairments, biological or medical.

Neurodiversity: Neurodiversity refers to the idea that humans have varying neurotypes, and there is no ‘right’ or ‘wrong’ neurotype, and that diversity in neurotype should not be stigmatised but acknowledged and celebrated.

NUS: The National Union of Students in the UK.

Office for National Statistics: The executive office of the UK Statistics Authority, a non-ministerial department which reports directly to the UK Parliament.

Office for Students: The independent regulator of Higher Education in England.

PGRs: Postgraduate Research Students and Postgraduate Researchers, often referred to as PhD students, graduate students, or doctoral candidates depending on institution and location. In the UK this includes some Professional Doctorates and Masters by Research students.

PHQ: The PHQ (Patient Health Questionnaire) is a screening measure for depression and depressive disorders. The PHQ-9 contains 9 questions, and the PHQ-2 contains 2 questions.

PRES: The Postgraduate Research Experience Survey, an annual or bi-annual survey open to all UK postgraduate research students.

SMaRteN: The Student Mental Health Research Network in the UK.

Social Model of Disability: The Social model of disability looks at the way that society is organised and how that can be disabling for people.

Staff: Staff is defined here as academic faculty such as professors, supervisors and lecturers, and non-academic faculty such as pastoral support staff, laboratory technicians, hospitality staff etc.

Stigma: Stigma is the negative beliefs associated with a condition such as mental health, often based on incorrect, out of date or discriminatory ideas. Stigma can be public (about others) or self (about yourself) and can take many forms from interpersonal to structural.

Student Minds: Student Minds is the UK's student mental health charity.

Student Support: Student Support is defined here as any support service or provision offered by a HEI; counselling, wellbeing workshops, crisis support, student services, disability support, etc.

Students: Students are those studying at HEIs, undergraduate or postgraduate, home, or international, part-time, or full time.

Survivor research: Survivor research is a growing body of knowledge in the emerging 'Mad Studies' field; survivor research often locates itself within the counter-discourse to biomedical psychiatry, and some mental health service users who have experienced iatrogenic trauma from mental health services.

UCAS: UCAS is the University and Colleges Admissions service, the centralised service that UK undergraduate students use to apply for the majority of university or professional courses.

University Support Services: An umbrella term used to capture all pastoral support offered at universities, including but not limited to; Student Services, Disability Support, Wellbeing Support, Counselling, Financial Advisors and Student Mentors.

Vitae: Vitae is a professional and career development organisation for researchers

WHO: The World Health Organisation is a specialised agency of the United Nations responsible for international public health.

YouGov: YouGov is a global public opinion and data company.

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*Denotes the paper was included in the systematic review (Chapter 2)

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Appendices

Appendix 1: Relevant Publications

- **Zile A.,** Porter, B., Crozier, K., Sanderson, K. (2023). The mental health of UK Postgraduate Research Students following the COVID-19 pandemic. Education Sciences: Special Edition. (Invited, under review).
- **Zile A.,** Porter, B., Crozier, K., Sanderson, K. (2023). Postgraduate students with mental health challenges: to disclose or not to disclose? A systematic review evidence map. Studies in Graduate and Postdoctoral Education (under review)
- **Zile A.,** Sanderson R., Spacey, R. (2023). *Why universities need to understand the value of carers*. University World News https://www.universityworldnews.com/post.php?story=20230214074542959
- Sanderson R., Spacey, R., **Zile, A.** (2024). The care-less academy? Making space for parents and cares in Higher Education. *Widening Participation and Lifelong Learning.* Spring 2024 edition (invited, under review)
- Sanderson, R., **Zile, A.** (2023). Who Cares about the Carers? WonkHE https://wonkhe.com/blogs/who-cares-about-the-carers/
- Spacey, R., Sanderson, R. and **Zile, A**. (2022) Who Cares? Identifying, understanding, and supporting the work-life balance and wellbeing of students with caring responsibilities. *IMPact e-journal.* University of Lincoln: Lincoln.
- Jackman, C., Sanderson, R., Haughey, T. J., Brett, C. E., White, N., **Zile, A.,** Tyrrell, K. & Byrom, N. C. (2022). The impact of the first COVID-19 lockdown in the UK for doctoral and early career researchers. *Higher Education.* 84 (4). 705-722.

Appendix 2: Invited Speaker Opportunities

- **Durham University PGR Development Conference** - EDI and PGR presentation (2023)

- **University of East Anglia Faculty of Medicine and Health Sciences Postgraduate Research Conference** – Keynote Panel Chair (2023)
- **University Alliance Doctoral Training Alliance -** University Mental Health Day Workshop: 20 minute workshop (2023)
- **UK Council for Graduate Education Belonging for Postgraduate Researchers Workshop**: 40 minute workshop (2023)
- **Arden University:** QUEST Seminar Series (2022)
- **2nd International Conference on the Mental Health and Wellbeing of Postgraduate Researchers** - Keynote Panellist (2021)
- **University of Albany** – Protecting and Maintaining Your Mental Health in Graduate School Seminar (2021)
- **Society for Research in Higher Education International Research Conference** – Student Mental Health Symposium Discussant (2021)

Appendix 3: Conference Presentations

- **University of East Anglia Faculty of Medicine and Health Sciences Postgraduate Research Conference (2023)** – 3 Minute Thesis® presentation – 'Understanding Postgraduate Research Students Disclosure of Mental Health Challenges Within the UK University Context'
- **7th Biennial International Conference on Access, Participation and Success Conference (2023) –** 20-minute presentation - The Careless Academy? Making space for carers and parents in Higher Education https://youtu.be/tG2Y1TM_41Q
- **Society for Research in Higher Education International Research Conference (2022) –** 20-minute presentation – 'Ties That Bind: Reimagining Participation for Student Parents and Carers in the Hybrid University'
- **UKCGE 3RD International Conference on the Mental Health and Wellbeing of Postgraduate Researchers (2022)** 20 minute presentation – 'PGR Identity, Power and Supervision: Impacts on Mental Health and Wellbeing'
- **UKCGE 3RD International Conference on the Mental Health and Wellbeing of Postgraduate Researchers (2022)** 2x small group workshops – 'A Postgraduate

Researchers’ Reflections on Being a Postgraduate Research Culture Coordinator’

- **SMaRteN Network Showcase (2022)** lightning talk – ‘Who Cares? The Wellbeing and Work, Life & Study Balance of Students with Caring Responsibilities
- **European Psychiatric Association Section of Epidemiology and Social Psychiatry Congress (2022).** ECR Rapid-fire presentation – ‘Student Disclosure and Non-Disclosure of Mental Health Within the University Environment: A Quantitative Exploration’
- **SMaRteN Network PhD Student Mental Health Special Interest Group (2022).** 40 minute talk – “PGR Identity, Power and Supervision: Impacts on Mental Health and Wellbeing” https://www.youtube.com/watch?v=VC7vX83cS0g
- **International Conference on Doctoral Education (2022)** 10 minute presentation – ‘Research Culture and Research Supervision: Impact on the Doctoral Experience and Candidate Wellbeing’
- **University of East Anglia Faculty of Medicine and Health Sciences Postgraduate Research Conference (2022).** 10 minute talk – ‘Student Disclosure and Non-Disclosure of Mental Health at University’
- **Student Mental Health Research Network, Early Career Research Group (2022).** Who Cares? Exploring the experiences of students with caring responsibilities. https://www.youtube.com/watch?v=NLjNdX7mLNs
- **Arden University QUEST Seminar Series (2022)** Invited speaker.
- **City University of London Student Mental Health Conference (2022)** Poster presentation – ‘The Impact of the Covid-19 Pandemic on UK Postgraduate Research Students’
- **Student Mental Health Research Network (2022)** 20 minute presentation – ‘Improving Support for Postgraduate Students with Mental Health Challenges: The Overlooked Consideration of Disclosure’
- **Institute of Mental Health Annual Conference (2022)** 5 minute presentation – ‘Student Mental Health Disclosures: A Systematic Review Evidence Map https://www.youtube.com/watch?v=7Gkn__8ivEI

- **Student Mental Health Research Network (2021)** 20 minute presentation – ‘Disclosure and Help-Seeking: Some Preliminary Findings
- **University of East Anglia Faculty of Medicine and Health Sciences Postgraduate Research Conference (2021)** 10 minute presentation – ‘Improving Support and Early Intervention for PGR Student Mental Health: The Role of Disclosure and Perceptions of University Processes
- **2nd International Conference on the Mental Health and Wellbeing of Postgraduate Researchers (2021)** 20:20 Presentation ‘Postgraduate Research Student Disclosures of Mental Health Challenges: A Systematic Review Evidence Map’
- **University of East Anglia Faculty of Medicine and Health Sciences Postgraduate Research Conferences** Poster (2020)
- **Education for Mental Health Special Interest Group (2020)** 20 minute presentation – ‘Disclosure and Help-Seeking Processes’

Appendix 4: Representative Roles

- University Mental Health Charter Assessor (Student Minds, 2021 – Present)
- Postgraduate Research Culture Co-ordinator (University of East Anglia, May – August 2022).
- Equality Diversity and Inclusion Committee: Postgraduate Representative (School of Health Sciences, 2021-present)
- PGR Representative (School of Health Sciences, 2021-present)
- Bitesize PhD Seminar co-facilitator (Faculty of Medicine and Health Sciences, 2021-present)
- Student Mental Health Research Network Early Career and Postgraduate Researcher Lab Group co-facilitator (SMaRteN, 2020-present)

Appendix 5: Professional Development & Awards

- **Associate Fellow of the Higher Education Academy** (2021-present)
- **Mental Health First Aider** (2020-present)
- **Registered IAPT Practitioner** (2022-present)
- **Peer Assisted Learning Mentor** (2021-present)
- **Special Merit in Research Award (2022), University of East Anglia Researcher Summit:** Received for my PhD work
- **Outstanding Contribution to the Postgraduate Community Award (2022), UEASU:** Received for my contributions to the Postgraduate Student Community
- **Engagement Award (2021/2022), University of East Anglia:** Received as part of Headucate: University of East Anglia's outreach work
- **Impact and Innovation Award Finalist, University of East Anglia:** Finalist for the 'Impact and Innovation Awards' as part of Headucate UEA
- **Brilliant Club Tutor (2021): Seren Award developed module 'Researching Mental Health and Wellbeing) delivered seminars and marked 36 800-1,000 essays**
- **MBBS (Medical Research Module – Year 3)** Delivered multiple workshops and marked 40 Research Protocols (>500 words)
- **MBBS (Problem Based Learning – Year 1)** facilitated weekly problem-based learning workshops.
- **MBBS (Analytical Review Module – Year 2)** Marked 101 Research Protocols (<750 words)
- **Occupational Therapy Apprenticeship Degree Programme (Research Practice Module)** Developed and delivered multiple lectures on Qualitative Methods
- **Evidence Based Practice (Speech and Language Therapy, Physiotherapy, Operating Department Practice Courses)** Marked 25 Qualitative summative assessments (<2500 words)
- **MSc Mental Health Nursing: Adult and Children (Principles and Practice of Health Research Module)** Developed and delivered multiple lectures on Qualitative Methods

Appendix 6: Evidence Map Bias Assessments

6a: Grey literature using the AACODS

	Authority (reputable, authority, reference list/bibliography, done other work in field)	**Accuracy (clearly stated aim, stated methodology, supported by sources, representative of work in the field, appropriate data collection)**	**Coverage (limits stated)**	**Objectivity (biases, balance)**	**Date (date related to content, contemporary material in refs)**	**Significance**
Dig-In (2020)	Low	Low	Low	Low	Low	Low
Equality Challenge Unit (2014)	Low	Low	Low	Medium. Gave multiple institution perspectives but these were self-submitted and may not reflect practice	Low	Low
Student Minds (2018)	Low	Low	Low	Low	Low	Low

	Authority (reputable, authority, reference list/bibliography, done other work in field)	**Accuracy (clearly stated aim, stated methodology, supported by sources, representative of work in the field, appropriate data collection)**	**Coverage (limits stated)**	**Objectivity (biases, balance)**	**Date (date related to content, contemporary material in refs)**	**Significance**
Student Minds (2014)	Low	Low	Low	Medium. No acknowledgment of review by anyone outside of Student Minds team	Low	Low
AYP (2019)	Low	Medium. Information on survey and interview method and data collection clear. Not fully clear the procedure for the participation workshops and stakeholder event.	Medium. Challenges acknowledged such as universities not wanting to take part, and ethical concerns. Charities they usually worked with didn't work with students	Medium. No acknowledgement of review by anyone else	Low	Low
Vitae (2018)	Low	Low	Low	Low	Low	Low

	Authority (reputable, authority, reference list/bibliography, done other work in field)	**Accuracy (clearly stated aim, stated methodology, supported by sources, representative of work in the field, appropriate data collection)**	**Coverage (limits stated)**	**Objectivity (biases, balance)**	**Date (date related to content, contemporary material in refs)**	**Significance**
IES (2019)	Low	Low	Medium. Smaller sample than previous work by them in this area.	Medium. Institutions could submit own account of what they were doing, which may not reflect practice	Low	Low
IPPR (2017)	Low	Low	Low	Low	Low	Low
National Alliance on Mental Illness (2012)	Low	Medium. Can interpret what questions were from results but not explicitly listed for all areas discussed	Low	Low	Medium - comparatively. Contemporary references but report on responses from 2011	Low

6b: Qualitative using the JBI QAT

Author (date)	**Is there congruity between the stated philosophical perspective and the research methodology?**	**Is there congruity between the research methodology and the research question or objectives?**	**Is there congruity between the research methodology and the methods used to collect data?**	**Is there congruity between the research methodology and the representation and analysis of data?**	**Is there congruity between the research methodology and the interpretation of results?**	**Is there a statement locating the researcher culturally or theoretically?**	**Is the influence of the researcher on the research, and vice- versa, addressed?**	**Are participants, and their voices, adequately represented?**	**Ethical approval by an appropriate body**	**Do the conclusions drawn in the research report flow from the analysis, or interpretation, of the data?**
Woloshyn (2019)	Low. Basic interpretative design used with interviews which makes sense	Low	Low	Low	Low	Low. Conceptual framework section within introduction	Medium. Not acknowledged explicitly	Low. Quotes throughout	High. None stated	Low
Venville (2010)	Low. Qualitative and interpretive approach using phenomenological research methods	Low	Low. Nonprobability purposive sampling used in poster presentations and information sessions in classes.	Low	Low. In depth information on analysis, coding etc given	Medium. Policy type frameworks discussed but unclear if researcher located there or is just contextual information about study itself	Medium. Not explicitly mentioned outside of TAFE context	Low	Low. Given information on date of approval	Low
Bathurst (2000)	Low. Gives background from disability services and mental health service use	Low. Set out to examine disclosure thoroughly and used narratives	Medium. Used posters on campuses, vested interest of participants?	Medium. Quotations given but limited information on analysis approach	Low.	Medium. No statement locating culturally but some background on theories of disclosure	Medium. Not mentioned explicitly but acknowledges limitations of conclusions	Low. Quotes throughout	Medium. No explicit statement of ethical approval but did guarantee confidentiality	Low. Concluded there was no real way to conclude due to different perspectives and experiences, which made sense from data

Author (date)	**Is there congruity between the stated philosophical perspective and the research methodology?**	**Is there congruity between the research methodology and the research question or objectives?**	**Is there congruity between the research methodology and the methods used to collect data?**	**Is there congruity between the research methodology and the representation and analysis of data?**	**Is there congruity between the research methodology and the interpretation of results?**	**Is there a statement locating the researcher culturally or theoretically?**	**Is the influence of the researcher on the research, and vice- versa, addressed?**	**Are participants, and their voices, adequately represented?**	**Ethical approval by an appropriate body**	**Do the conclusions drawn in the research report flow from the analysis, or interpretation, of the data?**
Vergunst (2020)	Low	Low	Low. Purposive sampling at 2 universities with qual exploratory interviews	Low. Thematic content analysis stated with 2 sentences on how done	Low	Medium. No specific locating but frameworks of disclosure given	Medium	Low. Quotes within	Low. Ethics approval code given.	Low
Kranke (2013)	Low	Low	Low. Wanted more in-depth following survey so did interviews with participants exploratory study	Low. Gave info on semi structured interview instrument used and sample questions	Medium. Used software to code with minimal explanation but then authors pulled together	Low	Medium. None given	Low. Quotes supporting theme development and throughout	Low. Ethics approval stated	Low. Implications and future recommendations given alongside limitations
Ramluggun (2018)	Low. Constructivist approach for in depth collection and analysis so used interviews.	Low. Qualitative approach that assumes knowledge is situated and experientially based.	Low. Interview schedule based on available literature and revised as new topics arose from interviews	Low	Medium. Short description of framework analysis and coding.	Medium. None explicitly provided	Medium. None explicitly provided	Low. Transcripts sent to participants for accuracy checks. Quotes throughout.	Low. Ethics approval from both unis included	Low
Redpath (2013)	Low	Low. Wanted stakeholders to explore opinions so did interviews.	Low. Participants from network of disability organisations	Low	Low	Low/med. Drew on social model of disability but nothing about	Medium. Not stated explicitly.	Low. Quotes throughout paper	Low. Ethics approval stated.	Low

Author (date)	Is there congruity between the stated philosophical perspective and the research methodology?	Is there congruity between the research methodology and the research question or objectives?	Is there congruity between the research methodology and the methods used to collect data?	Is there congruity between the research methodology and the representation and analysis of data?	Is there congruity between the research methodology and the interpretation of results?	Is there a statement locating the researcher culturally or theoretically?	Is the influence of the researcher on the research, and vice- versa, addressed?	Are participants, and their voices, adequately represented?	Ethical approval by an appropriate body	Do the conclusions drawn in the research report flow from the analysis, or interpretation, of the data?
			and student support.			researchers themselves				
Rocco (2000)	Medium. Very short sentence on constant comparative measure to generate grounded theory.	Low	Low	Medium. Discusses coding and emergent themes but no information on dual coding etc	Medium. Not huge amounts of info on this	Medium. Not explicit.	Low. Acknowledged assumptions made about what faculty would think	Low. Quoted throughout	High. None stated	Low
Winter (2017)	Low	Low. Gave info on formulation of questions	Low. Details of study and request for participants put on Virtual Learning Platform at each school, convenience sample	Low. Subcategories, codes, and reflection of these based on repeated readings given	Low	Low	Medium. Positioned as commissioned by GMC but no acknowledgement of possible affect	Low. Quotations throughout supporting	Low. Ethical approval given at each school	Low
McAllister (2014)	Low	Low. Wanted insights and strategies so did interviews	Low. Snowball sampling and open invitation to staff	Low. Braun and Clarke method, dual coding, and interrater	Low. Quotes throughout supporting the themes.	Medium. Not given	Medium. Not given	Low	Low. Ethics approval stated.	Low

Author (date)	Is there congruity between the stated philosophical perspective and the research methodology?	Is there congruity between the research methodology and the research question or objectives?	Is there congruity between the research methodology and the methods used to collect data?	Is there congruity between the research methodology and the representation and analysis of data?	Is there congruity between the research methodology and the interpretation of results?	Is there a statement locating the researcher culturally or theoretically?	Is the influence of the researcher on the research, and vice- versa, addressed?	Are participants, and their voices, adequately represented?	Ethical approval by an appropriate body	Do the conclusions drawn in the research report flow from the analysis, or interpretation, of the data?
				reliability assessment						
Fossey (2017)	Low	Low. Wanted further detail on staff actions and experiences so did qualitative interviews with staff	Low. Uni central admin unit distributed survey. All who had previously identified to uni that they had worked with disability services to support students with ABI or MH invited to interview.	Low. Thematic analysis	Low	Medium. Not given	Medium. Not given	Low	Low. Ethics approval given	Low
Stanley (2011)	LOW	Low	Low. Purposive sample constructed from those who met criteria for participation.	Low. Analysis details given	Low	Low. Adopted social definition of disability.	Medium. Not explicitly given	Low	Low. Ethics approval given	Low

Author (date)	Is there congruity between the stated philosophical perspective and the research methodology?	Is there congruity between the research methodology and the research question or objectives?	Is there congruity between the research methodology and the methods used to collect data?	Is there congruity between the research methodology and the representation and analysis of data?	Is there congruity between the research methodology and the interpretation of results?	Is there a statement locating the researcher culturally or theoretically?	Is the influence of the researcher on the research, and vice- versa, addressed?	Are participants, and their voices, adequately represented?	Ethical approval by an appropriate body	Do the conclusions drawn in the research report flow from the analysis, or interpretation, of the data?
Eccles (2018)	LOW	Low. Wanted to understand UCAS issues and definitions of disability so did focus group interviews. Interpretative approach with participatory research.	Low. Two questions asked and both given	Low. Braun and Clarke, dual coding and reviewing	Low	Medium	Low. Used participatory research so fieldwork was conducted by students with lived experience as co-researchers to facilitate honest thoughts and perceptions. They were given training and supervised at all stages.	Low	Low. Ethics approval given	Low

6c: Quantitative appraisal using AXIS tool

Please note, for ease of reading the following table has been split into two sections. Where reading the file in excel there would be an additional 9 columns after "Were the methods sufficiently described to enable repetition", these have been put into an additional table that can be found below.

Author	**Were the aims / objectives of the study clear?**	**Was the study design appropriate?**	**Was the sample size justified?**	**Was the target population clearly defined?**	**Was the sample taken from an appropriate population base?**	**Was the selection process likely to select representative population?**	**Were measures undertaken to address non responders?**	**Were the risk factor and outcome variables measured appropriately?**	**Were the risk factor and outcome variables appropriate to the aim?**	**Were the risk factor and outcome variables previously trialled piloted or published?**	**Is it clear what was used to determine statistical significance?**	**Were the methods sufficiently described to enable repetition?**
Armiento (2014)	Yes	Yes	No information given	Yes - college students	Yes - notes backgrounds are consistent with broader demographics for region	Yes - emails, posters, and classroom announcements	Yes - missing values imputed using expectation-maximisation algorithm and reasoning given	Yes	Yes	Yes- ISAS, SBQR, Rosenberg, IPPA, Willoughby	Yes - alpha of .02 used to determine significance	Yes
Grimes (2017)	Yes	Yes	Maybe - only around indigenous Australian populations	Yes, students	Yes	Yes, recruitment for all students invited by university executive unit	Gave return percentage	Yes	Yes	No- used modified HESA disability categories, but questions were own	95% confidence intervals, p=0.000	Yes
Grimes (2019)	Yes	Yes	No information given	Yes, part of larger study	Yes, acknowledged hidden population targeted	Yes, recruitment for all students invited by university executive unit	Gave return percentage	Yes	Yes	Developed question using previous research identified barriers to disclosure and modified HESA as above	Yes, p<0.05, <0.000	Yes, full questions provided

Author	**Were the aims / objectives of the study clear?**	**Was the study design appropriate?**	**Was the sample size justified?**	**Was the target population clearly defined?**	**Was the sample taken from an appropriate population base?**	**Was the selection process likely to select representative population?**	**Were measures undertaken to address non responders?**	**Were the risk factor and outcome variables measured appropriately?**	**Were the risk factor and outcome variables appropriate to the aim?**	**Were the risk factor and outcome variables previously trialled piloted or published?**	**Is it clear what was used to determine statistical significance?**	**Were the methods sufficiently described to enable repetition?**
Hampole (2019)	Yes	Yes	No information given	Yes	Maybe - only included those who reported mental health conditions without comorbidities	Mostly - campus accessibility centre recruitment, and psychology students.	Not included	Yes	Yes	Yes, SWANNS reliability =.88	Yes, significance level set at 0.05	Yes
Mamboleo (2019)	Yes	Yes	No information given	Yes, college students with disabilities but used Disability Support Services to distribute so may not have got students not registered	Yes, 6 major public colleges	Yes, notes the distribution of colleges provided geographical diversity and adds to representativeness	Addressed missing data by adopting average score of total items completed for each subscale then replacing missing data with average	Yes, and interrater reliability .91	Yes	Unsure - revised WAS and WDD but correlations between items were high indicating items related to latent construct, consistency of WAS =.83, WDD =.815	Yes	Yes
Mitchell (2018)	Yes	Yes - cross sectional	Power calculation information given - a priori sample size for one-way anova; 80%	Yes - inclusion was full time students registered at one university doing adult,	Yes	Yes, invites given to all full-time students who were eligible	Not included	Yes	Yes	Scl-90-r for psychiatric and psychological symptoms (a=.86-.90) seeking support scale was not	Yes - significance level of p<.05 adopted	Yes

Author	Were the aims / objectives of the study clear?	Was the study design appropriate?	Was the sample size justified?	Was the target population clearly defined?	Was the sample taken from an appropriate population base?	Was the selection process likely to select representative population?	Were measures undertaken to address non responders?	Were the risk factor and outcome variables measured appropriately?	Were the risk factor and outcome variables appropriate to the aim?	Were the risk factor and outcome variables previously trialled piloted or published?	Is it clear what was used to determine statistical significance?	Were the methods sufficiently described to enable repetition?
			chance of rejecting null hypothesis with medium effect size of f=0.31 required 120 students	mental health, learning disabilities or child nursing						existing (a=.77-.88)		
Pheister (2020)	Yes	Yes	No information given	Yes - residency director contact information obtained from publicly available accreditation council for graduate medical education	Yes, randomised sampling also	Yes	Gave response rate including those who did not fully complete survey and duplicate email addresses in flowsheet depicting final response rate of 10.7%	Yes	Yes	Not really - untested vignettes used, however language was as neutral as possible. Ratings on 5-point Likert scale	Statistical significance set at <0.05	No, not enough detail on vignettes provided. There is enough information on the analysis though
Sniatecki (2015)	Yes	Yes	No information given	Yes, faculty	Yes, distributed to all faculty	Yes	Gave response rate broken down	Yes	Yes	Maybe - used adapted faculty survey	Yes, p<.05 and p<.01	Yes

Author	Were the aims / objectives of the study clear?	Was the study design appropriate?	Was the sample size justified?	Was the target population clearly defined?	Was the sample taken from an appropriate population base?	Was the selection process likely to select representative population?	Were measures undertaken to address non responders?	Were the risk factor and outcome variables measured appropriately?	Were the risk factor and outcome variables appropriate to the aim?	Were the risk factor and outcome variables previously trialled piloted or published?	Is it clear what was used to determine statistical significance?	Were the methods sufficiently described to enable repetition?
							by full time vs part time			from university of Oregon, but no information on psychometric properties of survey made available, but was given within this population		
Martin (2010)	Yes	Yes	No information given	Yes, students	Yes	Maybe, only from one school of the university	Gave response rate, 3.6% of overall student body	Yes, open ended questions also	Yes	Maybe, open ended questions used so no information on psychometric properties or exact questions asked	No, more percentages and free text based	Probably not
Brown (2017)	Yes	Yes	No information given	Yes	Yes, 6 colleges	Maybe - some colleges did campus wide recruitment, others subject targeted.	Gave response rate by institution	Yes	Yes	Yes - Corrigan scale used for disclosure a=.89, attribution scale for public	Yes, fully saturated model fit indices - comparative fit index	Yes

Author	Were the aims / objectives of the study clear?	Was the study design appropriate?	Was the sample size justified?	Was the target population clearly defined?	Was the sample taken from an appropriate population base?	Was the selection process likely to select representative population?	Were measures undertaken to address non responders?	Were the risk factor and outcome variables measured appropriately?	Were the risk factor and outcome variables appropriate to the aim?	Were the risk factor and outcome variables previously trialled piloted or published?	Is it clear what was used to determine statistical significance?	Were the methods sufficiently described to enable repetition?
										stigma a=.87, secrecy scales a=.92	=1.000, root mean square error =.000, standardised root mean square residual <.001	
Becker (2002)	Yes	Yes	No information given	Yes - university faculty who teach and students	Yes - all faculty eligible, randomised student sample	Yes - wanted faculty, emailed faculty, stratified student sample	Gave response rate	Yes	Yes	Piloted but all own questions - variable of faculty confidence a=.88, variable of faculty	Yes, p<.001, <.01, <.05	Yes
Osborne (2019)	Yes	Yes	No information given	Yes	Yes, utilised number of student disability advocacy groups also	Self-selecting, broad demographic spectrum reached. Overrepresentation of white students.	Not included	Yes	Yes	Maybe - survey questions given but based on previous literature rather than existing measures	No, more percentages and free text based	No - gave percentages but also statistics just saying 'in the more detailed analysis' so lay person would not know what x2 means

Author	**Were the aims / objectives of the study clear?**	**Was the study design appropriate?**	**Was the sample size justified?**	**Was the target population clearly defined?**	**Was the sample taken from an appropriate population base?**	**Was the selection process likely to select representative population?**	**Were measures undertaken to address non responders?**	**Were the risk factor and outcome variables measured appropriately?**	**Were the risk factor and outcome variables appropriate to the aim?**	**Were the risk factor and outcome variables previously trialled piloted or published?**	**Is it clear what was used to determine statistical significance?**	**Were the methods sufficiently described to enable repetition?**
Corrigan (2016)	Yes	Yes, with path models to justify	No information given	Yes	Yes	Maybe - some colleges did campus wide recruitment, others subject targeted. Authors note in discussion was not representative of college students, but age gender and ethnicity was	Missing data noted in descriptive statistics	Yes	Yes	Maybe- attribution scale is in press, other scales secrecy scale, disclosure scale, join program scale do not appear to be tested	Yes, NFI and CFI greater than 0.90, coefficient significance determined by t-tests	Yes
Kent (2018)	Yes	Yes	No information given	Yes	Yes	Maybe - invitation sent from disability office, so those not registered would have been missed	Yes, response rate given and compared with previous study	Yes	Yes	Maybe - survey replicates previous study, no info given on reliability or validity etc	Used percentages not statistical analyses	Yes
Busch (2023)	Yes	Yes	No information given	Yes	Yes	Yes	Gave response	Yes	Yes	Maybe - designed for this survey and reviewed	Yes	Yes
Abraham (2022)	Yes	Yes	No information given	Yes	Yes	Yes	Gave return percentage	Yes	Yes	Maybe - designed for survey and reviewed	Yes	Yes

Author	**Were the data adequately described?**	**Does response rate raise concerns about non-response bias?**	**Was information about non-responders described?**	**Were the results internally consistent?**	**Were the results presented for all analyses?**	**Were the discussions and conclusions justified?**	**Were the limitations of the study discussed**	**Were there any funding sources of conflicts of interest that may affect interpretation of results?**	**Was ethical approval or consent of participants attained?**
Armiento (2014)	Yes	No	2% of those who started survey did not complete	Yes - Cronbach's alphas provided for measures	Yes	Yes	Yes - section in discussion	No	Yes
Grimes (2017)	Yes	Used proportional estimates for non-responses of IA and non-disclosed	No	No information given	Yes	Yes	Yes, model could account for only 26.1% of variance in non-disclosure, HESA issues, one regional university	No information given	Yes, granted institutional ethics approval
Grimes (2019)	Yes	No information given	No information given	No information given	Yes	Yes	Yes, cross sectional, one Australian university	None reported by authors	Yes, granted institutional ethics approval
Hampole (2019)	Yes	No	No	Yes, alphas reported for sample and compared to pilot	Yes	Yes	Yes, says participants did not need formal diagnosis and no verification of diagnoses	No information given	Yes, IRB approval
Mamboleo (2019)	Yes	In limitations says response rate could not be calculated because uni personal	No	Unsure - limitations say relatively low total variance	Yes	Yes	Yes, cross sectional, self-report, not fully established psychometric	Grant from program evaluation and research centre	Yes, institutional review board approval granted

Author	**Were the data adequately described?**	**Does response rate raise concerns about non-response bias?**	**Was information about non-responders described?**	**Were the results internally consistent?**	**Were the results presented for all analyses?**	**Were the discussions and conclusions justified?**	**Were the limitations of the study discussed**	**Were there any funding sources of conflicts of interest that may affect interpretation of results?**	**Was ethical approval or consent of participants attained?**
		were responsible for distribution and information of overall numbers of students registered at DDS not recorded		explained may indicate other factors related to disability disclosure may not be included in this study			properties of the measures used	but no conflicts of interest reported by authors	at each institution
Mitchell (2018)	Yes, and separated by test and section within	Not included	No	Yes	Yes	Yes, referenced previous lit and differences between their results and other similar studies and possibly why this is	Yes, section in discussion acknowledging confidence intervals in relation to odds ratio are wide, temporal issues with cross sectional design	No - funded from university research grants scheme (internal) and quality research funding scheme (internal)	Yes
Pheister (2020)	Yes	Acknowledged in limitations that 10.7% of ACGME directors only	No	Yes	Yes	Yes	Unclear - only around sample size, not study design or vignette development	Corresponding author says none	Not explicitly said - however recruited from ACGME?
Sniatecki (2015)	Yes	No	No information given	Yes, internal reliability of items was a=0.859	Yes	Yes	Yes, representative of one institution, sample size, pressure to respond to items in socially desirable way	None mentioned	No information given
Martin (2010)	Yes	No	No information given	Unsure -no information on	Few analyses done	Yes	None mentioned	No funding conflicts apparent	No information given

Author	**Were the data adequately described?**	**Does response rate raise concerns about non-response bias?**	**Was information about non-responders described?**	**Were the results internally consistent?**	**Were the results presented for all analyses?**	**Were the discussions and conclusions justified?**	**Were the limitations of the study discussed**	**Were there any funding sources of conflicts of interest that may affect interpretation of results?**	**Was ethical approval or consent of participants attained?**
	🟩	🟧	🟧	measures as free text focused	🟧	🟩	🟧	🟩	🟥
Brown (2017)	Yes	No information given	Response rate only given for two colleges of the 6	Yes	Yes	Yes	Yes, cross sectional data, potential for bidirectional relationships among factors considered	None mentioned	Yes, institutional review boards reviewed and approved survey protocol
Becker (2002)	Yes	No information given	Faculty response rate 21.2% student 38.6%	Yes	Yes	Yes	Yes, single large urban university, response rates	None mentioned	Maybe - sampling was done with office of institutional research and planning suggesting some approval but no explicit mention of ethics approval
Osborne (2019)	Free text was statistics not so much	No information given	No information given	No information given	Yes, even when analysis itself was unclear	Yes	Not within discussion only within method r.e. White and subject over representation	Author reports no conflict of interest	Not explicitly mentioned
Corrigan (2016)	Yes	Yes - no significant differences in response patterns found across the universities	Response rate was given but no info about non responders	Yes- internal consistency for scales over 0.80 for all	Yes	Yes	Yes - standard deviations in path analysis moderate, not fully representative sample	Authors report no conflict of interest. No funding info given	Yes, passed IRB at each of the 6 colleges

Author	**Were the data adequately described?**	**Does response rate raise concerns about non-response bias?**	**Was information about non-responders described?**	**Were the results internally consistent?**	**Were the results presented for all analyses?**	**Were the discussions and conclusions justified?**	**Were the limitations of the study discussed**	**Were there any funding sources of conflicts of interest that may affect interpretation of results?**	**Was ethical approval or consent of participants attained?**
Kent (2018)	Yes	Maybe	Response rate was given but no info about non responders	Yes	Yes	Yes	No	Authors report no conflict of interest, funding partially gained from national centre for student equity in he	Yes, gave ethics approval number and explicitly mentioned obtaining informed consent
Busch (2023)	Yes	No and acknowledged	Response rate given	Yes	Yes	Yes	Yes	Authors report no	Yes, passed IRB
Abraham (2022)	Yes	No and acknowledged	Response rate given	Yes	Yes	Yes	Yes	Authors report no	Maybe - was conducted by national science foundation

Appendix 7: Quantitative Survey

7A: Participant Information Sheet

(Provided as a Microsoft Sway document)

You are being invited to consider taking part in the research study ‘Student Mental Health Challenges: Support, Disclosure and Perceptions’. Before you decide whether or not you wish to take part, it is important for you to understand why this research is being done and what it will involve. Please take time to read this information carefully and discuss it with friends and relatives if you wish. Please contact the researcher at a.zile@uea.ac.uk if there is anything that is unclear or if you would like more information.

- This study is open to all students registered at UK Higher Education Institutions, and is being undertaken by Amy Zile as part of their PhD research in the School of Health Sciences at the University of East Anglia

- A full Participant Invitation can be found here with all of the information about this study, and you can save the information as a ‘favourite’ on your browser to come back to at any point https://sway.office.com/NlbvAgIBlik5XlOn?ref=Link

- The survey will ask you to provide some demographic information and answer a series of questions about your course, your perceptions of student mental health, the available support, and disclosure processes

- All of the data will be anonymised, and pseudonyms will be used wherever individual responses are discussed

- All data management will follow the GDPR and UEA’s Research Management Policy

- This study has been approved by the Faculty of Medicine and Health Sciences Ethics Review Board (202021-057)

- The study is not designed to cause any distress; however, resources are listed at completion of the survey and within the larger Participant Invitation

- Participation in this study is voluntary. By giving consent to take part in this study you are telling us that you 1) understand what you have read, 2) agree to take part in the research study as outlined, 3) agree to the use of your personal information as described

- The survey should take between 10-30 minutes – if you are using your mobile phone, it is recommended to utilise the ‘landscape’ view for ease of completion if preferred!

Invitation

You are being invited to consider taking part in the research study ‘Student Mental Health Challenges: Support, Disclosure and Perceptions’. Before you decide whether or not you wish to take part, it is important for you to understand why this research is being done and what it will involve. Please take time to read this information carefully and discuss it with friends and relatives if you wish. Please contact the researcher at a.zile@uea.ac.uk if there is anything that is unclear or if you would like more information.

Participation in this research study is voluntary. By giving consent to take part in this study you are telling us that you:

- Understand what you have read.
- Agree to take part in the research study as outlined below.
- Agree to the use of your personal information as described.

Who are the researchers and what is the purpose of this research?

This research is being undertaken by Amy Zile, as part of their PhD research in the School of Health Sciences at the University of East Anglia. The purpose of this research is to investigate student expectations of and understanding of available support at university, and student perceptions of disclosing a mental health challenge.

Why have I been invited to take part in this research?

You have been invited to take part in this research as you are a current student at a UK Higher Education Institution.

What type of data is being collected?

The following survey will ask you to provide some demographic information, and a series of questions surrounding your perceptions of student mental health, the available support, and disclosure processes within Higher Education.

How long will it take?

The research should take no longer than 30 minutes to complete.

What are the benefits (if any) for taking part in this research?

You will have an opportunity to learn about the research process by participating in a research project and have a genuine sense of what it feels like to be a research participant. You will also get the opportunity to share your views and experiences around student mental health, help-seeking, and issues around disclosure. Taking part gives you an opportunity as a student, to feed back into the development of a student specific disclosure processes model which can be used to aid universities development of clear, accessible and student informed mental health and disclosure policies and practices.

What are the risks (if any), or costs involved with taking part in this research?

This research poses no particular risks, no risk of physical harm and is not using deception in any way. The risks associated with participating in this survey centre on the potential for distress through the topic in question (for example if questions were to remind you of an upsetting personal experience), although the questions involved are not designed to illicit distress. In order to minimise the risk of emotional distress, it is important that you only share what thoughts and opinions you are comfortable with in the survey. If you do feel distressed as a result of participating, please utilise the following resources:

- Student Space (a dedicated student resource and support service) at www.studentspace.org.uk where you can access free phone and webchat support between 4pm-11pm daily, and a range of online resources
- The Samaritans (a safe space to talk) on 116 123, or you can download their Self-Help app onto your phone, or email jo@samaritans.org and they will respond within 24 hours
- Student Minds (the UK's student mental health charity) who can provide information and support on a range of issues relating to student mental health on their website www.studentminds.org.uk

Will I be identifiable?

No, all of the data will be anonymised, with pseudonyms utilised wherever individual cases are discussed within the research report.

What will happen to my information and who will have access?

By providing your consent, you are agreeing to us collecting demographic information about you and your views for the purposes of this research study. Your information will only be used for the purposes outlined in this Information Statement unless you consent otherwise. Data management will follow the 2018 General Data Protection Regulation Act and the University of East Anglia Research Data Management Policy (2019).

Only the researcher Amy Zile and the supervisor Professor Kristy Sanderson will have access to your information, and this will be kept secure. All information and data will be kept in a locked file cabinet, or on a password protected external hard drive within the researchers' study room. The data will be stored in this manner until 10 years after completion of the research. Following this date data and consent forms will be destroyed, either shredded or erased from, the hard drive. However, researchers have to work within the confines of current legislation over such matters as privacy and confidentiality, data protection and human rights and so offers of confidentiality may sometimes be overridden by law (for example if you indicate that you or another person are in immediate danger, the researcher has a legal obligation to share this information).

Can I withdraw from the research?

Once you have agreed to participate in the research you can withdraw at any time by exiting the survey window and your data will not be saved. As the survey is anonymous, it will not be possible to withdraw your responses following completion of the survey, so it is recommended that if you wish to withdraw, to do so without finishing answering the questions.

What if there is a problem?

If you have a concern about any aspect of this study, you may wish to speak to the researcher who will do their best to answer your questions. You should contact Amy Zile at a.zile@uea.ac.uk. Alternatively, if you do not wish to contact the researcher you may contact her supervisor Professor Kristy Sanderson at kristy.sanderson@uea.ac.uk, or Professor Sally Hardy at s.hardy@uea.ac.uk.

Who is funding and organising the research?

This research has not been funded or sponsored by any external body and has no financial gains for the researcher.

Will I be told the results of the study?

There will be an opportunity for you to receive updates on any outputs from this research study following completion of the survey if you wish to be updated on the study results, and any articles or media that follows. This study is part of an ongoing project into mental health disclosure, and we may wish to discuss these issues in further detail through interviews later in 2021; as such you will also be invited to leave your email address if you consent to being contacted if you meet the participant requirements for the interview study. This will be separate from the research data and there will be no way for the researchers to connect your email address to any of your responses. The research will be disseminated through public channels through the planned publication of journal articles, and media posts, however these will not contain any identifiable information about participants. The results will also form part of the PhD thesis which will be published on the University of East Anglia Digital Repository as part of the thesis submission.

This research study has been approved by the Faculty of Medicine and Health Sciences Ethics Review Board (Reference 202021-057).

7B: Consent form

Student Mental Health Challenges: Support, Disclosure and Perceptions

☐ – I confirm that I have read the information sheet for this study. I have had the opportunity to consider the information and ask questions

☐ – I understand that my participation is voluntary, and I am free to withdraw without giving any reason

☐ – I understand that the findings of the study, which may include anonymised information about me may be used to support future research within this PhD project.

☐ – I agree for any free text responses I give to be quoted using a pseudonym

☐ – I agree to participate in this questionnaire

By clicking the 'next' button below, you are indicating your agreement with, and understanding of, the above terms and providing your consent to take part in this questionnaire.

7C: Survey

Thank you for wanting to participate in this survey. Please answer the following questions to ensure your eligibility to take part:

Are you currently studying at a UK University?

- Yes ☐
- No ☐

What is your level of study?

- Undergraduate ☐
- Postgraduate Taught ☐
- Postgraduate Research ☐

Is your course a:

- Foundation Degree (e.g., HND, FdA) ☐
- Certificate or Diploma of Higher Education (e.g., CertHE, DipHE) ☐
- Bachelors Degree (e.g., BA, BSc, LLB, BEng) ☐
- Masters Degree (e.g., MA, MSc, MBA) ☐
- Integrated Masters Degree ☐
- Primary Dental, Medical or Veterinary Qualification ☐
- PGCE ☐
- Doctorate (PhD) ☐

If not eligible:

Thank you for wanting to take part in this survey, and for taking the time to answer the previous questions. Unfortunately, this particular survey is aimed at university students doing their Bachelors, Masters, Doctorate or equivalent. If you are interested in sharing your views and experiences of student mental health, there are frequently updated research participation opportunities at https://www.studentminds.org.uk/research.html and https://mcpin.org/get-involved/currentresearchopportunities/ where you can find potential projects! Thank you again for your time and your interest in this topic.

If eligible:

What is your year of study:

- 1 ☐
- 2 ☐
- 3 ☐
- 4+ ☐

Are you a:

- Home student ☐

- EU student ☐
- Non-EU international student ☐

Are you the first in your family to go to university:

- Yes ☐
- No ☐
- Unsure ☐

Do you go on placements (e.g., clinical placements) as part of your course:

- Yes ☐
- No ☐
- Unsure ☐

What is your mode of study:

- Full time ☐
- Part time ☐
- Modular

What is your School/Subject area:

- Medicine and Dentistry ☐
- Subjects allied to Medicine ☐
- Biological Sciences ☐
- Veterinary Science ☐
- Agriculture & related subjects ☐
- Physical Sciences / Mathematical Sciences ☐
- Computer Science / Engineering and Technology ☐
- Architecture, Building & Planning ☐
- Social Sciences ☐
- Law ☐
- Business and Administrative Studies ☐
- Mass Communications and Documentation ☐
- Languages ☐
- Historical and Philosophical Studies ☐
- Creative Arts and Design ☐
- Education ☐
- Combination of subjects ☐

What is your main source of funding:

- Student Finance (student loan) ☐
- NHS or Department of Education ☐
- Non-UK Government ☐

- Research Council ☐
- Other funding source (please state) ☐ __________________

The following questions ask about your perceptions of mental illness, and your understanding of mental ill health. (MHL Scale)

Please read each item carefully and indicate to what extent you agree with the statements.

	Strongly Disagree	Disagree	Neither agree or disagree	Agree	Strongly agree
People with a mental illness could snap out if it if they wanted					
A mental illness is a sign of personal weakness					
A mental illness is not a real medical illness					
People with a mental illness are dangerous					
It is best to avoid people with a mental illness so that you don't develop this problem					
If I had a mental illness, I would not tell anyone					
Seeing a mental health professional means you are not strong enough to manage your own difficulties					
If I had a mental illness, I would not seek help from a mental health professional					
I believe treatment for a mental illness, provided by a mental health professional, would not be effective					

These questions ask about your knowledge and understanding of gaining support for your mental health and how to access it. (MHLS Scale)

Please read each item carefully and indicate to what extent you agree with the following statements.

	Strongly Disagree	Disagree	Neither agree or disagree	Agree	Strongly agree
I am confident that I know where to seek information about mental illness					
I am confident using the computer or telephone to seek information about mental illness					
I am confident attending face to face appointments to seek information about mental illness (e.g., seeing the GP)					
I am confident I have access to resources (e.g., GP, internet, friends) that I can use to seek information about mental illness					

The next set of questions are about your feelings, how you typically deal with emotions and distress, and how you might go about getting help or support for your wellbeing and mental health. (DDI Scale)

Please read each of the following items carefully. Indicate to the extent to which you agree or disagree with each item according to the rating scale below.

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
When I feel upset, I usually confide in my friends					
I prefer not to talk about my problems					

When something unpleasant happens to me, I often look for someone to talk to					
I typically don't discuss things that upset me					
When I feel depressed or sad, I tend to keep those feelings to myself					
I try to find people to talk with about my problems					
When I am in a bad mood, I talk about it with my friends					
If I have a bad day, the last thing I want to do is talk about it					
I rarely look for people to talk with when I am having a problem					
When I'm distressed, I don't tell anyone					
I usually seek out someone to talk to when I am in a bad mood					
I am willing to tell others my distressing thoughts					

The next questions ask about who you might go to for support. (GHSQ)

Please read each of the items carefully and select the most likely option for you.

If you were having a personal or emotional problem, how likely is it that you would seek help from the following people:

	Extremely Unlikely	Unlikely	Unsure	Likely	Extremely likely
An intimate partner					
A friend					
A parent					
Other family member					

Your University tutor or supervisor					
A mental health professional					
A telephone helpline / online web-based or chat resource					
Your GP/Doctor					
A minister or religious leader					
I would not seek help from anyone					
I would seek help from another source not listed above					

If you indicated you would seek help from another source which was not listed, please use this space to indicate what that source would be if you are comfortable sharing this information. (200 words)

____

The following questions ask you about how you might feel seeking help from a professional source. (SSOSH Scale)

Please read all the items carefully and indicate how much you agree with the statements about seeking help.

	Strongly disagree	Disagree	Agree and disagree equally	Agree	Strongly agree
I would feel inadequate if I went to a professional for psychological help					
My self-confidence would NOT be threatened if I sought professional help					
Seeking psychological help would make me feel less intelligent					
My self-esteem would increase if I talked to a professional					
My view of myself would not change just because I made the choice to see a professional					

It would make me feel inferior to ask a professional for help					
I would feel okay about myself if I made the choice to seek professional help					
If I went to a counsellor/therapist, I would be less satisfied with myself					
My self-confidence would remain the same if I sought professional help for a problem I could not solve					
I would feel worse about myself if I could not solve my own problems					

The following questions ask you about how you think people you know would react to you seeking professional help. (PSOSH Scale)

Imagine that you had an emotional or personal issue that you could not solve on your own. If you sought professional help for this issue to what degree do you believe that the people you interact with would:

	Not at all	A little	Some	A lot	A great deal
React negatively to you					
Think bad things about you					
See you as seriously disturbed					
Think of you in a less favourable way					
Think you posed a risk to others					

The final questions are about disclosure (telling others) about mental health challenges, and how universities approach this with students.

You do not have to answer these questions if you do not want to, and there is no right or wrong answer to any of the following questions.

Have you formally disclosed a disability or mental health challenge to your university? (This could be through Student Services, Disability Support, or on your UCAS application):

- Yes ☐
- No ☐
- Prefer Not to Say ☐

→If Yes, how would you describe this experience ____________ (200 words)

→If Yes, did you receive accommodations or adjustments following disclosure? _______ (200 words)

→If Yes, would you encourage other students to do so if they are having difficulties? ___ (200 words)

→If Yes, how long ago was this? ___________ (50 words)

→If No, would you be willing to briefly explain why? (Possible reasons could be; not knowing that you could get support while studying, not wanting others to treat you differently, not knowing what would happen to this information, etc) __________ (200 words)

Have you informally discussed or disclosed information about your mental health to a member of university staff?

- Yes ☐
- No ☐
- Unsure ☐
- Prefer Not to Say ☐

→If Yes, could you describe who you disclosed to? _______ (200 words)

→If Yes, how would you describe this experience __________ (200 words)

→If Yes, would you encourage other students to do so if they are having difficulties? _______ (200 words)

If you were to experience a mental health challenge during your studies, do you think that you would disclose this to the university?

- Yes ☐
- No ☐
- Unsure ☐

What factors do you think would influence this decision? __________ (200 words)

If you were to experience a mental health challenge during your studies, do you think that you would discuss or disclose this informally to a member of staff (a lecturer, tutor, laboratory technician etc)?

- Yes ☐
- No ☐
- Unsure ☐

What factors do you think would influence this decision? __________ (200 words)

If you were to experience a mental health challenge during your studies, do you think that you would benefit from being able to disclose this at any point after enrolment (e.g., in the start, or middle of 2nd or 3rd semester, or around the examination periods?

- Yes ☐
- No ☐
- Unsure ☐

→[If participant selected ‘PGR’] If you were to disclose a mental health challenge to your supervisor, how do you think that they would respond? ________ (200 words)

Were you made aware of any information on disclosing a mental health challenge to the university before applying for your course?

- Yes ☐
- No ☐

→[If participant selected ‘PGR’]: Were you made aware of any information on disclosing a mental health challenge to your supervisor before or during applying for your PhD?

- Yes ☐
- No ☐

Were you made aware of any information on disclosing a mental health challenge to the university during your course induction?

- Yes ☐
- No ☐

→[If participant selected ‘PGR’]: Were you made aware of any information on disclosing mental health challenge to your supervisor during your induction for your PhD?

- Yes ☐
- No ☐

Would information being available have affected your decision to disclose or not disclose a mental health challenge to the university?

- Yes ☐
- No ☐
- Unsure ☐

Do you have any other thoughts or views on these topics that you would like to share?
______ (500 words)

Demographic Section

Gender:

- Male ☐
- Female ☐
- Non-Binary ☐
- Trans woman ☐
- Trans man ☐
- Prefer Not to Say ☐
- Other (please state) ☐ ____

Age: ______

Ethnicity:

- **White-** ☐
    - English / Welsh / Scottish / Northern Irish / British / Irish / Gypsy or Irish Traveller / Any other White background
- **Mixed / Multiple ethnic groups -** ☐
    - White and Black Caribbean / White and Black African / White and Asian / Any other Mixed / Multiple ethnic background
- **Asian / Asian British-** ☐
    - Indian / Pakistani / Bangladeshi / Chinese / Any other Asian background
- **Black / African / Caribbean / Black British-** ☐
    - African / Caribbean Any other Black / African / Caribbean background
- **Other ethnic group –** ☐
    - Arab / Any other ethnic group

How would you define your sexuality:

- Heterosexual ☐
- Bisexual ☐
- Lesbian ☐
- Gay ☐
- Prefer Not to Say ☐
- Other (please define) ☐ _________

Do you identify as disabled:

- Yes ☐
- No ☐
- Prefer Not to Say ☐
- Unsure ☐

→If yes, how would you define your disability. ______ (prefer not to specify option ☐)

→If yes, did you declare this on your UCAS form:

- Yes ☐
- No ☐

Would you self-define as having a mental health challenge?

- Yes ☐
- No ☐
- Unsure ☐
- Prefer Not to Say

→If yes, how would you define your disability______ (prefer not to specify option ☐)

Are you a carer of any sort:

- Yes ☐
- No ☐
- Unsure ☐
- Prefer not to say ☐

7D: Participant Debrief

Thank you for taking part in this research.

The aim of this research was to explore the perceptions that students have about available support for their mental health, ways to access or engage with the support, and their views on disclosing their mental health status to their university, tutors, or other academic staff. Previous research has shown that the number of students with mental health problems is rising, and that students often are unaware of the support available for them. It has been demonstrated that students fear being judged and are reluctant to tell others they have a mental health problem or are struggling (Student Minds, 2011).

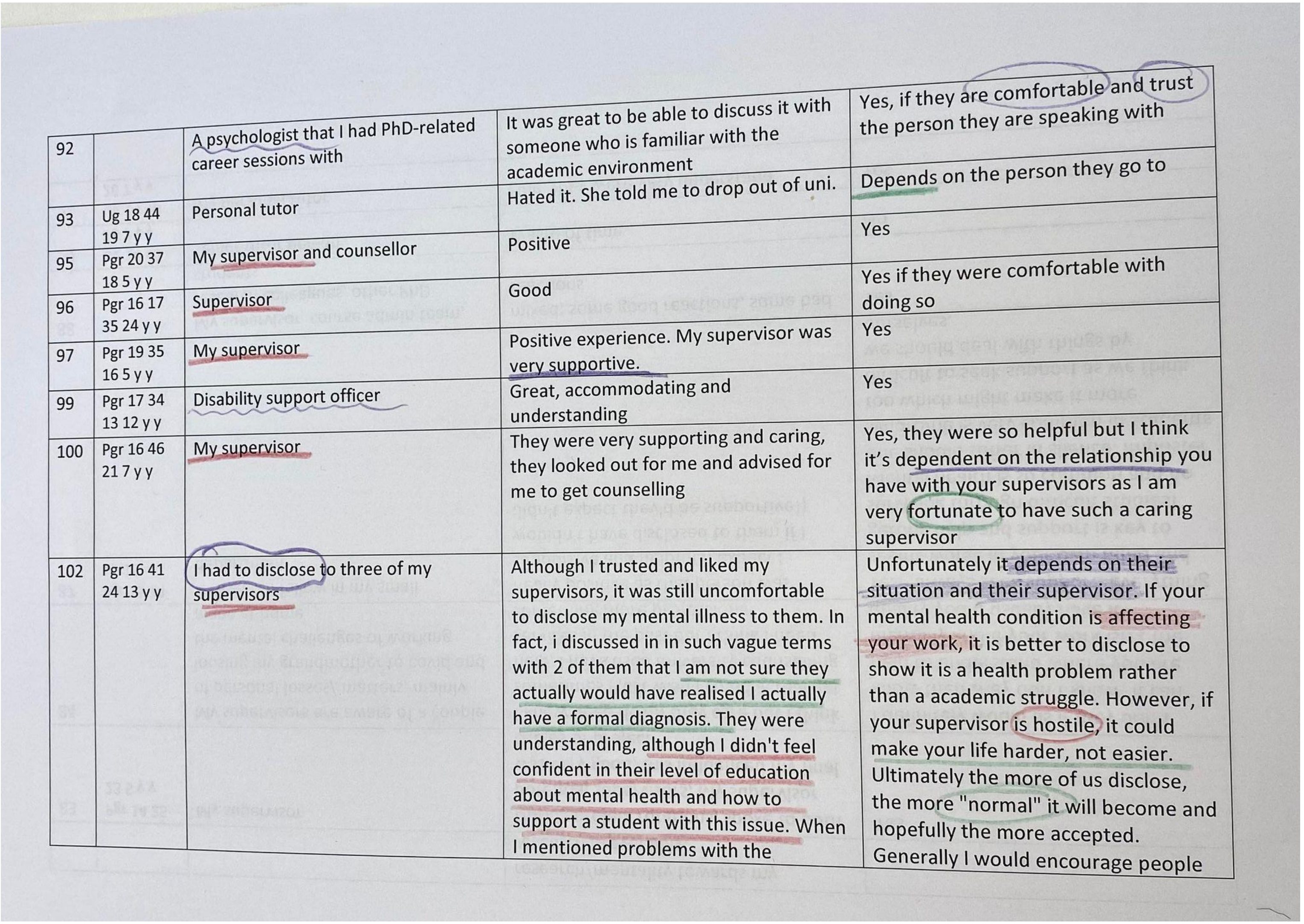
You were asked to share your views on mental health, the support services provided and your understanding of the processes around disclosing this information to the university, your tutors, or other university staff, both formally and informally. It is thought that the implications of disclosing one's mental health status may be differently understood by different groups within the general population, influencing disclosure decisions.

This research allows some understanding of what disclosing mental health challenges mean mental health means to students, and what perceptions students hold about mental health disclosure processes within universities to be gained. The researchers will be looking for themes and patterns within the data, which will help to identify how students perceive and understand mental health disclosure, if these differ between groups of students (or based upon other characteristics) and how universities can best promote disclosure and discussion of mental health on campuses, ensuring clarity, confidentiality and understanding.

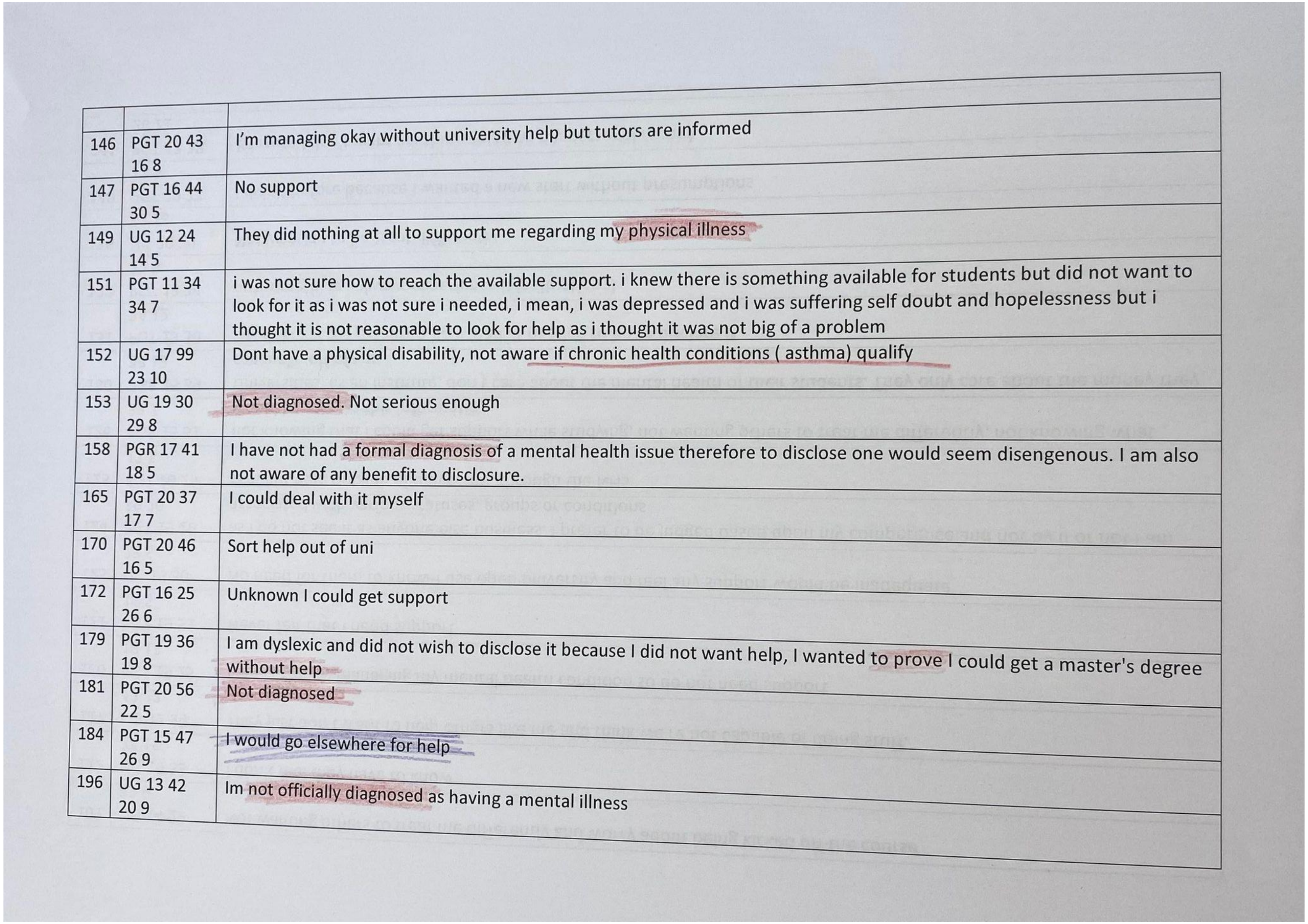
For more information on student mental health please see the Student Minds website (http://www.studentminds.org.uk), or the Student Space resource (www.studentspace.org.uk). If you are feeling distressed as a result of participating in this survey, and feel you are in crisis please contact the Samaritans (a safe space to talk) at any time on 116 123, call 999 or go to A&E. Also remember your University crisis support, and student support services if you are concerned about your wellbeing, or you can email jo@samaritans.org for a response within 24 hours or download their Self-Help app onto your mobile phone.

If you would like to save or print this information, please visit https://sway.office.com/WMGNtkpBNlcQHlXe?ref=Link

Appendix 8: Example analysis of free text responses



92		A psychologist that I had PhD-related career sessions with	It was great to be able to discuss it with someone who is familiar with the academic environment	Yes, if they are comfortable and trust the person they are speaking with
93	Ug 18 44 19 7 y y	Personal tutor	Hated it. She told me to drop out of uni.	Depends on the person they go to
95	Pgr 20 37 18 5 y y	My supervisor and counsellor	Positive	Yes
96	Pgr 16 17 35 24 y y	Supervisor	Good	Yes if they were comfortable with doing so
97	Pgr 19 35 16 5 y y	My supervisor	Positive experience. My supervisor was very supportive.	Yes
99	Pgr 17 34 13 12 y y	Disability support officer	Great, accommodating and understanding	Yes
100	Pgr 16 46 21 7 y y	My supervisor	They were very supporting and caring, they looked out for me and advised for me to get counselling	Yes, they were so helpful but I think it's dependent on the relationship you have with your supervisors as I am very fortunate to have such a caring supervisor
102	Pgr 16 41 24 13 y y	I had to disclose to three of my supervisors	Although I trusted and liked my supervisors, it was still uncomfortable to disclose my mental illness to them. In fact, i discussed in in such vague terms with 2 of them that I am not sure they actually would have realised I actually have a formal diagnosis. They were understanding, although I didn't feel confident in their level of education about mental health and how to support a student with this issue. When I mentioned problems with the	Unfortunately it depends on their situation and their supervisor. If your mental health condition is affecting your work, it is better to disclose to show it is a health problem rather than a academic struggle. However, if your supervisor is hostile, it could make your life harder, not easier. Ultimately the more of us disclose, the more "normal" it will become and hopefully the more accepted. Generally I would encourage people



146	PGT 20 43 16 8	I'm managing okay without university help but tutors are informed
147	PGT 16 44 30 5	No support
149	UG 12 24 14 5	They did nothing at all to support me regarding my physical illness
151	PGT 11 34 34 7	i was not sure how to reach the available support. i knew there is something available for students but did not want to look for it as i was not sure i needed, i mean, i was depressed and i was suffering self doubt and hopelessness but i thought it is not reasonable to look for help as i thought it was not big of a problem
152	UG 17 99 23 10	Dont have a physical disability, not aware if chronic health conditions (asthma) qualify
153	UG 19 30 29 8	Not diagnosed. Not serious enough
158	PGR 17 41 18 5	I have not had a formal diagnosis of a mental health issue therefore to disclose one would seem disengenous. I am also not aware of any benefit to disclosure.
165	PGT 20 37 17 7	I could deal with it myself
170	PGT 20 46 16 5	Sort help out of uni
172	PGT 16 25 26 6	Unknown I could get support
179	PGT 19 36 19 8	I am dyslexic and did not wish to disclose it because I did not want help, I wanted to prove I could get a master's degree without help
181	PGT 20 56 22 5	Not diagnosed
184	PGT 15 47 26 9	I would go elsewhere for help
196	UG 13 42 20 9	Im not officially diagnosed as having a mental illness

Appendix 9: Full responses for potential disclosures

Potential future formal disclosure		
Yes & factors	**No & factors**	**Unsure & factors**
To gain support and / or adjustments (36)	If I would experience stigma (8)	If my mental health was impacting my studies (14)
If my mental health was impacting my studies (16)	There is no support available (8)	The type of support available (12)
If I had a good relationship with the university (8)	If it would be confidential (7)	If I was aware of the support and it was accessible (12)
The type of support available (5)	If my mental health was impacting my studies (6)	How bad my mental health was (11)
If disclosing would affect my progression or not (3)	The type of support available (4)	If it would have a negative impact on my progression (7)
If I had a previous positive experience of this (2)	It would not make a difference (4)	If I would experience stigma (7)
How accessible it was (2)	That I don't know what the outcome would be (4)	It would not make a difference (4)
How bad my mental health was (2)	Bureaucracy (2)	If it would be confidential (2)
	The emotional impact of this (2)	The emotional impact of this (2)
Potential future informal disclosure		
Yes & factors	**No & factors**	**Unsure & factors**
Who it was to and how they might respond (14)	There is no support available (14)	Who it was to and how they might respond (21)
To get support / adjustments (20)	Who it was to and how they might respond (13)	If it was affecting my studies (12)
If it was affecting my studies (11)	I would experience stigma (11)	What would be done following the disclosure (4)
How bad my mental health was (3)	I feel it is a private issue (8)	If I had the confidence or comfort to do so (4)
If I had a previous positive experience of this (2)	If it was affecting my studies (3)	If I had a previous bad experience of this (2)
If it would be confidential (2)	Whether I knew who to talk to or how to disclose (2)	Bureaucracy (2)
	If there would be repercussions of this (2)	If it would impact on my progression (1)

Appendix 10: PGR Interviews

10A: PGR Interview Information Sheet

Invitation

You are being invited to consider taking part in the research study 'Student Mental Health Challenges: Support, Disclosure and Perceptions'. Before you decide whether or not you wish to take part, it is important for you to understand why this research is being done and what it will involve. Please take time to read this information carefully and discuss it with friends and relatives if you wish. Please contact the researcher at a.zile@uea.ac.uk if there is anything that is unclear or if you would like more information.

Participation in this research study is voluntary. By giving consent to take part in this study you are telling us that you:

- Understand what you have read.
- Agree to take part in the research study as outlined below.
- Agree to the use of your personal information as described.
- You have received a copy of this Information Statement to keep.

Who are the researchers and what is the purpose of this research?

This research is being undertaken by Amy Zile, as part of their PhD research in the School of Health Sciences at the University of East Anglia. The purpose of this research is to investigate student expectations of and understanding of available support at university, and student perceptions of disclosing a mental health challenge.

Why have I been invited to take part in this research?

You have been invited to take part in this research as you are a current student at a UK Higher Education Institution.

What type of data is being collected?

The following interview will ask you to provide some demographic information and partake in a discussion surrounding your perceptions of student mental health, the available support, the impact of the supervisory relationship and disclosure processes within Higher Education. This discussion will be audio recorded and transcribed to allow analysis of the findings.

How long will it take?

The research should take between 30 and 60 minutes to complete.

What are the benefits (if any) for taking part in this research?

You will have an opportunity to learn about the research process by participating in a research project and have a genuine sense of what it feels like to be a research participant. You will also get the opportunity to share your views and experiences around student mental health, help-seeking, and issues around disclosure. Taking part gives you an opportunity as a PGR student, to feed back into the development of a student specific disclosure processes model which can be used to aid universities development of clear, accessible and student informed mental health and disclosure policies and practices.

What are the risks (if any), or costs involved with taking part in this research?

This research poses no particular risks, no risk of physical harm and is not using deception in any way. The risks associated with participating in this interview centre on the potential for distress through the topic in question (for example if questions were to remind you of an upsetting personal experience), although the questions involved are not designed to illicit distress. In order to minimise the risk of emotional distress, it is important that you only share what thoughts and opinions you are comfortable with in the interview. If you do feel distressed as a result of participating, please utilise the following resources:

- Student Space (a dedicated student resource and support service) at www.studentspace.org.uk where you can access free phone and webchat support between 4pm-11pm daily, and a range of online resources
- The Samaritans (a safe space to talk) on 116 123, or you can download their Self-Help app onto your phone, or email jo@samaritans.org and they will respond within 24 hours
- Student Minds (the UK's student mental health charity) who can provide information and support on a range of issues relating to student mental health on their website www.studentminds.org.uk

Will I be identifiable?

No, all of the data will be anonymised, with pseudonyms utilised wherever individual cases are discussed within the research report.

What will happen to my information and who will have access?

By providing your consent, you are agreeing to us collecting personal information about you for the purposes of this research study. Your information will only be used for the purposes outlined in this Information Statement unless you consent otherwise. Data management will follow the 2018 General Data Protection Regulation Act and the University of East Anglia Research Data Management Policy (2019).

Only the researcher Amy Zile and the supervisor Professor Kristy Sanderson will have access to your information, and this will be kept secure. All information and data will be kept in a locked file cabinet, or on a password protected external hard drive within the researchers' study room. The data will be stored in this manner until 10 years after completion of the research study. Following this date data and consent forms will be destroyed, either shredded or erased from, the hard drive. However, researchers have to work within the confines of current legislation over such matters as privacy and confidentiality, data protection and human rights and so offers of confidentiality may sometimes be overridden by law (for example if you indicate that you or another person are in immediate danger, the researcher has a legal obligation to share this information). Confidentiality will be discussed at the beginning of the interview, and the intended use of the interview data will also be discussed, so that you can make an informed decision about your participation and level of disclosure.

Can I withdraw from the research?

Once you have agreed to participate in the research you can withdraw at any point during the interview and the researcher will stop the interview and delete the recording. You can also withdraw up to 1 month after the date of the interview and your data will be removed. If you wish to withdraw your data, please contact Amy Zile at a.zile@uea.ac.uk

What if there is a problem?

If you have a concern about any aspect of this study, you may wish to speak to the researcher who will do their best to answer your questions. You should contact Amy Zile at a.zile@uea.ac.uk. Alternatively, if you do not wish to contact the researcher you may contact her supervisor Professor Kristy Sanderson at kristy.sanderson@uea.ac.uk or Dr Sarah Hanson (s.hanson@uea.ac.uk).

Who is funding and organising the research?

This research has not been funded or sponsored by any external body and has no financial gains for the researcher.

Will I be told the results of the study?

There will be an opportunity for you to receive updates on any outputs from this research study following the interview if you wish to be updated on the study results, and any articles or media that follows. This will be separate from the research data and there will be no way for the researchers to connect your email address to any of your responses. You will also have the opportunity to provide an email address if you wish to review the transcripts (written records) of the interview, to amend or expand on any points that you made in the interview or provide more information on a particular point or topic that you feel you missed out of the discussion. The research will be disseminated through public channels through the planned publication of journal articles, and media posts, however these will not contain any identifiable information about participants. The results will also form part of the PhD thesis which will be published on the University of East Anglia Digital Repository as part of the thesis submission.

This research has been approved by the Faculty of Medicine and Health Sciences Ethics Review Board (Reference 202021-057).

10B: Consent and Demographic Form

UEA University of East Anglia

Student Mental Health Challenges: Support, Disclosure and Perceptions

Consent for Interview Participation

Please read the statements below carefully and click each box to confirm your agreement

1. I confirm that I have read the information sheet for this study. I have had the opportunity to consider the information and ask questions. ☐
2. I understand that my participation is voluntary, and I am free to withdraw without giving any reason ☐
3. I understand that the findings of the study, which may include anonymised information about me may be used to support future research within this PhD project. ☐
4. I understand that this interview will be audio-recorded and transcribed ☐
5. I agree for any free text responses I give to be quoted using a pseudonym ☐
6. I agree to participate in this interview ☐

By ticking the boxes below, you are indicating your agreement with, and understanding of, the above terms and providing your consent to take part in this interview.

Signature ____
*Date*______________________________

*Researcher Signature*________________________________
*Date*______________________________

Student Mental Health: Support, Disclosure and Perceptions Interview Participant Demographics

Please read each question carefully and check the response that best describes your study

Type of degree

- Undergraduate (BA/BSc) ☐
- Masters (MA/MSc) ☐
- PhD ☐

Year of Study

- First year ☐
- Second year ☐
- Third year ☐
- Fourth year or above ☐

Are you enrolled as a

- Home student (UK) ☐
- EU student ☐
- Non-EU international student ☐

Are you the first in your family to go to university

- Yes ☐
- No ☐
- Unsure ☐

What is your mode of study

- Full time ☐
- Part time ☐
- Modular ☐

What is your School/Subject area

- Medicine & Allied Subjects ☐
- STEM ☐
- Social Sciences ☐
- Art & Humanities ☐
- Education ☐
- Law & Business ☐
- Combination of Subjects ☐

What is your main source of funding:

- Student Finance (student loan) ☐
- NHS or Department of Education ☐
- Non-UK Government ☐
- Research Council ☐
- Other funding source ☐

Please describe how you would define yourself in these categories

Gender: Click or tap here to enter text.____

Age: Click or tap here to enter text.____

Ethnicity: Click or tap here to enter text.____

How would you define your sexuality: Click or tap here to enter text._________________

Do you identify as disabled:

- Yes ☐
- No ☐
- Prefer Not to Say ☐
- Unsure ☐

If yes, and you are comfortable sharing, how would you define your disability?

Click or tap here to enter text._______________________________________

If yes, did you declare this on your PhD application?

- Yes ☐
- No ☐

Would you self-define as having a mental health challenge?

- Yes ☐
- No ☐
- Unsure ☐
- Prefer Not to Say ☐

If yes, and you are comfortable sharing, how would you define your mental health challenge?

Click or tap here to enter text.____

Are you a carer of any sort:

- Yes ☐

- No ☐
- Unsure ☐
- Prefer not to say ☐

10C: Interview Schedule

Preamble:

Hi, I'm Amy Zile. Thank you very much for your help with this research project, and I will start by telling you a bit more about it. The focus of this project is to understand PhD students experience of mental health challenges and how the university processes and supervisory relationship impacts on us. Mental health challenges is a term I have chosen to use as it captures both mental illness (e.g., a clinical diagnosis) and mental distress (e.g., emotional difficulties without a diagnosis), from a lens that does not view the challenge as an inherently negative 'disorder' 'difficulty' or 'issue', but a challenge that can be overcome, or lived with.

The interview will work by me asking you some questions about your knowledge and experiences, and these questions have been developed following a systematic review of the literature, and a quantitative survey where I unpicked PhD student experiences from a larger student population.

If you do not wish to answer a certain question, you do not have to, and there is no pressure on you to share anything in this interview that you do not wish to share. All of your information will be completely anonymised before any publication or write up, and I will also keep in touch with you to share the findings and allow you to reflect on the interview transcript before analysing it.

The recordings of the interview will be kept in accordance with GDPR regulations and safely behind password protected storage. The findings from the interviews I carry out will form part of my PhD thesis, and I plan to produce a report of the findings for publication. Are you happy to proceed?

I will start the recording now.

- Start recording -

To start with, I will tell you a little about myself. I am in my second year of my PhD at the UEA, and I have a Masters in Clinical Psychological Research. I live with my partner and our rescue bunny called Pascal. Outside of my PhD I enjoy doing embroidery work and watching documentaries.

Introductory questions

Could you tell me a bit about where you are at in your PhD?

- *What year are you in? what is your topic?*
- *What led you to pursue a PhD?*
- *Do you have any hobbies or activities you enjoy outside of your PhD?*
- *How do you find the experience of managing work and life balance during your PhD studies?*
- *How has the pandemic impacted on your PhD project?*

I will now ask you some questions about mental health and wellbeing during the PhD journey, there are no right or wrong answers to these questions, I am looking to hear and understand your personal perspective

Mental Health and Wellbeing

Q1: Could you tell me a bit about how you personally understand mental health?

- Are there any sorts of mental health challenges you think PhD students might be likely to experience?
- **Support and Peer Support**

Q2: Some PhD students find peer support for mental health very beneficial, do you have any experiences or thoughts on this that you would like to share?

- why do you think it might be useful?
    - Prompt: Do you know of any peer support groups or organisations at your university?
    - Are you familiar with (or have used) any online support spaces, such as Twitter, Facebook, WhatsApp, or WeChat to gain support from peers?

Q3: If you have had an experience seeking support for your mental health during your PhD, could you tell me about that?

If NO experience:

- *If you were to experience a concern around your mental health, would you feel able to get support on campus?*
    - *What support services are you aware of for PhD students? [university counselling? going to the GP? Charities?]*
    - *Would you know where to go? Do you have any thoughts on if these services are accessible to PhD students? Do you think the services would meet your needs?*

Q4: What do you think universities should do to support the mental health of their PhD students?

- *Prompt: since you started your PhD, have you been made aware of any information on mental health services available at your university? Have you been made aware of any ways to maintain your mental health whilst completing your PhD?*

Research Culture

Q5: How would you describe your experience of research culture within your PhD?

- Do you feel there is an open sharing culture among your peers? Have you observed discussions around stress, distress, or mental health among your peers?
- Would you feel comfortable disclosing or discussing your mental health with your peers?
- Do you think the pandemic has impacted your experience of a research culture during your PhD?

- How do you feel stress is viewed within the research community you're based in?
- *how do you distinguish between 'stress' and 'distress'?*
- *have you seen any good or bad experiences of seeking help or talking about mental health?*
  - *Prompt: this could be in your research team, or lab?*
- Do you have any thoughts on how certain aspects of the PhD journey might affect a PhD students mental health?
- *Prompt: these might be aspects such as rejection from publication, experiments not working out, concerns about progression or career*

Supervision

Q6: If you have had an experience talking to your supervisor about your mental health during your PhD, could you tell me about that?

If NO experience

- *Has your supervisor presented any opportunities for you to discuss your mental health and wellbeing?*
  - *prompt: would this be something you would appreciate or like them to do?*
  - *What are your supervisors' expectations for you to balance stress and mental health?*
- *If you were experiencing challenges with your mental health, do you think it is likely you would tell your supervisor about this?*
- *How do you think they would respond?*
  - *Prompt questions: would you feel comfortable doing this? do you think that they would be understanding? Do you think that they would know where you could go to get support from the university? Do you think that it would affect their view/treatment of you?*

Do you have any other thoughts on the topics we have discussed that you would like to share?

Do you have any questions that you would like to ask me?

I would like to say thank you again for giving up your time to speak with me today.

10D: Participant Debrief

Thank you for taking part in this research.

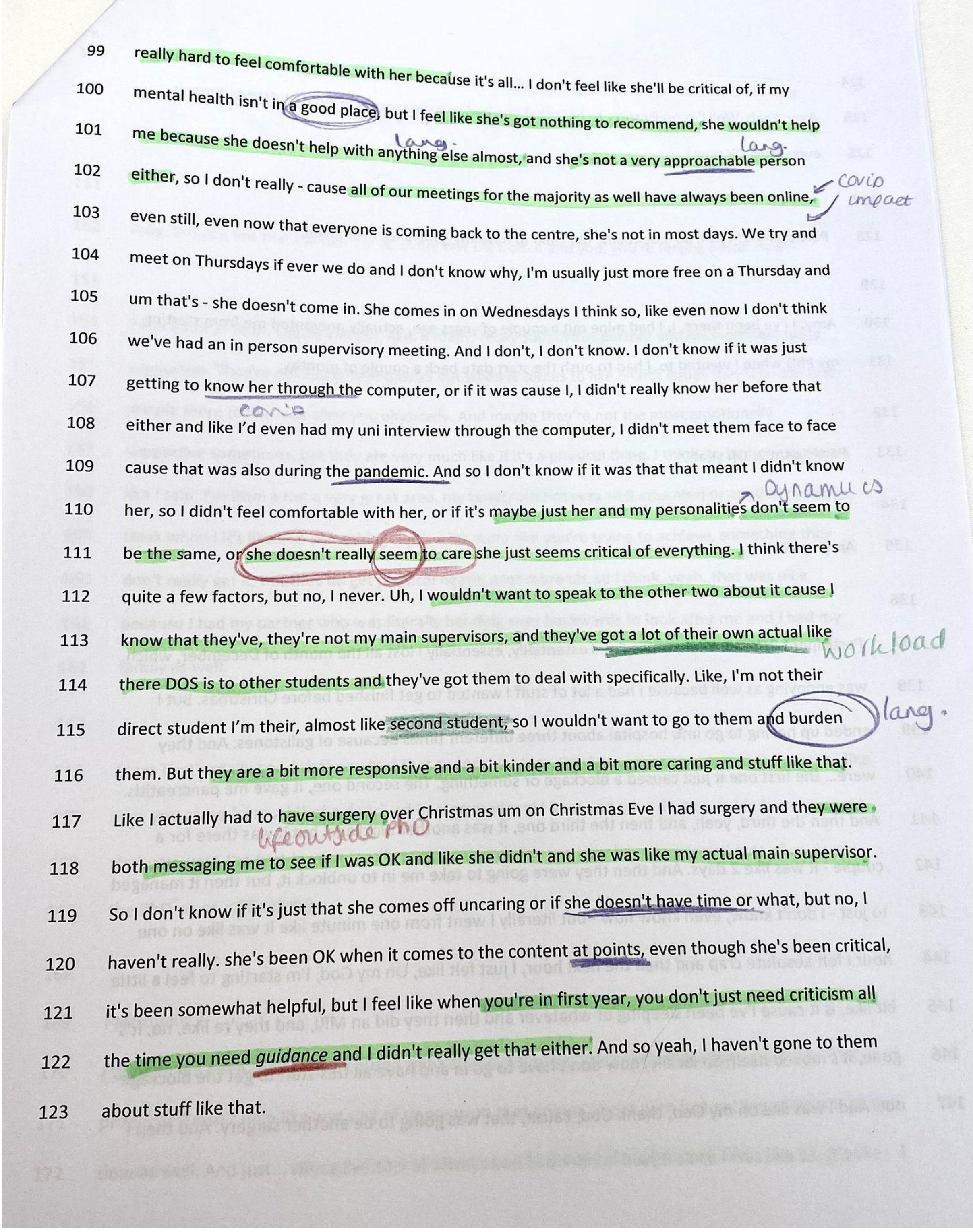
The aim of this research was to explore the perceptions that students have about available support for their mental health, ways to access or engage with the support, and their views on disclosing their mental health status to their university, tutors, or other academic staff. Previous research has shown that the number of students with mental health problems is rising, and that students often are unaware of the support available for them. It has been demonstrated that students fear being judged and are reluctant to tell others they have a mental health problem or are struggling (Student Minds, 2011).

You were asked to share your views on mental health, the support services provided and your understanding of the processes around disclosing this information to the university, your tutors, or other university staff, both formally and informally. It is thought that the implications of disclosing one's mental health status may be differently understood by different groups within the general population, influencing disclosure decisions.

This research allows some understanding of what disclosing mental health challenges mean mental health means to students, and what perceptions students hold about mental health disclosure processes within universities to be gained. The researchers will be looking for themes and patterns within the data, which will help to identify how students perceive and understand mental health disclosure, if these differ between groups of students (or based upon other characteristics) and how universities can best promote disclosure and discussion of mental health on campuses, ensuring clarity, confidentiality and understanding.

For more information on student mental health please see the Student Minds website (http://www.studentminds.org.uk), or the Student Space resource (www.studentspace.org.uk). If you are feeling distressed as a result of participating in this interview, and feel you are in crisis please contact the Samaritans (a safe space to talk) at any time on 116 123, call 999 or go to A&E. Also remember your University crisis support, and student support services if you are concerned about your wellbeing, or you can email jo@samaritans.org for a response within 24 hours or download their Self-Help app onto your mobile phone.

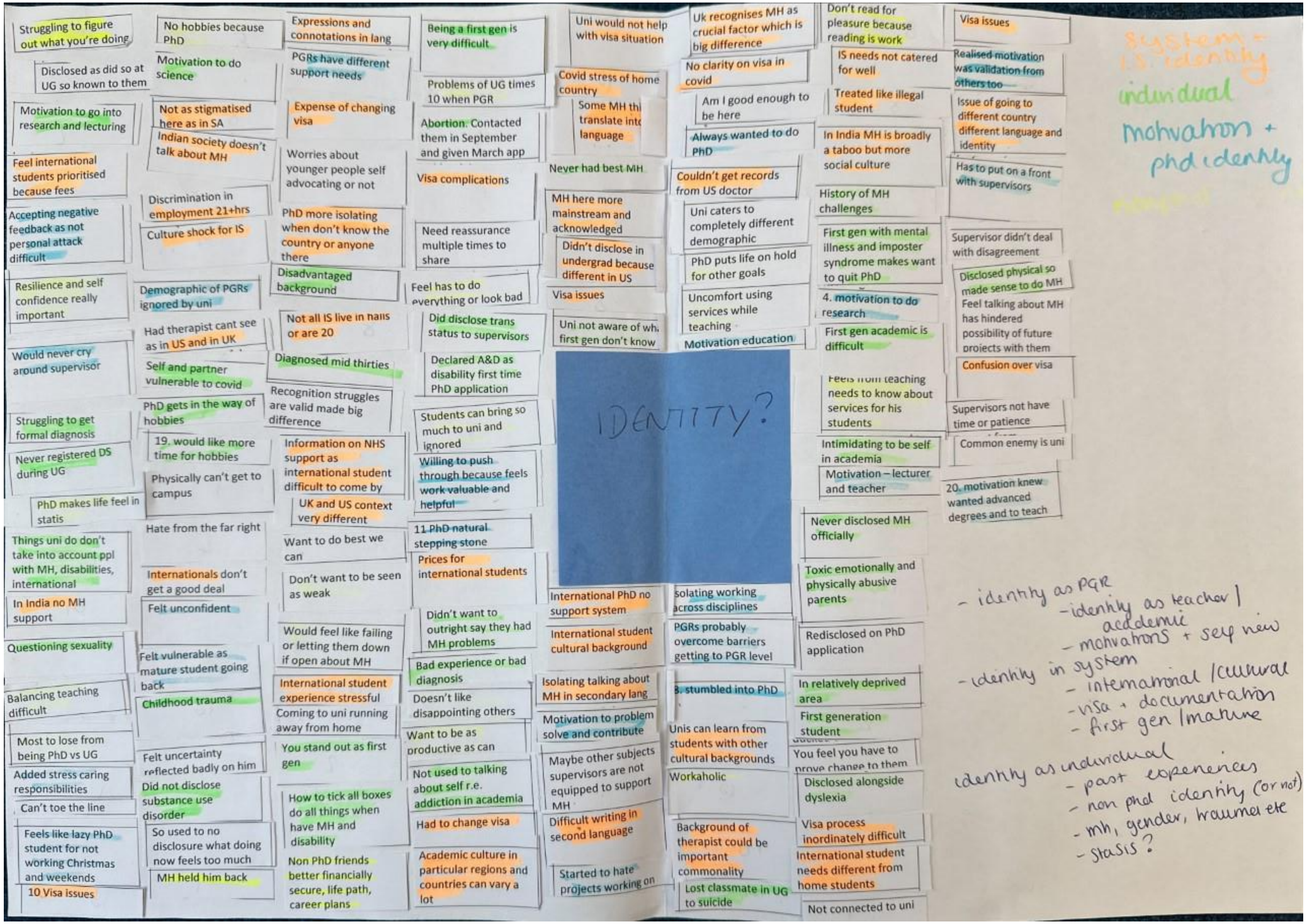
Appendix 11: Example interview transcript page with preliminary analysis



really hard to feel comfortable with her because it's all... I don't feel like she'll be critical of, if my mental health isn't in a good place, but I feel like she's got nothing to recommend, she wouldn't help me because she doesn't help with anything else almost, and she's not a very approachable person either, so I don't really - cause all of our meetings for the majority as well have always been online, even still, even now that everyone is coming back to the centre, she's not in most days. We try and meet on Thursdays if ever we do and I don't know why, I'm usually just more free on a Thursday and um that's - she doesn't come in. She comes in on Wednesdays I think so, like even now I don't think we've had an in person supervisory meeting. And I don't, I don't know. I don't know if it was just getting to know her through the computer, or if it was cause I, I didn't really know her before that either and like I'd even had my uni interview through the computer, I didn't meet them face to face cause that was also during the pandemic. And so I don't know if it was that that meant I didn't know her, so I didn't feel comfortable with her, or if it's maybe just her and my personalities don't seem to be the same, or she doesn't really seem to care she just seems critical of everything. I think there's quite a few factors, but no, I never. Uh, I wouldn't want to speak to the other two about it cause I know that they've, they're not my main supervisors, and they've got a lot of their own actual like there DOS is to other students and they've got them to deal with specifically. Like, I'm not their direct student I'm their, almost like second student, so I wouldn't want to go to them and burden them. But they are a bit kinder and a bit more caring and stuff like that. Like I actually had to have surgery over Christmas um on Christmas Eve I had surgery and they were both messaging me to see if I was OK and like she didn't and she was like my actual main supervisor. So I don't know if it's just that she comes off uncaring or if she doesn't have time or what, but no, I haven't really. she's been OK when it comes to the content at points, even though she's been critical, it's been somewhat helpful, but I feel like when you're in first year, you don't just need criticism all the time you need *guidance* and I didn't really get that either. And so yeah, I haven't gone to them about stuff like that.

lang.
lang.
covid impact
covid
dynamics
workload
lang.
lifeoutside PhD

Appendix 12: Example of theme development



Struggling to figure out what you're doing
Disclosed as did so at UG so known to them
Motivation to go into research and lecturing
Feel international students prioritised because fees
Accepting negative feedback as not personal attack difficult
Resilience and self confidence really important
Would never cry around supervisor
Struggling to get formal diagnosis
Never registered DS during UG
PhD makes life feel in statis
Things uni do don't take into account ppl with MH, disabilities, international
In India no MH support
Questioning sexuality
Balancing teaching difficult
Most to lose from being PhD vs UG
Added stress caring responsibilities
Can't toe the line
Feels like lazy PhD student for not working Christmas and weekends
10 Visa issues

No hobbies because PhD
Motivation to do science
Not as stigmatised here as in SA
Indian society doesn't talk about MH
Discrimination in employment 21+hrs
Culture shock for IS
Demographic of PGRs ignored by uni
Had therapist cant see as in US and in UK
Self and partner vulnerable to covid
PhD gets in the way of hobbies
19. would like more time for hobbies
Physically can't get to campus
Hate from the far right
Internationals don't get a good deal
Felt unconfident
Felt vulnerable as mature student going back
Childhood trauma
Felt uncertainty reflected badly on him
Did not disclose substance use disorder
So used to no disclosure what doing now feels too much
MH held him back

Expressions and connotations in lang
PGRs have different support needs
Expense of changing visa
Worries about younger people self advocating or not
PhD more isolating when don't know the country or anyone there
Disadvantaged background
Not all IS live in halls or are 20
Diagnosed mid thirties
Recognition struggles are valid made big difference
Information on NHS support as international student difficult to come by
UK and US context very different
Want to do best we can
Don't want to be seen as weak
Would feel like failing or letting them down if open about MH
International student experience stressful
Coming to uni running away from home
You stand out as first gen
How to tick all boxes do all things when have MH and disability
Non PhD friends better financially secure, life path, career plans

Being a first gen is very difficult
Problems of UG times 10 when PGR
Abortion. Contacted them in September and given March app
Visa complications
Need reassurance multiple times to share
Feel has to do everything or look bad
Did disclose trans status to supervisors
Declared A&D as disability first time PhD application
Students can bring so much to uni and ignored
Willing to push through because feels work valuable and helpful
11 PhD natural stepping stone
Prices for international students
Didn't want to outright say they had MH problems
Bad experience or bad diagnosis
Doesn't like disappointing others
Want to be as productive as can
Not used to talking about self r.e. addiction in academia
Had to change visa
Academic culture in particular regions and countries can vary a lot

Uni would not help with visa situation
Covid stress of home country
Some MH thi translate int language
Never had best MH
MH here more mainstream and acknowledged
Didn't disclose in undergrad because different in US
Visa issues
Uni not aware of wh. first gen don't know

IDENTITY?

International PhD no support system
International student cultural background
Isolating talking about MH in secondary lang
Motivation to problem solve and contribute
Maybe other subjects supervisors are not equipped to support MH
Difficult writing in second language
Started to hate projects working on

Uk recognises MH as crucial factor which is big difference
No clarity on visa in covid
Am I good enough to be here
Always wanted to do PhD
Couldn't get records from US doctor
Uni caters to completely different demographic
PhD puts life on hold for other goals
Uncomfort using services while teaching
Motivation education
solating working across disciplines
PGRs probably overcome barriers getting to PGR level
8. stumbled into PhD
Unis can learn from students with other cultural backgrounds
Workaholic
Background of therapist could be important commonality
Lost classmate in UG to suicide

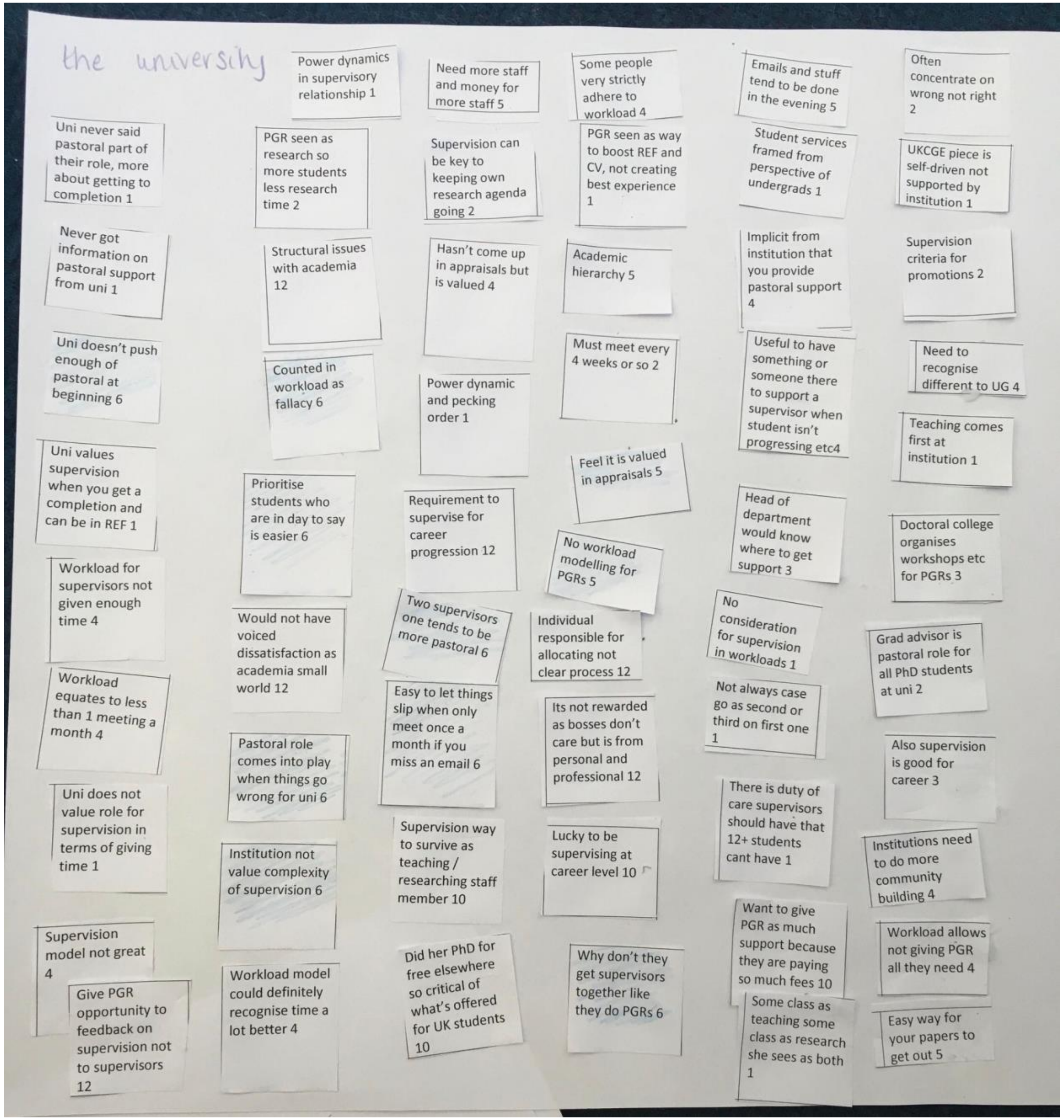
Don't read for pleasure because reading is work
IS needs not catered for well
Treated like illegal student
In India MH is broadly a taboo but more social culture
History of MH challenges
First gen with mental illness and imposter syndrome makes want to quit PhD
4. motivation to do research
First gen academic is difficult
Feels from teaching needs to know about services for his students
Intimidating to be self in academia
Motivation – lecturer and teacher
Never disclosed MH officially
Toxic emotionally and physically abusive parents
Redisclosed on PhD application
In relatively deprived area
First generation student
You feel you have to prove change to them
Disclosed alongside dyslexia
Visa process inordinately difficult
International student needs different from home students
Not connected to uni

Visa issues
Realised motivation was validation from others too
Issue of going to different country different language and identity
Has to put on a front with supervisors
Supervisor didn't deal with disagreement
Disclosed physical so made sense to do MH
Feel talking about MH has hindered possibility of future projects with them
Confusion over visa
Supervisors not have time or patience
Common enemy is uni
20. motivation knew wanted advanced degrees and to teach

system + IS identity
individual
motivation + phd identity

- identity as PGR
  - identity as teacher / academic
  - motivations + self view
- identity in system
  - international / cultural
  - visa + documentation
  - first gen / mature

identity as individual
  - past experiences
  - non phd identity (or not)
  - mh, gender, trauma etc
  - stasis?



the university

Uni never said pastoral part of their role, more about getting to completion 1

Never got information on pastoral support from uni 1

Uni doesn't push enough of pastoral at beginning 6

Uni values supervision when you get a completion and can be in REF 1

Workload for supervisors not given enough time 4

Workload equates to less than 1 meeting a month 4

Uni does not value role for supervision in terms of giving time 1

Supervision model not great 4

Give PGR opportunity to feedback on supervision not to supervisors 12

Power dynamics in supervisory relationship 1

PGR seen as research so more students less research time 2

Structural issues with academia 12

Counted in workload as fallacy 6

Prioritise students who are in day to say is easier 6

Would not have voiced dissatisfaction as academia small world 12

Pastoral role comes into play when things go wrong for uni 6

Institution not value complexity of supervision 6

Workload model could definitely recognise time a lot better 4

Need more staff and money for more staff 5

Supervision can be key to keeping own research agenda going 2

Hasn't come up in appraisals but is valued 4

Power dynamic and pecking order 1

Requirement to supervise for career progression 12

Two supervisors one tends to be more pastoral 6

Easy to let things slip when only meet once a month if you miss an email 6

Supervision way to survive as teaching / researching staff member 10

Did her PhD for free elsewhere so critical of what's offered for UK students 10

Some people very strictly adhere to workload 4

PGR seen as way to boost REF and CV, not creating best experience 1

Academic hierarchy 5

Must meet every 4 weeks or so 2

Feel it is valued in appraisals 5

No workload modelling for PGRs 5

Individual responsible for allocating not clear process 12

Its not rewarded as bosses don't care but is from personal and professional 12

Lucky to be supervising at career level 10

Why don't they get supervisors together like they do PGRs 6

Emails and stuff tend to be done in the evening 5

Student services framed from perspective of undergrads 1

Implicit from institution that you provide pastoral support 4

Useful to have something or someone there to support a supervisor when student isn't progressing etc4

Head of department would know where to get support 3

No consideration for supervision in workloads 1

Not always case go as second or third on first one 1

There is duty of care supervisors should have that 12+ students cant have 1

Want to give PGR as much support because they are paying so much fees 10

Some class as teaching some class as research she sees as both 1

Often concentrate on wrong not right 2

UKCGE piece is self-driven not supported by institution 1

Supervision criteria for promotions 2

Need to recognise different to UG 4

Teaching comes first at institution 1

Doctoral college organises workshops etc for PGRs 3

Grad advisor is pastoral role for all PhD students at uni 2

Also supervision is good for career 3

Institutions need to do more community building 4

Workload allows not giving PGR all they need 4

Easy way for your papers to get out 5

Appendix 13: Supervisory Interviews

13A: Participant Information Sheet

Participant Information Sheet

Invitation

You are being invited to consider taking part in the research study ‘Supervision of PhD Students: Challenges, Support, and Perceptions’. Before you decide whether or not you wish to take part, it is important for you to understand why this research is being done and what it will involve. Please take time to read this information carefully and discuss it with friends and relatives if you wish. Please contact the researcher at a.zile@uea.ac.uk if there is anything that is unclear or if you would like more information.

Participation in this research study is voluntary. By giving consent to take part in this study you are telling us that you:

- Understand what you have read.
- Agree to take part in the research study as outlined below.
- Agree to the use of your personal information as described.
- You have received a copy of this Information Statement to keep.

Who are the researchers and what is the purpose of this research?

This research is being undertaken by Amy Zile, as part of their PhD research in the School of Health Sciences at the University of East Anglia. The purpose of this research is to investigate experiences of supervisors of PhD students, how supervisors perceive their responsibilities, what training and support are given to supervisors and any barriers to providing effective supervision.

Why have I been invited to take part in this research?

You have been invited to take part in this research as you supervise one or more PhD students at a UK Higher Education Institution.

What type of data is being collected?

The interview will ask you to provide some demographic information and partake in a discussion surrounding your experiences as a PhD supervisor, your role and responsibilities, training and support you give and receive, and any barriers to providing effective supervision to your candidates. This discussion take place over and be audio recorded using Microsoft Teams and transcribed to allow analysis of the findings.

How long will it take?

The interview should take between 30 and 60 minutes to complete.

What are the benefits (if any) for taking part in this research?

You will get the opportunity to share your views and experiences of PhD supervision and supporting your candidates. Taking part gives you an opportunity as a supervisor, to feed back into the development of a disclosure processes model which can be used to aid universities development of clear, accessible and student informed mental health and disclosure policies and practices for PhD students and supervisors.

What are the risks (if any), or costs involved with taking part in this research?

This research poses no particular risks, no risk of physical harm and is not using deception in any way. The risks associated with participating in this interview centre on the potential for distress through the topic in question (for example if questions were to remind you of an upsetting personal experience), although the questions involved are not designed to illicit distress. In order to minimise the risk of emotional distress, it is important that you only share what thoughts and opinions you are comfortable with in the interview. If you do feel distressed as a result of participating, please utilise the following resources:

- The Samaritans (a safe space to talk) on 116 123, or you can download their Self-Help app onto your phone, or email jo@samaritans.org and they will respond within 24 hours
- Your local mental health crisis support team or GP
- Your university Employee Assistance Programme or Staff Wellbeing Support
- The UK Council for Graduate Education Research Supervisor network https://ukcge.ac.uk/networks/research-supervisors

Will I be identifiable?

No, all of the data will be anonymised, with pseudonyms utilised wherever individual cases are discussed within the research report.

What will happen to my information and who will have access?

By providing your consent, you are agreeing to us collecting personal information about you for the purposes of this research study. Your information will only be used for the purposes outlined in this Information Statement unless you consent otherwise. Data management will follow the 2018 General Data Protection Regulation Act and the University of East Anglia Research Data Management Policy (2019).

Only the researcher Amy Zile and the supervisor Professor Kristy Sanderson will have access to your information, and this will be kept secure. All information and data will be kept in a locked file cabinet, or on a password protected external hard drive within the researchers' study room. The data will be stored in this manner until 10 years after completion of the research study. Following this date data and consent forms will be destroyed, either shredded or erased from, the hard drive. However, researchers have to work within the confines of current legislation over such matters as privacy and confidentiality, data protection and human rights and so offers of confidentiality may sometimes be overridden by law (for example if you indicate that you or another person are in immediate danger, the researcher has a legal obligation to share this information). Confidentiality will be discussed at the beginning of the interview, and the intended use of the interview data will also be discussed, so that you can make an informed decision about your participation and level of disclosure.

Can I withdraw from the research?

Once you have agreed to participate in the research you can withdraw at any point during the interview and the researcher will stop the interview and delete the recording. You can also withdraw up to 1 month after the date of the interview and your data will be removed – the recordings will be deleted, and any paper documents destroyed. If you wish to withdraw your data, please contact Amy Zile at a.zile@uea.ac.uk

What if there is a problem?

If you have a concern about any aspect of this study, you may wish to speak to the researcher who will do their best to answer your questions. You should contact Amy Zile at a.zile@uea.ac.uk. Alternatively, if you do not wish to contact the researcher you may contact her supervisor Prof Kristy Sanderson at kristy.sanderson@uea.ac.uk or Prof Sally Hardy at s.hardy@uea.ac.uk

Who is funding and organising the research?

This research has not been funded or sponsored by any external body and has no financial gains for the researcher.

Will I be told the results of the study?

There will be an opportunity for you to receive updates on any outputs from this research study following the interview if you wish to be updated on the study results, and any articles or media that follows. This will be separate from the research data and there will be no way for the researchers to connect your email address to any of your responses. You will also have the opportunity to provide an email address if you wish to review the transcripts (written records) of the interview, to amend or expand on any points that you made in the interview or provide more information on a particular point or topic that you feel you missed out of the discussion. The research will be disseminated through public channels through the planned publication of journal articles, and media posts, however these will not contain any identifiable information about participants. The results will also form part of the PhD thesis which will be published on the University of East Anglia Digital Repository as part of the thesis submission.

This research has been approved by the Faculty of Medicine and Health Sciences Ethics Review Board (Reference 2122-1983).

13B: Consent and Demographic Form

University of East Anglia

Supervision of PhD Students: Challenges, Support and Perceptions

Consent for Interview Participation

Please read the statements below carefully and click each box to confirm your agreement

7. I confirm that I have read the information sheet for this study. I have had the opportunity to consider the information and ask questions. ☐
8. I understand that my participation is voluntary, and I am free to withdraw without giving any reason ☐
9. I understand that the findings of the study, which may include anonymised information about me may be used to support future research within this PhD project. ☐
10. I understand that this interview will be audio-recorded and transcribed ☐
11. I agree for any responses I give to be quoted using a pseudonym ☐
12. I agree to participate in this interview ☐

By ticking the boxes below, you are indicating your agreement with, and understanding of, the above terms and providing your consent to take part in this interview.

Signature ____ *Date*
____

*Researcher Signature*________________________________
*Date*______________________________

Supervision of PhD Students: Challenges, Support and Perceptions Interview Participant Demographics

Please read each question carefully and check the response that best describes your study

Please indicate 2-3 dates and times that you would be available for interview: Click or tap here to enter text. ____________________

How many PhD students do you currently supervise as primary supervisor? Click or tap here to enter text. ____________________

How many PhD students do you currently supervise as secondary or third supervisor? Click or tap here to enter text. _________________

How many PhD students have you previously supervised? Click or tap here to enter text.

____

How long have you been involved with supervising PhD students? Click or tap here to enter text. ________________

What is your primary School/Subject area

- Medicine & Allied Subjects ☐
- STEM ☐
- Social Sciences ☐
- Art & Humanities ☐
- Education ☐
- Law & Business ☐
- Combination of Subjects ☐

Please describe how you would define yourself in these categories

Gender: Click or tap here to enter text.____

Age: Click or tap here to enter text.____

Ethnicity: Click or tap here to enter text.____

How would you define your sexuality: Click or tap here to enter text._________________

Do you identify as disabled:

- Yes ☐
- No ☐
- Prefer Not to Say ☐
- Unsure ☐

If yes, and you are comfortable sharing, how would you define your disability?

Click or tap here to enter text.____

Would you self-define as having a mental health challenge?

- Yes ☐
- No ☐
- Unsure ☐
- Prefer Not to Say ☐

If yes, and you are comfortable sharing, how would you define your mental health challenge?

Click or tap here to enter text.____

Are you a carer of any sort:

- Yes ☐
- No ☐
- Unsure ☐
- Prefer not to say ☐

13C: Interview Schedule

Interview questions

Preamble

Hi, I’m Amy Zile. Thank you very much for your help with this research project, and I will start by telling you a bit more about it. The focus of this project is to understand PhD supervisors experience of supervision and providing support for their candidates, university processes and how you feel they impact on the supervisory relationships that you have.

The interview will work by me asking you some questions about your knowledge and experiences, and these questions have been developed following a systematic review of the literature, a quantitative survey and in depth qualitative interviews with PhD students.

If you do not wish to answer a certain question, you do not have to, and there is no pressure on you to share anything in this interview that you do not wish to share. All of your information will be completely anonymised before any publication or write up, and I will also keep in touch with you to share the findings and allow you to reflect on the interview transcript before analysing it.

The recordings of the interview will be kept in accordance with GDPR regulations and safely behind password protected storage. The findings from the interviews I carry out will form part of my PhD thesis, and I plan to produce a report of the findings for publication. Are you happy to proceed?

I will start the recording now.

To start with, I will tell you a little about myself. I am in my third year of my PhD at the UEA, and I have a Masters in Clinical Psychological Research. I live with my partner and our rescue bunny called Pascal. Outside of my PhD I enjoy doing embroidery work and watching documentaries.

Introductory questions

Could you tell me a bit about your research and your history with supervising PhD students?

- *What subject areas do you mainly work within?*
- *What led you to get involved with supervising PhD students?*
- *How many PhD students have you supervised?*
- *How many PhD students are you currently supervising?*
- *How would you describe your supervision style?*
- *How do you balance supervision and your own research projects?*
- *How has the pandemic impacted on your experiences of supervision?*

Training and Support

Have you had experience accessing training or support to aid you in supervising your candidates?

- *Was this training mandatory or optional?*

- *Is the training repeated regularly?*
- *Did you find the training helpful?*
- *Did the training prepare you for your day to day responsibilities as a supervisor?*
- *Are there other things you thought should be included in the training?*
- *Have you accessed support from your institution due to your role as a supervisor?*

Issues for supervisors

Have you encountered any barriers to providing effective supervision?

- *Do you feel comfortable with the processes for if a candidate is not progressing?*
- *Do you feel comfortable with the processes for if the supervisory relationship breaks down?*
- *Do you feel your institution values your role as a supervisor in appraisals and evaluations?*
- *Do you feel supported in your role as a supervisor?*

Issues for PhD candidates

There has been a lot of research and discussion on common stressors for PhD candidates, is this something your candidates have experienced?

- *Have you encountered any recurring issues that your candidates have experienced?*
- *Did your candidates speak with you directly about these issues?*
- *Did you feel able to support them with these issues?*
- *Is there anything you think your institution could be doing to help deal with these issues?*

<u>The following questions ask about your understanding and approach to mental health and wellbeing – there are no right or wrong answers to these questions, I am interested in the range of experiences of supervisors</u>

Mental Health

Have any of your candidates discussed their mental health and wellbeing with you?

- *Is supporting candidate mental health something you feel is part of your role as a supervisor?*
- *Is supporting candidate mental health something you have had training or support in doing?*
- *Is supporting candidate mental health something you feel your institution expects of you?*

Do you provide opportunities for your candidates to discuss their mental health and wellbeing?

- Is this something you have had any training on?
- Is that something you feel your role allows you to do?
- Is that something you feel you have time to do?
- Is that something you feel you have the ability to do?

If you were worried about a candidate’s mental health and wellbeing, what would your course of action be?

- *If a candidate came to you with a mental health concern, do you feel you would be able to signpost them to university resources or services?*
  - *If yes: how did you learn about these resources or services?*
  - *If no: do you think supervisors should be equipped with knowledge about these resources or services?*

Is there anything else pertinent to your role as a supervisor that I might have missed, or any thoughts on the topics we have discussed that you would like to share?

Do you have any questions that you would like to ask me?

I would like to say thank you again for giving up your time to speak with me today.

13D: Participant Debrief

University of East Anglia

Supervision of PhD Students: Challenges, Support and Perceptions Participant Debrief

Thank you for taking part in this research.

The aim of this research was to explore how current supervisors of PhD students perceive their role, any training, support, and recognition given to them, perceived barriers to effective supervision and what motivates them as a supervisor.

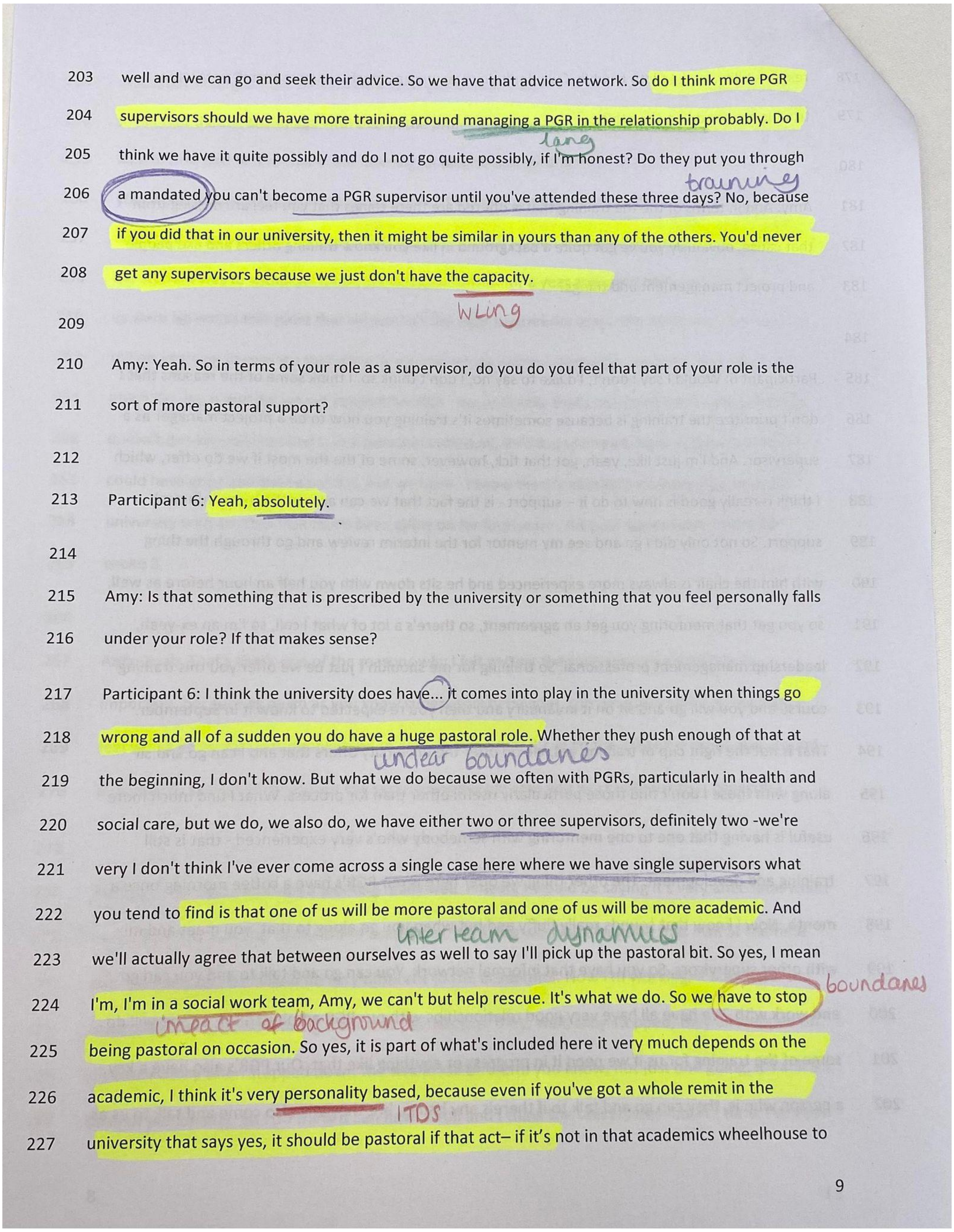
The supervisory relationship is a crucial factor for PhD student progression and success, with the relationship between supervisors and candidates noted as a factor that can affect both supervisor and candidate mental health (Mackie & Bates, 2019; Berry, Niven & Hazell, 2021). Supervisors appear to have varying levels of training on supporting their candidates, with access to formal, institutionally sponsored training on pastoral and/or mental health and wellbeing issues only existing in a minority of supervisors (Leadership Foundation for Higher Education, 2018). This research interview aimed to explore some of these factors and gain individual supervisors' perspectives.

You were asked to share your views on being a supervisor, barriers and enablers to effective supervision, and any experiences of supporting a candidate's mental health. It is thought that the knowledge, training, and experiences of supervisors greatly impact the candidate experience. The researchers will be looking for themes and patterns within the data, which will help to identify how students perceive and understand mental health disclosure, if these differ between students based upon demographic or study characteristics and how universities can best promote disclosure and discussion of mental health on campuses, ensuring clarity, confidentiality and understanding.

If you are feeling distressed as a result of participating in this interview, and feel you are in crisis please contact the Samaritans (a safe space to talk) at any time on 116 123, call 999 or go to A&E. Also remember your University Employee Assistance Programme or local mental health team if you are concerned about your wellbeing, or you can email jo@samaritans.org for a response within 24 hours or download their Self-Help app onto your mobile phone.

As discussed, all of your information will be fully de-identified before entering into the research report, and you will have been offered the chance to review and amend the research interview transcript. Please do not hesitate to contact the researcher at a.zile@uea.ac.uk if you have any questions or wish to withdraw any data within two months of the interview date.

Appendix 14: Example interview transcript with preliminary analysis



well and we can go and seek their advice. So we have that advice network. So do I think more PGR supervisors should we have more training around managing a PGR in the relationship probably. Do I think we have it quite possibly and do I not go quite possibly, if I'm honest? Do they put you through a mandated you can't become a PGR supervisor until you've attended these three days? No, because if you did that in our university, then it might be similar in yours than any of the others. You'd never get any supervisors because we just don't have the capacity.

lang

training

WLing

Amy: Yeah. So in terms of your role as a supervisor, do you do you feel that part of your role is the sort of more pastoral support?

Participant 6: Yeah, absolutely.

Amy: Is that something that is prescribed by the university or something that you feel personally falls under your role? If that makes sense?

Participant 6: I think the university does have… it comes into play in the university when things go wrong and all of a sudden you do have a huge pastoral role. Whether they push enough of that at the beginning, I don't know. But what we do because we often with PGRs, particularly in health and social care, but we do, we also do, we have either two or three supervisors, definitely two -we're very I don't think I've ever come across a single case here where we have single supervisors what you tend to find is that one of us will be more pastoral and one of us will be more academic. And we'll actually agree that between ourselves as well to say I'll pick up the pastoral bit. So yes, I mean I'm, I'm in a social work team, Amy, we can't but help rescue. It's what we do. So we have to stop being pastoral on occasion. So yes, it is part of what's included here it very much depends on the academic, I think it's very personality based, because even if you've got a whole remit in the university that says yes, it should be pastoral if that act– if it's not in that academics wheelhouse to

unclear boundaries

inter team dynamics

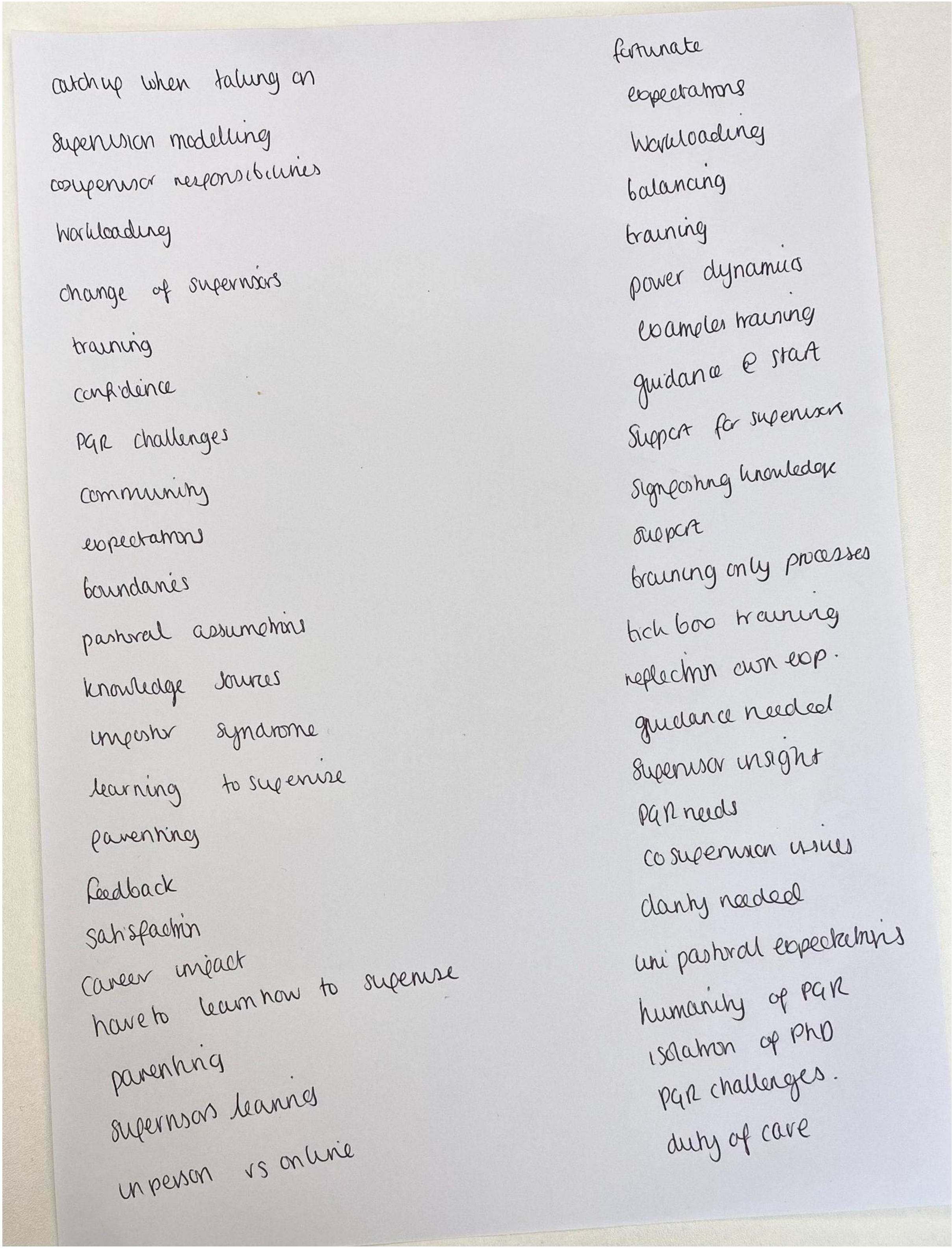
boundaries

impact of background

ITDs

9

Example 15: Example of developing preliminary codes



catchup when taking on
supervision modelling
cosupervisor responsibilities
workloading
change of supervisors
training
confidence
PGR challenges
community
expectations
boundaries
pastoral assumptions
knowledge sources
imposter syndrome
learning to supervise
parenting
feedback
satisfaction
career impact
have to learn how to supervise
parenting
supervisors learning
in person vs online

fortunate
expectations
workloading
balancing
training
power dynamics
examples training
guidance @ start
support for supervisors
signposting knowledge
support
training only processes
tick box training
reflection own exp.
guidance needed
supervisor insight
PGR needs
co supervision issues
clarity needed
uni pastoral expectations
humanity of PGR
isolation of PhD
PGR challenges.
duty of care