Anxiety:

Compliance with ecological momentary assessments and the feasibility of an online training for school staff

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Overall Abstract

Background: Anxiety difficulties require early identification and prevention. This relies on feasible and implementable assessment and intervention methods for individuals in real-world settings. The aims of this thesis were to systematically review the evidence on compliance rates of ecological momentary assessments (EMA) in individuals with anxiety disorders and to conduct a feasibility study of an online training on childhood anxiety for primary school staff. **Methods:** A meta-analysis assessed the pooled compliance rate of EMA in individuals with anxiety disorders and identified whether study design and participant characteristics explained variation in these rates across studies. The feasibility study extended findings from a previous study (Nicola et al., 2024). Immediate post-training and maintenance (follow-up) effects on primary school staff's knowledge and confidence at theoretically recognising and responding to anxious children were evaluated as well as feasibility, acceptability, and implementation utility factors. **Results:** 10 studies were included in the meta-analysis. A high pooled compliance rate (73%) was found. None of the moderating variables significantly explained variation in compliance rates. The empirical study recruited 27 participants (with a 26% dropout rate, yielding 19 participants at follow-up). Findings suggested the training and research process were generally acceptable to staff who completed the study, with some strategies implemented in staff's work. Some potential barriers were highlighted to implementing the training information. Preliminary evaluation suggested the training shows promise at improving school staff's theoretical knowledge and confidence in recognising, responding to, and intention to refer children experiencing excessive anxiety for support. Substantial recruitment challenges, limited sample diversity, and lack of objective measurement of behaviour and knowledge change warrants further investigation. **Conclusions:** EMA is a feasible method of assessing individuals with anxiety disorders. The online training shows potential for feasibility, acceptability, implementation utility, and promise at improving outcomes for primary school staff working with anxious children in school settings. Further research is needed in both areas to establish possible facilitators and barriers to engagement with EMA and training methods in real-world settings.

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Chapter 1: Introduction

Anxiety disorders are one of the most prevalent mental health difficulties in both children and adults (Kessler et al., 2007; 2012) with around 4% of the global population estimated to have an anxiety disorder (Javaid et al., 2023). Prevalence of anxiety is suggested to have increased since the COVID-19 pandemic (Amini-Rarani et al., 2024). Typically, anxiety difficulties begin in childhood and can follow a chronic trajectory extending into adulthood and later life if they are not identified and treated at an early age (Kessler et al., 2009). Anxiety difficulties can have a negative impact on functioning in occupational, educational, social, and health-related settings (Mendlowicz & Stein, 2000), and are a risk factor for the development or worsening of other mental and physical health conditions (Doering et al., 2019; Sareen et al., 2005).

Although there are evidence-based assessment and intervention methods available for the treatment of various mental health difficulties, there is a gap in those needing support and those accessing support (Campion et al., 2022). Anxiety disorders, particularly, are highlighted as underrecognized, often overlooked, and therefore inadequately treated (Bandelow et al., 2017; Lecrubier, 2007). Globally, around 10% of people diagnosed with an anxiety disorder are reported to access adequate intervention, with this implementation gap reported to have worsened since the COVID-19 pandemic due to under resourced, underfunded, and understaffed mental health services (Campion et al., 2022). This has a global impact on the prevention and treatment of individuals with mental health difficulties, contributing to wider public health, social and economic costs (Campion et al., 2022). Given this, it is important to understand how to effectively assess and treat individuals experiencing excessive anxiety, and ensure methods used to do this are feasible and implementable in real-world settings.

Since the COVID-19 pandemic, there has been an increase in the use of digital mental health interventions (DMHIs) which utilise technology-based platforms to deliver assessment and intervention of various mental health difficulties (Park et al., 2022). These methods also provide

psychoeducation which is crucial for early identification and prevention. This is especially important for those experiencing persistent anxiety where a gap has been identified (Riordan and Singhal, 2018; Zhong et al., 2024). DMHIs have been developed and adapted to overcome the increased demand for mental health services and to broaden access to a wider population than traditional mental health services may be able to reach (Park et al., 2022).

Traditionally, anxiety symptoms are assessed using paper-based, self-report questionnaires, which are limited to a one-time stamp (Walz et al., 2014). This can introduce retrospective recall bias. Anxiety symptoms are known to fluctuate across time of day, situation, and periods of time, in response to internal factors (i.e., thoughts and feelings) and external factors (i.e., environment). Thus, traditional assessment methods reduce the opportunity to measure the dynamic nature of anxiety in day-to-day life (Helbig-Lang et al., 2012). Instead, over the past decade, there has been a growing interest and development in ecological momentary assessment (EMA) methods which address these limitations by collecting momentary, repeated data of individuals' thoughts, feelings, and behaviours, in real-time, in their naturalistic environments (Stone & Shiffman, 1994). Increasingly, these methods are moving away from paper-based assessments to technology-based platforms (i.e., smartphone apps). This allows for more accurate mapping and identification of relationships between anxiety symptoms and factors like time, environment, and situation (Carpenter et al., 2016). EMA methods may also improve the ecological validity of anxiety assessment and overall understanding of the patterns of anxiety symptoms. Reviews highlight the usefulness of using EMAs to accurately identify and understand patterns of anxiety disorders in both children and adults in real-world settings (Walz et al., 2014).

Whilst EMA demonstrates some advantages over traditional assessment methods for the assessment of anxiety in real-world contexts, it is important to consider its limitations. Concerns regarding how the repeated assessments may alter a person's thoughts, feelings or behaviours have been raised (Shiffman et al., 2008). This may be particularly relevant when assessing anxiety, as frequent monitoring may increase individuals' focus on their symptoms, potentially heightening their

anxiety symptoms. This means the assessment may not completely capture the intended construct being measured (Stone et al., 2023). Moreover, the use of technological-based EMA designs may introduce both technical and practical challenges, including issues with connectivity or device access (Burke et al., 2017). This may introduce a selection bias, particularly for individuals who have less familiarity or access to digital technologies, as they may find it harder to participate. Furthermore, EMA assessments are generally designed to be shorter than traditional screening questionnaires and clinical interviews to reduce participant burden (Hall et al., 2021). This may limit the extent to which the heterogenous and complex nature of anxiety symptoms can be evaluated. This is particularly important when considering how EMA maps onto the assessment of anxiety disorders in clinical services, which often use DSM-5 (American Psychiatric Association, 2013) or ICD-11 (World Health Organisation, 2019) criteria. Assessments of anxiety using these criteria tend to require more than measurement of momentary symptoms alone, instead requiring comprehensive information about longer-term functioning, differentiation from other conditions or disorders, and integration of contextual, historical, and clinical information (APA, 2013; National Institute for Health and Care Excellence (NICE), 2014; WHO, 2019). Consequently, EMA may be better conceptualised as a complementary, rather than stand-alone, approach to assessing anxiety disorders when making diagnostic decisions.

Despite these limitations, EMA methods do still appear to be a promising method to support with addressing the implementation gap of accurately assessing and understanding how anxiety disorders present in the real world. It should, however, be considered that a recent review suggested most studies have only investigated their use in children above the age of seven years old (Heron et al., 2017),despite evidence suggesting anxiety disorders can emerge from as young as four years old, with anxiety symptoms manifesting at an even younger age (Walkup et al., 2022). EMA methodology requires individuals to monitor and reflect on their internal states, thoughts, feelings, and behaviours. However, metacognitive, self-reflective, and monitoring abilities in children may not completely develop until late childhood to early adolescence (Oana & Flavia, 2025), introducing

possible developmental differences in their ability to understand, identify, and accurately report their internal experiences. This may impact on the use of EMA in younger children, consequently reducing the reliability and quality of the data collected (Milojevich et al., 2023). Younger children may also rely on adults (e.g., parents, teachers) to help them recognise their emotions, support them with regulating and managing their difficulties, and signpost them to places for further support (Tungalag, 2024). To add to this, assessments of children's experiences of anxiety (especially for the purposes of clinical or diagnostic decisions), relies on gathering comprehensive information using a multi-informant approach from children, parents, schools, and other relevant figures, through a range of questionnaires, clinical interviews, and behavioural observations (Miller et al., 2014). Therefore, completion of EMA assessments independently by children may miss key information available from these informants to understand how anxiety manifests in their daily lives. This is particularly relevant in relation to school where younger children may not have access to devices and may have limited opportunities to respond to EMA assessments during school hours (Charitos et al., 2026), but where the school environment is one where children may encounter a range of anxiety-inducing situations (Weber et al., 2026).

Instead, the school setting has been highlighted as a key environment to support with identifying anxiety difficulties in children (Childs-Fegredo et al., 2021). Anxiety difficulties are one of the most common challenges amongst children and adolescents, with prevalence of these difficulties suggested to have increased since the COVID-19 pandemic (Panchal et al., 2023; Racine et al., 2021). Increasingly, there has been a growing awareness about children's anxiety, with academic pressures, social media use, and lasting effects of COVID-19 pandemic thought to contribute to childhood anxiety difficulties (Ludwig-Walz et al., 2023; Robson et al., 2023; Saleem et al., 2024). Children spend most of their day at school, thus school staff are in a key position to identify signs of anxiety at an early stage and have opportunities for early intervention by implementing strategies to prevent difficulties from extending into adolescence and adulthood (Soneson et al., 2024). This is in line with the government's Green Paper which highlights the importance of a whole-school approach in

recognising and supporting children with mental health difficulties (Department of Health and Social Care & Department for Education [DHSCE & DfE], 2017; NICE, 2022). Increasingly, demand for specialist children's mental health services has placed pressure on the capacity of support able to be offered, with over a third of children awaiting outstanding support at the end of March 2025 (Children's Commissioner for England, 2026). Consequently, there is an increasing recognition that supporting anxious children should be preventative, of which guidance highlights school staff are central to support with (DHSCE & DfE, 2017).

Despite this, evidence suggests primary school teachers may not accurately recognise mild-moderate anxiety difficulties in children (Headley & Campbell, 2011) and may not express concern about internalizing symptoms in children (typical in anxiety). Thus, they may fail to intervene at an early stage (Hanie & Stanard, 2009; Splett et al., 2019). Furthermore, school staff have expressed a need for training to support them with developing knowledge and confidence in knowing how to recognise and respond to children experiencing anxiety (Savage, 2022; O'Farrell et al., 2023). This highlights the importance of enhancing staff knowledge and confidence through further training to strengthen their capacity to provide support to children experiencing excessive anxiety in line with government and national policies (DHSCE & DfE, 2017; NICE, 2022).

Training is often offered to school staff through in-person sessions, facilitated by external staff. These training methods may be difficult to implement due to limited time, resources, and funding. Instead, online training alternatives have been suggested to support with reducing these barriers, allowing for more sustainable and scalable access to training, supporting school staff and children alike (Ohrt et al., 2020). Increasingly, digital platforms are being used to deliver training to school staff (Soneson et al., 2024). A newly developed online training using cognitive-behavioural therapy (CBT) principles (an evidence-based treatment for anxiety in children and young people (Higa-McMillan et al., 2016) showed promise at improving school staff's hypothetical responses to children with anxiety (Nicola et al., 2024). Feedback from school staff highlighted the training was acceptable, deemed useful, and was in demand by school staff as demonstrated by the recruitment

uptake (Nicola et al., 2024). However, limitations in the generalisability of the sample were identified. Additionally, the data was only collected immediately post-training, with no evidence of the effects being maintained over time. This highlighted the need for further research on the training to understand whether this method is both feasible and implementable in real-world settings for school staff.

To ensure anxiety-focused assessments (EMA) for individuals with anxiety disorders and intervention methods (online training) for school staff can be implemented into real-world settings, careful consideration is needed to understand how feasible these methods are in practice. Feasibility is often thought of as a multiple construct, asking the question of whether something can be successfully integrated into its usual setting (Park et al., 2022). Factors such as acceptability, demand, participant burden, implementation ability, and limited efficacy testing are to be considered to understand how individuals may use and engage with these methods, and how effective the methods are perceived to be in practice (Bowen et al., 2009; Orsmond & Cohn, 2015).

Both EMA research and research into training for school staff rely on understanding how feasible and implementable they are in real-world settings. In EMA research, one factor of feasibility can be explored through participant compliance to the repeated assessments, to ensure an accurate and valid assessment of anxiety symptoms (Walz et al., 2014; Wrzus & Neubauer, 2023). Compliance to EMA methodology in individuals with anxiety disorders may be moderated by symptom burden as these individuals may be more likely to experience heightened cognitive loads due to increased worries, higher levels of emotional distress, and may be more likely to avoid engaging with, and completing the frequent assessments (Sain et al., 2025). However, compliance may also be moderated by the burden the study design places on individuals (due to assessment frequency, study duration etc.) or through the interaction with individual participant characteristics (Hall et al., 2021; Walz et al., 2014; Wrzus & Neubauer, 2023). This, therefore, emphasizes the importance of exploring what factors may explain compliance in this population to address the feasibility of EMA methods in real-world settings. To our knowledge, no current meta-analysis has been conducted to explore these

ideas in individuals with anxiety disorders, thus by completing the meta-analysis presented in this thesis, it was hoped to provide data that supports with designing EMA studies that generate more accurate and valid assessment of anxiety disorders in real-world settings.

Similarly, feasibility in delivering training to school staff can also be measured through participant engagement with and dropout from the training (Johnson et al., 2025). School staff report increased time pressures and competing demands in their role (Robinson et al., 2023), which are reported to have increased since COVID-19 and may impact on their ability to engage with and implement information from the training. Therefore, it is also important to consider their feedback to understand how acceptable, relevant, and likely it is the training will support their knowledge and confidence in responding to anxious children in their day-to-day work (Askell-Williams & Koh, 2020; Shelemy et al., 2019). There is limited research focused on online training for primary school staff, with one recent study highlighting that an online training for this population was in demand and deemed acceptable and useful (Nicola et al., 2024). Results also showed the training improved school staff's hypothetical responses to children experiencing anxiety (Nicola et al., 2024), warranting further exploration.

Prior to, and alongside Nicola et al. (2024) study, there have been changes within the mental health provision for children in the United Kingdom. Since 2017, there has been an expansion in the implementation of Mental Health Support Teams (MHSTs) across England, as set out in the government's green paper (DSCHE & DfE, 2017), to strengthen school-based mental health support, and make stronger links between education and mental health services. On the one hand, although MHSTs have expanded across the UK, the implementation of these remains below target, with full coverage not expected until 2030, meaning access to MHST support may be uneven across the country (Department for Education, 2026). This highlights the need to continue to develop training programmes that enhance school staff's ability and confidence to support anxious children. The recent training developed by Nicola et al. (2024) showed promise at being an acceptable method of doing this. On the other hand, however, it is possible the current provision of MHSTs may already be

providing adequate support to both school staff and children alike (Ellins et al., 2023; Savage, 2022), reducing their need for training like that developed by Nicola et al. (2024). Additionally, around the time of Nicola et al. (2024) study, school staff were being encouraged to engage in online training after this was de-prioritized at the start of the COVID-19 pandemic (Perry, 2022). This may suggest appetite for such training may have been greater around that time, and warrants further investigation given the increasing demands reported on school staff (Robinson et al., 2023).

Taken together, therefore, given the changing landscape of children's mental health support systems as well as increasing demand on schools to support with identification and prevention of mental health difficulties, more research is needed to understand how feasible the newly developed online training is, in a new sample of school staff to implement into school settings. By doing this, this is hoped to support school staff with improving their knowledge and confidence of recognising and responding to children experiencing anxiety, contributing to earlier identification and prevention. Taken together, understanding individuals with anxiety disorders compliance with EMA methods, and understanding the feasibility of online training methods on childhood anxiety for school staff, will help to understand how best to implement these methods into real-world settings, supporting more sustainable identification, prevention, and intervention of individuals experiencing anxiety.

This thesis aimed to synthesise the gaps identified in the research that address anxiety-focused assessment and intervention across both clinical and educational settings. Chapter Two presents a meta-analysis investigating the compliance rates of ecological momentary assessments (EMA) in individuals with anxiety disorders. Specifically, this chapter explored what the overall pooled compliance rate is, and whether types of study design factors and participant characteristics explain the variation in these compliance rates. Chapter Four presents an empirical paper detailing a feasibility study on a recently developed online training on childhood anxiety for primary school staff which extends a previous feasibility study completed on the training (Nicola et al., 2024). The training includes information informed by a cognitive-behavioural therapy (CBT) approach, focusing on ways to identify anxiety in children, and strategies staff can use in their day-to-day work to support

children they may work with. Chapter Three summarises the links between the meta-analysis and empirical paper. Although these papers differ in both population and methodological focus, Chapter Six provides a summary of the findings from both studies, highlighting strengths, limitations, implications, and future directions addressing how anxiety-focused assessment and intervention methods can be implemented and sustained in real-world settings.

Chapter 2: Meta-Analysis

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Compliance with ecological momentary assessments for individuals with anxiety disorders: a meta-analysis

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Abstract

Ecological momentary assessments (EMA) are a growing method of assessing individuals with anxiety disorders. The validity of EMA, relies, crucially, on participant compliance. To our knowledge, no previous meta-analyses have been conducted to specifically investigate compliance of EMA studies in individuals with anxiety disorders. Understanding this will inform the design of EMA protocols to generate ecologically valid assessments of individuals with anxiety disorders in real-world settings. This is important to ensure accurate interpretation of results from EMA studies. This meta-analysis aimed to identify the pooled compliance rate of EMA studies in individuals with anxiety disorders and whether study design and participant-level factors may explain the variation in compliance rates. A total of 10 studies were included, published between 2009 and 2025, totalling 509 participants. Substantial heterogeneity was found across studies. A random-effects meta-analysis of proportion and meta-regression were conducted. The pooled compliance rate was 73%, 95% CI [65%, 80%], close to the recommended threshold of 80%. Study duration, prompt frequency, items per assessment, training, participant age, and gender did not significantly explain the between-study variation in compliance rates. The results should be interpreted cautiously given the small number of included studies. Implications of the findings underscore the need for EMA studies to consistently and explicitly report on all features of their protocols. A better-powered meta-analysis is needed, with a greater number of included studies, to meaningfully explore moderating factors of compliance in individuals with anxiety disorders. Importantly, future research should include anxiety disorder diagnosis as a moderating factor to compliance.

Key words: Anxiety Disorders; Ecological Momentary Assessment; Study Compliance; Study Dropout; Study Design; Meta-Analysis

1. Introduction

Anxiety disorders are one of the most prevalent psychological disorders across the world (Remes et al., 2016). They are generally characterised by symptoms such as avoidance, hyperarousal, and excessive worry and fear, which can be extremely draining (Simpson et al., 2010). Despite a range of commonly shared symptoms and experiences among those who are diagnosed with an anxiety disorder, these may vary among individuals as well as across the type of disorder diagnosed (Hendriks et al., 2013; Marques et al., 2011). For some symptoms there is stability and consistency over time allowing them to be measured using one-time questionnaires. However, other symptoms may fluctuate depending on the time of the day, situation (which may be more specific due to a specific phobia, or more unpredictable i.e., during panic attacks), and across periods of time, with symptoms often viewed as dynamic, occurring in response to internal thoughts and feelings as well as environmental triggers (Helbig-Lang et al., 2012). Replicating and measuring these anxiety symptoms in lab-based settings can be challenging and may not be representative of the reality of how they present in real-world settings (Walz et al., 2014). Additionally, traditional methods of assessing anxiety symptoms have mostly used self-report methods, through one-time-based questionnaires, and time-limited clinical observations and assessments. These methods rely on retrospective recall of symptoms, often hours or sometimes days later than the symptom experienced. This may introduce the possibility of bias, limiting the validity of such methods, and accuracy of the responses collected. Furthermore, traditional methods reduce the opportunity of capturing the variability of symptoms across individuals and across time, reducing the ecological validity of measuring current, past, and future states (Walz et al., 2014). Taken together, this highlights the need to explore other assessment methods that can better capture anxiety symptoms in day-to-day life.

Ecological momentary assessments (EMAs), also known as experience sampling methods, have emerged as an approach to address the limitations of traditional assessment methods. EMA

involves the repeated collection of data about individuals' thoughts, feelings, behaviours, and other contextual information, in their natural environments, at the point at which they occur (Stone & Shiffman, 1994). They provide researchers with detailed information about individuals' daily experiences, allowing the mapping of moment-to-moment variability in symptoms, and modelling of relationships between individuals and their environments (Carpenter et al., 2016; Lucas et al.., 2021). This reduces the retrospective recall inherent in traditional methods, improving ecological validity of the assessment of anxiety disorders. The increase in the development of technology in recent years has improved the access of EMA tools to study anxiety symptoms, with research conducted using EMA in assessing symptom and temporal fluctuations, cognitive processes, and treatment development (Walz et al., 2014).

EMA methodology is extremely heterogenous, with study design varying greatly across studies. Study design typically includes prompts (which are either a notification or reminder that asks participants to complete an assessment). These can vary in frequency (also known as the sampling strategy) (Shiffman, 2007). At each prompt, participants are asked to complete an assessment (often a survey or questionnaire about their thoughts, feelings, behaviours). Researchers may choose to alter the timing or frequency of these prompts using sampling designs such as signal-contingent (where prompts are delivered randomly throughout a specified time period e.g., six prompts between 9am and 9pm), interval-contingent (where prompts are delivered within fixed time frames e.g., every evening at 9pm), or event-contingent (where assessments are completed in response to a specific situation) (Shiffman, 2007). They may also choose to alter the question wording and length of the assessment.

Despite the methodological advantages of EMA, the validity and accuracy of the data collected relies, crucially, on participant compliance (Wrzus & Neubauer, 2023). Compliance is typically defined as the proportion of completed assessments relative to the number of scheduled assessments due to be delivered in the study (Wrzus & Neubauer, 2023). Measuring compliance (and understanding how to maximize it) is crucial in EMA research as low or inconsistent compliance can

lead to missing data (Wrzus & Neubauer, 2023). This can be problematic when the data are missing systematically rather than at random (e.g., when participants repeatedly miss assessments due to competing demands when the assessment is due for completion) (Murray et al., 2023). Systematic missing data can reduce data quality, introduce bias, and increase the possibility of drawing inaccurate conclusions about the constructs and samples being studied (Stone et al., 2023). Moreover, missingness through poor compliance reduces the number of observations available for analysis, which can reduce statistical power and precision of the findings (Stone et al., 2023; Wrzus & Neubauer, 2023). These issues have important implications for future research, as compliance estimates can inform sample size, power calculations, study design, and decisions around how to handle missing or dropout data in future EMA studies (Stone et al., 2023). Although statistical techniques can be used to handle missing data, their effectiveness may depend on the nature of missingness, which may be partly influenced by participant factors (e.g., motivation) and EMA study design factors (e.g., prompt frequency, length of assessments) (Stone et al., 2023). Consequently, understanding how compliance may be impacted by both participant-level and study-design factors is important to inform future EMA study design that maximizes compliance, reduces and better handles missing data, improves statistical power, and allows for more robust conclusions.

Compliance rates across EMA studies are varied. A recent meta-analysis of EMA studies indicated, broadly speaking, EMA achieves a compliance rate of 80% (Wrzus & Neubauer, 2023). This has been highlighted as the recommended figure of which studies should aim to attain (Stone & Shiffman, 2002). A recent meta-analysis showed compliance rates across healthy and clinical samples (with both physical and mental health difficulties) and study topics (i.e., emotions, relationships, employment), in both adult and children's samples, is high (79% - Wrzus & Neubauer, 2023). Though compliance rates across specific samples are high, there are fluctuations in compliance, suggesting compliance may be affected by individuals' experiences of mental or physical health symptoms. For example, adults with chronic pain had an 85% compliance rate (Ono et al., 2019) whereas adults with severe mental health disorders (major depressive disorder, bipolar disorder, and psychotic disorder)

compliance rate was lower at 75% (Vachon et al., 2019). Moreover, youth only samples demonstrated a 78% compliance rate (Wen et al., 2017), with elderly samples demonstrating even higher compliance at 86% (Yao et al., 2023).

Empirical studies examining EMA methods with individuals with anxiety disorders report a variation in compliance rates, with some describing high compliance, suggesting these methods are a feasible way to engage and assess anxiety symptoms (Helbig et al., 2009), whereas others report lower compliance rates, noting an increase in dropout or missing data (Newman et al., 2019).

For individuals with anxiety disorders, compliance with EMA protocols may be impacted by symptoms such as avoidance, concentration and memory difficulties, and heightened emotional distress (Murray et al., 2023; Sain et al., 2025). EMA methodology requires individuals to repeatedly check-in on their thoughts, feelings, and behaviours. For individuals who experience persistent anxiety, this may increase their sense of vigilance towards their experiences, increasing their worry and focus on uncomfortable emotions and body sensations (Zvolensky & Forsyth, 2002). Completing the assessments may therefore feel more distressing, possibly leading them to avoid the prompts. Indeed, a study found higher levels of momentary stress led to an increased likelihood of missing subsequent prompts (Murray et al., 2023). Individuals who experience persistent anxiety may also have higher cognitive loads through increased rumination and hypervigilance towards physical sensations and monitoring of danger (Beck et al., 2005; Kimble et al., 2014). Responding to frequent EMA prompts may feel like an additional, cognitively demanding task, with individuals being more easily distracted, therefore making it more difficult to comply with the protocols, particularly when anxiety is heightened (Vytal et al., 2012). Individuals diagnosed with social anxiety disorder may also have heightened fears of negative judgment from others, leading to rumination about their performance in the EMA protocols (Mohammadi et al., 2020). This may lead to further avoidance or dropout from the responses.

On the other hand, it is possible compliance with EMA protocols may also be affected by other factors, outside of an individual's experiences of anxious symptoms consistent with their

diagnostic presentation. These may include factors related to study design (e.g., study duration, number of assessments (or prompts) per day, use of incentives, or training in EMA methods) as well as the sample characteristics (e.g., age, gender). Evidence around what features are associated with an increase in compliance is mixed across studies. Whilst some evidence suggests higher financial incentives (Vachon et al., 2019; Wrzus & Neubauer, 2023), fewer prompts per day (Vachon et al., 2019), and a shorter monitoring (assessment) period (Rintala et al., 2019) predict higher compliance, others suggest no relationship between incentive use (Wen et al., 2017), study duration (Vachon et al., 2019), number of items per assessment (Vachon et al., 2019), number of assessments per day (Jones et al., 2019; Wang et al., 2025) and compliance. Findings across studies, however, are inconsistent, often due to gaps in information reported, making conclusions around compliance in context to EMA design difficult to assess (Hall et al., 2021).

Larger meta-analyses, instead, highlight the impact of individual characteristics on compliance (Wrzus & Neubauer, 2023). Evidence highlights participant age and gender may account for variability in compliance of EMA methods. Although some studies suggest no relationship between age or gender and compliance rates (Jones et al., 2019), others suggest studies with a larger number of male participants (Vachon et al., 2019) and a lower mean age of participants (Ono et al., 2019) negatively affect compliance rates. Taken together, it is therefore important to understand the compliance rates of EMA protocols of individuals with anxiety disorders, and what moderating factors relating to study design and participant characteristics may influence the compliance of these methods. This is to ensure conclusions made about individuals with anxiety disorders are as valid as possible.

Evidence demonstrating a relationship between anxiety symptoms and compliance is limited. Current meta-analyses investigating compliance rates of EMA studies investigate general, clinical samples of participants, or in specific diagnostic populations, of which anxiety disorders has not been explored explicitly. These findings may not generalise to individuals with anxiety disorders, which are characterised by symptoms (i.e., avoidance) that may directly affect compliance to EMA protocols.

Examining compliance rates and possible moderating factors to these rates, specifically within anxiety disorder populations, is necessary to support researchers in understanding how to design EMA studies for this population. This will help to understand how to reduce burden to participants to ensure compliance is optimised, dropout is minimised, and conclusions can be interpreted with more reliability and ecological validity (Wrzus & Neubauer, 2023).

The current meta-analysis, therefore, aimed to address the above limitations and gaps by seeking to 1) estimate the pooled compliance rate across EMA studies of individuals with anxiety disorders and 2) identify study design- and participant-level factors that moderate these compliance rates. This study aimed to inform best practice for the design and implementation of EMA methods in the study of participants with anxiety disorders.

2. Methods

The protocol for the meta-analysis was registered on International Prospective Register of Systematic Reviews (PROSPERO: protocol number: CRD420251112463) on 28th August 2025.

2.1 Search Strategy

Four electronic databases (PsycINFO, MEDLINE, Scopus, and Web of Science) were searched from inception until 7th November 2025. ProQuest Dissertations & Theses was also searched for grey literature and unpublished theses and dissertations. The details of the search terms for each database can be found in Appendix B. Forwards and backwards searches of reference lists of relevant systematic reviews were also completed to identify studies that may have been missed during the initial search. 768 additional records were identified and included.

2.2 Eligibility Criteria

Studies were included if they met the following criteria:

a. Participants had a primary diagnosis of an anxiety disorder (as defined by either DSM-5 (American Psychiatric Association [APA], 2013) [or equivalent DSM-IV (APA, 1994)] or ICD-11 (World Health Organisation [WHO], 2019) [or ICD-10 equivalent (WHO, 1992)] criteria)
b. EMA methods were used. These could also be known as ambulatory assessments, experience sampling methods, and/or daily diaries. Assessments had to be completed by the participant themselves, outside of a laboratory or clinic for more than once per day, and for more than 24 hours in duration.
c. Studies needed to use electronic-based technology (i.e., smartphone, telephone) for data collection.
d. Papers needed to be written in the English language or needed to be available with a published translation.
e. Dissertations, theses, and/or pre-registrations were included if they met all of the above criteria.

There was no lower publication time limit for the studies identified to allow for identification of all possible studies. However, given that the DSM-5 (APA, 2013) (or DSM-IV equivalent (APA, 1994)) or ICD-11 (WHO, 2019) (or ICD-10 equivalent (WHO, 1992)) criteria were used to establish anxiety disorder diagnosis, this limited the publication time to studies published after 1992 along with the implementation date of these diagnostic criteria. Earlier diagnostic criteria (i.e., DSM-III (APA, 1980)) were not used as the definitions of anxiety disorders, symptom classification, and criteria are likely to be different, with some disorders no longer classified as an anxiety disorder in the most up-to-date criteria. This was to ensure diagnostic consistency across the studies, reducing the heterogeneity in how they are assessed and defined, to ensure results could be compared accurately across studies and are relevant to the criteria used in current clinical practice. Studies that did not collect primary data (i.e., systematic reviews, meta-analyses) were excluded. Studies that used secondary data analyses (re-analysis of the full or subset of the data) were also excluded to ensure that each study was independent, and datasets and methodology were not repeated. Where

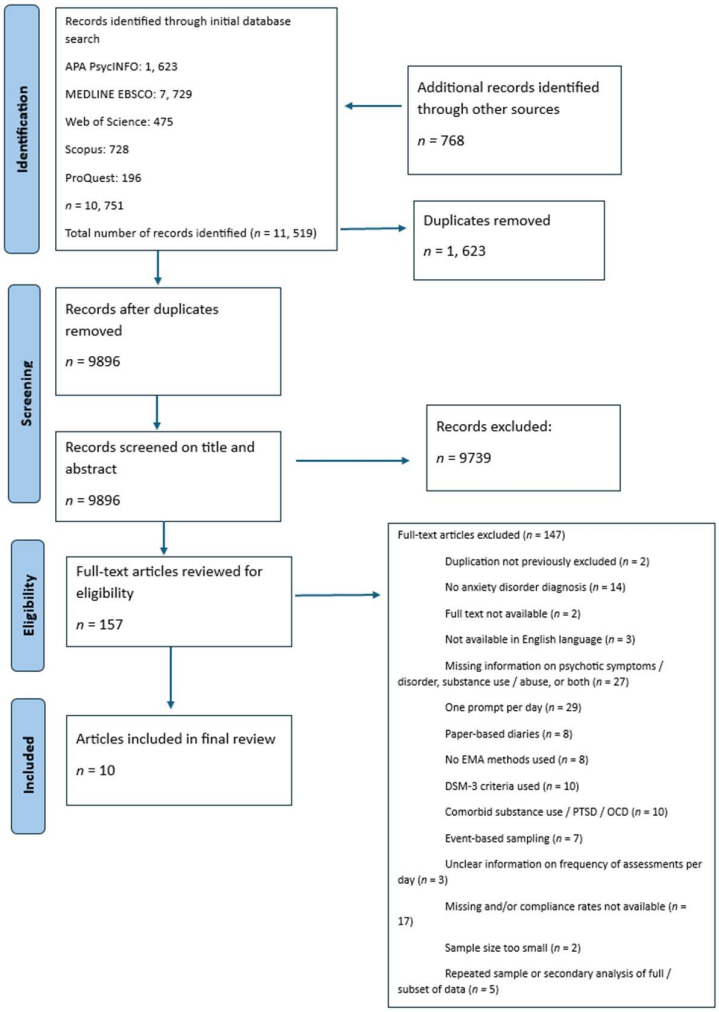
possible, where there were multiple publications of the same EMA dataset, the study with the most detailed report on EMA was used. Studies were also excluded if they included participants with a primary diagnosis of obsessive-compulsive disorder (OCD) or post-traumatic stress disorder (PTSD) as these are no longer classified as anxiety disorders in the DSM-5 or ICD-11 criteria (APA, 2013; WHO, 2019). Where studies reported participants with multiple, comorbid diagnoses, the diagnosed anxiety disorder had to be the primary problem determined by the study researchers (Walz et al., 2014). Studies that included participants with substance use difficulties, other addictive disorders (i.e., alcohol use disorder), as well as psychotic symptoms or disorders were also excluded. Individuals with these difficulties differ from those with anxiety disorders in terms of their symptoms and underlying psychopathological processes. Furthermore, these individuals may experience difficulties that directly impact on how they engage with EMA protocols, introducing potential confounding effects within studies of anxiety disorder populations (Jones et al., 2019; Vachon et al., 2019). Therefore, to ensure the meta-analysis focused on interpreting valid results from anxiety disorder populations specifically, individuals with these difficulties were excluded. Studies that assessed participants once per day or for only one day (less than 24 hours) were also excluded as these sampling periods are suggested to be insufficient for assessing within- and between-day variations in daily life (Robinson & Clore, 2002; Trull & Ebner-Priemer, 2020). This exclusion decision is consistent with previous analyses (Jones et al., 2019; Walz et al., 2014; Wrzus & Neubauer, 2023). Studies that used event-contingent assessments (based on self-initiated reports) were also excluded. Event-contingent assessments rely on individuals to identify, remember, and then initiate the assessment based on when and how often an event occurs (Himmelstein et al., 2019). Individuals may not remember nor report all the events that occurred meaning the true number of events that occurred is unknown (or inaccurate). This makes it difficult to establish the difference between low / high compliance and low / high frequency of event occurrence as there is no concrete, total figure of events to compare it to. Therefore, the validity and accuracy of measuring compliance with these sampling schedules is more challenging (Burke et al., 2017; Jones et al., 2019). Studies that used

paper-based diaries for data collection were also excluded as these methods are subject to bias and are less reliable at capturing compliance rates (Stone et al., 2003). Studies that only used passive data collection (through physiological measures i.e., actigraphs), without accompanying EMA self-report measures, were also excluded.

2.3 Study Selection

Figure 1 shows a summary of the search strategy using a Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) flowchart. First author (JM) initially screened all abstract and titles from the retrieved articles for eligibility. Broadly, exclusion reasons at this stage were related to no anxiety disorder diagnosis studied (either anxiety-related symptoms or other clinical diagnoses studied) or no EMA method used. Two authors (JM and HLW) then independently screened 20% of these articles and compared the outcome. There was 95% agreement between the raters at this stage. The inter-rater reliability was calculated and was rated as “almost perfect”, Cohen’s Kappa = 0.86 (Landis & Koch, 1977). Author (JM) then screened all eligible articles for their full text (*n* = 157), with both JM and HLW then independently screening 20% (*n* = 31) of these articles each. There was 94% agreement between the raters, with inter-rater reliability rated as “almost perfect”, Cohen’s K = 0.86 (Landis & Koch, 1977). Disagreements were resolved through discussion between the raters.

Figure 1. *PRISMA diagram of selection process.*



2.4 Assessment of Study Quality

There is currently no standardised assessment tool designed to assess quality in EMA studies. Published systematic reviews have used the Checklist for Reporting of EMA Studies (CREMAS) guidelines, a modified version of the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) checklist, adapted for EMA studies, to assess their quality (Liao et al., 2016). The CREMAS checklist was used to assess if the papers included descriptions of EMA protocol training, EMA technology used, study duration, length of monitoring period, prompting design, prompt frequency, prompt delivery, prompt latency, additional design features, participant dropout,

compliance rate, missing data, and limitations of the EMA approach. Using similar coding schemes to previous reviews (Han et al., 2024; Wang et al., 2025), each item was scored with 1 (sufficient information present), 0.5 (information somewhat present), or 0 (information missing). Papers could be assigned a maximum score of 13. Scores were then converted into percentages with higher percentages representing higher quality (See Appendix C and D for a full breakdown of the quality scores). Both JM and HLW independently coded 100% of the papers (*n* = 10). There was a 92% agreement, with inter-rater reliability calculated and rated as "substantial", Cohen's K = 0.82 (Landis & Koch, 1977). The results from the quality assessment reflect the heterogeneity of EMA studies due to the variety of study methods and designs used. They also highlight the lack of sufficient quality assessment to make firm conclusions on each study. Discrepancies were discussed and resolved between the raters.

During the quality assessment, multiple papers (*n* = 17) were identified that either did not report the compliance rates for the overall sample, did not provide a differentiated compliance rate for the subgroup of participants with an anxiety disorder, or the compliance rate could not be calculated from the information available in the paper. As this was a key criterion needed to complete the meta-analysis, authors were contacted and given eight weeks to provide the relevant information. All 17 papers were eventually excluded as this information was not provided, not available, or was not able to be calculated in the time frame of the study.

For all 10 included studies, the average CREMAS score was 9.9 (SD = 1.16). All included studies reported (coded as yes or somewhat) the technology used, study duration, monitoring period, prompting design, prompt frequency, and compliance rate. Studies least frequently reported information on participant dropout (n = 6, 60%), prompt latency (n = 5, 50%), and how missing data were processed (n = 6, 60%).

2.5 Data Extraction and Synthesis

Data were initially extracted and coded by JM. HLW independently coded 50% of the included papers (*n* = 5). There was a 93% agreement with an inter-rater reliability rated as "almost perfect", Cohen's K = 0.84 (Landis & Koch, 1977). From each paper, the following information was extracted and coded: author, year, sample size, mean and SD of age, gender (proportion of female participants), anxiety disorder studied, device type used, sampling schedule (i.e., signal- or interval-contingent), monitoring duration (total length of assessment in days), prompts per day, items per assessment, training / familiarization sessions used (coded yes, not reported), incentives (coded yes, no, not reported), and compliance rate. Other design factors (i.e., participant dropout) and other participant characteristics (i.e., ethnicity) were not extracted due to inconsistent reporting and missing data across most of the included studies. Compliance rate was operationalised as the proportion of completed assessments relative to the total number of assessments scheduled in each study (Vachon et al., 2019). The data was coded as missing if there was insufficient or missing data for any of the extracted variables.

One study provided a pre- and post-compliance rate of the EMA section of the study following an intervention (Meine et al., 2024). To ensure we had one compliance rate for data analysis, we calculated an average compliance rate adjusted for the sample size at each timepoint. Two studies employed a variation in frequency of prompts delivered per day (Blalock et al., 2018; Silk et al., 2018), one of which separated this for weekdays and weekends (Silk et al., 2018). The average daily prompting frequency was calculated (by dividing the total number of times participants were prompted by the total number of assessment days). Where the number of items per assessment was not explicitly reported, a calculation was made based on the information available in the study. Where optional questions were included based on participants' answers, the maximum possible number of items that could have been asked was calculated. Where one study used both time-based and event-based prompts, only the compliance rate calculated for the time-based prompts were used.

2.6 Data Analysis

Analysis was conducted using the meta package in R (version 8.2-1.; Balduzzi et al., 2019). Compliance rates were analysed using a logit transformation (Barendregt et al., 2013; Higgins et al., 2022). The pooled compliance rate estimates and confidence intervals were transformed back to proportions for interpretation.

A random-effects meta-analysis of proportions was then conducted to estimate the pooled EMA compliance rate among studies that investigated individuals with anxiety disorders. This model was used to account for the expected heterogeneity between EMA studies due to the variation in study protocols used and population characteristics investigated. Variance between studies was estimated using the restricted maximum likelihood (REML; Patterson & Thompson, 1971). Evidence suggests a Knapp-Hartung adjustment should be used when there are a small number of studies, and when studies are heterogeneous (van Aert & Jackson, 2019). Therefore, given the small number of studies in the current study, this was applied. Heterogeneity between studies was evaluated using Cochran's Q test, where a statistically significant result ($p < 0.05$) suggests the presence of heterogeneity, and the I^2 statistic, where higher I^2 values indicate greater levels of heterogeneity (Cochran, 1954; Higgins et al., 2003). Forest plots were also used for visual inspection of the pooled compliance estimates. Publication bias across studies was evaluated using funnel plots, where an asymmetric pattern suggests a presence of publication bias (Sterne et al., 2011). Formal evaluation of publication bias through the Egger's test (Egger et al., 1997) was not completed as evidence suggests this test is not recommended for proportion meta-analyses (Hunter et al., 2014) because it can be unreliable when there is significant heterogeneity, especially prevalent in EMA studies (Schwarzer et al., 2015).

Prior to conducting a meta-regression of the moderating variables, all moderators (study duration, number of prompts per day, number of items per assessment, use of training, participant age and gender) were evaluated for correlations between each other. Anxiety disorder diagnosis was not included as a moderator due to the small number of studies representing each individual

diagnosis (i.e., one study for panic disorder), reducing the statistical power to detect meaningful effects. Generally, evidence recommends a greater number of studies per moderator to produce reliable results. Additionally, some studies included participants with multiple, different anxiety disorders. This made it difficult to classify how to code each study to assess how compliance impacted on one specific disorder. Coding the studies under one type of anxiety disorder would lead to misleading results. Therefore, moderator analyses included only study-design and participant characteristics that were consistently reported across studies to produce more reliable findings. As the assumptions needed to conduct a Pearson's correlation were violated, Spearman's rank correlation analysis was used (Hauke & Kossowski, 2011; Higgins et al., 2022). These were conducted as exploratory analyses to inform overall interpretation of the analysis of the moderators.

Meta-regression analyses were then conducted to assess whether study-level design factors (study duration, number of prompts per day, number of items per assessment, and whether training was used) and participant characteristics (age and gender) moderated compliance rates. Due to the small number of studies, a multi-variable meta-regression was not conducted as the estimates are likely to be misleading. Evidence recommends conducting univariate meta-regressions for analyses with small sample sizes (Deeks et al., 2024; Harrer et al., 2021). Therefore, each moderator was analysed separately allowing for evaluation of each moderator on the compliance rates (Borenstein et al., 2021; Higgins et al., 2022). Sensitivity analyses using a leave-one-out approach was used to assess if there was a significant influence from one (or several) of the individual studies (Deeks et al., 2024).

3. Results

3.1 Study Identification

A total of 11,519 records were identified during the initial search procedure. 10 studies, between 2009 and 2025, with 509 participants, were included in the final sample. See Figure 1 for description of the selection procedure.

3.2 Study Characteristics

Table 1 summarises the study characteristics and participants included in the meta-analysis. Most studies used an interval-contingent (n =6; 60%) or signal-contingent (n=4, 40%) sampling design. One study (10%) used a combination of signal- and event-contingent sampling design. The average study duration was 13 days (range: 7 – 28 days), with an average of 4.88 (range: 2.8 – 8) assessments per day, and an average of 13 (range: 4 – 22) items per assessment delivered. Five studies (50%) used smartphone devices, one study (10%) used a telephone device, three studies (30%) used personal digital assistants / handheld computers, and one study (10%) used a portable device (iPod).

Three studies studied participants with generalised anxiety disorder (GAD) only, one studied panic disorder (PD) only, and one studied generalised social anxiety disorder (GSAD) only. The remaining studies (n = 5) looked at participants with a range, and/or combination of, anxiety disorders, including GAD, PD, social anxiety disorder (SAD), separation anxiety disorder (SepAD), social phobia (SP), and panic disorder with agoraphobia (PD with AG). All studies (n = 10) reported using clinical interviews to assess anxiety disorder diagnosis. Two studies reported the use of additional clinical rating scales and questionnaires. Most studies (n = 9, 90%) reported using a form of training and/or familiarisation sessions prior to the EMA. Half of the studies (n = 5, 50%) reported using some form of incentive, with all reporting this in the form of monetary compensation. Two of these studies used incentives dependent on the level of compliance. One study (10%) explicitly reported using no incentives.

Table 1

Characteristics of the included studies.

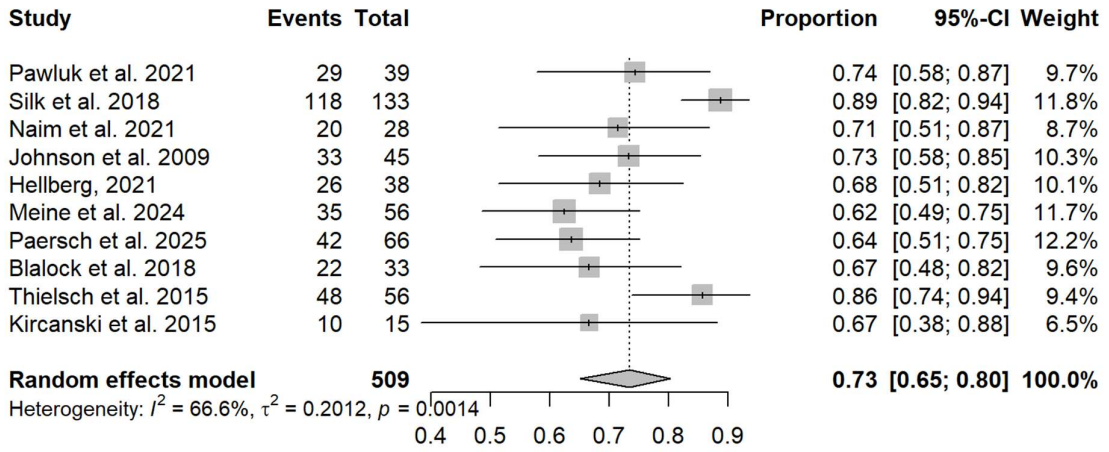
Author	Year	Country	Sample size (n)	Age (Mean, SD)	Gender (% female)	Anxiety disorder studied	Technology used	Sampling design	Study duration (days)	Prompts per day	Items per assessment	Training (Yes, No, Not Reported)	Incentives (Yes, No, Not reported)	Compliance rate (0–100%)	Quality score (/13)
Pawluk et al.	2021	CAN	39	25.3 (1.06)	80	GAD	Smartphone	Signal-contingent	7	8	13	Yes	Yes	75.5	11.5
Silk et al.	2018	USA	133	11 (1.47)	56	GAD, SepAD, SAD	Telephone	Interval-contingent	25	2.8	9	Yes	Yes	89.0	10.5
Naim et al.	2021	USA	28	12.9 (2.89)	25	GAD, SAD, SepAD	Smartphone	Interval-contingent	7	3	8	Yes	Yes	72.6	11
Johnson et al.	2009	FRA & GER	45	29.1 (8.5)	60	PD & AG, SP	PDA / Handheld Computer	Interval-contingent	7	5	4	Yes	No	73.0	11.5
Hellberg	2021	USA	38	34.5 (13.34)	58	PD	Smartphone	Interval-contingent	14	5	18	Yes	Yes	69.0	9.5
Meine et al.	2024	SWI	56	33.3 (12.45)	68	SAD, GAD, PD + AG, SP, PD	Smartphone	Interval-contingent	28	5	22	NR	NR	62.7	8
Blalock et al.	2018	USA	33	-		GSAD	PDA / Handheld Computer	Signal-contingent	14	4	12	Yes	NR	66.6	9.5
Thielsch et al.	2015	GER	56	38.3 (13.47)	80	GAD	Portable device (iPod)	Signal-contingent	7	3	11	Yes	NR	86.0	9
Kircanski et al.	2015	USA	15	31.1 (6.97)	100	GAD	PDA / Handheld Computer	Signal-contingent	7.5	8	11	Yes	Yes	65.5	8.5
Paersch et al.	2025	SWI	66	32.5 (11.1)	73	SP, PD/AG, PD, GAD, SepAD	Smartphone	Interval-contingent	14	5	22	Yes	NR	63.8	10

Notes. '-' – missing value. NR – Not reported. CAN – Canada. FRA – France. GER – Germany. USA – United States of America. SWI – Switzerland. GAD – Generalized Anxiety Disorder. SepAD – Separation Anxiety Disorder. SP – Social Phobia. PD + AG – Panic Disorder and Agoraphobia. PD – Panic Disorder (without agoraphobia). GSAD – Generalised Social Anxiety Disorder. SAD – Social Anxiety Disorder. PDA – Personal Digital Assistant. Silk et al. (2018) and Blalock et al. (2018)'s prompts per day were averaged, taking account the total number of prompts divided across the study duration. Quality score is based on the CREMAS guidelines (Liao et al., 2016).

3.3 Pooled Compliance Rates

The random-effects meta-analysis of proportions (*n* = 10) examining the overall pooled compliance rate across EMA studies of individuals with anxiety disorders showed the pooled compliance rate was 73%, 95% CI [65%, 80%], indicating moderate to high compliance across studies. Individual estimates across studies ranged between 62.7% to 89.0%. There was substantial heterogeneity across studies which was found to be statistically significant, $Q(9) = 26.9$, $p = .001$, $I^2 = 66.6\%$. Sensitivity analyses, where each study was individually removed and the analysis re-run, demonstrated that the pooled estimate (73%, 95% CI [65%, 80%]) remained stable, with substantial heterogeneity also remaining the same ($I^2 = 66.6\%$). Omission of one study (Silk et al., 2018) showed that heterogeneity substantially reduced ($I^2 = 18.1\%$). The methodological design of this study was slightly different to that of the other studies (used telephone EMA), and included the largest sample size, suggesting this contributed considerably to the variability between the included studies. However, as the pooled compliance rate remained unchanged, this study remained included in the analysis and rather suggests the pooled estimate is robust and instead demonstrates the need to conduct moderator analyses to further explore other sources of variability. The forest plot in Figure 2 demonstrates the individual and pooled compliance rates and weights assigned to each study. See Appendix E for the forest plot demonstrating the outcome of the sensitivity analysis.

Figure 2. *Forest plot of the transformed and pooled compliance rates of EMA studies of individuals with anxiety disorders.*



3.4 Moderator Correlations

Assumptions for a Pearsons's correlation analysis were not met as visual inspection of Q-Q plots and boxplots indicated some deviations and outliers, with observations of the residuals vs fitted plot demonstrating a slight non-linear pattern. Given the small number of studies, and to analyse the relationships between all continuous variables and the binary (training) variable, Spearman's rank-order correlation was conducted to explore possible associations between the moderators prior to conducting the meta-regressions. None of the associations amongst the variables were statistically significant. Given the small number of studies, the moderators were entered independently in a univariate meta-regression.

3.5 Meta-Regression Analyses

Table 2 presents the meta-regression analysis results. Independent meta-regressions were conducted with each moderator entered separately. None of the moderators significantly predicted compliance. Due to the small number of studies and substantial unexplained heterogeneity, these analyses should be considered exploratory and hypothesis-generating rather than confirmatory.

Table 2

Meta regression analyses for each moderating variable and compliance rates.

Moderator	*B* [95% CI]	*F* (df1, df2)	*p*	R^2 (%)
Study duration	0.003 [-0.052, 0.058]	0.02 (1,8)	.90	0.0
Number of prompts per day	-0.153 [-0.375, 0.070]	2.51 (1,8)	.15	23.5
Number of items per assessment	-0.049 [-0.108, 0.010]	3.73 (1,8)	.09	37.3
Use of training	0.573 [-0.644, 1.790]	1.18 (1,8)	.31	1.8
Participant age	-0.027 [-0.073, 0.019]	1.97 (1,7)	.20	24.7
Participant gender	-0.003 [-0.029, 0.023]	0.06 (1,7)	.81	0.0

Note. B = unstandardized regression coefficient. CI = confidence intervals. F = test statistic. P = p-value (significance). Df = degrees of freedom. R^2 = proportion of between-study heterogeneity explained.

3.6 Publication Bias

Visual inspection of funnel plots was used to detect asymmetry which may suggest the possibility of the presence of publication bias (Sterne et al., 2011). The funnel plot (see Appendix F) exhibited some asymmetry, with one study (Silk et al., 2018) lying outside of the estimated confidence intervals. This may reflect the presence of publication bias or underlying heterogeneity between the studies which is expected among EMA studies due to variety in study design and population characteristics explored as demonstrated in the quality assessment (Higgins et al., 2022). The sensitivity analyses indicated this study (Silk et al., 2018) appeared to drive substantial heterogeneity between studies, possibly due to its larger sample size and slight difference in EMA study design, thus suggesting this reflects methodological and population differences rather than publication bias. However, given the small number of studies included in the meta-analysis (*n* = 10), the funnel plot interpretation was only used as an exploratory analysis of publication bias, and it is

not recommended to draw firm conclusions, particularly in the absence of a formal statistical test (i.e., Egger's test) (Sterne et al., 2011). Therefore, the conclusions around publication bias should be interpreted with caution.

4. Discussion

The present meta-analysis synthesised compliance rates across 10 studies which investigated EMA for individuals with anxiety disorders and examined study design and sample-level moderators associated with compliance. The results suggest the overall pooled compliance rate was high (73%). In line with previous reviews, there was substantial heterogeneity observed across studies, indicating other factors (such as study-design or participant characteristics) may influence compliance rates (Jones et al., 2019). Moderator analyses indicated none of the moderating variables (study duration, number of prompts per day, number of items per assessment, use of training, participant age, and gender) significantly predicted compliance rates. Moderator analyses were conducted as exploratory given the small number of studies but will nonetheless be discussed. These findings should be interpreted with caution given the small number of studies included in the analysis and thus there is limited statistical power to draw representative conclusions.

The primary aim of this meta-analysis was to provide a pooled estimate of the compliance rate for EMA studies investigating individuals with anxiety disorders. The pooled compliance estimate (73%) was similar to, but slightly lower than, those found in reviews of EMA studies in other clinical diagnoses and populations (personality disorders [Davanzo et al., 2023], children and adolescents [Heron et al., 2017; Wen et al., 2017], elderly samples [Yao et al., 2023], chronic pain [Ono et al., 2019], psychotic disorders [Vachon et al., 2019], and substance use [Jones et al., 2019]). The current meta-analysis excluded multiple studies that used lower frequency prompt designs (i.e., once per day) as these are suggested to be insufficient to reliably detect within- and between-person differences. Instead, the analysis focused on higher intensity EMA protocols to address this. It is

possible lower frequency prompting designs are linked with a decrease in participant burden and an increase in compliance (Stone & Shiffman, 1994; Wang et al., 2025). This may have shifted the pooled compliance rate estimate downwards in the current study. Stone and Shiffman (2002) recommended studies should aim for a minimum compliance of 80%. In the current analysis, the upper confidence interval limit was 80%. This indicates the true compliance rate may meet this recommended threshold. Though sensitivity analyses suggested no one study significantly impacted on the pooled estimate, it did show that omission of one study (Silk et al., 2018) substantially reduced the heterogeneity between studies. This study had a slight difference in EMA methodology (using telephone-based EMA) and had a much larger sample size than the other included studies, suggesting this may reflect methodological and/or sample differences, inherent in EMA studies. Similarly, individual study estimates highlight compliance is not uniform, with rates differing from lower compliance (62%) to higher compliance (80%). It is therefore possible other contextual and/or methodological differences in EMA studies may account for the compliance rate in this population.

The slightly lower compliance rate found in this analysis, compared with other clinical populations, may be explained by the fact participants were diagnosed with an anxiety disorder, where core features of these diagnoses (e.g., avoidance, increased cognitive load, attentional difficulties, and fears around evaluation or self-monitoring), may reduce their compliance with EMA methods (Murray et al., 2023; Sain et al., 2025). Many anxiety disorders are characterised by avoidance of both distressing internal states (i.e., thoughts and feelings) and external factors (i.e., triggers in the environment) (Ohi et al., 2025). As EMA methodology requires individuals to reflect on these factors, frequent assessments may heighten their awareness of their symptoms, leading to avoidance of, or dropout from, completing the assessments to reduce the distress this may cause (Zvolensky & Forsyth, 2002). Additionally, individuals with anxiety disorders may have reduced capacity to think about and respond to the prompts due to an already increased cognitive load (due to rumination) or reduction in concentration, leading to lower compliance. This may be supported by the cognitive-behavioural therapy (CBT) approach which highlights, especially for individuals with

panic disorder, their attenuation to physical sensations can lead to greater anxiety-inducing thoughts and experiences, leading to avoidance (Salkovskis et al., 1996). Indeed, the one study included in this analysis investigating individuals with panic disorder was on the lower end of the compliance range (Hellberg, 2021). This may be further compounded by the fact some studies included samples diagnosed with different (and multiple) anxiety disorders which showed the lowest compliance rates amongst the included studies (Meine et al., 2024; Paersch et al., 2025). Experiences of anxiety symptoms may be different depending on the type of disorder diagnosed. For example, those with panic disorder may find it difficult to respond to prompts during periods of high arousal or panic (Brown & McNiff, 2009), whereas those with social anxiety disorder may find it difficult to respond specifically in social settings (Leichsenring & Leweke, 2017). It is possible studies that use one EMA protocol for different types of anxiety disorders may not effectively capture the specific burden this may place on individuals with different disorder-related symptomatic experiences, which may impact on their compliance to the prompts. On the other hand, data from individual studies investigating only one diagnosis (GAD), demonstrated a range of compliance rates from lower (65.5%) to higher (86.0%) rates. This may suggest other factors, aside from (or in addition to) anxiety disorder diagnoses, related to the EMA protocol, may also explain the lower compliance rate in this population. Given the current analysis did not include anxiety disorder diagnosis as a moderating variable, definitive conclusions about the influence of this cannot be drawn. Instead, this highlights the need for further research to be conducted, with a greater number of studies that include a range of specific anxiety disorder diagnoses, to assess whether compliance may be explained by differences in diagnostic group.

Moderator analyses demonstrated none of the study-design (study duration, number of prompts per day, number of items per assessment, use of training) nor participant characteristics (age and gender) significantly explained compliance rates in this population. Generally, these findings are consistent with previous reviews and meta-analyses (Heron et al., 2017; Jones et al., 2019; Vachon et al., 2019; Wang et al., 2025; Wen et al., 2017; Wrzus & Neubauer, 2023). However, given

the small number of included studies in the analysis, these results should be interpreted with caution. Instead, it is possible other EMA design features (i.e., use of incentives, flexible responding windows) may also impact on compliance rates in this population. Indeed, two studies in this analysis, that demonstrated the highest compliance rates, used incentives as well as additional design features (i.e., prompts to be delivered outside of school hours / on weekends or by allowing individuals to choose intervals of when to receive prompts) to encourage compliance (Naim et al., 2021; Silk et al., 2018). However, other EMA design features, that were not included in the current analysis, are not as consistently reported in studies. This is demonstrated by the exclusion of multiple studies that did not report compliance rate figures as well as missing information demonstrated by the CREMAS quality assessment in section 2.4. This highlights the need for EMA studies to explicitly and consistently report on all study design features included in their EMA protocols to allow for more accurate and reliable synthesis through meta-analyses. Without this data, conclusions cannot be definitively drawn around EMA compliance rates and how to improve them. Taken together, these findings underscore the need for further meta-analyses to be conducted in anxiety disorder populations, with a greater number of studies and a greater variation of moderating variables included, to enable a better understanding of compliance to EMA protocols in this diagnostic group. Individual EMA studies will need to report more detailed methodological and sample characteristics to allow for accurate synthesis of the data.

4.1 Limitations

Several limitations in this analysis should be considered. Firstly, the analysis only included a small number of studies (n = 10). It is likely this limited the statistical power needed to identify effects between moderating variables and the compliance rates. The findings should be interpreted with caution given this. Secondly, we identified a number of studies that could not be included in the analysis due to missing information on compliance, and other relevant study design characteristics. Despite contact made with the study authors to obtain this information, this was not available or could

not be calculated in the timeline of the study. It is not uncommon for EMA studies to be missing information and there have been calls from researchers to improve the reporting of EMA studies to include crucial information such as compliance (Hall et al., 2021; Stone & Shiffman, 2003; Williams et al., 2021). Thirdly, although the overall estimate of compliance was close to the recommended 80% threshold (Stone & Shiffman, 2002), the current analysis did not include a sub-clinical nor non-anxious comparison group, therefore conclusions cannot be drawn around whether anxious participants have higher or lower compliance rates compared to these populations. Furthermore, it is possible the overall compliance rate was inflated. Many of the included studies excluded participants who had low levels of compliance and/or who did not reach a certain level of compliance (Kircanski et al., 2015; Naim et al., 2021; Paersch et al., 2025). This minimum level of compliance often varied among individual studies which may have biased the overall compliance rates in the current analysis, leading to an over-inflated pooled compliance rate, and consequently ill-reflecting the true compliance of all participants within and between studies. Fourth, not all possible study-design and participant-related moderating factors were included in the current analysis. This was due to inconsistent reporting or missing data, leading to insufficient number of studies per moderator, reducing the statistical power needed to draw reliable conclusions. Fifth, it is possible coding of some moderating variables was not completely sensitive. For example, some studies did not explicitly state whether they had trained participants, nor provided detail on how much or in what way they were trained, making it difficult to make concrete classifications of the information provided. Finally, a broader limitation of existing EMA literature is that samples included in the analyses of studies are biased to those that are compliant and therefore complete the study. Many studies do not consistently or accurately report on dropout or missing data, and it is possible studies with high compliance rates are more likely to be published and reported on.

4.2 Clinical Implications and Future Directions

The findings of this meta-analysis suggest EMA methodology can be used with individuals with anxiety disorders, with compliance rates remaining high despite the theoretical challenges discussed related to the psychopathology of anxiety symptoms and experiences. This supports the clinical use of EMA as a tool for assessment in both research and real-world settings.

The compliance rate, however, was slightly lower than that compared with other clinical populations. The current study did not examine the interaction between anxiety disorder diagnosis, moderator variables, and compliance rates nor explore compliance rate comparisons between clinically anxious and non-anxious populations. Although many anxiety disorders are underpinned by similar characteristics (i.e., avoidance), symptoms and experiences can look different depending on the diagnosis being studied, which may impact on compliance to EMA protocols in different ways. Future research should investigate whether anxiety disorder diagnosis and relevant psychological processes (e.g. avoidance, catastrophising, anxious arousal) are also a moderating factor to compliance rates and unpick if this differs across diagnosis and population type. This would help to better understand how to design EMA protocols with disorder-specific facilitators and barriers to compliance in mind, especially for studies that are including individuals with different and/or various diagnoses (Shiffman et al., 2008). Future EMA studies could also consider collecting qualitative data from anxious individuals who dropout of EMA studies to further understand what factors (whether generalized anxiety, disorder-specific, study design, or other participant characteristics) impact on compliance. Together, these would help to improve the implementation of EMA, both in assessment of anxious individuals, but also when designing interventions for these populations.

The moderator analyses showed that none of the moderating variables significantly predicted compliance in this population. It is plausible the current study did not include enough studies to meaningfully tease apart the relationships between the study-design and sample-level characteristics and compliance rates in this population. Therefore, further research should aim to conduct another meta-analysis with a greater number of EMA studies in individuals with anxiety

disorders to assess what factors may be meaningfully associated with compliance in this population and draw more definitive conclusions about these relationships. This may involve broadening the inclusion criteria (and reducing the exclusion criteria) than that used in the current analysis.

Furthermore, the current study did not investigate all possible study-design or participant-level factors that could be associated with compliance due to inconsistent reporting or missing data within studies. Analysis of the studies at the individual-level highlighted differences in the use of additional design features (i.e., incentives, flexible prompting windows) which warrant further exploration. Future research should aim to examine whether other study-design and sample-level characteristics influence compliance in this population.

Additionally, consideration should be given to how EMA methodology, designed to improve compliance, may translate into real-world clinical settings. Although analysis of individual studies suggested the use of incentives may have increased compliance rates in anxious individuals (Naim et al., 2021; Silk et al., 2018), their use may be more difficult to implement into clinical services due to potential practical challenges (Soyster et al., 2023), including budget and resource constraints as well as ethical considerations around payments made to individuals (Bernstein & Feldman, 2015; Garland et al., 2021; Health Research Authority, 2026).

Finally, as is recommended in previous reviews, and given the multiple papers excluded in the current analysis due to missing information, researchers should aim to consistently and transparently report on all study design factors and participant characteristics used in EMA studies to allow for in-depth assessment and analysis of these variables on compliance. This also includes minimum thresholds of compliance as well as dropout or missing data. Researchers could consider using guidelines such as the CREMAS guidelines to support with reporting procedures (Liao et al., 2016).

4.3 Conclusion

In conclusion, this meta-analysis demonstrates EMA methodology can be used as an assessment method for individuals with anxiety disorders, with a high estimate of compliance rates across studies. However, like previous research, compliance is highly variable across these studies, with multiple studies excluded in the current analysis due to missing information on compliance. Together, with the small number of studies included in this review, this makes it difficult to make concrete and generalizable conclusions about compliance rates in EMA across anxiety disorder populations. Moderator analyses were conducted as exploratory given the small number of included studies. The findings showed all variables (study duration, prompt frequency, number of items per assessment, training, participant age, and gender) did not significantly explain differences in compliance rates. The findings highlight the need for further research, followed by a better-powered meta-analysis, that includes a greater number of studies, with a wider variation in moderating variables, to meaningfully explore possible factors associated with compliance in this population. Specifically, EMA studies should aim to consistently report on all EMA protocol and participant-level characteristics included. Future meta-analyses should also aim to explore comparisons to non-anxious samples, and whether anxiety disorder diagnosis moderates compliance in this population. This would support with generating more representative conclusions about compliance in EMA studies in individuals with anxiety disorders.

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Chapter 3: Bridging Chapter

The meta-analysis in Chapter Two found compliance with EMA methods is generally high in individuals with anxiety disorders, suggesting these methods are broadly acceptable and feasible at the participant-level to implement in real-world settings for this population. However, substantial heterogeneity across studies was observed indicating compliance is not uniform and may be influenced by other factors such as study design or sample-level characteristics. Moderator analyses, however, indicated that none of the moderating variables related to study design (study duration, number of prompts per day, number of items per assessment, use of training) nor participant characteristics (age and gender) significantly predicted compliance. It is important to consider these findings were underpowered due to the small number of studies included in the analysis and should therefore be interpreted with caution. It is possible anxiety-specific symptoms and processes may influence compliance in this population, and this warrants further exploration in future research. The findings highlighted the inconsistent reporting of information within EMA protocols, including, crucially, information of compliance rates. This led to the exclusion of multiple studies from the analysis, with a lack of information available on other study-design and participant-level moderating factors, limiting the investigation of these on compliance. Furthermore, the small number of studies included, with limited numbers of studies investigating a range of specific anxiety disorder diagnoses, prevented analysis of anxiety disorder diagnoses as a moderating variable. Together, these findings underscore the importance of conducting further research through a fully powered meta-analysis that includes a larger number of studies, with a greater variation of moderating variables, including anxiety disorder diagnosis. This will support with understanding the factors that affect the engagement with EMA assessment methods in real-world settings to ensure these accurately capture the experiences of individuals with anxiety disorders in their natural environments.

While the findings from the meta-analysis were focused on studies from clinical populations, the implications represent a broader challenge within anxiety-focused research of ensuring

assessment and intervention methods are feasible and able to be implemented in real-world settings (Lau et al., 2024). Since the COVID-19 pandemic, there has been an increase in the use of digitalized mental health interventions to improve access to assessments and interventions to address underfunded and under resourced mental health services (Park et al, 2022). However, like the implementation of EMA methods in clinical populations, challenges to engagement and sustainable implementation are not limited to individuals with persistent anxiety but also extend to non-clinical settings and individuals who are responsible for early identification and prevention of anxiety in individuals.

Only two studies included in the meta-analysis included child samples. This is possibly due to many child studies coming from one parent study, leading to exclusion within the meta-analysis. However, according to a systematic review, this may also reflect that EMA studies have not yet been conducted in children under the age of seven (Heron et al., 2017). This may be explained by the higher-level meta-cognitive, interoceptive, and emotion recognition processes needed to engage with EMA methods accurately and sustainably, and that these skills may not develop fully until late childhood to early adolescence (Oana & Flavia, 2025; Riddell et al., 2024). Research suggests children may not recognise and label more complex emotions such as fear until later childhood (Widen & Russell, 2008), even though anxiety difficulties are suggested to develop as young as the age of four (Walkup et al., 2022). Instead, younger children often rely on adults around them (e.g., parents, school staff) to recognise their difficulties, scaffold their learning, and use strategies to reduce their worries and anxiety (Margolis, 2020; Tungalag, 2024).

The school setting has been highlighted as an appropriate context to support with the identification and prevention of anxiety in children as staff have prolonged contact with children, often being the first point of contact to recognise, prevent, and support children with mental health difficulties (Soneson et al., 2024). Recent campaigns (i.e., Time for Change) have encouraged school staff to engage in further training that enhances their understanding of mental health difficulties in children (Sampogna et al., 2017). However, school staff report a lack of access to this training, leading

to a lack of confidence and knowledge in how to support in early identification and prevention (O'Farrell et al., 2023). School staff have consistently called for clearer information on how to do this, highlighting training as a crucial factor to aid them in this process (Savage, 2022). However, like EMA studies, implementation of training programmes into school settings, are impacted by broader system-level (e.g., limited costs and resources, school culture) and individual-level factors (e.g., day-to-day demands).

Like individuals with anxiety disorders in the meta-analysis, school staff share similar cognitive, emotional, and practical demands that may influence their capacity to engage with training programmes. Since COVID-19, school staff have experienced an increase in workload and pressures to manage competing priorities (Creagh et al., 2025; Robinson et al., 2023). Thus, this potentially reduces the time available to engage in training programmes, especially when this may be delivered alongside, or in addition, to their current responsibilities. Some school staff have highlighted managing mental health difficulties in children is not part of their roles (Shelemy et al., 2019), possibly reducing their agency to engage with such training as this may not feel relevant, adding further burden to their already busy schedules. Therefore, this emphasizes the importance of understanding how school staff engage with training programmes to ensure they can be implemented sustainably in real-world contexts.

Understanding how to feasibly implement and sustain access to both EMA methods in individuals with anxiety disorders and training programmes for school staff relies on similar factors such as uptake and engagement. However, whilst measuring compliance, as a factor of feasibility, of individuals with anxiety disorders to EMA protocols, is important to ensure greater validity and accuracy in identification of symptoms in day-to-day life (Wrzus & Neubauer, 2023), evaluating the feasibility of training programmes for school staff requires the investigation of additional factors related to feasibility such as acceptability, demand, implementation ability, and limited efficacy testing (Bowen et al., 2009; Park et al., 2022). Addressing these factors will ensure the training is

developed so school staff are better equipped to accurately identify, prevent, and support anxiety difficulties in children (Fazel et al., 2014).

Research suggests online training programmes for school staff may improve access to training, especially where schools have limited budgets and resources, and where school staff are constrained by time and competing demands (Soneson et al., 2024). Previous feasibility studies in secondary school staff highlight online training packages are a feasible and accepted method of delivering training, and that they show promise at improving staff's confidence and agency to recognise and respond to anxiety difficulties in adolescence (Carroll, 2022; Wickson, 2022). A recent study investigated the feasibility of an online training package, based on evidence-based CBT principles (Nicola et al., 2024), in primary school staff. The training package, comprising of online videos, were delivered in a flexible and asynchronous way, and were aimed at school staff working directly with children aged four to 11 years. The videos provided psychoeducation on anxiety difficulties in children as well as strategies staff could use in their work to support anxious children. The findings demonstrated this training was both in demand and accepted by school staff and showed promise at improving school staff's responses to hypothetical scenarios detailing anxious children (Nicola et al., 2024). However, limitations were identified at both the participant-and methodological-level which may impact on understanding how feasible the training is. Findings highlighted a lack of diversity of regional and ethnic backgrounds. Additionally, the study did not investigate whether the training improved school staff's knowledge and confidence in recognising anxiety in children (which evidence suggests is needed to support with supporting parents and children alike; Reardon et al., 2020), and whether the results were sustained over time.

Therefore, given the limitations of Nicola et al. (2024) study, to contribute to the understanding of the feasibility of this training and how this translates into real-world school settings, the empirical study presented in Chapter Four aimed to conduct another feasibility study on this training. By focusing on acceptability (through participant feedback), engagement (through recruitment, retention, and dropout rates), perceived implementation ability, and potential utility

(through measurement of the effect of the training on school staff's knowledge and confidence at hypothetically recognizing as well as responding to anxiety in children), this study aimed to extend, and build upon, the results of Nicola et al. (2024). Research has emphasized that assessing the feasibility, acceptability, and effectiveness of an intervention over time is crucial to ensure it is able to be implemented consistently and sustainably (Park et al., 2022). It was hoped the short follow-up conducted in the empirical study would help to address these factors to provide further understanding around the feasibility of the training in real-world, school-based settings, further building upon Nicola et al. (2024) findings.

Chapter 4: Empirical Study

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A follow-up feasibility study on a Cognitive Behavioural Therapy (CBT)-informed online intervention on childhood anxiety for primary-school staff.

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Abstract

Aims: This study aimed to build upon previous research of an online training on childhood anxiety for primary school staff by evaluating the feasibility and preliminary efficacy of the training in a new sample of school staff. **Method:** A within-subjects pre-post (with a short follow-up) design was used. Participants completed three questionnaires pre and immediately post-training at timepoint one and three similar questionnaires four to eight weeks after timepoint one. **Results:** 27 participants were recruited, with a 26% dropout rate after timepoint one. Most staff who completed both timepoints reported the training content and research process were generally acceptable, with some strategies from the training implemented in their work. Some potential barriers were highlighted to implementing the training information. Preliminary evaluation suggests the training shows promise at improving school staff's theoretical knowledge and confidence in recognising, responding to, and intention to refer children experiencing excessive anxiety for support and warrants further investigation. **Conclusions:** The training content appears acceptable to school staff who completed the study. Recruitment challenges, limited sample diversity, and a lack of objective measurement of behaviour and knowledge change warrants further investigation to draw more robust conclusions on feasibility and effectiveness of the training.

Key words: Anxiety, Training, Intervention, Children, Schools, School Staff, Feasibility

1. Introduction

Anxiety disorders are one of the most common difficulties in children and adolescents, with an estimated worldwide-pooled prevalence rate of 6.5% in this population (Polanczyk et al., 2015). Prevalence studies suggest these figures have increased since the COVID-19 pandemic (Panchal et al., 2023; Racine et al., 2021). Excessive anxiety in children is linked with school refusal, lower academic achievement (Jones et al., 2019), relationship difficulties (Nail et al., 2015), and with psychological difficulties in later life (Bittner et al., 2007; Copeland et al., 2014). Excessive anxiety is often internalised and may be difficult to identify (Deacon, 2015; Stormont et al., 2015). Children often rely on adults to recognise and respond appropriately to their difficulties and signpost them for support (Tungalag, 2024). Parents and primary school staff report being insufficiently equipped to do this; thus children may not access the support they need (O'Farrell et al., 2023; Papandrea & Winefield, 2011; Reardon et al., 2020). Taken together, the prevalence of childhood anxiety, its associated impact, and difficulties amongst key stakeholders who support children experiencing anxiety highlights the importance of supporting these key figures in early identification and prevention in this population.

Within England, schools play an integral role within the mental health support system and are highlighted as appropriate settings for the early identification, prevention, and intervention of mental health difficulties in children (Childs-Fegredo et al., 2021). Government and national policies also emphasize a whole-school approach whereby school staff work alongside mental health leads and specialist child and adolescent mental health services to recognise, support, and appropriately refer children experiencing mental health difficulties for support (Department of Health and Social Care & Department for Education [DHSCE & DfE], 2017; National Institute for Health and Care Excellence [NICE], 2022). Since the government's green paper in 2017, this approach has been strengthened through the introduction of Mental Health Support Teams (MHSTs) who work collaboratively with school staff to support the early intervention and prevention of children

experiencing mental health difficulties. These teams also support with facilitating links between schools and specialist services (Department for Education, 2026; DHSCE & DfE, 2017). However, MHSTs are conceptualised as a complementary rather than a replacement of the role of school staff in mental health support for children, with school staff remaining well placed to identify children experiencing mental health difficulties (Department for Education, 2026).

As children spend most of their day at school, school staff have prolonged daily contact with children. As a result, they remain the first point of contact to identify, support, and make appropriate onward referrals for children who may be experiencing excessive anxiety, and therefore are in a crucial position to support with timely identification as they are likely to observe signs of anxiety in children at an early stage (Feeney-Kettler et al., 2010; Johnson et al., 2011). Furthermore, MHST coverage across the UK is still expanding, with 100% coverage not expected until 2030 (Department for Education, 2026), meaning many schools continue to rely on their own staff to recognise, respond to, and refer children experiencing excessive anxiety for further support. Consequently, taken together, ensuring staff have the appropriate knowledge and confidence to identify, respond to, and appropriately refer children experiencing excessive anxiety for further specialist support is important to ensure the guidance around wider mental health support systems for children is implemented.

Studies investigating this topic have primarily focused on teachers, however, some studies refer to participants who are also school staff in other roles. Evidence on school staff's identification of children experiencing anxiety is mixed. Some evidence suggests primary school teachers accurately recognise severe and excessive anxiety in children (Headley & Campbell, 2011,2013; Layne et al., 2006). However, in the same studies, teachers struggled to differentiate between children experiencing normal, mild-moderate, and severe anxiety, often seeing anxiety as a widespread difficulty (Headley & Campbell, 2011,2013). Furthermore, primary school teachers appear to be less concerned about students expressing internalizing symptoms, often associated with anxiety (Loades & Mastroyannopoulou, 2010; Splett et al., 2019) and have challenges in knowing when to refer children for further support (Headley & Campbell, 2011). This suggests teachers, and school staff

more generally, may misinterpret anxiety symptoms, failing to accurately identify children experiencing excessive anxiety, especially those with less obvious symptoms, therefore missing the opportunity to intervene earlier (Hanie & Stanard, 2009). Together, this highlights the importance of providing training to school staff to develop their skills in recognising, responding to, and referring children experiencing excessive anxiety for support.

School staff have expressed a need for such training (Nygaard et al., 2024; Savage, 2022), often reporting feelings of helplessness (Kidger et al., 2009) and a lack of confidence and knowledge in how to recognise and respond to anxious children (Neil & Smith, 2017; O'Farrell et al., 2023). Instead, school staff report using subjective judgments to decide how to respond (Trudgen & Lawn, 2011) meaning without the appropriate knowledge and training, staff are likely to maintain their difficulties (Allen & Lerman, 2018; Ginsburg et al., 2024). This reinforces the need for training for school staff to support early identification, intervention, and prevention of anxiety difficulties.

Despite this, school staff have different perspectives on whether mental health recognition and management is part of their roles (Cross & Currie, 2018; Shelemy et al., 2019). Whilst school staff appear to agree their role includes supporting children's mental health needs (Reinke et al., 2026), staff who had received little to no training were less likely to see this as part of their responsibilities (Maclean & Law, 2022). Additionally, applying evidence-based interventions in schools has its challenges (Forman et al., 2013). This includes challenges at the system-level (i.e., a lack of school leadership support) (March et al., 2022). At the individual level, school staff report limited time and increasing competing demands in their roles (Connolly et al., 2024), which have increased further since COVID-19, adding more pressure on school staff (Robinson et al., 2023). This emphasizes the need to understand school staff's perspectives when developing training, to account for the specific challenges they face, to ensure training can be implemented effectively into school settings (Connolly et al., 2024; Reinke et al., 2011; 2026; Shelemy et al., 2019).

So far, training for primary school staff appears effective at improving knowledge of anxiety symptoms, strategies to use in their day-to-day work (Ginsburg et al., 2024) and their confidence to

recognise and respond to mental health difficulties (Soneson et al., 2024). A recent study investigating the feasibility of a newly developed online training, based on evidence-based cognitive behavioural therapy (CBT) principles, on childhood anxiety for primary school staff was conducted by Nicola et al. (2024). The findings demonstrated the training's promise at improving school staff's responses to hypothetical scenarios describing children experiencing anxiety. The results highlighted staff's responses shifted from an anxiety-promoting response (suggested to maintain children's anxiety) to an autonomy-promoting response (suggested to support children experiencing anxiety) (Allen & Lerman, 2018). School staff also reported the training was acceptable and useful, and appeared accessible to staff following a large uptake in the training. However, the study did not investigate whether the training facilitated school staff's ability to recognise anxiety in children nor if it improved their confidence in their recognition of, responses to, and intention to refer children experiencing excessive anxiety for support. These are key areas which are highlighted as gaps where school staff could be better supported through training (Reardon et al., 2020). Nicola et al. (2024) also only measured immediate effects following the training, and research emphasizes the need to consider the feasibility of an intervention over time (Park et al., 2022). The sample diversity was also limited.

Since Nicola et al. (2024) study, there has been ongoing change in the landscape of children's mental health systems and training alike. The implementation of MHSTs has continued to expand across the UK, thus it is possible these may already be providing adequate support to both school staff and children alike (Ellins et al., 2023; Savage, 2022), potentially reducing their need for such training. Additionally, around the time of Nicola et al. (2024) study, school staff were initially encouraged to engage in training following the de-prioritisation of this after the COVID-19 pandemic (Perry, 2022), suggesting a possible increase in appetite for training at that time. Consequently, taking the limitations in Nicola et al. (2024) study and the ongoing evolution of children's mental health systems and training priorities together, the aim of the current study was to conduct a new feasibility study on the same training used by Nicola et al. (2024) to build upon the existing findings.

Specifically, the current study aimed to build upon Nicola et al. (2024) by:

a. Assessing whether the training is feasible and acceptable to a different sample of school staff.
b. Assessing whether anxiety- and autonomy-promoting responses were maintained over time.
c. Assessing whether the training improved school staff's knowledge and confidence to theoretically recognise, respond to, and refer children experiencing excessive anxiety for support and if these effects were maintained over time.
d. Evaluating whether school staff implement strategies from the training in their day-to-day work.

These aims are crucial to ensure any uncertainties around the feasibility of the training are addressed before further research and wider roll out of the training is considered. By focusing on factors of acceptability, demand, implementation utility, and limited efficacy testing, it was hoped this would build upon the understanding of the training's feasibility to be implemented into school settings (Bowen et al., 2009; Eldridge et al., 2016; Orsmond & Cohn, 2015).

2. Methods

2.1 Design

To build upon Nicola et al. (2024) findings, a new quantitative feasibility study was conducted. This was important to assess further considerations around the feasibility and implementation of the training prior to further research (Eldridge et al., 2016; Lancaster, 2015; National Institute of Health and Care Research, 2021).

To assess a change in primary school staff's knowledge and confidence to theoretically recognise and respond to children experiencing anxiety, a within-subjects pre-post (with a short follow up) design was used. There were two timepoints to the study. Initial pre and immediate post-

training effects were measured at the first timepoint. Maintenance effects were measured at the second (follow-up) timepoint, which was sent to participants four weeks after completing timepoint one.

2.1.1 Patient and Public Involvement (PPI)

A PPI group was established to inform the development of an add-on video to the training videos developed by Nicola et al. (2024). This also ensured the measures developed for the current study were appropriate and accessible to school staff. Individuals were recruited through expressions of interest through personal contacts of the research team and local schools known to the researchers. The group was made up of class teachers (n = 2), teaching assistants (n = 1), and pastoral support staff (n = 2) working directly with children aged four to 11 years old, as well as mental health professionals working within school-based mental health teams (n = 2). The group were consulted individually. Feedback was implemented into the content and design of the add-on video, and amendments, including adaptations to the wording, were made to the questionnaires.

Alongside this, a second PPI group, made up of trainee clinical psychologists from a university doctoral programme, was created to inform and refine the development of study-derived vignettes. Feedback around the anxiety symptoms used and clarity around categorisation of the vignette severity levels was incorporated. The vignettes were then reviewed by the school staff PPI group to ensure they were ecologically valid for a school setting and represented the symptoms school staff may recognise in their day-to-day work. Some changes to the wording of the vignettes were incorporated at this stage.

2.2 Participants and Recruitment

Participants were primary school staff, in any job role, who had direct contact with children between the ages of 4 and 11 years old. Staff working in middle schools, schools that bridge the gap between primary (ages four to 11) and secondary (ages 11-18) schools and cater to children aged

around nine to 14 years old, were included if they had direct contact with the specified age range of children above.

Exclusion criteria included school staff who:

a) Had previously attended any mental health training course that included substantial information on childhood anxiety which had occurred within the last five years prior to expressing an interest in the current study.
b) Worked exclusively within special educational needs schools as content of the training for children with additional needs may require adaptations that the current training did not address.
c) Had accessed separate, additional mental health training (with a specific focus on childhood anxiety), other than the recommended resources suggested through the current study, between the first and second timepoints. This was to prevent interference when evaluating the possible maintenance effects of the current training. Staff were asked about the type, duration, and content of the training they had attended.

Seven individuals (two primary school headteachers, one senior pastoral lead, one senior lead of an academic federation, one regional school co-ordinator, and two university staff working on an educational mental health programme) consented to act as study gatekeepers. This method was used to promote snowball recruitment of school staff (Sadler et al., 2010). Gatekeepers were asked to share the study advert (see Appendix H) alongside a lay summary of the study with any school staff contacts they had. Following recruitment challenges, Chapter Five details additional recruitment methods conducted following ethical amendments made. Feedback from gatekeepers and school staff resulted in the development of a short recruitment video which was shared with gatekeepers to disseminate amongst school staff they had contact with (see Appendix I). Following persistent recruitment challenges and further feedback from gatekeepers and school staff, an ethical amendment was made to allow direct contact with schools across the UK. This was hoped to facilitate recruitment of school staff from a wide range of geographical backgrounds to address

limitations in the sample diversity in Nicola et al. (2024). 367 schools across all regions of the UK were contacted via email and sent a summary of the study and study advert. A senior member of their school was encouraged to disseminate this information to their school staff. Furthermore, JM attended one school in person to deliver a short presentation on the study. The study information was also shared through social media.

2.3 Online Intervention

The original training package developed by Nicola et al. (2024) consisted of three videos (totalling around 30 minutes) which were designed using the "Teacher's Guide" found within the "Helping your Child with Fears and Worries: A Self-Help Guide for Parents" (Creswell & Willets, 2019) and therapists' manuals (Halldorsson et al., 2021). Appendix J provides a description of each video. For more details on how these videos were developed, see Nicola et al. (2024).

As part of the ongoing research into the training package developed by Nicola et al. (2024) and to build upon their findings, JM designed and created an additional video to add to the training package. Following feedback from the school staff PPI group and discussions in the research team, it was identified the original training did not provide sufficient detail on recognising specific signs and symptoms to look for in children experiencing anxiety nor provide explicit consideration to when anxiety may be becoming problematic. This additional content was considered fundamental as the literature suggests school staff's confidence and ability to recognise anxiety in children is inconsistent (Headley & Campbell, 2011, 2013; O'Farrell et al., 2023; Splett et al., 2019). Therefore, the add-on video was created to provide more explicit information on recognising anxiety in children to support school staff before they consider what actions to take next (Connolly et al., 2024). Including this content also ensured the training aligned with the current study's expanded aims of measuring school staff's recognition of, as well as their responses to, anxiety in children, allowing for a more meaningful evaluation of the training's potential efficacy in improving recognition of anxiety in children.

The video was around six minutes long and was added in between videos one and two from the original training package. The final online training consisted of four videos totalling around 35 minutes. The add-on video script was created by JM using the same resources as Nicola et al. (2024). The animation software, VideoScribe, was used to ensure consistency in the format and visuals. PPI were consulted and feedback was implemented into both the script and animations, text, and speed of the video. The video included a narrative commentary as well as optional subtitles to increase accessibility.

The first three videos used scenarios detailing worries and behaviours commonly seen in children in school-based settings. This is crucial to support with school staff's understanding and implementation of information into their work (Nicola et al., 2024; Shelemy et al., 2019). Furthermore, to support with interactivity and solidification of learning from the videos, a short quiz (11 questions in total) was completed at the end of each of the first three videos (see Appendix K). The same questions used by Nicola et al. (2024) for the first and third quizzes were used to support with consistency in the training.

Like Nicola et al. (2024), the training process remained asynchronous, allowing staff to complete the study at a time that suited them around their work schedules and commitments (Shelemy et al., 2019). School staff who were interested in taking part could do this immediately from the study link or QR code to reduce the number of times they needed to access the information.

2.4 Measures

2.4.1 Demographic Questionnaire

Demographic information was collected prior to staff completing the training. This included participant's age, gender, ethnicity, job role, highest level of education, length of time working in education, prior mental health training and/or pastoral responsibility, school Ofsted rating, and how they heard about the study (see Appendix L).

2.4.2 Teacher Responses to Anxiety in Children (TRAC) Questionnaire (Allen & Lerman, 2018)

School staff completed the TRAC measure pre-training, immediately post-training, and at the second (follow-up) timepoint to assess their theoretical responses to anxiety in children based on CBT theory (see Appendix M). The questionnaire consists of nine scenarios describing common behaviours anxious children may exhibit within a school setting based on three types of anxiety difficulties (separation anxiety, social anxiety, generalized anxiety). For each scenario, there are six response options that relate to different approaches in responding to anxious children. School staff are asked to rate how likely they are to use each response using a one to seven Likert scale (very unlikely [1] to very likely [7]). For each scenario, three of the six response types form the autonomy-prompting subscale (encouragement, reward, and problem-solving responses), and the other three response types form the anxiety-promoting subscale (avoidance reinforcement, sanctions, and overprotection responses). School staff were provided with the instructions and questions from the original measure (Allen & Lerman, 2018), and the scoring system used was consistent with this also. Differences between the scores (indicated by low anxiety-promoting and high autonomy-promoting response scores) indicated a positive change in knowledge and perceived responses to anxious children had occurred and been maintained. The measure has demonstrated good validity and reliability among primary school teachers in the UK (Allen & Lerman, 2018).

2.4.3 Vignettes and Vignette Questionnaire

Nine vignettes, describing children with varying levels of anxiety symptoms, were developed and adapted by JM based on previous vignette studies (Loades & Mastroyannopoulou, 2010; Splett et al., 2019; Wickson, 2022) (see Appendix N). The vignette content was based on children aged four to 11 years to reflect the age range school staff may work with. Vignette descriptions were developed using DSM-5 criteria as a guideline (APA, 2013) to describe children exhibiting a range of generalized, separation, and social anxiety symptoms. These symptoms are common across childhood (Rockhill et

al., 2010; Smith et al., 2012). The training content also focused on a wide range of symptoms children may experience in school settings; therefore, it was hoped the vignettes accurately reflected this.

The vignettes differed in symptom severity, with three vignettes detailing severe symptoms (clinical levels of anxiety), three detailing mild-moderate symptoms, and three detailing low-level symptoms (consistent with non-clinical symptoms consistent with temporary, day-to-day worries). Background details in each vignette differed to represent the variation in presentations seen in school settings. Gender-neutral pronouns were used to represent each child as teachers may be influenced by gender when identifying vignettes describing children experiencing internalizing symptoms (Loades & Mastroyannopoulou, 2010). Three vignettes (one for each severity level) were presented pre-training, immediately post-training, and at follow-up. Vignettes were presented in different severity orders to avoid order effects.

The vignettes were initially reviewed and rated (based on symptom severity) by trainee clinical psychologists (n = 18) which yielded an 85% agreement. The vignettes (n = 4) that yielded less agreement were then amended, subsequently checked by the school staff PPI group to ensure representativeness, and then reviewed and rated again by trainee clinical psychologists until a 100% agreement was reached.

A vignette questionnaire (see Appendix O), accompanying each vignette, was developed and adapted as part of this study from previous vignette-based studies (Carroll, 2022; Jacobs & Loades, 2016; Loades & Mastroyannopoulou, 2010; Splett et al, 2019; Wickson, 2022). Prior to completing the vignettes, school staff were asked to rate their confidence (based on a 10-point Likert scale from “not at all confident” [0] to “definitely confident” [10]) in recognising and responding to anxious children and referring them for further support. After reading each vignette, subsequent questions asked staff to identify if there was a mental health difficulty being presented, and if yes, then what type. They were then asked to rate (based on 10-point Likert scales) how severe the difficulties were (no problem [0] to severe [10]), their level of concern (not concerned [0] to extremely concerned [10]), likelihood of offering help and referring for further support (extremely unlikely [0] to extremely

likely [10]) and confidence in providing help to the child (not at all confident [0] to definitely confident [10]). For mild-moderate and severe vignettes, higher scores on each Likert scale indicated higher levels of each outcome assessed (i.e., higher Likert score for concern = higher levels of concern). The opposite was favourable for low vignettes. The number of correct responses to anxiety being identified as the mental health difficulty (for the mild-moderate and severe vignettes) were coded as 1 = correct, 0 = incorrect. If participants mentioned anxiety in the free-response section, this was also scored as correct. Once they read all three vignettes at pre-, immediate post-training, and at follow-up, they were asked to rank each vignette from least to most severe. Each correctly ranked vignette was given one mark (scoring a maximum of three marks). Higher scores demonstrated a greater level of knowledge and recognition accuracy.

2.4.4 Structured Feedback Questionnaires

Two structured feedback questionnaires were developed and adapted from Nicola et al. (2024). The first feedback questionnaire was administered immediately post-training to assess school staff's experience of the training and overall research process (see Appendix P). The second feedback questionnaire was administered at follow-up to assess school staff's use of the training content and resources in their work (see Appendix Q). School staff were asked to rate statements in both questionnaires using a seven-point Likert scale (strongly disagree [1] to strongly agree [7]). They were also asked a series of closed questions (with Yes, No, Not sure responses). A small number of open-ended questions were included in both questionnaires.

2.5 Procedure

All study materials and training videos were uploaded and embedded into Jisc surveys (Jisc, 2025). Two Jisc links were created for each timepoint and were active between March 2025 – March 2026. Once recruitment opened, gatekeepers were contacted to share the study information. The study advert was shared via social media. School staff who were interested in taking part were

encouraged to click the first timepoint link or QR code. They were then presented with the participant information sheet (PIS; Appendix R) and consent form of which they had to agree with all statements (Appendix S). School staff then completed the pre-training questionnaires (demographics questionnaire, vignettes, and TRAC measures). They then watched all training videos and completed the associated quizzes before completing the post-training questionnaires (vignettes, TRAC, and structured feedback measures). School staff were asked to provide their email address to be sent the second (follow-up) link and whether they would consent to be contacted for future research. Upon completing this, they were provided with a debrief form. This included two downloadable information sheets (one, developed by JM as part of the current study, and one, developed by Nicola et al. (2024), see Appendix T) as well as information on additional resources to refer to, and details of mental health support. The first timepoint was estimated to take up to 90 minutes.

Participants were allocated a unique participant ID number upon completion of timepoint one to match their data together. Staff were sent a secure email via Outlook four weeks after completing timepoint one with access to the second timepoint link and their unique ID number to input. This link presented staff with a shorter information sheet (see Appendix U), as requested by PPI, before completing the follow-up questionnaires (a repeat of the vignette and TRAC measures, and another structured feedback questionnaire). They were provided with another debrief form (see Appendix V). School staff could provide their email address, via a separate Jisc link, to enter a randomized prize draw to win one of five £20 vouchers. The second timepoint was estimated to take up to 20 minutes.

School staff could complete both timepoints in their own time, either in one sitting or by saving their progress and returning to the links later. They had up to one week to complete timepoint one, and up to four weeks, to account for periods of school holidays, to complete timepoint two. School staff were sent email reminders up until the four-week deadline. Staff could contact the researchers at any time throughout the study timeline.

2.5.1 Ethical Considerations

Ethical approval was granted for the study by the University of East Anglia Faculty of Medicine and Health Sciences Research Ethics Committee (ETH2526-0651). All school staff provided informed consent to participate in both timepoints. Staff had two weeks following completion of the first and second timepoints to request withdrawal of their data. Participants' email addresses were de-identified from their unique participant ID numbers and stored in separate password-protected databases. Following a technical issue with Jisc, four participants were unable to download a copy of the debrief form. They were emailed this separately.

2.6 Analysis

Feasibility studies are not primarily designed to analyse null hypothesis-testing, usually due to insufficient power (Orsmond & Cohn, 2015). However, evaluation of preliminary effects can be used to assess a training's promise at improving responses to various outcomes. Previous similar studies have recruited between 29 – 80 participants (Nicola et al., 2014; Perkins et al., 2021; Wickson, 2022). The current study aimed for a recruitment marker of 40 participants.

As screening was not automatic through the Jisc platform, participants (n = 1) who had reported substantial mental health training prior to completing the study, or in between the first and second timepoints, were not able to be excluded until they submitted their data. Instead, the information they submitted regarding the training they had attended had to be manually reviewed by the research team, during data-analysis, to determine if this met exclusion criteria and then manually excluded if this was met.

Descriptive statistics were used to analyse demographic, participant feedback, recruitment, and dropout rate data. To assess whether a change in school staff's knowledge and confidence in theoretically recognising and responding to anxiety in children had occurred, pre, post, and follow-up means and standard deviations were calculated for each outcome (TRAC scores, general confidence scores, and vignette-based question scores). Cohen's d effect size was used to estimate within-group

differences between pre- and post-training (to assess immediate effects) and pre and follow-up data points (to assess maintenance effects). The direction of change was also described. Effect sizes were interpreted using small (0.2), moderate (0.5), and large (0.8) scales (Fritz et al., 2012). Descriptive statistics were used to report on a change in school staff's theoretical recognition of anxiety in the vignettes.

As open-ended responses on the feedback questionnaires were supplementary to support overall feasibility findings, were generally short (from one-word to short sentences), and were limited (less than ten responses at each timepoint), formal qualitative data analysis was not conducted. Instead, data were reviewed and reported descriptively to identify general ideas and themes relating to participants' experiences of the training and use of the information in their work.

3. Results

27 participants were recruited to the study, with a 26% (n = 7) dropout rate after timepoint one. Data were then cleaned and prepared for analysis. Two participants were excluded, one for incomplete pre-training data (thus comparisons could not be made to post-training and follow-up data) and one for meeting exclusion criteria (mental health training which included substantial information on childhood anxiety). The latter participant was manually excluded during data analysis. Therefore, 25 participants who completed all pre and immediate post-training measures and had the opportunity to complete the follow-up measures were included in the final analysis.

3.1 Demographic Information

Table 1 shows a summary of the demographic data.

Table 1

Participant Demographic Characteristics (n = 25).

Demographic	Characteristic	Frequency (%)
Role	Class teacher	7 (28%)
	Teaching assistant, HLTA	12 (48%)
	Trainee teacher	1 (4%)
	ELSA, LSA	1 (4%)
	Pastoral Team	1 (4%)
	Head of Phase / Subject	1 (4%)
	Managerial role	1 (4%)
	MSA	1 (4%)
Time Working in Education		
	Less than 6 months	1 (4%)
	2-5 years	4 (16%)

	5-10 years	8 (32%)
	10+ years	12 (48%)
Highest Level of Education		
	GCSEs	5 (20%)
	A-levels	1 (4%)
	Undergraduate degree	8 (32%)
	Postgraduate Certificate	3 (12%)
	Postgraduate degree (Masters)	5 (20%)
	Other	3 (12%)
Pastoral Responsibility		
	Yes	4 (16%)
	No	21 (84%)
School Ofsted Rating		
	Outstanding	9 (36%)
	Good	15 (60%)
	I don’t know	1 (4%)

Region		
	London	3 (12%)
	South-East England	4 (16%)
	South-West England	2 (8%)
	East of England	15 (60%)
	East Midlands	1 (4%)
Age		
	25-34	8 (32%)
	35-44	5 (20%)
	45-54	8 (32%)
	55-64	4 (16%)
Gender		
	Female	23 (92%)
	Male	2 (8%)
Ethnicity		
	White-British	19 (75%)

	White-English	3 (12%)
	White-Irish	1 (4%)
	Any other white background	2 (8%)
Prior Mental Health Training		
	Yes	9 (36%)
	No	16 (64%)
Recruitment Platform		
	Social media (Facebook)	1 (4%)
	Social media (LinkedIn)	1 (4%)
	Recommended by manager / boss	16 (64%)
	Recommended by friend / colleague	5 (20%)
	Other	2 (8%)

Note. HLTA – Higher-Level Teaching Assistant. ELSA – Emotional Literacy Support Assistant. LSA – Learning Support Assistant. MSA – Midday Support Assistant. Other Education included diplomas and level 4 national vocational qualifications. Any other white background included European. Other recruitment platform included work email and meeting participants through an inset day.

3.2. Outcome Data

Tables 2, 3, and 4 show the means and standard deviations alongside estimated effect sizes of pre- and immediate-post-training and pre- and follow-up-training differences for the TRAC, general confidence, and vignette measures.

For the TRAC measure, a negative effect size for the anxiety-promoting score pre to immediate-post training indicated a small, positive change in theoretical responses to anxiety in children. This was not maintained at follow-up. Instead, large, positive effect sizes for the autonomy-promoting score at both pre to immediate post-training, and pre-training to follow-up indicated a positive shift in school staff's theoretical responses to anxiety in children that were also maintained over time.

For the general confidence data, school staff's responses to their confidence in identifying signs of anxiety in children, their confidence in knowing how to respond, and their confidence in referring them for further support, all suggested a positive change following the training, which was also maintained at follow-up. All outcomes had moderate-large effect sizes.

For the vignette measure, all within-group differences, for both mild-moderate and severe vignettes, showed a positive shift immediately post-training which were also maintained at follow-up, indicating training had improved perceived recognition, severity, concern, likelihood and confidence in offering help, and likelihood of referring for further support. For mild-moderate vignettes, all had small-moderate effect sizes. For severe vignettes, large effect sizes were seen for pre- and post-training differences in perceived severity, and pre- to post-training and follow-up differences in perceived offer of help. For low-anxious vignettes, results were mixed. Within-group effect sizes indicated a small but positive shift in knowledge for pre to follow-up differences in perceived concern and likelihood of referring for further support. These were not seen immediately post-training. Within-group differences for perceived severity and likelihood of offering help for low-anxious vignettes were in the opposite direction to that which indicated a positive change in immediate and maintained knowledge.

Table 2

Within-group differences for pre- and immediate post-training, and pre- and follow-up training TRAC scores.

Subscale	Mean (SD)			Pre > Post ES within-group difference (95% CI)	Pre > Follow-up ES within-group difference (95% CI)
	Pre*	Post*	Follow-up**		
Anxiety-promoting total score	2.65 (0.63)	2.56 (0.65)	2.79 (0.73)	-0.22 (-0.61 – 0.18)	0.29 (-0.19 – 0.75)
Autonomy promoting total score	4.88 (0.80)	5.65 (0.98)	5.51 (0.73)	**1.18** (0.66 – 1.68)	**1.17** (0.55 – 1.76)

Note. Post = scores immediately post-training at first timepoint. Follow-up = scores at second timepoint (four to eight weeks after post scores). "*" denotes n = 25 (for all available participants at pre and immediate post). "**" denotes n = 19 (for all participants who had matched data at pre/post and follow-up). Pre–post comparisons are based on n = 25; pre–follow-up comparisons are based on participants with complete data (n = 19). The pre mean used in the pre > follow-up comparison reflects this subset. ES = effect size, based on Cohen's d. Negative ES for both comparisons for anxiety-promoting subscale is desirable. Positive ES for both comparisons for autonomy-promoting subscale is desirable. Medium-large effect sizes are highlighted in bold.

Table 3

Within-group differences for pre- and immediate post-training, and pre- and follow-up training general confidence scores.

Question	Mean (SD)			Pre > Post ES within group difference (95% CI)	Pre > Follow-up ES within-group difference (95% CI)
	Pre*	Post*	Follow-up**		
How confident are you that you could recognise signs of anxiety in children you work with?	6.48 (1.81)	7.72 (1.65)	7.84 (1.57)	**0.87** (.40 – 1.30)	**1.19** (0.59 – 1.77)

If you spotted signs of anxiety in a child you work with, how confident would you be in knowing how to respond?	5.92 (1.96)	7.68 (1.52)	7.32 (1.83)	**1.04** (0.55 – 1.52)	**0.63** (0.13 – 1.11)
If you spotted signs of anxiety in a child you work with, how confident would you be in referring them for further mental health support?	4.88 (2.30)	7.28 (1.77)	6.79 (2.27)	**1.27** (0.73 – 1.79)	**0.80** (0.27 – 1.31)

Note. Post = scores immediately post-training at first timepoint. Follow-up = scores at second timepoint (four to eight weeks after post scores). "*" denotes n = 25 (for all available participants at pre and immediate post). "**" denotes n = 19 (for all participants who had matched data at pre/post and follow-up). Pre–post comparisons are based on n = 25; pre–follow-up comparisons are based on participants with complete data (n = 19). The pre mean used in the pre > follow-up comparison reflects this subset. ES = effect size, based on Cohen's d. Positive ES for all comparisons are desirable. Moderate-large effect sizes are highlighted in bold.

Table 4

Within-group differences for pre- and immediate post-training, and pre- and follow-up training vignette measure scores.

Question	Vignette severity	Mean (SD)			Pre > Post ES within-group difference (95% CI)	Pre > Follow-up ES within-group difference (95% CI)
		Pre*	Post*	Follow-up**		
How severe do you think X's difficulties are?	Non-anxious	2.36 (1.47)	4.52 (1.56)	2.53 (2.01)	**1.03*** ** (0.54 – 1.51)	0.25*** (-0.21 – 0.71)
	Mild-moderate	4.56 (1.83)	5.36 (2.06)	5.27 (1.81)	0.31 (-0.10 – 0.70)	0.43 (-0.06 – 0.91)
	Severe	6.84 (2.06)	8.16 (1.95)	7.47 (1.71)	**0.92** (0.44 – 1.38)	0.37 (-0.10 – 0.83)
If X is a child you work with, how concerned would you be about them?	Non-anxious	3.16 (2.36)	5.08 (1.89)	2.53 (2.27)	**0.78*** ** (0.32 – 1.22)	-0.09*** (-0.54 - 0.36)
	Mild-moderate	5.24 (1.88)	5.84 (2.34)	5.63 (2.50)	0.23 (-0.17 – 0.63)	0.28 (-0.18 – 0.74)
	Severe	7.64 (1.96)	8.72 (1.54)	8.21 (1.27)	**0.70** (0.25 – 1.13)	0.23 (-0.23 – 0.69)
How likely would you be to offer help to this child?	Non-anxious	4.68 (3.04)	7.04 (2.56)	4.84 (3.13)	**0.77*** ** (0.32 – 1.22)	0.14*** (-0.31 – 0.59)
	Mild-moderate	7.00 (2.63)	7.36 (2.66)	7.37 (2.85)	0.17 (-0.23 – 0.57)	0.23 (-0.23 – 0.68)
	Severe	8.32 (1.68)	9.00 (1.29)	8.53 (2.20)	0.43 (0.02 – 0.84)	0.12 (-0.34 – 0.57)
How confident would you be in offering help to this child?	Non-anxious	6.84 (3.04)	7.28 (1.88)	7.37 (2.41)	0.19 (-0.20 – 0.59)	0.13 (-0.32 – 0.58)
	Mild-moderate	6.56 (2.48)	6.72 (2.56)	6.79 (2.15)	0.06 (-0.34 – 0.45)	0.06 (-0.39 – 0.51)

	Severe	6.04 (2.13)	7.52 (1.90)	7.42 (1.71)	**0.98** (0.50 – 1.46)	**1.21** (0.60 – 1.80)
How likely are you to refer this child for further mental health support?	Non-anxious	2.32 (2.06)	4.04 (2.34)	1.63 (1.77)	**0.65*** **	-0.22*** (-0.67 – 0.24)
	Mild-moderate	4.24 (2.05)	6.00 (2.47)	4.79 (2.97)	**0.58** (0.15 – 1.00)	0.30 (-0.17 – 0.75)
	Severe	7.00 (2.43)	8.12 (1.83)	7.89 (2.13)	**0.49** (0.07 – 0.90)	0.26 (-0.20 – 0.72)

Note. Post = scores immediately post-training at first timepoint. Follow-up = scores at second timepoint (four to eight weeks after post scores). "*" denotes n = 25 (for all available participants at pre and immediate post). "**" denotes n = 19 (for all participants who had matched data at pre/post and follow-up). Pre–post comparisons are based on n = 25; pre–follow-up comparisons are based on participants with complete data (n = 19). The pre mean used in the pre > follow-up comparison reflects this subset. For mild-moderate, severity ratings, pre > follow-up is matched on n = 18 due to a missing response at follow-up for this question. ES = effect size, based on Cohen's d. Positive ES for all comparisons are desirable except those noted with "***" where a negative ES is desirable. Moderate-large effect sizes are highlighted in bold.

Tables 5 and 6 show the % of correct responses to vignette identification and ranking measures. The means and median are presented alongside pre to immediate-post and pre to follow-up training changes in these scores.

For both vignette ranking and identification, there was a negative shift in correct ranking and identification of the vignettes between pre and immediate post-training. This shift was maintained at follow-up for vignette ranking accuracy but was not maintained for vignette identification accuracy. These results suggest school staff experienced a decrease in recognition accuracy after the training. For vignette ranking accuracy, overall scores show 16% of staff improved between pre-training and both immediate post-training (n = 4) and at follow-up (n = 3) at correctly ranking the vignettes, whereas 20% (n = 5) declined between pre-training and immediate post-training and 26% (n = 5) declined between pre-training and follow-up. The rest (60% (n = 15) and 58% (n = 11) respectively) stayed the same. For vignette identification accuracy, overall scores show only 8% (n = 2) of staff improved between pre-training and immediate post-training and 32% (n = 6) improved between pre-training and follow-up at correctly identifying the vignettes, whereas 48% (n = 12) declined between

pre- and immediate post-training, and 32% (n = 6) declined between pre-training and follow-up. The rest (44% (n = 11) and 37% (n = 7) respectively) stayed the same.

Table 5

Mean and median change for pre- and immediate post-training and pre- and follow-up training vignette ranking scores.

		% correct responses	Mean (SD)	Median
Timepoint	Pre*	77	2.32 (0.95)	3
	Post*	72	2.16 (1.11)	3
	Follow-up**	74	2.21 (1.08)	3
Datapoint comparisons	Pre > post change	--	-0.16 (1.21)	0
	Pre > follow-up change	--	-0.21 (1.18)	0

Note. Post = scores immediately post-training at first timepoint. Follow-up = scores at second timepoint (four to eight weeks after post scores). "*" denotes n = 25 (for all available participants at pre and immediate post). "**" denotes n = 19 (for all participants who had matched data at pre/post and follow-up). Pre–post comparisons are based on n = 25; pre–follow-up comparisons are based on participants with complete data (n = 19). The pre mean used in the pre > follow-up comparison reflects this subset. % correct responses = total number of correct responses divided by total number of all responses across all participants. A positive mean and median change is desirable.

Table 6

Mean and median change for pre- and immediate post-training and pre- and follow-up training vignette identification scores.

		% correct responses	Mean (SD)	Median
Timepoint	Pre*	76	2.28 (0.61)	2
	Post*	61	1.84 (-.47)	2
	Follow-up**	77	2.32 (0.95)	3
Datapoint comparisons	Pre > post change	--	-0.44 (0.71)	0

	Pre > follow-up change	--	0 (0.82)	0

Note. Post = scores immediately post-training at first timepoint. Follow-up = scores at second timepoint (four to eight weeks after post scores). "*" denotes n = 25 (for all available participants at pre and immediate post). "**" denotes n = 19 (for all participants who had matched data at pre/post and follow-up). Pre–post comparisons are based on n = 25; pre–follow-up comparisons are based on participants with complete data (n = 19). The pre mean used in the pre > follow-up comparison reflects this subset. % correct responses = total number of correct responses divided by total number of all responses across all participants. A positive mean and median change is desirable.

3.3 Acceptability and Feasibility Data

3.3.1 Participant Feedback: Training and Research Process

Table 7 shows the means and standard deviations from both initial and follow-up feedback questionnaire items. Generally, results showed participants rated the training as easily accessible, suitable and applicable to a primary school setting, and was deemed helpful and useful in supporting children staff may work with. Most staff deemed the training as complimenting their responsibilities; however, some staff also agreed the training added to their responsibilities, suggesting some staff may see this as a burden to their role. Most staff deemed the content, length, and pace of the training to be appropriate, and agreed they would not have preferred an alternative format of training. Instead, staff reported the need for more training on mental health.

Regarding the research process, school staff indicated they enjoyed participating and disagreed there were difficulties with finding the time to complete the study. The questionnaires and vignettes were deemed as understandable and applicable to a school setting indicating the appropriateness of the measures for school staff.

Table 7

Means and standard deviations from the initial and follow-up structured feedback questionnaires.

	Item	Mean	Standard Deviation
Training			
	The content was easy to understand.	6.08	1.38
	The content was easily accessible.	6.24	1.01
	The content was applicable to a primary school setting.	6.36	0.99
	The content was suitable for primary school staff.	6.40	0.87
	The content will be helpful and useful for primary school staff.	6.44	0.82
	The content will be helpful and useful for supporting children I work with.	6.48	0.82
	I found the length of the training was appropriate.	6.24	1.05
	I found the training was a good pace throughout.	6.20	1.08
	I feel another format other than a pre-recorded video would have been a better way of delivering the content.	3.24	1.81
	I would have preferred several trainings on this topic.	3.96	1.49
	The training is important for primary school staff in their work.	6.40	1.15
	I feel this training compliments my responsibilities at work.	6.24	1.36
	I feel this training adds to my responsibilities at work.	4.44	1.76
	I feel that there needs to more training on mental health delivered to school staff.	6.20	1.08
	I would recommend the video to colleagues at my own and at different schools.	6.08	1.08
	I will use some of the strategies from the training in my work.	6.46	0.83
	I feel that there will be difficulties with using the content and strategies from the training in my work.	2.92	1.79
Research Process			
	I found it difficult to find the time to complete this training.	3.00	1.73
	I found there were other difficulties that made it hard to complete this training.	2.04	1.49
	I understood what the questionnaires were asking me.	6.20	0.96
	The vignettes were easy to understand.	6.12	1.33
	The vignettes were applicable to a primary school setting.	6.20	1.00
	It took too long to complete all of the questionnaires.	3.12	1.33
	I enjoyed taking part in the study.	6.21	1.02
Implementation of Strategies			

	Since completing the training, I have found the content from the training helpful and useful for supporting children I work with.	5.37	1.38
	Since completing the training, I have found it easy to use the content and strategies with children I work with.	5.05	1.18
	Since completing the training, I have found there have been challenges / barriers to using the training in my work.	2.89	1.56

Note. Means and standard deviations for training and research process variables included data calculated from all participants (n = 25), whereas means and standard deviations from implementation of strategies variable included only data from participants who completed the follow-up (n = 19). Scores ranged from strongly disagree (1) to strongly agree (7).

3.3.2 Strategy Implementation

Immediate post-training feedback indicated school staff felt they would use the strategies in their day-to-day work. At follow-up, most staff agreed the content had been helpful and useful for the children they worked with, and they found it easy to use this in their day-to-day work. Most staff disagreed there were challenges or barriers to using the content in their work.

Table 8 shows the frequencies and percentages of school staff's self-reported use of the strategies from the training as well as the potential change in the use of these strategies after completing the training. The strategies used most by staff were praise / rewards (74%, n = 14), normalizing statements (84%, n = 16), modelling coping behaviours and showing curiosity (89%, n = 17). Averaging across all strategies, around 54% of staff reported using previously used strategies more after completing the training, and around 12% of staff reported using some strategies for the first time since the training. Setting SMART goals (50%, n = 4) and problem-solving (57%, n = 4) were the strategies staff reported they used most frequently for the first time. Showing curiosity (70%, n = 12), creating a step-by-step plan (66%, n = 4), checking in with the child about their worries (82%, n = 9), and speaking to parents / carers (83%, n = 5) were the strategies staff reported they had used before and had used more frequently since the training.

Most staff (63%, n = 12) had not downloaded nor accessed the information worksheets. For the 21% of staff (n = 4) who said they had downloaded the resources, 50% (n = 2) said they had referred to it. 95% of staff (n = 18) said they had not accessed any of the suggested additional resources and 100% (n = 19) said they had not signed up to more training. 22% of staff (n = 4) said they had referred a child they were concerned about for further support. They referred them to the school nurse / counsellor (n = 1), pastoral team (n = 1), GP (n = 1), and an external charity (n = 1).

Table 8

Frequencies and percentages of the use of the strategies since completing the training.

Strategy	Use of Strategy	Frequency (%)	Change in use of the strategy after completing the training.	Frequency (%)
Normalizing statements				
	Yes	16 (84%)	Never used it before, begun using it since.	2 (12%)
	No	2 (11%)	Used it before but not used it more frequently.	7 (44%)
	Not sure	1 (5%)	Used it before, and used it more frequently.	7 (44%)
Modelling helpful coping behaviours				
	Yes	17 (89%)	Never used it before, begun using it since.	1 (6%)
	No	2 (11%)	Used it before but not used it more frequently.	7 (41%)
	Not sure	0 (0%)	Used it before, and used it more frequently.	9 (53%)
Being curious about why the child is feeling a certain emotion (i.e., using open questions)				
	Yes	17 (89%)	Never used it before, begun using it since.	1 (6%)
	No	2 (11%)	Used it before but not used it more frequently.	4 (24%)
	Not sure	0 (0%)	Used it before, and used it more frequently.	12 (70%)
Setting SMART goals.				
	Yes	8 (42%)	Never used it before, begun using it since.	4 (50%)

	No	8 (42%)	Used it before but not used it more frequently.	2 (25%)
	Not sure	3 (16%)	Used it before, and used it more frequently.	2 (25%)
Supporting children to think about what they need to learn and do to challenge their anxious expectations.				
	Yes	12 (63%)	Never used it before, begun using it since.	1 (8%)
	No	5 (26%)	Used it before but not used it more frequently.	5 (42%)
	Not sure	2 (11%)	Used it before, and used it more frequently.	6 (50%)
Developing a step-by-step plan to break down goals and test out worries.				
	Yes	6 (32%)	Never used it before, begun using it since.	1 (17%)
	No	12 (63%)	Used it before but not used it more frequently.	1 (17%)
	Not sure	1 (5%)	Used it before, and used it more frequently.	4 (66%)
Problem-solving				
	Yes	7 (37%)	Never used it before, begun using it since.	4 (57%)
	No	11 (58%)	Used it before but not used it more frequently.	1 (14%)
	Not sure	1 (5%)	Used it before, and used it more frequently.	2 (29%)
Creative ideas to manage worries (i.e., worry monster)				
	Yes	10 (53%)	Never used it before, begun using it since.	0 (0%)
	No	8 (42%)	Used it before but not used it more frequently.	5 (50%)
	Not sure	1 (5%)	Used it before, and used it more frequently.	5 (50%)

Using praise and rewards.				
	Yes	14 (74%)	Never used it before, begun using it since.	0 (0%)
	No	5 (26%)	Used it before but not used it more frequently.	7 (50%)
	Not sure	0 (0%)	Used it before, and used it more frequently.	7 (50%)
Checking-in to see what the child has learnt when facing their worries.				
	Yes	11 (58%)	Never used it before, begun using it since.	0 (05)
	No	7 (37%)	Used it before but not used it more frequently.	2 (18%)
	Not sure	1 (5%)	Used it before, and used it more frequently.	9 (82%)
Speaking with parents / carers about strategies to support the child.				
	Yes	6 (32%)	Never used it before, begun using it since.	0 (0%)
	No	13 (68%)	Used it before but not used it more frequently.	1 (17%)
	Not sure	0 (0%)	Used it before, and used it more frequently.	5 (83%)
Meeting with parents / carers / the child to review their progress on facing their fears.				
	Yes	6 (32%)	Never used it before, begun using it since.	1 (16%)
	No	13 (68%)	Used it before but not used it more frequently.	2 (33%)
	Not sure	0 (0%)	Used it before, and used it more frequently.	2 (33%)

Note. SMART = Specific, Measurable, Achievable, Relevant, Timely. Responses reflect participants who completed the follow-up measures (n = 19). The frequency (and percentage) figures for the change in the use of the strategy after completing the training reflects only participants who answered “Yes” to using the strategy since completing the training.

3.3.3 Participant Feedback: Open-Ended Responses

Immediately post-training (at timepoint one), nine open-ended responses were provided, and at follow-up (timepoint two), seven open-ended responses were provided. At timepoint one, responses described the training as positive, with three responses describing it as “very relevant”, “helpful” and “useful”. Another four responses commented on the benefits of the presentation of the training, including descriptions like “aesthetically pleasing”, “lovely visuals”, and “loved the presentation with writing of words” with one response stating how this helped with “absorbing and retaining the information”. Most responses about the applicability of the training to school staff’s roles were positive, with two comments suggesting the training was “applicable to my role” and was also “a reminder and consolidation of what I have worked on over the last few years” [regarding working with anxious children]. One response described “useful strategies and examples” that another response thought was also “suitable for older children too”.

Some challenges were raised about accessing the training, with two responses commenting on difficulties with pacing and accessing the training via mobile devices. One participant also commented on the difficulty answering the questionnaire scales, explaining how answers could “depend because of a lot of factors”. Two responses suggested improvements, including “adding a built pause” after each slide and delivery of the training through “live lessons” and “discussions”.

At follow-up, four responses continued to report the usefulness of the training, with descriptions of strategies staff had implemented in their day-to-day work. For example, one comment stated they had asked “the children to think about how they have coped in the past”. However, three responses highlighted barriers to implementation, including time constraints, competing work demands (e.g., "SATs…and moderation”), role-specific constraints (e.g., strategies being “outside of my role as a TA”), and staff consistency (e.g., staff may not “always remember to follow through” when implementing the strategies).

3.3.4 Recruitment, Retention, and Attrition Rates

The recruitment period of the study was nine months longer than Nicola et al. (2024) between March 2025 and March 2026. This spanned across a full calendar year of school terms and school holidays. The study also recruited additional gatekeepers and was shared many more times than Nicola et al. (2024). Despite this, the recruitment target of 40 participants was not reached. This suggests the training may not be feasible for school staff or may indicate there are further barriers that prevented recruitment of school staff to the study. Despite this, 20 out of 27 participants (74% of the sample) opted to provide their consent to be contacted for future research. This suggests the training may be acceptable to school staff and further research in such training is of interest to them. Due to restrictions on the Jisc survey platform, the non-completion rate of participants who started but did not complete either timepoint were unable to be collected. However, 26% of participants (n = 7) dropped out between the first and second timepoints. Due to the anonymous nature of the study, reasons for dropout were not collected.

4. Discussion

This study aimed to evaluate the feasibility of an online training on childhood anxiety for primary school staff. Overall, the findings suggest the training was generally acceptable and relevant to most school staff who completed it, with participant responses suggesting some use of the strategies from the training in their work, especially strategies that staff had used prior to completing the training. Preliminary evaluation findings extended that of Nicola et al. (2024) with the training demonstrating promise at improving school staff's perceived confidence, knowledge, and theoretical recognition and responses towards children experiencing excessive anxiety, with some effects also maintained over time. However, substantial recruitment challenges, limited sample diversity, and ongoing questions around the implementation utility and specificity of the training indicates the overall feasibility of the training and generalisability of the findings is not yet established. Further research is

needed to understand more about the feasibility, implementation utility, and efficacy of the training as well as feasibility of research procedures for school staff before larger-scale controlled trials are conducted.

4.1 Acceptability and Feasibility Findings

Generally, staff who completed the study reported the training and research process to be acceptable, mirroring Nicola et al. (2024) findings. However, engagement with the study raises questions around the feasibility of the training and warrants further investigation. Firstly, the study did not reach its recruitment target of 40 participants, despite extensive recruitment efforts that extended beyond those conducted by Nicola et al. (2024), including more gatekeepers, a longer recruitment period, and the use of various social media platforms. Within feasibility studies, difficulties recruiting participants is an important finding that may indicate challenges with implementation of training within the intended setting (Bowen et al., 2009). It is possible the low engagement with the study reflects that either the training itself and or the broader research processes are not feasible within school staff's current context. One possible reason for this may be the barriers school staff already report when engaging in such training procedures, including increasing workload and competing demands, with pressures on school staff reported to have increased further since the COVID-19 pandemic, possibly reducing their ability to engage with the current study (Connolly et al., 2024; Robinson et al., 2023). Conversely, it may also reflect a difference in appetite for such training. Nicola et al. (2024) study was conducted around two years post-COVID-19 pandemic when accessing online training was encouraged following a de-prioritization of staff's professional development at the start of the pandemic (Perry, 2022). This may have reflected the larger recruitment uptake in Nicola et al. (2024) study in comparison to the current study's recruitment figures. Furthermore, since the publication of the government's green paper (DHSCE & DfE, 2017), mental health support teams (MHSTs) were implemented to improve early intervention and prevention. These teams were already reportedly improving access to support

for both school staff and children alike (Ellins et al., 2023; Savage, 2022). It is therefore possible schools already receive training from these teams, reducing their need for the training in the current study. Taken together, these findings raise the possibility that barriers to engaging with the study may extend beyond research participation alone and instead may reflect limitations in the feasibility of the training within the current national school context.

Despite recruitment challenges, retention among participants was encouraging, with only 26% of staff dropping out between first and second timepoints, and 74% of participants consenting to be contacted for future research. Responses from those who completed the training also highlighted few difficulties with finding the time to complete it and generally felt it did not add responsibility to their roles. However, these findings should be interpreted with caution as they are based on a limited number of open-ended participant responses and are biased to the staff who completed the training and chose to remain engaged in the study and therefore does not give insight into those who declined participation or dropped out from the study. Like Nicola et al. (2024), reasons for dropout nor non-completion were not collected, thus the current findings may overestimate acceptability of the training.

The recruitment patterns observed also suggest organisational factors may influence feasibility. Although demographic characteristics showed school staff from a range of ages, job roles, and those that had both pastoral responsibilities and previous mental health training, took part, the overall sample lacked demographic and geographical diversity, suggesting the recruitment strategy or training itself may not be feasible for all school staff. Notably, almost two-thirds of staff were recruited through recommendations from a manager, suggesting tackling organisational-level buy-in may be more efficient than individual-level recruitment. This is supported by research which highlights the importance of school culture and leadership in the implementation of mental health interventions in school settings (Sundaram et al., 2024). Future implementation may therefore benefit from considering how to adopt a whole-school approach to recruitment. Nonetheless, like Nicola et al. (2024), for the staff who completed the study, responses to the feedback statements

suggested agreement that the training was accessible, interesting, informative, applicable to a primary school setting, helpful and useful in their day-to-day work, and that they enjoyed taking part in the study. Together, this highlights that while the training may be acceptable to most staff who engaged in the study, consideration is needed to the acceptability and feasibility of the wider reach of the training.

Taken together, these findings suggest further research into the feasibility of the training and research processes are needed before larger-scale trials are conducted. Future work could consider outreach and consultation work with schools as well as using qualitative research approaches to understanding schools (and other relevant stakeholders) perspectives on the organisational and individual-level facilitators and barriers to engagement with, and implementation and sustainability of the training and research processes in the current national mental health and school contexts. These findings could inform a co-production approach amongst school staff, mental health professionals, wider stakeholders, and researchers to collaboratively refine the implementation of the training and research procedures to ensure they are acceptable, practical and feasible within real-world education settings (Williamson et al., 2022).

4.2 Implementation Findings

The findings build upon Nicola et al. (2024) indicating the training appeared to influence the use of CBT-strategies that facilitate a reduction in children's anxiety (Allen & Lerman, 2018) and increased staff's use of previously used strategies more than novel ones. More complex, individualised or systemic CBT-based strategies (i.e., creating SMART goals, meetings with parents / carers) were reportedly used less often. Given the pressures on staff, practicing new or complex strategies may feel like an additional task. Some strategies may also require staff to be more familiar with the theoretical CBT model which requires continual practice in their work (Stallard et al., 2014). Some staff highlighted the lack of opportunities to implement the strategies, either due to organisational level constraints (i.e., exam moderation) or individual-level factors (i.e., role

responsibilities). This may have limited staff's ability to practice the strategies, reducing their familiarity and confidence in knowing what to do with them (Coleman, 2021). Moreover, research indicates school staff differ in their views on managing mental health difficulties in children (Reinke et al., 2011). Some staff agreed they felt the training added to their role responsibilities, thus, using the strategies may be seen as lower priority, possibly reducing implementation ability (Birnbaum et al., 2017). However, direct effects of strategy implementation were not measured in this study. Further research could aim to directly measure how school staff implement the strategies and the impact this has on children's access to support and mental health outcomes (Yamaguchi et al., 2020).

Equally, research highlights the importance of a positive school culture and senior leadership support around children's mental health as a crucial factor in supporting the implementation and sustainability of mental health training (Moore et al., 2022). Buy-in and support from a whole-school perspective may support with allocating the time and resources needed to implement the training and encourage staff members to engage in this (Coleman, 2021). Furthermore, collaboration between schools, parents / carers and mental health services is paramount to ensuring school staff are supported to embed the strategies into their work (Soneson et al., 2024). This consolidates the need for further exploration around the organisational facilitators and barriers to implementing the current training in the current national school context and how this integrates with current mental health provisions such as MHSTs.

4.3 Preliminary Outcome Data

Preliminary findings suggest the training showed promise at improving school staff's perceived confidence and knowledge at theoretically recognising, responding to, and referring children experiencing excessive anxiety for further support, with some findings being maintained over time. However, caution is needed when interpreting these results due to the small and limited diversity of the sample.

Large, positive effect sizes for the autonomy-promoting responses demonstrate a positive shift in school staff's hypothetical responses to children experiencing anxiety after the training, that was also maintained over time. The within-group differences for the anxiety-promoting responses also shifted in favour of the training immediately post-training but was not maintained at follow-up. This is supported by evidence from CBT theory that indicates increasing autonomy-promoting responses (i.e., rewards and praise) and reducing anxiety-promoting responses (i.e., overly protective) supports to reduce children's anxiety (Hawes & Allen, 2016; Manley et al., 2023; Rapee et al., 2009). These findings build upon Nicola et al. (2024) study suggesting the training may strengthen the use of positive strategies more than reduce strategies that maintain children's anxiety. Future research could benefit from measuring school staff's baseline knowledge and strategy use prior to completing the training to draw more robust conclusions on if a change occurred.

School staff's self-reported confidence in recognising, responding to, and referring children experiencing anxiety for further support all increased after the training, and were also maintained at follow-up, with moderate to large effect sizes for all outcomes. This was a positive finding as evidence highlights how school staff's beliefs and confidence in their ability to help a child experiencing mental health difficulties is influential in how they consequently offer support (Graham et al., 2011) and how they implement and use skills from training (Ginsburg et al., 2024). The finding that staff felt more confident in knowing when to refer a child for further mental health support is crucial for early prevention.

These findings are also supported by the results from the vignette measure which demonstrated immediate positive, moderate-large effect size increases in perceived recognition, severity, level of concern, likelihood and confidence in offering support, and likelihood of referring for further support in both mild-moderate and severe vignettes after the training. These effects were also maintained over time. School staff also appeared to be able to accurately identify a lower level of concern and decreased likelihood of intention to refer children in the low-anxious vignettes, showing small effect size decreases between pre-training and follow-up. These findings are in line

with previous vignette-based studies (Splett et al., 2019; Wickson, 2022) and builds upon Nicola et al. (2024) findings, suggesting the training shows promise at improving school staff's theoretical recognition accuracy, responses to, and intention to refer children experiencing excessive anxiety for more support.

Although increasing school staff's confidence in recognising anxiety in children is important, effective identification requires both sensitivity and specificity (Levitt et al., 2007). This raises the importance of being able to distinguish clinically significant levels of anxiety from developmentally normative fears and worries (Beesdo et al., 2009). This is particularly important given evidence highlights teachers' distinction between mild-moderate and excessive levels of anxiety is inconsistent (Headley & Campbell, 2011, 2013). Training programmes may therefore benefit from supporting staff to not only recognise children who need further support but also accurately distinguish between severity levels and impact of anxiety. Training that fails to achieve these outcomes may be problematic. Concerns have been raised about the possibility of increasing inaccurate (and potentially over) recognition of anxiety in children and encouraging further stigmatisation (Soneson et al., 2018). Consequently, the number of children referred for further support may exceed the capacity of specialist mental health services, which may potentially lead to adverse outcomes for both children who need support (e.g., through longer waiting lists) and those who don't need further support (e.g., through increased labelling) (Levitt et al., 2007). It is possible this may also lead to unnecessary concern amongst parents, the wider network, and the child themselves and has potential to label children with normative worries which may consequently dissuade them from accessing further support when necessary (Gulliver et al., 2010; Soneson et al., 2018).

Unexpectedly, the findings indicated school staff reported increased concern and intention to offer support for low-anxious vignettes, suggesting the training may have increased their vigilance towards anxiety symptoms, seeing this as a generalised difficult experience, mirroring previous findings (Headley & Campbell, 2011, 2013). Although staff's ratings for low-anxious vignettes were consistently lower than mild-moderate and severe vignettes across all outcomes, suggesting an

ability to differentiate between low and excessive levels of anxiety, the findings suggest the training may have increased staff's vigilance to children's anxiety experiences. This may also explain the finding that school staff were less accurate at recognising anxiety immediately after training and at follow-up. Although it is possible this result also reflects a ceiling effect as staff's recognition accuracy was already high pre-training, leaving little room for improvement, it may also indicate a mismatch between school staff's perceived versus actual competence in recognising anxious children. Evidence supports this with teachers who reported feeling confident in identifying students experiencing difficulties also reported feeling unsure about what the exact difficulty was (Rothi et al., 2008).

However, the current findings are based on self-report and therefore it is unclear if these theoretical responses reflect school staff's recognition ability in real-world school settings, and whether they translate into actual help-seeking behaviours. Consequently, more objective and direct measurements of school staff's ability to recognise, respond to, and refer children experiencing anxiety for further support is needed to ensure the training is not encouraging staff's misunderstanding of anxiety and its impact in children. Emphasis, therefore, should be placed on establishing whether the training improves recognition and intention to support children experiencing more severe levels of anxiety as opposed to those demonstrating developmentally appropriate fears.

Finally, effect size estimates do not isolate the effects of other variables that may have impacted on the within-group differences. Therefore, further research is needed, potentially using control groups, to establish causal relationships between the training and outcomes. Taken together, these findings highlight the training's promise at enhancing perceived confidence, theoretical recognition, responses to, and intention to refer children experiencing excessive anxiety for further support. However, further research is needed to understand if this translates into observable, objective, and actual behaviour and knowledge change.

4.4 Strengths, Limitations, and Future Directions

Like Nicola et al. (2024), the current study involved extensive PPI input to develop and refine the add-on video and questionnaires. The PPI members were recruited through expressions of interest, emphasizing the interest in such training.

The extensive recruitment efforts, which went beyond that of Nicola et al. (2024), was also a strength. Despite a lower recruitment rate, this information is crucial to understand whether the training is feasible for school staff (Johnson et al., 2025), and to consider what recruitment strategies are most effective. The study suggests targeting recruitment at a managerial / organisational level may be more effective than targeting school staff at the individual level. Future research should consider this as a possible recruitment strategy to support uptake of training in school staff.

Another strength was that of building upon Nicola et al. (2024) findings around the preliminary effects of the training as well as the implementation utility of the strategies from the training. This adds to the overall picture of the feasibility of the training in school staff's day-to-day work. Having said this, the length of the follow-up period may not have been long enough to accurately capture the implementation utility of the training, with some staff reporting a lack of opportunities in the timeframe to apply the skills in their work. This reduces the possible robustness of the findings. Instead, a longer follow-up may better capture the implementation utility more accurately. Furthermore, the small sample limits these findings. The results warrant further investigation, with a larger sample, before the training is evaluated through controlled trials (Park et al., 2022).

The study collected additional demographic data to add to the overall picture of who and where school staff were being recruited from. Despite this, the sample remained limited in its diversity, reducing the generalisability and representativeness of the findings to all school staff. Like Nicola et al. (2024), the sample was primarily made up of white (100%), female (92%) staff, from the East of England (60%). Despite contacting schools from all UK regions, sample diversity in several areas remained limited. Future research should aim to understand how to engage school staff from a

variety of demographic backgrounds to ensure the training is designed to be as successfully implementable and sustainable as possible (Park et al., 2022).

All study outcomes were exclusively based on self-report which may have been influenced by social desirability bias (van der Mortel, 2008). Additionally, this may have affected how staff interpreted the questionnaires, especially the vignettes. Though the vignettes were assessed for face validity, it is possible these did not accurately reflect the anxious children school staff see in schools. Future research would benefit from measuring actual knowledge and behaviour change of school staff who complete the training, through direct, objective observations, outcomes of children experiencing anxiety (i.e., being referred to mental health services, improvements in symptoms), and convergence with other stakeholders such as children, parents / carers, and mental health services. Furthermore, future research should consider measuring school staff's baseline knowledge and strategy use to ensure any changes observed in response to the training are more robustly interpretable.

Only school staff who were interested in taking part, were involved in the study. This may have introduced a self-selection bias, demonstrating only the feedback from staff who have an interest in mental health training. Future research could consider recruiting staff through random sampling to ensure the sample is representative, and a variation in perspectives are gathered.

Finally, information on non-completion rates and reasons for dropout were not available. Understanding the reasons why participants are or are not engaging in training or research processes is crucial to tailoring future studies and training programmes to ensure these can be successfully implemented and sustained (Johnson et al., 2025). A feasible next step would be to collect qualitative information from school staff and other key stakeholders, from a range of backgrounds, to understand what the facilitators and barriers are to engaging with such training and research processes at both the individual and organisational level. This may include consultation with and outreach to schools in addition to contacting staff who provided their consent to be contacted for future research. This will help to understand how to refine the training and research process,

through a collaborative and co-produced process, to ensure they are practical, feasible, and able to be implemented in real-world school settings (Williamson et al., 2022). This is needed before a larger controlled trial is conducted on the training (Bowen et al., 2009; Eldridge et al., 2016).

4.5 Conclusions

Overall, the findings suggest both the training and research process were generally acceptable to primary school staff who completed the study. Staff responses suggests strategy implementation after completing the training, with possible barriers around competing demands, time and role constraints impacting on the implementation utility of the training information. Preliminary outcome findings show some promise that school staff's perceived confidence and hypothetical recognition of, responses towards, and intention to refer children experiencing excessive anxiety for further support increases after training and are maintained at follow-up. However, substantial recruitment challenges, limited sample diversity, and lack of objective measurement of the implementation of the training information indicate the feasibility of the training is not yet established. Future research should consider qualitative exploration of schools' perspectives on engagement with and implementation of the training and research processes in real-world school settings as well as establish whether the training translates perceived confidence into accurate real-world recognition and help-seeking behaviours through more direct and objective outcome measures.

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Chapter 5: Additional Methodology

Throughout the recruitment period, 18 potential gatekeepers were contacted. These included regional mental health leads, deputy-head and headteachers from a variety of primary schools (across different regions of the UK), leads of academic trusts / federations, and leads of university teacher training programmes. Contact information was collected through personal contacts of the research team and contact information available on government and school webpages. Seven provided consent to act as gatekeepers for the study. Four declined consent, five did not respond to the expression of interest email, one expressed an interest, but no further response was received, and one expressed an interest but then declined to support due to a lack of expression of interest from their school staff. Gatekeepers who consented to support the recruitment of the study were contacted via email across the recruitment period to remind them of the study and prompt further dissemination of the study information. They were also asked if JM could attend any in-person or online inset or teacher-training days. Responses from gatekeepers confirmed sharing this to their staff, in school bulletins / newsletters, and via an online webpage set up on a county-wide schools' website.

To facilitate further recruitment, 123 schools across the UK (with 10-13 from each region, including Wales, Northern Ireland, and Scotland) were initially contacted via email to register interest in the study prior to the 2025 summer half-term. These schools were contacted again at the start of the 2025 autumn term with the study information. A further 47 different schools across England and 16 schools across Wales, Northern Ireland, and Scotland were also contacted in autumn 2025 with the study information. A further 138 different schools across England, and 43 schools across Wales, Northern Ireland, and Scotland were contacted in January 2026 with the study information. All 367 schools were contacted again in February 2026 to prompt a reminder of the study. Schools were selected at random but included a range of Ofsted ratings to represent a range of schools.

Across the course of recruitment, multiple posts (including a short message / brief post describing the study, study advert, and online link and QR code) were made across various social media platforms (including LinkedIn, Facebook, Instagram) which were shared / reposted many times.

Chapter 6: Critical Discussion

1. Overview of Findings

The overall aim of this thesis was to understand the aspects of feasibility of anxiety-focused assessment (through compliance to ecological momentary assessment (EMA) methods) and intervention (through investigation of an online training on childhood anxiety for primary school staff) across clinical, research, and educational settings.

1.1 Meta-Analysis

EMA's are a growing method of assessing individuals in their naturalistic settings to measure momentary experiences of thoughts, feelings, and behaviours (Stone & Shiffman, 1994). The validity and implementation of EMA relies on participant compliance to the assessments (Wrzus & Neubauer, 2023). Previous reviews and meta-analyses have explored participant compliance in mental health samples more generally, exploring clinical and non-clinical samples, in both adults and children (Jones et al., 2019; Vachon et al., 2019; Wen et al., 2017; Wrzus & Neubauer, 2023). To our knowledge, this thesis is the first to examine the compliance of EMA studies in individuals with anxiety disorders and explore moderating factors to compliance in this population. 10 studies were included in the analysis. Findings indicated EMA methodology is generally feasible for individuals with anxiety disorders, demonstrated by a high pooled estimate of compliance across studies (73%) which is close to the recommended threshold of 80% (Stone & Shiffman, 2002). In line with previous reviews, substantial heterogeneity was seen across studies, indicating other factors (such as study-design and/or participant characteristics) may influence compliance rates. However, none of the moderating variables examined (study duration, number of prompts per day, number of items per assessment, use of training, and participant age and gender) significantly explained variation in compliance rates. Given the small number of studies, these findings are to be interpreted cautiously. The findings demonstrated the need for EMA studies to consistently and explicitly report on all

features of their protocols. Future research would therefore be able to conduct a better-powered meta-analysis, that includes a greater number of included studies, to meaningfully explore all possible factors associated with compliance to EMA in individuals with anxiety disorders. Specifically, future research should aim to unpick whether anxiety disorder diagnosis moderates compliance in this population, and the compliance rates compared to non-clinical samples, as this would support with generating more robust conclusions about what facilitates and what acts as a barrier to compliance to EMA in individuals with anxiety disorders.

1.2 Empirical Study

Anxiety difficulties often begin in childhood, and if left without recognition or treatment, can extend into adolescence and adulthood (Kessler et al., 2009). This can impact on multiple areas of functioning (Mendlowicz & Stein, 2000), including the development or worsening of other mental and physical health conditions (Doering et al., 2019). Children often rely on adults to help with recognising and managing their difficulties (Tungalag, 2024), with school staff highlighted as key figures to recognise and support children experiencing excessive anxiety (Soneson et al., 2024). However, evidence on whether school staff can do this effectively is mixed (Headley & Campbell, 2011, 2013). Instead, staff have called for more training to support their knowledge and confidence in how to support children experiencing anxiety in a school setting (O'Farrell et al., 2023; Savage, 2022). A recent feasibility study investigating a newly developed online training focused on childhood anxiety for primary school staff showed promise at improving their hypothetical responses towards children experiencing anxiety in line with CBT theory (Nicola et al., 2024). The training was also rated as acceptable, in demand, and suggested promise at improving school staff's confidence and implementation of the strategies in their day-to-day work (Nicola et al., 2024). However, the study was limited to investigating immediate post-training effects to one questionnaire and had a lack of geographic and ethnic diversity of the sample. To address this, the current empirical study aimed to address the gaps identified in the literature and previous study by conducting a new feasibility study

on the same training used by Nicola et al. (2024). The findings build upon Nicola et al. (2024) study with staff who completed the study reporting the training to be accessible, relevant, and mostly applicable to their roles. Responses also indicated that staff used several of the strategies from the training in their day-to-day work, with the training appearing to increase the use of previously used strategies. Preliminary outcomes highlighted the training's promise at improving school staff's perceived confidence and hypothetical recognition of, responses towards, and intention to refer children experiencing excessive anxiety for further support immediately post-training with effects also maintained over time. Less consistent changes were noted for low-level anxiety symptoms and for overall identification accuracy. Substantial recruitment challenges, lack of sample diversity, as well as a lack of objective evidence of actual behaviour and knowledge change in school staff indicate further research is warranted to draw more robust conclusions around the training's feasibility before further testing on a larger scale is conducted.

2. Strengths, Limitations, and Future Directions

Firstly, a key strength was that, to our knowledge, the meta-analysis was the first to specifically explore compliance rates to EMA in individuals with anxiety disorders. As outlined in chapter two, understanding whether this population can engage with EMA is paramount to ensure these methods are as accurate and valid as possible at measuring anxious individuals' momentary thoughts, feelings, and behaviours, in real-time. Although the analysis did not explore whether anxiety disorder diagnosis was a moderating factor to compliance of EMA due to the limited number of included studies, the finding that none of the other moderating variables significantly explained differences in compliance, is not necessarily a weakness. Evidence from other reviews in clinical and non-clinical samples demonstrate inconsistent evidence around factors that affect compliance to EMA protocols, with some reviews finding no relationship between moderating factors included in the current analysis and compliance (Jones et al., 2019; Vachon et al., 2019; Wang et al., 2025). This

supports the current meta-analysis findings. Instead, this demonstrated the need for further research to untangle what, if any, factors moderate compliance in individuals with anxiety disorders.

Another key strength to the meta-analysis was that of the rigorous methodology, including forwards and backwards searching as well as independent screening of studies for eligibility, quality assessment, and coding of the variables. This strengthens the comprehensiveness of the studies identified, reducing the possibility of selection bias, and ensured the eligibility criteria were consistently applied across all studies (Higgins et al., 2022). This is important in EMA studies where the methodology is often heterogenous, and conclusions are often more difficult to determine. Moreover, there is currently no gold-standard quality assessment tool specific for EMA studies and traditional tools do not capture EMA-specific quality indicators such as sampling design, compliance and missing data. Instead, the current analysis used an adapted checklist (CREMAS) specifically designed to assess the methodological quality of EMA studies, accounting for the heterogeneity in their designs (Liao et al., 2016). Together, these steps strengthen the transparency and reproducibility of the methods and allows more accurate interpretation of the heterogeneity typically seen in EMA studies.

The biggest limitation in the meta-analysis was the small number of included studies. This likely limited the statistical power to identify effects between the moderating variables and compliance rates. This may be explained by multiple factors. Firstly, many studies that met the eligibility criteria were excluded due to missing information on the compliance rate and/or other relevant study design characteristics needed to draw robust conclusions. Despite contact being made with study authors to obtain this information, it was either not available or not able to be calculated in the timeframe of this thesis. Furthermore, as seen in the quality assessment, missing and/or dropout data is often reported less frequently in EMA studies, with individual studies often being biased to participants who are compliant (or meet minimum compliance levels) in the protocols. This makes it difficult to accurately identify and report on compliance rates in these studies. This is set in context to broader challenges around the reporting of EMA studies, of which researchers have called

for more consistent and transparent reporting of EMA study designs to aid in drawing conclusions in larger-scale reviews (Hall et al., 2021). Conversely, the small number of studies may be reflective of too narrow eligibility criteria. Whilst previous reviews were used as a reference when developing and refining the eligibility criteria to ensure this was applicable to the current analysis; it is possible that too many exclusion criteria limited the number of relevant studies that could have otherwise been included. Broadening the criteria could be valuable in producing a better-powered meta-analysis to draw more meaningful conclusions around compliance to EMA in anxiety disorder populations.

The empirical study showed several strengths. Firstly, like Nicola et al. (2024), the current study involved collaborative PPI input, from a range of school staff and mental health practitioners, during the development of the add-on video and study-derived questionnaires. Furthermore, vignettes were revised with input from both trainee clinical psychologists and school staff to ensure they accurately reflected children staff would work with. This was important to ensure school staff's perspectives were included to enhance the success of the training being implemented in real-world school settings (Pass et al., 2018).

Although this was not the first study to explore the feasibility of the online training, the findings build on that found by Nicola et al. (2024). Specifically, preliminary outcomes demonstrated the training's promise at improving school staff's theoretical knowledge and confidence in recognising, responding to, and intentions to refer children experiencing excessive anxiety for support immediately after training, with effects being maintained over time. Furthermore, the current study built upon the findings around implementation utility of the training which is a core part of the assessment of feasibility (Park et al., 2022). Moreover, extensive recruitment efforts to encourage school staff to participate in the training went beyond that of Nicola et al. (2024). Though the study did not reach the recruitment target, this information builds on the picture of feasibility of the training. Particularly, collecting information on where staff were recruited from highlights a possible benefit of targeting recruitment at managerial / organisational levels, which is supported by the evidence that emphasizes the influence of school culture on individual staff members use of

mental health training programmes (Moore et al., 2022). Taken together, the findings contribute to the literature on the feasibility of mental health training for school staff.

The design of the online training is also a strength. The format of the online training as well as the resources that were created from the training could be referred to and reviewed when needed to support with implementing the information. Although uptake of the resources was limited, feedback from some staff highlighted the helpfulness of the information to consolidate learning from the training. However, having said this, the short follow-up period may have impacted staff's opportunities to use the strategies, possibly influenced by school holidays or wider organisational demands (i.e., exam moderations). Therefore, the robustness of the conclusions around implementation utility of the training should be interpreted with caution.

Despite extensive recruitment efforts, a limitation of the empirical study is the small sample size which suggests the current findings may not be representative of how all staff may engage with children experiencing anxiety. Despite promising findings from Nicola et al. (2024), we did not use hypothesis-testing to analyse preliminary outcomes. Evidence shows this is also often a secondary focus of feasibility studies (Arain et al., 2010), and feasibility studies often lack statistical power to detect meaningful effects (Orsmond & Cohn, 2015). However, the use of effect sizes does not account for other extraneous variables which may have impacted on the within-group differences found in the current findings. This limits the direct testing of effects of the training on school staff's knowledge and confidence. Furthermore, the study did not measure school staff's baseline knowledge. Therefore, it is unclear whether the training had a significant impact on knowledge and behaviour change post-training. This highlights the need for a control group comparison to establish causality of the training on school staff's knowledge and confidence. Larger trials may want to consider using randomised sampling techniques to expand on the preliminary outcomes. Since the use of online training has expanded since the COVID-19 pandemic, future research may want to consider in-person training as a control to further assess the feasibility of online methods. This would add to the overall picture of feasibility of mental health training for staff.

The findings should also be considered in context to the limited sample diversity, and possible participant self-selection bias. Future research should aim to engage with individuals from a range of backgrounds, especially those from underrepresented groups, which are often missing in research, to understand what the possible facilitators and barriers are to them engaging in such training and research processes.

Furthermore, dropout and non-completion rates could not be collected due to restrictions on the online survey platform. Also, individuals who may have met exclusion criteria could not automatically be excluded. Future research should aim to use a platform that provides more in-depth analysis of dropout rates and allows automatic exclusion to reduce the burden on staff and minimise the length of the research analysis process.

Several limitations are raised in context to the measures used in the study and definitions of the way the research questions were framed. Firstly, the vignette questionnaire was developed for the purpose of this study. Despite positive feedback from PPI and participants as well as face validity testing on the vignettes, more precise assessment of the validity of the vignettes as well as piloting them before conducting the study could not be completed in the timeframe of the current thesis. Studies investigating both the feasibility of mental health training programmes for school staff and school staff's ability to identify children presenting with mental health difficulties have used a range of methods to assess their ability to identify and respond to anxious individuals (Wickson, 2022). Therefore, there is a benefit for future studies to develop standardized measures to draw more robust conclusions about the impact of training on behaviour and knowledge change. Secondly, the preliminary outcomes measured in the current study were exclusively based on self-report. Evaluating school staff's behaviour and knowledge change through observable and objective methods in future research will be important to generate more accurate findings about the training's effectiveness on school staff's knowledge and confidence when working with anxious children. Lastly, recognition accuracy was measured through school staff's ability to correctly identify anxiety in the vignette descriptions and rank them in order of severity. The closed questions used to assess

recognition accuracy was recommended as a step to build upon in future research by Wickson (2022). However, it is possible this is not an effective way of measuring recognition ability in school staff, echoing the unexpected decrease in recognition accuracy after the training. There are calls for the development of a standardized definition / measure of recognition of studies investigating school staff's recognition accuracy of mental health difficulties to allow for more robust conclusions to be drawn (Wickson, 2022).

3. Clinical and Theoretical Implications

Synthesizing research through meta-analyses and feasibility studies are important stages in the development of assessment and intervention methods to understand how to implement these approaches successfully and sustainably in real-world settings (Park et al., 2022). Although the meta-analysis and empirical study presented in the present thesis are focused on different populations and settings, they share a common theme: engagement with anxiety-related assessment and intervention approaches. The findings from both studies suggest feasibility extends beyond whether an approach can be delivered and engaged with, but rather future consideration of factors that facilitate or act as a barrier to engagement is needed.

The meta-analysis demonstrated that individuals with anxiety disorders can engage with EMA in real-world settings. Although the compliance rate (73%) was below the recommended threshold of 80% (Stone & Shiffman, 2002), it nevertheless suggests that anxiety-related symptoms may not automatically impair individuals' engagement with the repeated EMA protocols. However, substantial heterogeneity across compliance rates as well as the absence of significant associations between moderator variables and compliance suggest engagement is unlikely to be explained by a single EMA protocol or participant characteristic. Given the limited number of included studies, potentially important study design or individual-level factors (especially the influence of anxiety disorder diagnosis) may not have been detected. Instead, further research is needed to be conducted, in a better powered study, with a greater number of included studies, that includes

anxiety disorder diagnosis as well as other potential moderating variables, to further evaluate and understand the individual and contextual factors that facilitate or hinder compliance to EMA in this population.

Behaviour change theory provides a framework to make sense of these findings. The Capability, Opportunity, Motivation, and Behaviour (COM-B) model proposes that a behaviour occurs following an interaction between an individual's capability (capacity and knowledge), opportunity (context / environment), and motivation (beliefs and intentions) (Michie et al., 2011). Applying this to EMA, compliance with the assessments may be influenced by an individual's capability (e.g., remembering to answer the questions, understanding the instructions), opportunity (e.g., time, competing demands, access to technology or space to complete the assessments), and motivation (e.g., seeing value or burden in EMA). Although anxiety-related cognitive and attentional difficulties and avoidance strategies may theoretically affect an anxious individual's capability and motivation (Murray et al., 2023; Sain et al., 2025), the high compliance rate indicates these factors may not automatically reduce engagement. Instead, one possible explanation is their influence may depend on the interaction between participant characteristics as well as the extent of available opportunities and motivational support available in individuals' lives and in the EMA protocol itself (Stone et al., 2023). For example, the burden of the number of prompts per day may be perceived differently depending on individuals' symptom severity, daily activities, perceived value of EMA etc.

This has implications for implementing EMA in real-world settings. Given the ongoing shift toward the use of digital mental health interventions to bridge the gap between those needing support and those accessing support (Campion et al., 2022), as well as the need to broaden access to mental health services (Park et al, 2022), understanding potential barriers and facilitators to compliance of EMA, alongside measuring compliance itself, will be important. This could also support with implementing the use of EMA into clinical services through routine outcome monitoring and digitalized clinical interventions (Myin-Germeys et al., 2024; Walz et al., 2014). This will also require consistent and transparent reporting of EMA protocols, which is highlighted as an

ongoing challenge in EMA research more broadly. This will ensure better translation of the findings into clinical, research, and real-world settings, therefore supporting the individuals at which they target (Hall et al., 2021; Stone & Shiffman, 2002).

A similar theme around engagement was also evident in the empirical study. Despite extensive recruitment efforts, the study did not achieve the required sample size and was also significantly lower than the sample collected by Nicola et al. (2024). Within the COM-B model, school staff appeared to have the capability to engage, as shown by the relatively high retention rate (74%) between timepoints. However, opportunity to engage with the training and research process may have been influenced by individual workload and competing demands as well as school and organisational-level cultures (Sundaram et al., 2024). This is particularly relevant given that school staff report increasing demands and time constraints, possibly reflecting a lack of opportunity rather than a lack of interest or motivation to engage in the training (Connolly et al., 2024). Moreover, motivation have been influenced by staff's perceptions on their role in supporting children's mental health, their beliefs about making a difference, and the perceived relevance or burden of the training (Maclean & Law, 2022; Shelemy et al., 2019). Teachers' beliefs and self-efficacy have been shown to be important factors that influence the likelihood of them implementing training content into their day-to-day work and sustaining this to support child outcomes (Stein & Wang, 1988; Tschannen-Moran & Hoy, 2001). The need for ongoing consultation and modelling from mental health professionals as well as practice in the use of the information and strategies to build confidence in using the training content and developing actual knowledge change may be needed to sustain behaviour change (Han & Weiss, 2005). The establishment of MHSTs within school settings may be an appropriate starting point to support school staff to implement and consolidate the learning from the training and monitor downstream outcomes on children and staff alike (Department for Education, 2026; Yamaguchi et al., 2020).

Similarly, COM-B may also explain the difference between perceived confidence and actual behaviour and knowledge change. Whilst the improvement in perceived confidence supports the

training may increase school staff's capability through knowledge and strategies to recognise, respond to, and refer children experiencing anxiety for further support, the less consistent changes in low-anxiety vignettes and recognition accuracy highlight how knowledge and confidence alone may not translate to intended behaviour change. Staff would also require sufficient opportunity and motivation to apply the skills from the training in their day-to-day work within the demands of the school setting (Han & Weiss, 2005). Future research would benefit from identifying potential facilitators and barriers school staff encounter to engaging with such training and research processes to understand how to design these to optimise engagement. This may involve outreach and consultation work with school staff. Furthermore, although non-teaching staff are often not included in research of mental health training, the present results show over 50% of participants were in non-teaching roles, mirroring Nicola et al. (2024) and Wickson (2022) findings. This supports the guidance that a whole-school approach should be taken and indicates the possible benefit of consultation with wider organisations (e.g., MHSTs) to add to the picture of how to embed training and research processes into school settings (Department for Education, 2026). Future research could also consider distinguishing between school staff's feeling of capability versus demonstrating their actual competence to recognise and respond to anxious children accurately in practice using objective assessments of knowledge and behaviour change.

While COM-B provides a framework for understanding the broader determinants of engagement across both studies, the concept of mental health literacy (MHL) may represent an important component of capability within this framework. MHL describes the perceptions and knowledge about mental health difficulties. This is suggested to support with identification and prevention of these difficulties (Jorm et al., 1997). Though the meta-analysis findings suggest individuals with anxiety disorders can engage with EMA, compliance to the assessments does not tell researchers whether the individual has accurately recognised their anxiety symptoms or interpreted the EMA instruction as intended (Stone et al., 2023). Although not directly examined, this may theoretically explain how individuals understand and engage with EMA through the influence of how

they understand the purpose, relevance and burden of EMA as well as their own experiences of anxiety (Piccorillo et al., 2025).

Similarly, school staff require sufficient knowledge and understanding of anxiety to recognise, respond, and decide whether a child needs further support (Department for Education, 2026). Evidence indicates MHL training can improve teachers' mental health knowledge and stigma (Yamaguchi et al., 2020; Liang et al., 2025), albeit findings are not always consistent across outcomes. This is relevant to the current findings where improvements in perceived confidence and hypothetical responses towards anxious descriptions of children suggests the training may support staff's capability at recognising and responding to anxious children. However, inconsistent findings for recognition accuracy and the absence of direct measurements of behaviour change indicates this does not necessarily lead to actual behaviour change or competence. Thus, future research should consider the use of objective assessments of knowledge and behaviour change alongside perceived confidence. Furthermore, MHL may also interact with the opportunity and motivation components of the COM-B model. For example, staff who have greater knowledge and more favourable beliefs towards mental health difficulties may perceive greater value in engaging with and implementing knowledge from training programmes, potentially increasing motivation to engage (Maclean & Law, 2022). This may be opposite for those with more negative beliefs and lower levels of knowledge, creating a barrier to engagement (Maclean & Law, 2022). It is also possible individuals' motivation to engage and apply what they have learnt may be facilitated by organisational support (through school culture) (Roshan et al., 2025), suggesting the benefit of ongoing consultation with services like MHSTs to strengthen appropriate support and referral pathways (Department for Education, 2026).

Taken together, both studies highlight EMA methodology as well as online training for school staff is impacted by participant uptake and engagement. Although the studies considered engagement in different contexts, COM-B provides a framework to understand how the possible facilitators and barriers may influence engagement in both settings. Mental health literacy may also contribute to the capability component of the COM-B model by influencing how individuals

recognise and understand anxiety symptoms, their perceptions of the value of EMA and training, and consequently how they engage with assessment and intervention approaches. The findings therefore highlight the need to move beyond the question of whether an assessment or intervention is feasible but more towards understanding what facilitates and acts as a barrier to engagement with such approaches and how to integrate these within the wider systems to ensure they can work in real-world clinical and educational settings.

4. Personal Reflections on Engagement in Empirical Project

During the video-making and questionnaire-development phases, I was initially mindful of the study's length, especially given the additional training video, greater number of questionnaires, and follow-up timepoint. Discussions with the school staff PPI group, however, reassured me the training was perceived as in need, and the length was unlikely to significantly affect engagement. Consequently, I entered the recruitment phase with few concerns about engagement. This was reinforced by the successful recruitment by Nicola et al. (2024).

As recruitment progressed, I began to recognise I had underestimated how challenging recruitment was going to be. As a research team, we wondered about whether staff workload and time pressures may be reducing opportunities for participation during working hours, and whether competing demands outside of work may have reduced motivation to engage in their own time. Recruitment trends seemed to support this with fewer staff recruited to the study during school holidays and in-between terms.

In retrospect, I also perhaps overestimated the impact social media recruitment would have. Despite repeated posts across multiple platforms, engagement remained limited. This highlighted to me how maintaining relevance within a busy online space was another challenge. Feedback from gatekeepers further highlighted the importance of considering the logistic and practical demands associated with the school calendar, including exam moderation and beginning and ending of terms.

I have also since reflected on whether staff perceived sufficient immediate benefit from participation. Although the study offered benefits through accessing training, prize draw, and possibility of improving child outcomes, these may have felt intangible or too distant in the future to motivate engagement.

Overall, the research process highlighted the importance of not assuming the perceived need for training will directly translate into engagement in research. This feels like it reinforces the implications that future research should consider broader individual, organisational, and contextual factors that facilitate or hinder staff engagement in training and research processes.

5. Conclusions

Understanding the aspects of feasibility of EMA in individuals with anxiety disorders by exploring moderators of participant compliance and investigating the feasibility of online training methods on childhood anxiety for school staff, is important to understand how best to implement these methods into real-world settings. The research conducted in the present thesis highlights EMA is a feasible method of assessing individuals with anxiety disorders in real-world settings. However, further research is needed in a study with greater power and greater number of included studies to untangle what, if any, study design or participant characteristic factors influence compliance to these methods. Evaluating whether anxiety disorder diagnosis also moderates compliance will be important to tailor EMA methods to maximise engagement and minimize individual burden. Similarly, evaluating the feasibility of mental health training programmes for school staff also relies on considering the burden this may place on staff given an increase in their competing demands and time constraints. The empirical study extends the findings on the feasibility of an online training on childhood anxiety for primary school staff. The findings demonstrated both the training and research process were acceptable to staff who completed the study, with the training appearing to facilitate some staff's implementation of the strategies in their day-to-day work. Preliminary outcomes were promising and warrant further investigation. The findings should be interpreted in context to

substantial recruitment challenges and a lack of diversity amongst the sample. Further research should aim to understand the facilitators and barriers to engaging with the training.

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Appendices

Chapter 2: Systematic Review and Meta-Analysis

Appendix A: Journal of Anxiety Disorders guidelines

Appendix B: Meta-Analysis Search Strategy

Appendix C: Quality Assessment using the adapted CREMAS checklist (Liao et al., 2016)

Appendix D: Quality scores based on the adapted CREMAS checklist (n = 10).

Appendix E: Sensitivity Analysis Forest Plot

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Appendix M: Teacher Responses to Anxiety in Children (TRAC) Questionnaire (Allen & Lerman, 2018)

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Appendix A: Journal of Anxiety Disorders guidelines



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Appendix B: Meta-Analysis Search Strategy

Database	Search String
APA PsycINFO	(DE "Anxiety Disorders" OR DE "Phobias" OR DE "Panic Disorder" OR DE "Agoraphobia" OR DE "Generalized Anxiety Disorder" OR DE "Social Anxiety Disorder" OR DE "Separation Anxiety Disorder" OR DE "Selective Mutism" OR TX anxiety disorder* OR TX phobi* OR TX panic* OR TX agoraphobi* OR TX "generalized anxiety disorder" OR TX "generalised anxiety disorder" OR TX GAD OR TX "social anxiety disorder" OR TX social phobi* OR TX "separation anxiety disorder" OR TX selective mut*) AND (DE "Ecological Momentary Assessment" OR DE "Diary Measure" OR TX daily diar* OR TX "momentary assessment" OR TX "experience sampling" OR TX "event sampling" OR TX "experience sampling method" OR TX "ambulatory assessment")
Scopus	TITLE-ABS-KEY (("anxiety disorder*" OR phobi* OR panic* OR agoraphobi* OR "generalized anxiety disorder" OR "generalised anxiety disorder" OR GAD OR "social anxiety disorder" OR "social phobi*" OR "separation anxiety disorder" OR "selective mut*") AND ("daily diar*" OR "momentary assessment" OR "experience sampling" OR "event sampling" OR "ecological momentary assessment" OR "experience sampling method" OR "ambulatory assessment"))
Web of Science	TS=(("anxiety disorder*" OR phobi* OR panic* OR agoraphobi* OR "generalized anxiety disorder" OR "generalised anxiety disorder" OR GAD OR "social anxiety disorder" OR social phobi* OR "separation anxiety disorder" OR "selective mut*") AND ("daily diar*" OR "momentary assessment" OR "experience sampling" OR "event sampling" OR "ecological momentary assessment" OR "experience sampling method" OR "ambulatory assessment"))
MEDLINE EBSCO	(MH "Anxiety Disorders+" OR TX "anxiety disorder*" OR TX phobi* OR TX panic* OR TX agoraphobi* OR TX "generalized anxiety disorder" OR TX "generalised anxiety disorder" OR TX "social anxiety disorder" OR TX "social phobi*" OR TX "separation anxiety disorder" OR TX "selective mut*") AND (MH "Ecological Momentary Assessment+" OR TX "daily diar*" OR TX "momentary assessment" OR TX "experience sampling" OR TX "event sampling" OR TX "experience sampling method" OR TX "ambulatory assessment")
ProQuest	(SU("Anxiety Disorders") OR TI,AB(anxiety disorder* OR phobi* OR panic* OR agoraphobi* OR "generalized anxiety disorder" OR "generalised anxiety disorder" OR GAD OR "social anxiety disorder" OR social phobi* OR "separation anxiety disorder" OR selective mut*)) AND (SU("Ecological Momentary Assessment") OR TI,AB(daily diar* OR "momentary assessment" OR "experience sampling" OR "event sampling" OR "experience sampling method" OR "ambulatory assessment"))

Appendix C: Quality Assessment using the adapted CREMAS checklist (Liao et al., 2016)

Citation	Year	EMA protocol training	EMA technology used	Study Duration	Monitoring period	Prompting design	Prompt frequency	Additional design features	Participant dropout	Prompt delivery	Prompt latency	Compliance rate	Missing data	Limitations of EMA	Total Score (n, %)
Pawluk et al.	2021	0.5	1	1	1	1	1	1	1	1	0.5	1	0.5	1	11.5 (88.5)
Silk et al.	2018	1	0.5	1	1	1	1	1	1	1	0	1	1	0	10.5 (80.8)
Naim et al.	2021	1	1	0.5	1	1	1	1	0.5	0.5	1	1	0.5	1	11 (84.6)
Johnson et al.	2009	1	1	0.5	1	1	1	1	0.5	0.5	1	1	1	1	11.5 (88.5)
Hellberg et al.	2021	0.5	1	0.5	1	1	1	0	0	0.5	0	1	1	1	9.5 (73.1)
Meine et al.	2024	0	1	1	1	1	1	0.5	0	0.5	0	1	0	1	8 (61.5)
Paersch et al.	2025	1	1	1	1	1	1	0	0.5	0.5	1	1	0	1	10 (76.9)
Blalock et al.	2018	1	1	1	1	0.5	1	0	0.5	0.5	0	1	1	0	9.5 (73.1)
Thielsch et al.	2015	1	1	0.5	1	1	1	0.5	0	1	0	1	0	1	9 (69.2)
Kircanski et al.	2015	1	1	0.5	1	1	1	1	0	0	1	1	0	0	8.5 (65.4)

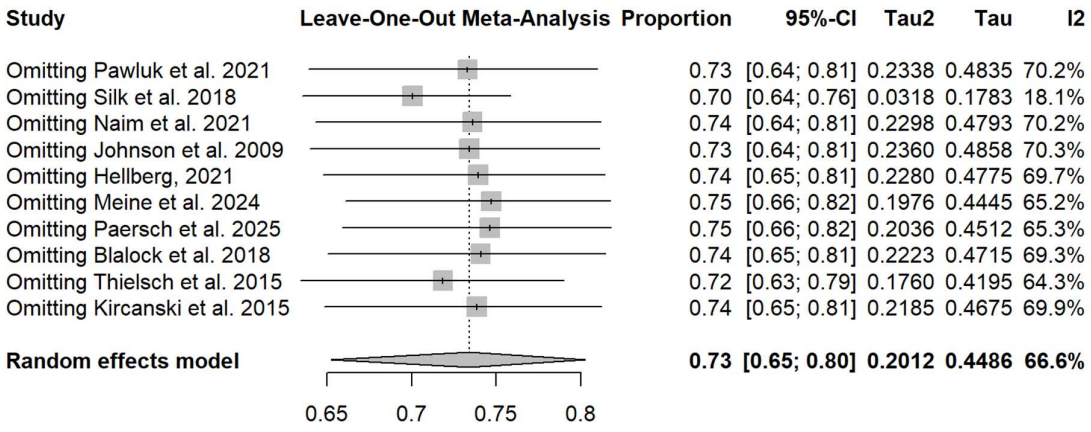
Note. EMA – Ecological Momentary Assessment.

Appendix D: Quality scores based on the adapted CREMAS checklist (n = 10).

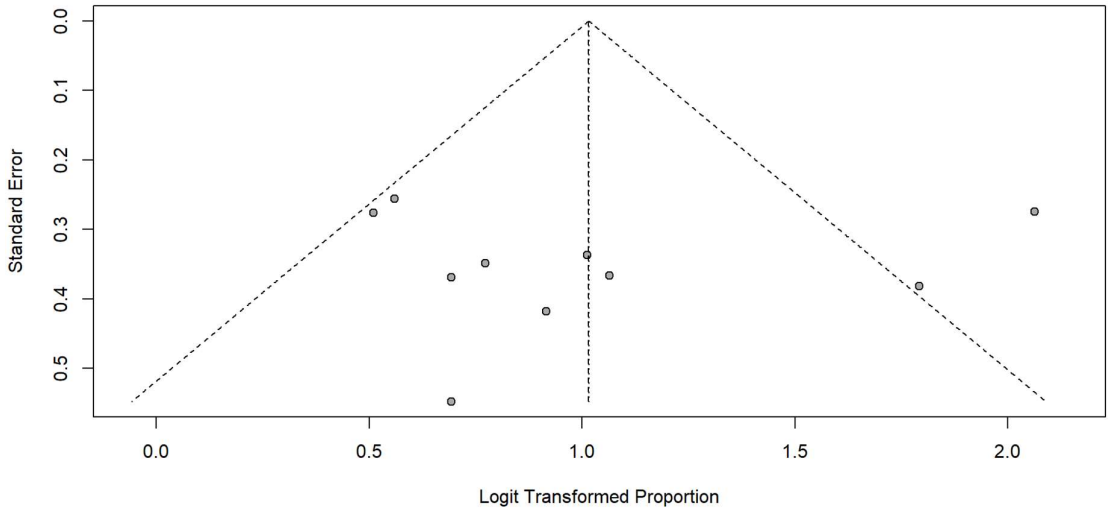
CREMAS item	Yes / Somewhat, n (%)
EMA protocol training	9 (90)
EMA technology used	10 (100)
Study duration	10 (100)
Monitoring period length	10 (100)
Prompting design	10 (100)
Prompt frequency	10 (100)
Additional design features	7 (70)
Participant dropout	6 (60)
Prompt delivery	9 (90)
Prompt latency	5 (50)
Compliance rate	10 (100)
Missing data	6 (60)
Limitations of EMA	7 (70)

Notes. EMA = Ecological momentary assessment. CREMAS = Checklist for Reporting of EMA Studies.

Appendix E: Sensitivity Analysis Forest Plot



Appendix F: Meta-Analysis Funnel Plot



Appendix G: Psychology in Schools Journal Guidelines



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Sections

1. Submission

2. Aims and Scope

3. Manuscript Categories and Requirements

4. Preparing the Submission

5. Editorial Policies and Ethical Considerations

6. Author Licensing

7. Publication Process After Acceptance

8. Post Publication

9. Editorial Office Contact Details

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Keywords

psychology; schools; school psychologists; teachers; counselors; administrators

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doi: **10.1176/appi.ajp.159.3.483**

Ramus, F., Rosen, S., Dakin, S. C., Day, B. L., Castellote, J. M., White, S., & Frith, U. (2003). Theories of developmental dyslexia: Insights from a multiple case study of dyslexic adults. *Brain*, *126*(4), 841–865.
doi: **10.1093/brain/awg076**

Example of reference with more than 7 authors

Rutter, M., Caspi, A., Fergusson, D., Horwood, L. J., Goodman, R., Maughan, B., … Carroll, J. (2004). Sex differences in developmental reading disability: New findings from 4 epidemiological studies. *Journal of the American Medical Association*, *291*(16), 2007–2012. doi: **10.1001/jama.291.16.2007**

Book edition:

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Appendix H: Study Advert

Online Training on Childhood Anxiety for School Staff

University of East Anglia

What is the current study?

We are looking to extend the evaluation of a newly-developed online training on childhood anxiety for school staff.

Who can get involved?

If you are a member of staff in an education setting who works directly with children aged between 4-11 years-old then you may be eligible to participate!

You may be a teacher, teaching / learning support assistant, a member of the pastoral support team, or in another role. We welcome anyone from any role as long as you fulfil the criteria described above.



What is involved?

There will be two timepoints to the study and your participation in both is strongly encouraged. The study will be completed online via a secure link.

The first timepoint will involve you completing an online training focused on childhood anxiety and answering three questionnaires before and immediately after the training. This is estimated to take around 75 minutes but may be shorter / longer depending on how long you take to answer the questions



The second timepoint will be completed four weeks after you have completed the first timepoint. You will only be asked to complete questionnaires and you will not be asked to complete the training again at this timepoint. You will be sent the follow-up study link via email should you choose to provide this to contact you with.

What will I gain by taking part?

It is hoped the training will provide you with an overview of childhood anxiety, the signs to look out for in children you work with, and learn some strategies to help children manage their anxiety in a school setting.

You can also opt in to be entered in a randomized prize draw to win one of 5 x £20 voucher for completing both timepoints of the study.





How can I get involved?

If you are interested in taking part in the study, to find out more information and to take part, please click the online link or QR code

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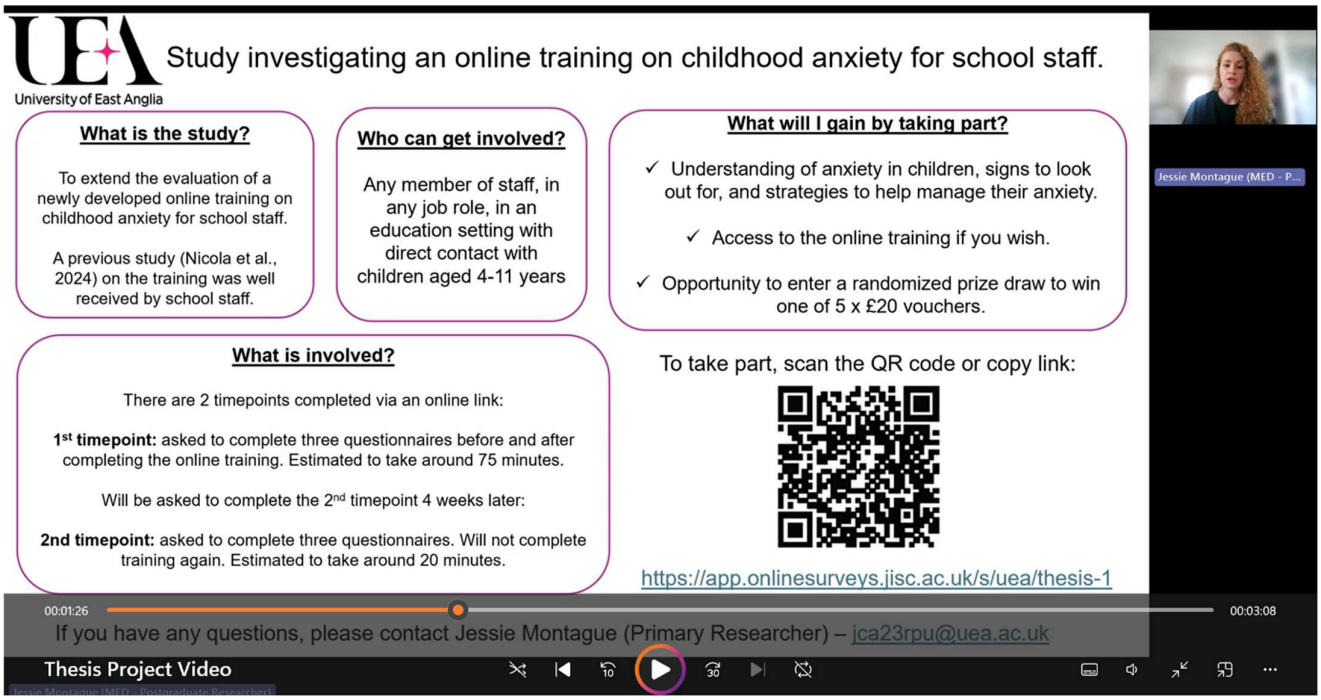


Questions?

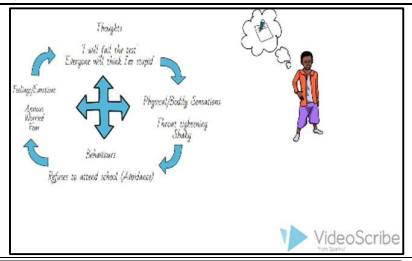
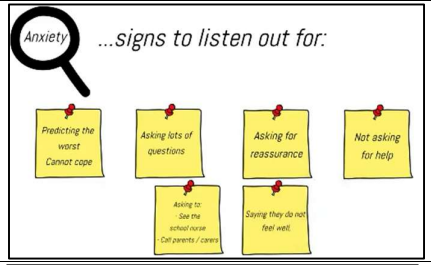
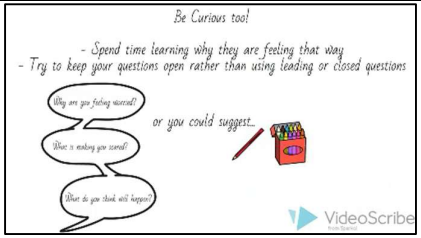
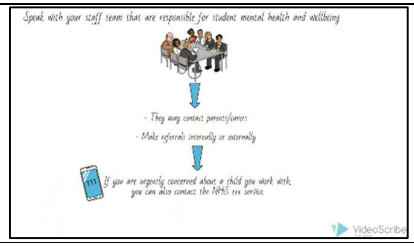
If you have any questions, please contact Jessie Montague (Primary Researcher) on: jca23rpu@uea.ac.uk



Appendix I: Screenshot of Recruitment Video



Appendix J: Description of the Online Training Videos

Video Number and Link	Sample Image	Information Included
Video 1 (Part One) https://youtu.be/qxYVlDm3Tao		• Information on the Cognitive Behavioural Therapy theory of how to understand anxiety and how it is maintained (including hot-cross bun maintenance cycles, the fight, flight, and freeze response, and the role of safety behaviours). • Information on prevalence rates of childhood anxiety, worries children may experience in education settings, how anxiety can impact children in school settings, and the relevance of the training to school staff.
Video 2 (Add-On) https://youtu.be/l_X3cAdJ5xY		• Additional information on how to recognise specific signs of anxiety in children (including behavioural signs such as avoidance, and what children may say such as feeling poorly) which may be more obvious or subtle. • Information on prompts for school staff to use to consider when anxiety may become more problematic.
Video 3 (Part Two) https://youtu.be/B6J_7nRXppE		• Information on CBT-informed strategies school staff could use. These included setting goals, use of normalizing statements, graded exposure, using encouragement and rewards, problem-solving, and externalization of worries.
Video 4 (Part Three) https://youtu.be/CuPcw8KSnsk		• Common questions and answers school staff may have • Resources staff could use to refer children for further support, • Wellbeing support for staff

Appendix K: Short Quiz Questions

Video 1 Questions:

After watching Part 1 of the Online Training for School Staff on Childhood Anxiety, please answer the short quiz questions below to check your understanding:

57. What are the names of the three automatic responses when we perceive a feared situation? *

0/32,000 characters

58. What are the 4 factors that make up the maintenance cycle (hot cross bun)? *

0/32,000 characters

59. What are examples of safety seeking behaviours (tick all that apply)? *

- [ ] Over-preparing for the day or task
- [ ] Always having someone by your side
- [ ] Avoiding eye contact
- [ ] Asking other people for reassurance excessively
- [ ] Being independent

Please click "Next" to go onto the next part of the training.

Video 2 Questions:

After watching the Add-On Video of the Online Training for School Staff on Childhood Anxiety, please answer the short quiz questions below to check your understanding:

60. What are the three signs to look out for when anxiety begins to become a problem? *

0/32,000 characters

61. Name three behaviours you might notice in a child who is struggling with anxiety. *

0/32,000 characters

62. Name two signs you might hear in a child who is struggling with anxiety. *

0/32,000 characters

Please click "Next" to go onto the next part of the training.

Video 3 Questions:

After watching Part 2 of the Online Training for School Staff on Childhood Anxiety, please answer the short quiz questions below to check your understanding:

63. How do we encourage a safe space for sharing? (Tick all that apply) *

- [ ] Normalizing Statements
- [ ] Open Questions
- [ ] Being Curious
- [ ] Leading questions
- [ ] Closed questions
- [ ] Telling them off

64. What does SMART stand for? *

0/32,000 characters

65. What are the functions of avoidance? *

0/32,000 characters

66. When is problem-solving strategy helpful to use? *

0/32,000 characters

67. What are helpful ways to reward and encourage children to face their fears? (Tick all that apply) *

- [ ] Be overprotective of them
- [ ] Use creative methods to externalize worry e.g., writing, drawing
- [ ] Praise
- [ ] Reward effort
- [ ] School staff/parents modelling brave and calm responses to anxiety
- [ ] Use safety seeking behaviours

Please click "Next" to go onto the next part of the training.

Appendix L: Demographics Questionnaire

1. What is your job title?

2. How long have you been working in an education setting for? (Select from drop-down list: less than 6 months, 6-12 months, 1-2 years, 2-5 years, 5-10 years, 10+ years)

3. What is your highest level of education (select from drop-down list: GCSEs, A-levels, Undergraduate degree, Postgraduate degree (Masters), Postgraduate Diploma, Postgraduate Certificate, PhD, Professional Doctoral degree, Other (please specify…))

4. Do you have any pastoral responsibility? (Yes / No)

5. If yes, please specify what pastoral responsibility you hold….

6. What is your school's Ofsted rating? (select from drop-down list: Outstanding, Good, Requires Improvement, Inadequate, or I don't know)

7. What region do you work in? (Select from drop-down list: North East England, North West England, Yorkshire and the Humber, East Midlands, West Midlands, East of England, London, South East England, South West England, Scotland, Wales, Northern Ireland, Other)

8. If other, please specify….

9. What is your age? (select from drop-down list of 0-100)

10. What gender do you identify with? (select from drop-down list: male, female, non-binary, trans-gender, other, prefer not to answer)

11. If other, please specify…

12. What is your ethnicity? (select from drop-down list: White [British, English, Welsh, Scottish, Northern Irish, Irish, Irish Traveller, Any other white background]. Black [African, Caribbean or any other Black background]. Multiple ethnic groups [White and Black Caribbean, White and Black African, White and Asian, any other multiple ethnic background], Asian [Indian, Pakistani, Bangladeshi, Chinese, Any other Asian background], Other ethnic group, Prefer not to answer)

13. If you answered "Any other [white, black, multiple ethnic groups, asian] ethnic group" or "other ethnic group", please specify:

14. Have you had any mental health training in the past? (Yes / No)

a. If yes, please can you provide us with some further details. Please answer the following questions in your answer:
   - What did the training cover (what was the content?)
   - Did the training include specific information on anxiety in children?
   - How long was the training for?

15. Finally, how did you hear about the research project? (Select from drop-down list: social media (option to list what platform this was on i.e., Facebook, LinkedIn), recommended to me by a friend or colleague, recommended to me by my manager / boss, other)

16. If other, please specify…

Appendix M: Teacher Responses to Anxiety in Children (TRAC) Questionnaire (Allen & Lerman, 2018)

Instructions: In the following items, please indicate on a scale from 1 (very unlikely) to 7 (very likely) the likelihood that you would respond in the ways listed for each item. Please read each item carefully and respond as honestly and sincerely as you can. For each response, please circle a number from 1-7.

Generalized anxiety / worry scenarios:

Response Scale:	1	2	3	4	5	6	7
	Very Unlikely			Medium			Very Likely

If a child in my class was worried about getting a task right and he/she is refusing to complete a piece of work, I would:

a) Tell the child it's OK, and do some of the work for him / her (OP)
b) Keep the child in at assembly or break to finish the work (S)
c) Encourage the child to keep trying (E)
d) Offer a small incentive for completing the work (R)
e) Sit down with the child and help him/help to figure out how to do the work (PS)
f) Give the child easier work (AR)

If a child in my class is asked to learn a new skill (e.g., calculation method) and looks visibly worried, I would:

a) Tell the child he/she can keep doing the task the way he/she is used toª (AR)
b) Tell the child he/she will have to stay in at break time if he/she doesn't try to do it (S)
c) Repeatedly show the child how to do the taskª (OP)
d) Tell the child to 'have a go' (E)
e) Tell the child that he/she will receive a small reward if he/she tries the new skill (R)
f) Sit down with the child and help him/her to practice the new skill (PS)

If a child in my class becomes very upset when another child scribbles on his/her work, I would:

a) Tell the child to calm down and stop over-reacting (S)
b) Tell the child that it's understandable that he/she is so upset (AR)
c) Sit down and re-do the work for the child (OP)
d) Tell the child they will get a reward when he/she has another go at it (R)
e) Talk with the child about how to fix the work (PS)
f) Encourage the child to have another go at it (E)

Social anxiety scenarios:

If a child looked scared when asked to speak in front of the class, I would:

a) Ask another child to speak instead (AR)
b) Tell the child to stop being nervous (S)
c) Ask the child to whisper to you what he/she wants to say and then say it to the class for him/her (OP)
d) Tell the child he/she will get a reward for participating (R)
e) Talk with the child about strategies to help him/her feel more confident speaking in class (PS)
f) Encourage the child to give it a try (E)

If a child is in the playground, watching their classmates play, but hanging back and joining in, I would:

a) Leave him/her to watch (AR)
b) Ask the child to come and do some jobs for you in the classroom (OP)
c) Tell the child 'you should be playing with the other children' (S)
d) Help the child figure out what to do so that he/she can join in (PS)
e) Tell the child if he/she joins in you will give them all a reward (R)
f) Encourage the child to play with their classmates (E)

If a child in my class was really quiet, and not joining in a group discussion, I would:

a) Leave the child to listen to the discussion (AR)
b) Give the child suggestions as to what he/she could say (OP)
c) Tell the child that he/she will have to stay in at lunchtime if he/she doesn't participate (S)
d) Praise the child for any contributions he/she makes to the discussion (R)
e) Help the child practice what he/she could say in the group (PS)
f) Encourage the child to participate (E)

<u>Separation anxiety scenarios:</u>

If a child stayed as close to you as possible during class and playtimes, I would:

a) Let him/her stay close (AR)
b) Tell the child to stop or you will send him/her to see another teacher (S)
c) You tell the child he/she can stay with you and do fun activities (OP)
d) Tell the child he/she will get a certificate or other reward if he/she sits/plays with his/her classmates (R)
e) Help the child think about what activities he/she could do with their classmates (PS)
f) Encourage the child to join the group (E)

If a child in my class is inconsolably upset, and tells you that he/she misses their parent(s) and wants to go home, I would:

a) Let the child speak to his/her parent(s) over the phone (AR)
b) Tell the child if he/she doesn't calm down, he/she will miss out on a fun activity (S)
c) Tell him/her to sit with you until he/she settles (OP)
d) Tell the child he/she can choose a small reward when he/she joins in with the class (R)
e) Help the child to think of things to do that would make him/her feel better about being at school (PS)
f) Remind the child of times when he/she has missed their parents before and coped well with it (E)

If a child was crying after arriving at school away from his/her parents, I would:

a) Tell the child you will call his/her parent(s) and ask them to take him/her home (AR)
b) Tell the child to calm down, he/she is over-reacting (S)
c) Tell him/her to sit with you until they settle (OP)
d) Tell the child he/she will get a reward for staying at school (R)
e) Help the child to figure out strategies to help him/her feel settled at school (PS)
f) Tell the child he/she is brave for coming to school (E)

Note. Scales are abbreviated as follows: Avoidance Reinforcement (AR), Overprotection (OP), Sanction (S), Reward (R), Problem-solving (PS), Encouragement (E). Items removed from scale during main analyses due to low inter-item total correlations.

Appendix N: Example Vignettes

Severe	Mild-Moderate	Low
F is 8-years old. F has missed many days off school this year. F's mother reports F becomes tearful in the mornings when getting ready them for school. F says they can't sleep as they think a lot about how to keep themselves and their mother safe. F asks if they can see the school nurse several times a day, saying they have a headache and their head "feels full". They ask repeatedly whether "something bad" is going to happen to them or other people at school. They can get angry if you do not give them reassurance that they are okay. F doesn't like listening to the news and will cover their ears if this is on TV. F likes to engage in creative activities at school. F is observed to spend time looking out of the window, often losing concentration. F has good friends who they spend time with at break and lunchtimes. They tend to spend time in the toilets when their friends are off school.	P is 10-years old. Since starting Year 6, P says they are worried about their upcoming SATs tests. P has been asking members of staff questions about how hard they will be and what happens if they do not do well. During their recent mock tests, P said they felt sick, and their chest felt funny before the tests. They did not sit their Maths test as their mother called to say they had not slept the night before. They did sit the rest of their tests and did well in their results. P likes sports, especially playing football with peers during lunchtimes and after school. Sometimes they may avoid playing if someone new joins their team. P's mother reports P was "on edge" at a recent open evening for secondary school. P has a big group of friends who they sometimes see outside of school. P stated they were excited for the end of term assembly to celebrate the end of Year 6.	G is 9-years old. G has two younger brothers who they go to swimming lessons with, with their father on the weekends. G has a group of friends who they sometimes see outside of school for trips out or sleepovers. Since joining Year 4, G has missed one day off school where their mother reports they had struggled to sleep overnight. This seemed to occur the day before a spelling test. G has expressed twice that they do not feel well before PE lessons. They asked to see the school nurse once for a headache. On one occasion, G asked if you could speak to the teachers in Years 2 and Reception to find out if their brothers were safe. G seemed to respond well to reassurance they are okay and has not asked again. G appears to like most of their lessons, though is less keen on literacy and reading. They seem to work well on their own and in a group of peers.
T is 5-years old. T has a few friends at school. T becomes visibly distressed when they are dropped off at school. T cries and refuses to come into the classroom despite reassurance from their father. T's father says they are not sleeping well at night, often waking with "bad dreams". T can be verbally aggressive towards their mother when they are encouraged to get ready for school, often shouting they don't want to go. T appears to enjoy lessons on literacy but will ask to go to the toilet a lot during creative lessons where they may have to interact with other children. If they are encouraged to engage, they throw things across the classroom or at other children so they can be taken out of the class. Almost every day T says they "feel sick" and need to go to the school nurse. T seems happy to greet their parents at the end of the day. T does not like to leave the house on the weekend.	J is 7-years old. J attends school regularly. Sometimes they can seem reluctant to join the classroom at the start of the day. Their parents report they can have "tantrums" before leaving home. Since the beginning of the term, J has expressed they are concerned about "something bad" happening to their sister. J's sister has just started at a new secondary school which requires her to get on a bus. J has asked you a few times to call their parents to check their sister is okay. As far as you are aware, their sister is doing well and there are no concerns. Usually, once J is engaged in activity, they do not tend to ask again. J sometimes complains of feeling tired and you have seen them becoming fidgety and restless, particularly at the start of the school day when their mother has just dropped them off. J has one close friend who like to do art and drawing together. They usually refuse to see them outside of school.	K is 5-years old. K seemed shy around their peers in their class at the start of the school term. Now they seem to have made a few friends who they spend time with at break and lunchtimes. You have overheard them talking about a recent trip to the zoo together. Once, at the beginning of term, K became upset when their parents dropped them off at school. K said their tummy and chest "felt funny" during the first breaktime. They went to see the school nurse but returned to class with no issues. K seems to enjoy reading a book with a member of staff on their own. They once said they did not want to join a group activity with other peers, but this has not persisted. K seemed quieter before a recent school trip which involved a long coach journey. They appeared to enjoy themselves on the trip. They were seen laughing and chatting with their friends on the coach.
M is 11-years old. M is frequently late to school. M's mother calls the office most days to say that M has not slept. M's mother reports that M gets upset when putting their school uniform on. They do not feel good enough. M arrives at school visibly shaking and refuses to go into the classroom. M does not like crowded places, and they avoid going to the local shops and park outside of school. They recently did not attend their end of term assembly as they said they felt they "couldn't breathe". M doesn't tend to finish their lunch. They say they are not hungry or are feeling full. M seems to have a good friend in their class who they sometimes talk to outside of school. In a recent writing exercise M wrote a story about not being able to make friends nor be able to keep up with the work when they move to their new secondary school. M did not want to talk about this.	R is 4-years old. R attends school. They have been observed to be upset a few times since the start of the school term when their parents drop them off. R tends to say they "do not feel well" and their head tummy and head hurt. R usually settles in the classroom once you offer them their favourite toy to play with. They seem to like one to one reading time with a member of staff. R has a few friends. R's parents report R has not wanted to attend any peer's birthday parties outside of school. They also refused to attend a recent family gathering. R's parents report R becomes irritable and upset if trying to encourage them to go. R likes going to the local park on the weekends with their brother. R can be disruptive in the classroom, especially before physical activities, often shouting and refusing to put on their PE kit. R says they do not want to get hurt if they play sports outside.	B is 8-years old. B appears interested in learning about different parts of the world. During one lesson at the end of term, B said that they had heard on the TV that "something bad" had happened to people in another country and they did not want that to happen to them or their family. B's parents report that B has not spoken about this since watching the news that day. Before a recent school trip to the seaside, B appeared upset when their father dropped them to school. Once on the school bus, B seemed brighter, chatting and laughing with their peers. On one occasion, B said they did not want to do Physical Education as they were feeling tired. They, otherwise, do not report feeling unwell often and have not missed a day off school this year. B has two older siblings who they play with at the local park outside of school. B talks about having sleepovers with two of their friends from school.

Appendix O: Vignette Questionnaire

Part 1

Prior to reading the below examples, please answer the following questions:

1. How confident are you that you could recognise signs of anxiety in children you work with? (0 = not at all, 10 = definitely confident)

0	1	2	3	4	5	6	7	8	9	10
Not at all confident										Definitely confident

2. If you spotted signs of anxiety in a child you work with, how confident would you be in knowing how to respond (i.e., what you would say / do)? (0 = not at all, 10 = definitely confident)

0	1	2	3	4	5	6	7	8	9	10
Not at all confident										Definitely confident

3. If you spotted signs of anxiety in a child you work with, how confident would you be in referring them for further mental health support? (0 = not at all, 10 = definitely confident)

0	1	2	3	4	5	6	7	8	9	10
Not at all confident										Definitely confident

Part 2

Now, you will read three written vignettes describing a child who you may work with
Please read the following example and answer the questions below.

[INSERT VIGNETTE]

After reading the above example:

1. Do you think that 'X' is presenting with a mental health difficulty?

Yes No Not sure

2. If you do think that 'X' is presenting with a mental health difficulty, what do you think they are presenting with?

	Obsessive Compulsive Disorder (OCD)		Depression
	Eating Disorder		Post-Traumatic Stress Disorder (PTSD)
	Anxiety Disorder / Difficulties		Behavioural difficulties (i.e., conduct disorder, oppositional defiant disorder)
	Other (please specify in the row below):		Not applicable

3. How severe do you think 'X's' difficulties are? (0 = no problem, 10 = severe difficulties)

0	1	2	3	4	5	6	7	8	9	10
No problem										Severe difficulties

4. If 'X' is a child you work with, how concerned would you be about them? (0 = not concerned, 10 = extremely concerned)

0	1	2	3	4	5	6	7	8	9	10
Not concerned										Extremely concerned

5. How likely would you be to offer help to this child? (0 = extremely unlikely, 10 = extremely likely)

0	1	2	3	4	5	6	7	8	9	10
Extremely unlikely										Extremely likely

6. How confident would you be in offering help to this child? (0 = not at all confident, 10 = definitely confident)

0	1	2	3	4	5	6	7	8	9	10
Not at all confident										Definitely confident

7. How likely are you to refer this child for further mental health support? (0 = extremely unlikely, 10 = extremely likely)

0	1	2	3	4	5	6	7	8	9	10
Extremely unlikely										Extremely likely

Part 3

Please consider the vignettes again and rank them in order from who you think has the least to the most severe difficulties.

[INSERT ALL THREE VIGNETTES]

Severity Level	Number of vignette
Least Severe	

Moderately Severe	
Most severe	

Appendix P: Initial Structured Feedback Questionnaire

Please answer **all** questions as accurately and honestly as possible.

Section 1: The following questions will focus on the training itself.

1. The content was easy to understand.

1	2	3	4	5	6	7
Strongly disagree			Neither agree nor disagree			Strongly agree

1. The content was easily accessible.

1	2	3	4	5	6	7
Strongly disagree			Neither agree nor disagree			Strongly agree

2. The content was applicable to a primary school setting.

1	2	3	4	5	6	7
Strongly disagree			Neither agree nor disagree			Strongly agree

3. The content was suitable for primary school staff.

1	2	3	4	5	6	7
Strongly disagree			Neither agree nor disagree			Strongly agree

4. The content will be helpful and useful for primary school staff.

1	2	3	4	5	6	7
Strongly disagree			Neither agree nor disagree			Strongly agree

5. The content will be helpful and useful for supporting children I work with.

1	2	3	4	5	6	7
Strongly disagree			Neither agree nor disagree			Strongly agree

6. I found the length of the training was appropriate (if not, please specify an appropriate length in the comments box below)

1	2	3	4	5	6	7
Strongly disagree			Neither agree nor disagree			Strongly agree

7. I found the training was a good pace throughout.

1	2	3	4	5	6	7
Strongly disagree			Neither agree nor disagree			Strongly agree

8. I feel another format other than a pre-recorded video would have been a better way of delivering the content (if so, please specify in the comments box below)

1	2	3	4	5	6	7
Strongly disagree			Neither agree nor disagree			Strongly agree

9. I would have preferred several trainings on this topic.

1	2	3	4	5	6	7
Strongly disagree			Neither agree nor disagree			Strongly agree

10. The training is important for primary school staff in their work.

1	2	3	4	5	6	7
Strongly disagree			Neither agree nor disagree			Strongly agree

11. I feel this training compliments my responsibilities at work.

1	2	3	4	5	6	7
Strongly disagree			Neither agree nor disagree			Strongly agree

12. I feel this training adds to my responsibilities at work.

1	2	3	4	5	6	7
Strongly disagree			Neither agree nor disagree			Strongly agree

13. I feel that there needs to more training on mental health delivered to school staff.

1	2	3	4	5	6	7
Strongly disagree			Neither agree nor disagree			Strongly agree

14. I would recommend the video to colleagues at my own and at different schools.

1	2	3	4	5	6	7
Strongly disagree			Neither agree nor disagree			Strongly agree

15. I will use some of the strategies from the training in my work.

1	2	3	4	5	6	7
Strongly disagree			Neither agree nor disagree			Strongly agree

16. I feel that there will be difficulties with using the content and strategies from the training in my work (if so, please specify these in the comments box below).

1	2	3	4	5	6	7
Strongly disagree			Neither agree nor disagree			Strongly agree

Please add any further comments you have about the training here:

Section 3: The following questions will focus on your experience of the research process.

1. I found it difficult to find the time to complete this training.

1	2	3	4	5	6	7
Strongly disagree			Neither agree nor disagree			Strongly agree

2. I found there were other difficulties that made it hard to complete this training (if so, please specify these in the comments box below).

1	2	3	4	5	6	7
Strongly disagree			Neither agree nor disagree			Strongly agree

3. I understood what the questionnaires were asking me.

1	2	3	4	5	6	7
Strongly disagree			Neither agree nor disagree			Strongly agree

4. The vignettes were easy to understand.

1	2	3	4	5	6	7

Strongly disagree	Neither agree nor disagree	Strongly agree

5. The vignettes were applicable to a primary school setting.

1	**2**	**3**	**4**	**5**	**6**	**7**
Strongly disagree			Neither agree nor disagree			Strongly agree

6. It took too long to complete all of the questionnaires.

1	**2**	**3**	**4**	**5**	**6**	**7**
Strongly disagree			Neither agree nor disagree			Strongly agree

7. I enjoyed taking part in the study.

1	**2**	**3**	**4**	**5**	**6**	**7**
Strongly disagree			Neither agree nor disagree			Strongly agree

Please add any further comments you have about the research process here:

Section 4
General Feedback
Please provide any other comments or feedback you have about the whole study here.

Thank you for taking the time to complete the feedback questionnaire.

Appendix Q: Follow-up Structured Feedback Questionnaire

Section 1: The following statements will focus on the general use of information and strategies since completing the training.

1. Since completing the training, I have found the content from the training helpful and useful for supporting children I work with.

1	2	3	4	5	6	7
Strongly disagree			Neither agree nor disagree			Strongly agree

2. Since completing the training, I have found it easy to use the content and strategies with children I work with.

1	2	3	4	5	6	7
Strongly disagree			Neither agree nor disagree			Strongly agree

3. Since completing the training, I have found there have been challenges / barriers to using the training in my work. (If so, please specify in the comments box below).

1	2	3	4	5	6	7
Strongly disagree			Neither agree nor disagree			Strongly agree

Section 2: The following questions will focus on specific aspects of implementing the information and strategies since completing the training intervention.

1. Since completing the training, over the past month, have you used any of the following strategies from the training with children you work with?

   a. Using normalizing statements (i.e., "Lots of children get scared and anxious about different things")

Yes ☐ No ☐ Not sure ☐

If you answered yes, please pick which option best describes you:
I have never used this strategy before and have begun using it since completing the training. ☐
I used this strategy before completing the training but have not used it more frequently since completing the training. ☐
I used this strategy before completing the training and have used it more frequently since completing the training. ☐

   b. Modelling helpful coping behaviours towards anxiety (i.e., remaining calm)

Yes ☐ No ☐ Not sure ☐

If you answered yes, please pick which option best describes you:
I have never used this strategy before and have begun using it since completing the training. ☐

I used this strategy before completing the training but have not used it more frequently since completing the training.
I used this strategy before completing the training and have used it more frequently since completing the training

c. Being curious about why the child is feeling a certain emotion (i.e., by asking open questions)

Yes ☐ No ☐ Not sure ☐

If you answered yes, please pick which option best describes you:
I have never used this strategy before and have begun using it since completing the training.
I used this strategy before completing the training but have not used it more frequently since completing the training. ☐
I used this strategy before completing the training and have used it more frequently since completing the training ☐

☐

d. Setting SMART (Specific, Measurable, Achievable, Relevant, Timely) goals

Yes ☐ No ☐ Not sure ☐

If you answered yes, please pick which option best describes you:
I have never used this strategy before and have begun using it since completing the training.
I used this strategy before completing the training but have not used it more frequently since completing the training. ☐
I used this strategy before completing the training and have used it more frequently since completing the training ☐

☐

e. Supporting a child to think about what they need to learn and do to challenge their anxious expectations

Yes ☐ No ☐ Not sure ☐

If you answered yes, please pick which option best describes you:
I have never used this strategy before and have begun using it since completing the training. ☐
I used this strategy before completing the training but have not used it more frequently since completing the training. ☐
I used this strategy before completing the training and have used it more frequently since completing the training

☐

f. Developing a step-by-step plan with a child to break down their goals and test out their fears

Yes ☐ No ☐ Not sure ☐

If you answered yes, please pick which option best describes you:
I have never used this strategy before and have begun using it since completing the training. ☐
I used this strategy before completing the training but have not used it more frequently since completing the training. ☐
I used this strategy before completing the training and have used it more frequently since completing the training

☐

g. Problem-solving (e.g., using the 4-step method: describing the problem, brainstorming solutions, decide on the best solution, and decide to have a go)

Yes ☐ No ☐ Not sure ☐

If you answered yes, please pick which option best describes you:
I have never used this strategy before and have begun using it since completing the training. ☐
I used this strategy before completing the training but have not used it more frequently since completing the training. ☐
I used this strategy before completing the training and have used it more frequently since completing the training ☐

h. Using creative ideas to support children to manage their worries (i.e., making a worry box or a worry monster using Playdough)

Yes ☐ No ☐ Not sure ☐

If you answered yes, please pick which option best describes you:
I have never used this strategy before and have begun using it since completing the training. ☐
I used this strategy before completing the training but have not used it more frequently since completing the training. ☐
I used this strategy before completing the training and have used it more frequently since completing the training ☐

i. Using praise and rewards when they have faced their fears / worries

Yes ☐ No ☐ Not sure ☐

If you answered yes, please pick which option best describes you:
I have never used this strategy before and have begun using it since completing the training. ☐
I used this strategy before completing the training but have not used it more frequently since completing the training. ☐
I used this strategy before completing the training and have used it more frequently since completing the training ☐

j. Checking in with the child to see what they have learnt when they have faced their worry.

Yes ☐ No ☐ Not sure ☐

If you answered yes, please pick which option best describes you:
I have never used this strategy before and have begun using it since completing the training. ☐
I used this strategy before completing the training but have not used it more frequently since completing the training. ☐
I used this strategy before completing the training and have used it more frequently since completing the training ☐

k. Speaking with parents / carers about the strategies you have been using to work together to support the child.

Yes ☐ No ☐ Not sure ☐

If you answered yes, please pick which option best describes you:

I have never used this strategy before and have begun using it since completing the training. ☐

I used this strategy before completing the training but have not used it more frequently since completing the training. ☐

I used this strategy before completing the training and have used it more frequently since completing the training ☐

l. Meeting with parents / carers (and the child) to review the child's progress on how they are facing their fears (this would be separate from usual school progress meetings)

Yes ☐ No ☐ Not sure ☐

If you answered yes, please pick which option best describes you:

I have never used this strategy before and have begun using it since completing the training. ☐

I used this strategy before completing the training but have not used it more frequently since completing the training. ☐

I used this strategy before completing the training and have used it more frequently since completing the training ☐

2. Since completing the training, have you referred any children for further mental health support?

Yes ☐ No ☐ Not sure ☐

a. If yes, where have you referred them to?

	GP		Mental Health Support Team (MHST)
	Pastoral member of staff		Child and Adolescent Mental Health Service (CAMHS)
	School nurse or counsellor		Special Educational Needs Co-ordinator (SENCO)
	Educational Psychologist		Other (please specify):

3. Since completing the training, have you downloaded the information worksheet?

Yes ☐ No ☐ Not sure ☐

a. If Yes, have you referred back to it and/or used it to support your work?

Yes ☐ No ☐ Not sure ☐

4. Since completing the training, have you accessed any of the additional resources given to you?

Yes ☐ No ☐ Not sure ☐

a. If Yes, please specify what ones you have accessed and/or used?

5. Have you recommended the training to a colleague?

Yes ☐ No ☐ Not sure ☐

6. Since completing the training, have you signed up to any further mental health training?

Yes ☐ No ☐ Not sure ☐

Please add any further comments you have about using the information and strategies from the training here:

Section 3: General Feedback

Please provide any other comments or feedback you have about the training package since you completed it here:

Appendix R: Participant Information Sheet

Online Intervention on Childhood Anxiety for School Staff

Introduction

Thank you for expressing your interest in completing this research study. We invite you to take part in this research study which involves completing a newly developed online training focussed on childhood anxiety for primary school staff. You will also be asked to complete some questionnaires before and immediately after completing the training, and then again four weeks later.

Summary

The purpose of this intervention (and the study) is to provide primary school staff with an introduction to and an understanding of childhood anxiety. This will include learning some of the signs and symptoms of anxiety during childhood and some strategies that you can use during your day-to-day work which may be useful in supporting children who experience anxiety at your school. Please take the time to carefully read the information below which will explain why the research is being conducted and what will be involved if you decide to participate.

What is involved?

There are two timepoints to this study. If you decide to participate, you are strongly encouraged to complete **both** timepoints as they will both inform the overall results of the study.

At the first timepoint, you will be asked to complete an online training as described above. You can complete the training in more than one sitting by saving your progress under the "Finish Later" button and coming back to it later if you wish, however, you will need to complete the training within one week. You will also be asked to complete three questionnaires before and immediately after the training. It is anticipated that completion of both the training and the questionnaires at this timepoint will take around 75 minutes. It may take you shorter or longer depending on how long you spend on each question.

At the end of the first timepoint, you will be asked to provide your email address to be contacted to complete the second timepoint of the study. You will be sent a separate online link to take part in this second timepoint four weeks after you complete the first timepoint. In this email you will be sent your participant ID number. It is important that you make note of this in order to match your answers together from the first and second timepoints.

The second timepoint will involve you completing three questionnaires similar to those you will complete in the first timepoint. You will not be asked to complete the online training again at the second timepoint. You will be able to complete the questionnaires in more than one sitting by saving your progress under the "Finish Later" button and coming back to it later if you wish, however, you will need to complete these measures within four weeks of being sent the invitation. You will be sent an email reminder to complete these follow-up measures two weeks after you have been sent the second timepoint link. You may be also sent other email reminders during this time up until the four weeks you have to complete the second timepoint. It is anticipated that the second timepoint will take around 20 minutes.

What are the possible benefits of taking part?

Taking part in the study will give you the opportunity to understand more about childhood anxiety, how to recognise it, and learn strategies that are based on scientific evidence that may help you support children to manage their anxiety. Taking part in the study is free and is completed online so you can choose when and where you complete it. The online training itself can also be made available to you after completing the study to allow you to refer back to if you wish.

You will also have the opportunity to provide your email address to be entered into a randomized prize draw to win one of five £20 vouchers. You must complete both timepoints in the study to be entered into the draw.

What are the possible drawbacks and risks of taking part?

We do not anticipate that completing the study will cause you any disadvantage or risk by taking part. As the study is focussed on anxiety, you may find some aspects of the training upsetting or sensitive based on your own personal experiences of anxiety or other events in your life. If this happens at any point during the study, and you find that the study has been distressing for you, we encourage you to seek further support. We recommend speaking with family, friends as well as your GP if you need further support and advice regarding your mental and emotional wellbeing.

You will also be provided with reminders of various services throughout the study that you can contact for support. A list of these services can also be found below:

Mind (www.mind.co.uk) – 0300 123 3393 (Monday to Friday, 9am to 5pm)
Samaritans (www.samaritans.org.uk) – 116 123 (free 24-hour helpline)
SANEline (www.sane.org.uk) – 0300 304 7000 (4pm-10pm every day)
PAPYRUS Hopeline (Under 35s) (www.papyrus-uk.org) – 0800 068 4141 (open 24/7)

How will my information be stored?

Taking part in this study is completely voluntary and you aren't obliged to take part.

In line with the Data Protection Act (2018) and General Data Protection Regulation guidelines (European Union, 2016), all information collected from the study will be stored on password protected databases, on a shared UEA OneDrive, that will only be accessed by members of the research team. Once you submit your answers following the first timepoint, your data will be given a unique participant ID number. This will be used to match your answers between the first and second timepoints.

If you choose to provide your email address for the second timepoint of the study, this will be de-identified from your study data and saved in a separate password-protected database to promote your confidentiality. It is important to note that there will be an indirect link between your study data and your email address as they will both be linked to your participant ID number despite being saved in separate databases. The database with your email address will only be used to send you the second timepoint link as well as reminders to complete the follow-up measures to protect your anonymity as much as possible.

If you choose to provide your email address to be entered into the prize draw, this will be completed on a separate, online link, unattached to your study answers to promote your anonymity as much as possible. Your email address for the purpose of the prize draw will not be linked to your participant ID number and will be stored in a separate database to your study data and email address you provided to be contacted for the second timepoint.

Following completion of this study, UEA will retain control of the data which will be kept securely for 10 years as per UEA Research Data Management Policy before it is destroyed. After completion of the first timepoint, you will be asked if you would like to opt into the research team retaining your email address to be used to be contacted for future research. If you do not wish to opt into this, your email address will be deleted immediately after the study has been completed.

You are free to withdraw from the study at any time before clicking the submit button at the end of both first and second timepoints. You do not need to give a reason for withdrawing from the study, you can simply close your browser window. Once you submit your data at the first timepoint, you will have two weeks after this date to contact the primary researcher to withdraw your data if you wish. This will also apply to after you submit your data at the second timepoint, where you will have another two weeks following this date to request your data to be withdrawn if you wish. You will need to provide your email address and/or participant ID number to locate your data, and state what data you would like to withdraw (e.g., first timepoint, second timepoint). After the two-week deadline at each timepoint, you will not be able to request to withdraw your data as it will have begun to be put together for analysis.

You will be contacted via your email address to be reminded to complete the follow-up questionnaires. You will be contacted via email if you are selected to win one of the five £20 vouchers.

Further Information

If you have any questions or concerns about any part of the study, you can contact the research team using the contact information below:

Primary Researcher:
Jessie Montague (jca23rpu@uea.ac.uk), Trainee Clinical Psychologist, University of East Anglia

Supervisors:
Kiki Mastroyannopoulou (k.mastroyannopoulou@uea.ac.uk), Clinical Associate Professor, University of East Anglia.

Dr Laura Pass (l.pass@uea.ac.uk), Clinical Associate Professor, University of East Anglia.

Dr Kenny Chiu (kenny.chiu@uea.ac.uk), Clinical Lecturer in Clinical Psychology, University of East Anglia.

Dr Elene Nicola (elene.nicola1@nhs.net) Clinical Psychologist, NHS.

If you have any further questions, concerns, or complaints regarding this research or any aspect of the study itself, please contact the primary researcher on the details below:

Jessie Montague (jca23rpu@uea.ac.uk)

Alternatively, if you would like to speak to someone independent from the research team, you can contact

Professor Niall Broomfield (n.broomfield@uea.ac.uk), Head of Department of Clinical Psychology and Psychological Therapies (CPPT), Professor of Clinical Psychology, Programme Director for ClinPsyD, Director of Postgraduate Studies, University of East Anglia.

Thank you for taking the time to read this information. If you are happy to take part in the study (which includes both timepoints), please click the continue button below. This will take you to the consent form.

Appendix S: Participant Consent Form

A follow-up feasibility study on a cognitive-behavioural therapy (CBT)-informed online intervention on childhood anxiety for primary school staff.

Support Information:
Mind (www.mind.co.uk) – 0300 123 3393 (Monday to Friday, 9am to 5pm)

Samaritans (www.samaritans.org.uk) – 116 123 (free 24-hour helpline)

SANEline (www.sane.org.uk) – 0300 304 7000 (4pm-10pm every day)

PAPYRUS Hopeline (Under 35s) (www.papyrus-uk.org) – 0800 068 4141 (open 24/7)

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Consent Form

Study Title: A follow-up feasibility study on a cognitive-behavioural therapy (CBT)-informed online intervention on childhood anxiety for primary school staff.

Name of Researcher: Jessie Montague, University of East Anglia

Contact Information: jca23rpu@uea.ac.uk

*Please tick the "Agree" box at the end of this form if you agree with **all** of the following statements:*

1. I confirm that I am a member of staff in an education setting who has direct contact with children aged 4 to 11 years old.

2. I confirm that I do not work in a special educational needs (SEN) school

3. I confirm that I have read the information sheet for this study and have had the opportunity to consider the information, ask any questions I have had, and have had these answered satisfactorily by one of the research team.

4. I understand that my participation in the study is voluntary, and I am not obliged to take part.

5. I understand that I am free to withdraw from either the first and/or second (follow-up) timepoints of the study at any time before I submit my answers without giving any reason.

a. I understand that, once I have submitted my data at the first and second timepoints, I have two weeks after each respective timepoint to contact the primary researcher to withdraw my data if I wish.

b. I understand I will need to provide my email address and/or my participant ID number to the primary researcher if I wish to withdraw my data to locate my data and state what data I would like to withdraw (e.g., first timepoint, second timepoint).

c. I understand that after the two-week deadline at each timepoint, I will not be able to request to withdraw my data as it will have begun to be put together for data analysis.

6. I understand that the information I provide in the study may be used to inform and support other, future research, may be shared anonymously with other researchers, and the results could be used in research publications and journal articles.

7. I understand that my research data (including my email address if I choose to provide this) will be accessed and stored securely by the research team on password-protected databases, on a shared UEA OneDrive.

8. I understand that, if I **do not** opt into the research team retaining my email address to be used in future research, my email address will be deleted immediately after completion of the study.

9. I agree to take part in the above study.

1. ***By clicking 'agree' you confirm that you agree with all of the above statements. Once you have clicked 'agree', you can proceed to the first questionnaire.*** *

○ Agree

Next

Appendix T: Participant Resource Sheets

CHECKLIST FOR SCHOOL STAFF OF SIGNS TO LOOK OUT FOR IN CHILDREN WHO MAY BE STRUGGLING WITH ANXIETY

Signs to look out for:

- Avoidance (such as not participating in tasks or activities or appearing unusually quiet in class)
- Difficulties concentrating & remembering new information (this may look like children's minds going blank). This may impact on their schoolwork.
- Irritability, frustration, aggression, or anger.
- Emotional or behavioural outbursts, shouting, or crying. This may be disruptive in the classroom.
- Increased tiredness & fatigue. Parents / carers may report their child has difficulties with sleeping.
- Loss of appetite
- Loss of interest in usual hobbies / activities (both inside and outside of school) and not being able to do what their peers are doing.
- Staying close to someone's side and/or avoiding eye contact with others.
- Overpreparing for the day or task.
- Physical symptoms such as stomach-ache, muscle aches, headaches, or more vague symptoms such as "I do not feel well". This may lead to time off school.
- Saying statements that predict the worst is going to happen or they cannot cope.
- Asking lots of questions.
- Asking for reassurance (e.g., will I be okay?)
- Not asking for help.
- Asking to see the school nurse or to call parents / carers during the day.

What can I do?

This is not an exhaustive list, and signs may be similar to other difficulties such as depression or other behavioural challenges.

If you notice these signs in children you work with, especially if there is a change in their usual behaviour, or if these signs are present before or after a specific situation, this may indicate that they are experiencing anxiety.

You may want to speak to parents / carers, the child themselves, and share your concerns with the staff team responsible for student's mental health and wellbeing at your school i.e., SENCO (Special Educational Needs Co-ordinator), Mental Health or Safeguarding Lead, or Pastoral team.

You may also want to consider making a referral to internal services (such as Mental Health Support Teams) or external services (such as Children and Adolescent Mental Health services). However, check with your school guidelines and processes to see what is most appropriate for the child you are working with.

If you are urgently concerned about a child you are working with, you can contact the NHS 111 service.

Information gathered from:

Cartwright-Hatton, S. (2007). *Coping with an Anxious or Depressed Child: A CBT Guide for Parents and Children*. Simon and Schuster.

Chiu, A., Falk, A., & Walkup, J. T. (2016). Anxiety disorders among children and adolescents. *Focus*, *14*(1), 26-33.

Creswell, C., & Willetts, L. (2007). *Overcoming your child's fears and worries: A self-help guide using cognitive behavioural techniques.* Robinson.

Creswell, C., & Willetts, L. (2019). Helping Your Child with Fears and Worries: A Self-help Guide for Parents (2nd ed.). Robinson.

Fehr, K. K., Chambers, D. E., & Ramasami, J. (2021). The impact of anxiety on behavioral sleep difficulties and treatment in young children: A Review of the Literature. *Journal of Clinical Psychology in Medical Settings*, *28*(1), 102-112.

Foxman, P. (2004). *The worried child: Recognizing anxiety in children and helping them heal* (No. 144). Hunter House.

Muris, P. (2010). *Normal and abnormal fear and anxiety in children and adolescents*. Elsevier.

Rockhill, C., Kodish, I., DiBattisto, C., Macias, M., Varley, C., & Ryan, S. (2010). Anxiety disorders in children and adolescents. *Current problems in pediatric and adolescent health care*, *40*(4), 66-99.

CHECKLIST FOR SCHOOL STAFF TO HELP CHILDREN OVERCOME ANXIETY IN SCHOOL

Adapted from:

Halldorsson, B., Elliott, L., Chessell, C., Willetts, L., & Creswell, C. (2021). *Helping Your Child with Fears and Worries: Guided Self-Help Manual for Therapists Working with Groups.* **(This can be accessed freely on: https://centaur.reading.ac.uk/65533/)**

1. As much as possible, work with the child to set SMART goals so you both know what they want to achieve.
2. Think about what the child needs to learn in order to challenge their anxious expectations.
3. Work with the child to develop a plan to test out fears and gain new knowledge that they can cope. Make a step-by-step plan to gradually try out new things to test their anxious expectations.
4. If the child struggles with a step, it may simply be too difficult, in which case break it down into smaller ones.
5. Use normalising statements, to show the child you understand it can be upsetting or frustrating when things are difficult but encourage them to keep trying if it's manageable. It can also be helpful to share your own experiences and worries of learning new skills.
6. Be open and explicit with parents/caregivers about the strategies you are using so that you can work together. If a similar approach is being taken at home and at school, change will occur faster. Meet with parent/caregivers to review progress regularly and discuss ways in which you can work together to implement some of this work.
7. Find ways to motivate and reward the child. You could speak with parents or caregivers to help facilitate this – facing fears is hard work (and they may not always show you how hard they are finding it)!
8. Be positive and praise the child – just having a go is an achievement, even if they struggled or couldn't do it all. Show your confidence in them with your body language and let them know you think they can do it!
9. Be prepared for setbacks, they always happen. Just try again the next day or the next week.

Appendix U: Follow-up Participant Information Sheet

A follow-up feasibility study on a cognitive-behavioural therapy (CBT)-informed online intervention on childhood anxiety for primary school staff - follow-up.

Support Information:
Mind (www.mind.co.uk) – 0300 123 3393 (Monday to Friday, 9am to 5pm)

Samaritans (www.samaritans.org.uk) – 116 123 (free 24-hour helpline)

SANEline (www.sane.org.uk) – 0300 304 7000 (4pm-10pm every day)

PAPYRUS Hopeline (Under 35s) (www.papyrus-uk.org) – 0800 068 4141 (open 24/7)

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Online Intervention on Childhood Anxiety for School Staff

Introduction and Summary:

Firstly, thank you for taking the time to complete the first timepoint of the study and expressing an interest in completing the next part of this research study. To remind you of what is involved in this second timepoint of the study, a brief summary will be described below.

You will be asked to complete three questionnaires similar to the first timepoint in the study which is estimated to take around 20 minutes. You will not be asked to complete the online training again at this point. As this second (follow-up) timepoint is part of the overall study, you are encouraged to complete the questionnaires. You will be able to complete the questionnaires in more than one sitting by saving your progress under "Finish Later" button and coming back to it later if you wish, however, you will need to complete these measures within four weeks of being sent the online link.

You should have been sent your participant ID number in the email containing the online link. You will need to input this before you can complete the questionnaires so that we can match your answers together.

Additional Information

Before continuing to the first questionnaire, please could you answer the following question (s):

1. Since completing the first timepoint, other than the recommendations made and suggested resources provided to you during and after completing our training, have you engaged in any separate, additional training on anxiety in children? *

- ○ Yes
- ○ No

2. If yes, please can you provide us with some further details. Please answer the following questions in your answer:

- What did the training cover (what was the content?)
- Did the training include specific information on anxiety in children?
- How long was the training for?

0/32,000 characters

3. Please provide the participant ID number you received in the email with the second timepoint online link here. This will enable us to match your answers to the first timepoint of the study: *

0/32,000 characters

Thank you for taking the time to read this information. Please click the continue button below which will take you to the first questionnaire.

Appendix V: Debrief Forms

Initial Debrief Form

Thank you taking part in the first timepoint of the study!

The purpose of this study was to provide school staff with an introduction to and understanding of childhood anxiety. It also included learning some of the signs and symptoms of childhood anxiety and some strategies that could be used during your day-to-day work which may be useful in supporting children who experience anxiety at your school.
As discussed, before you complete this first timepoint of the study, there is a second (follow-up) timepoint to this study which you will be invited to complete in four weeks' time. You are strongly encouraged to complete this, as this is part of, and will inform the overall research study.

Data Storage

In line with the Data Protection Act (2018) and General Data Protection Regulation guidelines (European Union, 2016), all information collected from the study will be stored on password protected databases, on a shared UEA OneDrive, that will only be accessed by members of the research team. Once you submit your answers following the first timepoint, your data will be given a unique participant ID number. This will be used to match your answers between the first and second timepoints.

If you choose to provide your email address for the second timepoint of the study, this will be de-identified from your study data and saved in a separate password-protected database to promote your confidentiality. It is important to note that there will be an indirect link between your study data and your email address as they will both be linked to your participant ID number despite being saved in separate databases. The database with your email address will only be used to send you the second timepoint link as well as reminders to complete the follow-up measures to protect your anonymity as much as possible.

If you choose to provide your email address to be entered into the prize draw, this will be completed on a separate, online link, unattached to your study answers to promote your anonymity as much as possible. Your email address for the purpose of the prize draw will not be linked to your participant ID number and will be stored in a separate database to your study data and email address you provided to be contacted for the second timepoint.

Following completion of this study, UEA will retain control of the data which will be kept securely for 10 years as per UEA Research Data Management Policy before it is destroyed. After completion of the first timepoint, you will be asked if you would like to opt into the research team retaining your email address to be used to be contacted for future research. If you do not wish to opt into this, your email address will be deleted immediately after the study has been completed.

If you wish to withdraw your data from this first timepoint of the study, you will have two weeks following the date you completed the first timepoint to contact the primary researcher to request this.

Study Outcomes

We hope that through the data collected in both the first and second (follow-up) timepoints of the study will inform whether this online intervention is feasible and can be applied and implemented in the education setting and rolled out to more school staff.

Further Resources

To access the checklists with information related to this training, please follow the links below:

1. Checklist for School Staff to Recognise Signs of Anxiety in Children – https://acrobat.adobe.com/id/urn:aaid:sc:EU:59c34794-5299-46b9-94a0-61a7bb4d8857
2. Checklist for School Staff to Help Children Overcome Anxiety in School - https://acrobat.adobe.com/id/urn:aaid:sc:eu:9cc75b46-cfac-4db6-b304-37c1bfc632a8

If you are interested in learning more about young people's anxiety, please see the below useful resources for you to access:

- https://www.annafreud.org/schools-and-colleges/resources/
- https://youngminds.org.uk/resources/school-resources
- https://research.reading.ac.uk/andy/resources/resources-schools/
- https://www.samaritans.org/how-we-can-help/schools/education-professionals/
- https://educationhub.blog.gov.uk/2021/09/03/mental-health-resources-for-children-parents-carers-and-school-staff/?v=1725353388

If you would like more information following the training, please see the below resources that the training is based on for you to refer to:

- Creswell, C., Parkinson, M., Thirlwall, K., & Willetts, L. (2019). Parent-led CBT for child anxiety: helping parents help their kids. Guilford Press.
- Creswell. C., & Willets. L. (2019). Helping your Child with Fears and Worries: A self-help guide for parents. Robinson.
- Creswell, C., & Willetts, L. (2007). Overcoming Your Child's Fears and Worries: A Self-help Guide Using Cognitive Behavioural Techniques. Robinson
- Halldorsson, B., Elliot, L., Chessell, C., Willetts, L., & Creswell, C. (2021). Helping your Child with Fears and Worries: Guided Self-Help Manual for Therapists Working with Groups. (This can be requested and accessed on: https://centaur.reading.ac.uk/65533/)

Further Support

If any aspect of the content or process of the study has been upsetting for you, we encourage you to seek further support which can be from friends, family, as well as your GP who can provide you with advice regarding your mental and emotional wellbeing.
Please see the below contact information for further support which have been provided to you throughout the study:

Mind (www.mind.co.uk) – 0300 123 3393 (Monday to Friday, 9am to 5pm)
Samaritans (www.samaritans.org.uk) – 116 123 (free 24-hour helpline)
SANEline (www.sane.org.uk) – 0300 304 7000 (4pm-10pm every day)
PAPYRUS Hopeline (Under 35s) (www.papyrus-uk.org) – 0800 068 4141 (open 24/7)

Copy of the Findings

If you would like a copy of the findings sent to you, please contact the primary researcher on the contact details below. You will be sent a copy once the study is completed.

Contact Information

If you have any further questions, concerns, or complaints regarding this research or any aspect of the study itself, please contact the primary researcher on the details below:
Jessie Montague (jca23rpu@uea.ac.uk)

Alternatively, if you would like to speak to someone independent from the research team, you can contact

Professor Niall Broomfield (n.broomfield@uea.ac.uk), Head of Department of Clinical Psychology and Psychological Therapies (CPPT), Professor of Clinical Psychology, Programme Director for ClinPsyD, Director of Postgraduate Studies, University of East Anglia.

Thank you again for taking part in the first timepoint of the study!

Follow-up Debrief Form

Thank you taking part in this second (and final) timepoint of the study!

The purpose of this study was to provide school staff with an introduction to and understanding of childhood anxiety. It also included learning some of the signs and symptoms of childhood anxiety and some strategies that could be used during your day-to-day work which may be useful in supporting children who experience anxiety at your school. We also hope that we will understand more about how helpful this training is for school staff when supporting children with anxiety, and what considerations may be needed to implement the training into school settings.

If you would like to be entered into a randomized prize draw for completing both timepoints of the study, please follow the link below:

[INSERT SEPARATE PRIZE DRAW LINK]

Data Storage

In line with the Data Protection Act (2018) and General Data Protection Regulation guidelines (European Union, 2016), all information collected from the study will be stored on password protected databases, on a shared UEA OneDrive, that will only be accessed by members of the research team.

Your data from the first timepoint has already been allocated a unique participant ID number which you should have provided during this second timepoint to match your answers together.

As you have provided your email address for the second timepoint of the study, this has been de-identified from your study data and saved in a separate password-protected database to promote your confidentiality. It is important to note that there will be an indirect link between your study data and your email address as they will both be linked to your participant ID number despite being saved in separate databases. The database with your email address has only been used to send you the

second timepoint link as well as reminders to complete the follow-up measures to protect your anonymity as much as possible.

If you choose to provide your email address to be entered into the prize draw, this will be completed on a separate, online link, unattached to your study answers to promote your anonymity as much as possible. Your email address for the purpose of the prize draw will not be linked to your participant ID number and will be stored in a separate database to your study data and email address you provided to be contacted for the second timepoint.

Following completion of this study, UEA will retain control of the data which will be kept securely for 10 years as per UEA Research Data Management Policy before it is destroyed.

You would have been asked at the end of the first timepoint if you would like to opt into the research team retaining your email address to be used to be contacted for future research. If chose not to opt into this, your email address will be deleted immediately after the study has been completed.

You can no longer withdraw your data from the first timepoint as this has already begun to be put together for data analysis. However, if you wish to withdraw your data from this second timepoint of the study, you will have two weeks following the date you completed the second timepoint to contact the primary researcher to request this.

Study Outcomes

We hope that through the data collected in both the first and second timepoints of the study will inform whether this online intervention is feasible and can be applied and implemented in the education setting and rolled out to more school staff.

Further Resources

To access the checklists with information related to this training, please follow the links below:

1. Checklist for School Staff to Recognise Signs of Anxiety in Children – https://acrobat.adobe.com/id/urn:aaid:sc:EU:59c34794-5299-46b9-94a0-61a7bb4d8857

2. Checklist for School Staff to Help Children Overcome Anxiety in School - https://acrobat.adobe.com/id/urn:aaid:sc:eu:9cc75b46-cfac-4db6-b304-37c1bfc632a8

To remind you, if you are interested in learning more about young people's anxiety, please see the below useful resources for you to access:

- https://www.annafreud.org/schools-and-colleges/resources/
- https://youngminds.org.uk/resources/school-resources
- https://research.reading.ac.uk/andy/resources/resources-schools/
- https://www.samaritans.org/how-we-can-help/schools/education-professionals/
- https://educationhub.blog.gov.uk/2021/09/03/mental-health-resources-for-children-parents-carers-and-school-staff/?v=1725353388

If you would like more information following the training, please see the below resources that the training is based on for you to refer to:

- Creswell, C., Parkinson, M., Thirlwall, K., & Willetts, L. (2019). Parent-led CBT for child anxiety: helping parents help their kids. Guilford Press.
- Creswell. C., & Willets. L. (2019). Helping your Child with Fears and Worries: A self-help guide for parents. Robinson.
- Creswell, C., & Willetts, L. (2007). Overcoming Your Child's Fears and Worries: A Self-help Guide Using Cognitive Behavioural Techniques. Robinson
- Halldorsson, B., Elliot, L., Chessell, C., Willetts, L., & Creswell, C. (2021). Helping your Child with Fears and Worries: Guided Self-Help Manual for Therapists Working with Groups. (This can be requested and accessed on: https://centaur.reading.ac.uk/65533/)

Further Support

If any aspect of the content or process of the research has been upsetting for you, we encourage you to seek further support. We recommend speaking with family, friends as well as your GP if you need further support and advice regarding your mental and emotional wellbeing.

Please see the below contact information for further external support which have been provided to you throughout the study:

Mind (www.mind.co.uk) – 0300 123 3393 (Monday to Friday, 9am to 5pm)
Samaritans (www.samaritans.org.uk) – 116 123 (free 24-hour helpline)
SANEline (www.sane.org.uk) – 0300 304 7000 (4pm-10pm every day)
PAPYRUS Hopeline (Under 35s) (www.papyrus-uk.org) – 0800 068 4141 (open 24/7)

Copy of the Findings

If you would like a copy of the findings sent to you, please contact the primary researcher on the contact details below. You will be sent a copy once the study is completed.

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Thank you again for taking part in this study!