



SUSTAINABLE RETURN TO WORK (RTW) AFTER ILL-HEALTH: PERSONAL, SOCIAL AND ORGANISATIONAL FACTORS

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Abstract

Background: Musculoskeletal and common mental disorders (MSDs and CMDs) have been recognized as the most common causes of sickness absence in developed countries, and it has become a major research focus, especially as the economic cost on sickness absence is growing yearly. While there is a strong body of evidence on the effectiveness of workplace-based interventions in facilitating a return to work after sickness absence caused by these conditions, evidence of the sustainability of return to work is limited. Sustainable RTW is defined as a stable full-time or part-time RTW to either the original or modified job for a period of at least three months without relapse or sickness absence re-occurrence. With the insignificant reductions in reported lost days to work as a result of these conditions, it has become imperative to better understand what factors could play a role in sustainable RTW for the benefits of both employees and employers. This research therefore seeks to investigate the role of personal and social factors in facilitating a sustainable RTW for employees sick-listed with MSDs and CMDs. It also aims to explore the extent to which gender influences the factors that facilitate or impede a sustainable RTW.

Methods: This thesis employed a multi method consisting of a systematic review and a qualitative study which was conducted in a sequential order. In the first study, a systematic review was conducted to evaluate the impact of important personal and social factors on sustainable return to work (RTW) after ill-health due musculoskeletal disorders (MSDs) and common mental disorders (CMDs) and to compare the effects of these personal and social factors across both conditions. A literature search was conducted in 13 databases and 79 studies were selected for the review, and the methodological design was graded as very high, high and low quality.

A qualitative study was conducted using a modified realist evaluation approach thereafter to determine the extent to which factors that facilitate a sustainable RTW may vary across men and women. A realist evaluation is an approach grounded in realism which involves development of initial theories, testing and refining of theories by exploring the context, mechanism and outcome (CMO) interactions. Findings from the initial systematic review and five face to face interviews conducted with managers informed the development of thirteen initial theories. Theory here refers to the assumption about how a programme or process is expected to achieve its desired outcome. Initial theories were then configured within the CMO

structure and were then tested by conducting two semi-structured interviews with 22 participants sick-listed for MSDs and CMDs from two public organisations at an interval of two months. Second interviews were conducted for the purposes of clarification. Data analysis was conducted using a hybrid form of thematic analysis consisting of inductive, deductive and abductive inferences.

Results: In the systematic review, personal factors identified in the included studies comprised of attitude, self-efficacy, age, gender, education, economic status/income, length of sickness absence, job contract/ security. Social factors identified included support from leaders and co-workers (where leaders include managers, line managers, supervisors etc.) and job crafting. The most consistent evidence for achieving sustainable RTW for both MSDs and CMDs was from support from line managers or supervisors and co-workers, positive attitude, self-efficacy, young age and higher education levels. Job crafting, economic status, length of absence and job contract/security showed promising results, but too few studies exist to draw definite conclusions. Results regarding the effects of gender were inconsistent and unclear, as such, a qualitative study was conducted on gender as inconsistent findings indicated a major gap in the literature.

Fifteen main codes and 29 sub-codes explaining what factors, for whom and under what circumstance they influence or facilitate RTW outcomes were identified in the qualitative data. These codes were grouped under three main categories based on their RTW outcomes; factors that motivate or influence RTW after a sick leave period, factors that impact on the sustainability of RTW and factors that impede sustainable RTW or contribute to poor RTW outcomes. As a result of validating CMO configurations with accounts of participants, out of the thirteen initial theories developed a priori, one theory was discarded, four were retained, and in some cases updated to include more explanations and eight were refined. Eighteen new theories were developed from inductive themes identified in the transcript using the CMO configuration. In total, 30 theories were developed explaining the context in which various mechanisms are activated to facilitate RTW outcomes.

The main findings from the qualitative study showed that while some factors that influenced employee's decisions to RTW after a period of absence were gender-specific, sustainable RTW outcomes were mainly facilitated or impeded by a good quality or poorly implemented RTW strategy. RTW process was considered of a good quality and effective when implemented by a competent and supported line manager who works in collaboration with

other support services. However, implementation of effective RTW by line-managers appeared to be hinged on a supportive higher management. Factors that impacted RTW for female participants included: engaging workplace health services, work as evidence of achievement, work for social interaction, sick leave guilt, and workload clarity. For men, a fear of increasing workload and extended absence played a role in RTW outcomes.

Conclusions: Findings from the review demonstrate that a variety of personal and social factors have positive and negative influences on sustainable RTW. I suggest that the social environment and how it interrelates with personal factors like attitudes and self-efficacy should be studied in more detail in the future as the inter-relationship between these factors appears to impact positively on sustainable RTW outcomes. Areas for future research include more high-quality studies on job crafting, economic status/income, length of absence, job contract/security and gender. Findings from the qualitative study shows that while gender-based factors influence decisions to RTW, sustainability of RTW is mainly facilitated by organisational factors. This study also highlights the role of competent and supportive line-managers in the implementation of effective RTW strategies for returning workers. Proper education and training are imperative for these workplace actors as sustainable RTW for sick-listed workers appears to be hinged on their efficiency in managing the RTW process. This thesis highlights a number of contributions to the knowledge of sustainable RTW for people sick-listed with CMDs and MSDs. Specifically, the identification of certain approaches or elements of the RTW process that benefits individuals classed as short-term or long-term absentees is a new addition to knowledge in this field and it would prove useful in the implementation of more effective RTW plans for sick-listed workers.

Overall, findings from this thesis highlights the interacting role of personal and social factors in either facilitating or impeding sustainable RTW outcomes for people sick-listed with MSDs and CMDs on a short-term or long-term basis. It therefore suggests that when employers or RTW coordinators are careful to take account of these factors on a case by case basis during the RTW process, the potential to impact positively on lost days from work as result of ill-health may be heightened. Hence, sustainable RTW after ill-health hinges on employer's ability to effectively uphold their duty of care to employees.

Keywords: Return to work. Musculoskeletal pain. Mental disorders. Systematic review. Occupational health. Qualitative Study. Realist Evaluation.

Declaration

I confirm that no portion of the work referred to in this thesis has been submitted in support of an application for another degree or qualification at this or any other university or institution of learning.

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Original Papers

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Related but not included in this thesis;

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Etuknwa, A. (2019) *Returning to work after illness: evidence on improving the experience*. [Online] United Kingdom: What works wellbeing. Available at: <https://whatworkswellbeing.org/blog/returning-to-work-after-illness-evidence-on-improving-the-experience/>

Etuknwa A, Daniels K, Eib C. A Realist Evaluation on the Role of Gender on Sustainable RTW after ill-health. *Journal of Human Relation* (In preparation).

Etuknwa, A and Mathai, M. Common mental health problems. In Handbook Series in Occupational Health Sciences. *Handbook on Management and Employment Practices*. Switzerland: Springer (In preparation).

Conference Abstracts

Oral Presentations;

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Etuknwa A, Daniels K, Eib C. Sustainable Return to Work after Ill-health: Personal and Social Factors. In: European Academy of Occupational Health and Psychology Conference, Lisbon. September 2018. Page ivied.

Etuknwa A, Daniel K, Eib C, Nayani R. Are factors that facilitate a sustainable RTW gender-specific? In: British Academy of Management Doctoral Symposium, Birmingham. September 2019.

Other Presentations;

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Media Coverage

Personal and social factors impact return to work after ill-health

Outlet: workplaceinsight.net

Date: 17/02/2019

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Returning to work after illness: evidence on improving the experience

Outlet: whatworkswellbeing.org

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Employers need support to keep staff well and in work, says DWP advisor

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Colleague support, good attitude necessary for successful return to work, researchers say

Outlet: safetyandhealthmagazine.com

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Manager Support, Positive Attitude Aid in Return to Work after Sick Leave

Outlet: psychcentral.com

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Outlet: alphagalileo.org

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Press Release:

Personal and social factors impact return to work after ill-health

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Abbreviations

CMD	Common Mental Disorders
F	Female
GP	General Practitioner
HASAWA	Health and Safety at Work Act
HR	Human Resources
LM	Line-Manager
M	Male
MSD	Musculoskeletal Disorders
OH	Occupational Health
Org	Organisation
RTW	Return to Work
RQ	Research Question
S	Site
SA	Sickness Absence
T	Telephone
U	University
WHS	Workplace Health Services

SECTION A: Thesis Introduction

1. Chapter one: Thesis Introduction and Background

1.1 Background

Musculoskeletal and common mental disorders (MSDs and CMDs) have been recognized as the most common causes of sickness absence (SA) in developed countries, and it has become a major research focus, especially as the economic cost on sickness absence is growing yearly (Hill, 2015). In 2014/15, approximately 1.2 million workers in Great Britain were suffering from ill-health that was either caused or worsened by their current or past jobs (Health and Safety Executive (HSE), 2015). Of the 1.2 million workers, 80% of work-related illness was due to musculoskeletal disorders (MSDs) and common mental health disorders (CMDs) such as stress, depression or anxiety (Health and Safety Executive (HSE), 2015). These figures constitute significant fractions of reported SA episodes, and extended absence is associated with a reduced probability of return to work (RTW) (Henderson, et al., 2005), which becomes costly for employers, increasing the urgency to help workers RTW early. Therefore, to reduce costs related to sickness absence and reduce the risk of long-term disability associated with an extended absence from work, it is paramount to understand better the factors that either impede or facilitate a sustainable RTW for workers sick-listed with MSDs and CMDs. Sustainable RTW is defined as a stable full-time or part-time RTW to either original or modified job for a period of at least three months without relapse or sickness absence reoccurrence.

In 2017, employment rates for men and women aged 16-64 years in the UK recorded a 75.3% increase higher than a year earlier (74.5%) and the joint highest since comparable records began in 1971 (Office for National Statistics, 2017). While working women in that year recorded a 70.8% high from 68.7% in 2014, men recorded a 79.8% high from 78.4% in 2014 (Office for National Statistics, 2017). These figures suggest that more men and women are being employed in the labour market. However, evidence shows that compared to men, women have higher SA rate due to ill-health as a result of occupying more physically demanding jobs (Laaksonen, et al., 2008). In contrast, as some studies propose that the inequality in absence rate may be as a result of more women than men having lower education and as such occupying blue-collar jobs with high risk to health (Hansen, et al., 2005). Kelsh and Sahl (1996) argue that there is now an increased number of women expanding into male-dominant trade and craft occupations which have higher injury or illness rate. Hence, if both men and women are exposed to injury or illness-prone jobs, the wide margin of absence rate among women is still not explained. Some studies assert that even when men and women do the same jobs, exposure to risk factors may vary for both genders (Messing, et al., 2009). Even though there is a growing

recognition that the risk of work to health may differ for men and women based on either occupational exposure or influence from non-work factors (Koehoorn, 2013), it is unclear if this also translates to recovery time and ability to remain at work for both genders. According to Stergiou-Kita *et al.* (2016), because gender plays such a prominent role in the labour market, it becomes necessary to examine how it also influences return to work (RTW) outcomes after ill-health.

1.2 Problem statement

According to Fit for Work UK (2013), UK and Germany have the worst absence rates due to ill-health in Europe, lagging behind other European countries such as Poland, Spain, France, Austria, Ireland, Finland, Romania, Slovenia, Greece and Estonia. In 2015/16, work-related stress, depression and anxiety accounted for a total of 488,000 reported new cases in the United Kingdom, a prevalence rate of 1510 per 100,000 workers with 11.7 million working days lost. MSDs, in the same year, accounted for a total of 539,000 out of 1.311,000 for all work-related illnesses, with 8.8 million working days lost (Health and Safety Executive (HSE), 2016). In 2013, days lost as a result of SA in the UK totalled to 131 million; a significant decrease from 178 million days lost in 1993 (Office for National Statistics, 2014). However, between 2006 and 2018, there has been no significant reduction in days lost to SA (Health and Safety Executive (HSE), 2018). Based on these insignificant reductions in absence rates in the last decade, it is therefore unclear what factors are impeding the effectiveness of measures, best practices, policies and guidelines put in place by the government/ businesses to facilitate a RTW and reduce days lost to sickness absence.

Moreover, the high numbers of SA raise concerns about the appropriateness of factors considered when implementing RTW strategies at the workplace. Some authors suggest that reductions in absence rates will be achieved when the work factors that instigated absence are considered (Kelly, 2012). Failure to take into account important work factors may contribute to the implementation of ineffective measures, which, in turn, limits the likelihood of reductions in absence rate. Consequently, while employers have a duty of care to ensure the health and safety of its workers to a reasonably practicable level, the same act mandates employees to take reasonable care of their health and safety and that of their co-workers (Health and Safety at Work Act (HASAWA), 1974). Hence, it is also unclear if employees are fully engaging of workplace measures provided. Research is therefore needed to understand better key factors relevant for sustainable RTW to point to the best possible ways to manage RTW for people sick-listed with CMDs and MSDs.

1.3 Justification for concurrently investigating RTW outcomes for workers with both MSDs and CMDs

According to Gellatly (2019), while MSDs and CMDs clinically differ in the nature of illness and symptoms, they are intertwined and continuing to assess their symptoms separately as a single condition, with single causation, requiring a single intervention pathway will continue to result in a failed attempt at effectively preventing, assessing and managing these conditions.

Very few guidelines on SA management address both MSDs and CMDs holistically, although there are striking parallels between both conditions (Durand, et al., 2014). Both conditions share similarities in health characteristics relating to delayed onset, delayed recovery, reduced life expectancy and unclear diagnosis which in many cases may result in chronic absences (Kendall, et al., 2016; Naylor, et al., 2016). The RTW processes and psychosocial risk factors for these conditions are also similar (Kendall, et al., 2016; Naylor, et al., 2016). According to Heuvel (2017), even though psychosocial risk factors are often associated with CMDs, several studies have demonstrated that they also affect MSDs. The association between MSDs and CMDs has been widely investigated, and findings indicate that people of working age with CMDs are often coexisting with MSDs which may influence a person's successful RTW (Lloys, et al., 2008). Recent studies also provide evidence showing that being on sick leave for an extended period due to MSDs increases the likelihood of other health repercussions – including CMDs (Carnide, et al., 2016). Therefore, there are several reasons to investigate RTW outcomes for both MSDs and CMDs together.

By addressing the commonalities or association between MSDs and CMDs concurrently, there may scope for improving interventions or approaches targeted at improving the health and wellbeing of individuals, increasing productivity and reducing SA rate (Whysall, 2008).

1.4 Relevance of return to work

RTW is a process of a worker returning to work following SA due to illness or injury (Schultz, et al., 2007). It is considered an important component of speedy recovery after ill-health (Alavi & Oxley, 2013), especially as absence from work for an extended period reduces the likelihood of RTW for sick-listed individuals (Conroy, 2017; Krause, et al., 1998). Though studies have shown how work generally instigates ill-health such as MSDs and CMDs (Briand, et al., 2007; Houtman, et al., 1994), Waddell and Burton's (2006) review builds strong evidence suggesting otherwise. They argue that work is beneficial for physical and mental health and well-being, as such it is a crucial component of a speedy recovery, making it important to help employees on sick leave return to work early.

Work-related injuries/illnesses result in significant cost to employers. According to Occupational Safety and Health (2012), the United States estimated the total cost of chronic work-related injuries/illnesses at \$250 billion, and these costs have risen by more than \$33 billion since a 1992 analysis. Similarly, in Great Britain, new cases of work-related illness in 2014/15 cost society around £9.3 billion, compared with £4.8 billion spent on workplace injury (Health and Safety Executive (HSE), 2015). Bearing in mind the insignificant reductions in the working days lost as a result of workplace ill-health, Fleming (2015) suggests that the cost of workplace illness and injury looks set on increasing. In addition to rising costs associated with SA, poor outcomes have many other negative implications for workers, their families and dependents, and the wider community (Selander, et al., 2002). These implications include; loss of productivity and increased use of income support payments. Therefore, research into this area is aimed to not only help reduce costs spent on absence due to ill-health but also to implementing effective measures that would ensure long-term recovery and prevent a reoccurrence for individual workers.

1.5 Return to work process, policies, best practices and guidelines

Studies have been conducted to provide insight into best practices in managing RTW for people sick-listed with MSDs and CMDs and practical guidance on resources available to both employers and employees during the RTW process (Conroy, 2017). Dewa *et al.*'s (2016) review identified the following as best practices for RTW of employees absent due to mental disorders; a well-described organizational policy and procedure for the roles and responsibilities of all stakeholders, a disability leave plan, work accommodations and supervisory training and mental health literacy training for all staff. Consequently, the Health and Safety Executive (2004) assert that a speedy return to work for employees absent from work due to ill-health is linked with many activities considered as best-practice. These activities include; keeping regular contact with the employee, reviewing employee's situation with the GP, return to work discussions with employee to identify root causes of ill-health for provision of likely preventive measures, and a staged return to help employee ease back into their work. Though these guidelines may not be legal requirements, Carruthers (2014) suggests that consistent application of such approaches in implementing RTW programs for employees absent due to ill-health may be useful in lowering risk and legal exposure, documenting cost savings, increasing productivity and morale, and supporting a cohesive and integrated absence management approach. However, there are currently no studies strengthening these assumptions. Hence the relevance of this thesis in evaluating the RTW process for people sick-

listed with MSDs and CMDs to identify the components of suggested best practices that are effective and ineffective.

1.6 Rationale for study

Until now, systematic reviews on RTW have to a great extent focused on the effectiveness of a varied number of interventions (Cullen, et al., 2018; Mikkelsen & Rosholm, 2018; Lammerts, et al., 2016; Nigatu, et al., 2016; Dewa, et al., 2015; Van Vilsteren, et al., 2015; Arends, et al., 2012; Carroll, et al., 2010; Franche, et al., 2005; Krause, et al., 1998). However, it is still unclear what factors facilitate sustainable RTW outcomes (Cancelliere, et al., 2016; Franche, et al., 2007). According to Cancelliere et al.'s (2016), the process of RTW is complex and not merely dependent on the effectiveness of interventions, rather it involves an interplay of many factors beyond the health condition. Similarly, Alavi and Oxley (2013) assert that when research concentrates more on learning about factors associated with sustainable RTW, further gains will be achieved in the effectiveness of RTW programmes.

Cancelliere et al. (2016) conducted a systematic review of reviews to identify prognostic factors for RTW and their association with RTW outcomes. Cancelliere et al.'s study (2016) identified higher education levels, higher socio-economic status, higher self-efficacy and optimistic expectations for recovery and RTW, lower severity of injury/illness, better RTW coordination and multidisciplinary interventions as common prognostic factors associated with a positive RTW. Cancelliere et al.'s (2016) findings introduced a promising line of direction; that employee's personal and social relations in the workplace both play an important role for better understanding RTW. However, sustainable RTW was not the outcome measure in that review, and ill-health was not limited to MSDs and CMDs but extended across different health and injury conditions. Thus, there warrants a review specifically addressing sustainable RTW outcomes for people with MSDs and CMDs. Similarly, Gallagher et al. (1989) suggested that lasting RTW outcomes may be achieved through employees' personal factors like age and length of sickness absence and psychosocial factors like social support, health locus of control and illness behaviour. In recent times, there has been similar suggestions to take into account these personal and social factors while implementing RTW strategies in the workplace (Kelly, 2012; Tjulin, et al., 2011). However, there are currently no studies explicitly investigating the effects of personal and social factors on sustainable RTW outcomes for MSDs and CMDs, as such, this current thesis could help uncover key factors that can account for the stability of absence due to MSDs and CMDs in advanced economies, in spite of evidence for the effectiveness of RTW interventions (Cullen, et al., 2018; Mikkelsen & Rosholm, 2018; Lammerts, et al., 2016; Nigatu, et al., 2016). Additionally, in the current

literature on RTW, there is a heavy focus on MSDs, especially low back pain and little on CMDs (Cancelliere, et al., 2016). This thesis seeks to address these gaps in evidence, thus providing a unique contribution to the literature on sustainable RTW after ill-health due to MSDs and CMDs.

In this thesis, the systematic review specifically focused on identifying various employee's personal and social factors taken into account in both intervention and non-intervention-based studies reporting sustainable RTW outcomes for people sick-listed with MSDs and CMDs. Gaps in evidence from the systematic review (study 1) regarding the effects of gender on sustainable RTW outcomes were further investigated qualitatively, adopting a realist evaluation approach. As evidence in some studies in the review suggested that sick-listed men were more likely to RTW more sustainably than women, in others it was women who returned more sustainably. Therefore, suggesting that there may be a factor or many factors influencing outcomes differently for both genders. However, it is unclear what these factors are and under what circumstances sustainable outcomes are achieved, hence the need for a qualitative enquiry.

Sustainable RTW is difficult to define especially as different studies use varying durations for outcome measures because of the difference in absence duration for MSDs and CMDs (Demou, et al., 2018). According to Krause et al. (2001), because measures of duration of disability and RTW outcomes serve multiple functions in principle, it becomes important to clearly state the function of outcome measures. As such the function of sustainable RTW outcome in this review was to identify a stable period of return after sick leave without a relapse. Jensen et al. (2012) defined sustainable RTW for people sick-listed with MSDs as the first period of four consecutive weeks without receiving health-related benefits. They argued that the 4-week period without relapse was considered sufficiently long enough to suggest a lasting and stable return. Conversely, Lammerts et al.'s (2016) study on sick-listed workers with a depressive or anxiety disorder operationalized sustainable RTW as employed participants who have not been long-term sick-listed (more than 14 days) in the previous 6 months. Hoefsmit et al. (2016) investigated RTW outcomes for employees sick-listed with all ill-health apart from terminally ill employees, and defined sustainable RTW as working for four weeks without relapse in partial or complete sick leave. In this review, sustainable RTW was formulated with a timeframe of at-least 3 months without relapse or absence. Across the included studies in this review, 3 months was the lowest follow-up period of which successful return to full-time and part-time work was recorded for people sick-listed with both MSDs and CMDs. Like Jensen et al. (2012), the researcher argues that RTW for at-least 3 months with no

recorded incidence of relapse and subsequent absence is considered a sufficiently long enough timeframe to suggest sustainability of return for people with both conditions. The 3 months' timeframe also takes into account the different recovery and RTW period for both MSDs and CMDs identified in previous studies.

Findings from this thesis will aid an understanding of what factors may either instigate or hinder a sustainable RTW outcome and what role gender plays in this outcome. This thesis intends to provide employers and policy makers with knowledge of key factors that will aid in implementing more effective RTW programmes. It will also add to the body of evidence on the impact of personal and social factors on RTW outcomes which is currently limited (Frache, et al., 2005), inform policy decision making and provide avenues for future research in the field of RTW.

1.7 Aims of the study

The primary aim of this thesis is to increase understanding around the key personal, social and organisational factors that are likely to facilitate or impede a sustainable RTW after ill-health due to CMDs and MSDs. More specifically, the systematic review aimed to assess the impact of personal and social factors on a sustainable RTW after ill-health due to MSDs or CMDs. Also, it aimed to identify commonalities of effects of these personal and social factors between both conditions. Personal factors identified included attitude, self-efficacy, age, gender, education, economic status/income, length of sickness absence, job contract/ security. Social factors identified included support from leaders and co-workers (where leaders include managers, line managers, supervisors, etc.) and job crafting and its related practices (employee-initiated changes to a job). The qualitative study follows as a result of gender-related gaps identified in the systematic review. Conducting a qualitative study using a realist evaluation approach aided explanations on how, why, when and under what conditions gender plays a role in sustainable RTW outcomes. The aims of the two studies were, therefore addressed by investigating the below research questions (**RQ**).

Systematic review;

RQ1: Is sustainable RTW facilitated by personal and social factors for employees sick-listed with MSDs and CMDs?

RQ2: What are the personal and social factors common across people sick-listed with both conditions (MSDs and CMDs), that play a role in sustainable RTW?

Qualitative study;

RQ3: To what extent does gender play a role in facilitating sustainable RTW outcomes during the RTW process for people sick-listed with CMDs and MSDs?

Employing a systematic review of the literature of all study designs reporting a sustainable RTW for people sick-listed with CMDs and MSDs was the most appropriate approach achieving RQ (1) and (2). Based on the gaps identified in the systematic review, RQ (3) was developed to be attained qualitatively. Repeated semi-structured interviews were conducted with sick-listed participants to understand their perspective on the RTW process and what factors impacted RTW outcomes. A comparison of identified factors was carried out and queried by gender and other participant attributes, to identify similarities and differences in factors that played a role in their RTW. This comparison was conducted to determine if factors were gender-specific or influenced by other factors.

1.8 Thesis methods

This thesis employed a multi-method consisting of a systematic review and a qualitative study using a realist evaluation approach which was conducted in a sequential order to evaluate sustainable RTW after ill-health due to CMDs and MSDs. The systematic review presents findings on the effects of personal and social factors on sustainable RTW after ill-health. At the same time, the realist evaluation investigated what works during the RTW process, for whom and under what circumstances sustainable RTW is facilitated differently for sick-listed men and women.

1.9 Outline of the Thesis

Notwithstanding the depth of work conducted by researchers in the area of RTW after ill-health due to MSDs and CMDs, there is still a considerable shortage of studies highlighting the role of specific factors in facilitating sustainable RTW, as well as clarity on particular components of the RTW strategies or processes that positively impact on sustainable RTW outcomes for returning workers. This thesis contains seven chapters grouped into four sections (A, B, C & D). Section A provides the introduction and background of this thesis, section B presents findings from the systematic review, section C presents findings from the qualitative study, and finally section D draws on conclusions from both studies.

Chapter 2 of this thesis describes the systematic review process, detailing how included studies were selected, appraised for quality and evidence synthesized.

In chapter 3, I presented the result, analysis, discussion and conclusion of evidence from the systematic review. Results and analysis are presented in this chapter based on the main aims of the review under the two broad categories based on the conditions (MSDs, CMDs), as well as the conclusion.

Chapter 4 introduces the second study, which was informed by the findings from the systematic review in chapter 3. First, details of the rationale for conducting the research and employing a realist approach is presented. I described how the realist evaluation approach informed the research design and methods in addressing the study aims. The research paradigm and methodology clearly outlining the realist evaluation design: the data collection and analysis phases are also introduced in this chapter. Given the risk of bias associated with conducting qualitative research, I described in detail the processes that were involved in case recruitment and selection, present the study aims, and end the chapter with a summary.

In chapter 5, I presented the realist evaluation study and the data collection and analysis phases conducted. I also described in detail the research ethics, and the process employed to ensure the trustworthiness, validity and reliability of findings from this study. This chapter ends with a brief reflection on the data collection process and a summary.

Chapter 6 is devoted to the presentation of the main findings of the realist evaluation. Detailed in this chapter is how initial theories are retained, refined, or discarded, as well as how new theories that explain the relevant factors that impact a sustainable RTW for people sick-listed with CMDs and MSDs are generated. Additionally, key gender-specific factors are identified in this chapter, and an explanatory model of the interplay of factors that impact on RTW outcomes is developed. I summarise the main findings of the qualitative study and detail the conclusion in this chapter.

Chapter 7 concludes the thesis by summarising findings of both studies, the strengths and limitations of study one and two, the study's implications for policy and practice, the theoretical contributions and research implication, a set of recommendations for further studies and the conclusion of the thesis.

Table 1 presents a summary of the thesis aims and methods, chapters and publication.

Table 1: Summary of study aims, methods, chapters and publication in the thesis

Thesis Research Questions	Thesis Aims	Research Design	Groups represented	Chapter & Publication
<p>1. Is sustainable RTW facilitated by personal and social factors for employees sick-listed with MSDs and CMDs?</p> <p>2. What are the personal and social factors common across people sick-listed with both conditions (MSDs and CMDs), that play a role in sustainable RTW?</p>	<ul style="list-style-type: none"> - To assess the impact of personal and social factors on a sustainable RTW after ill-health due to MSDs and CMDs. - To identify common personal and social factors across both conditions. 	Systematic Review	a. Researcher – Evidence-based literature	<p>Section B: A systematic review on sustainable return to work (RTW) after ill-health: Personal and social factors</p> <p>Chapter 2: Research Strategy, Design and Methods</p> <p>Chapter 3: Results, Analysis, Discussion and Summary of Evidence of the Systematic Review</p> <p><i>Published in the Journal of Occupational Rehabilitation and various conference publications.</i></p>
<p>3. To what extent does gender play a role in facilitating sustainable RTW outcomes during the RTW process for people sick-listed with CMDs and MSDs?</p>	<ul style="list-style-type: none"> - Analyse the RTW processes at the workplace and identify the factors that facilitates or impedes RTW outcomes. - Using results of objective 1, compare factors across men and women to identify similarities and differences in factors that influence RTW outcomes. - Using results from objective 1 and 2, develop an in-depth understanding of the role of gender in facilitating a sustainable RTW 	Qualitative Study using a realist evaluation approach	<ul style="list-style-type: none"> a. Researcher – Evidence-based literature b. Workplace leaders (line-managers who coordinate the RTW process) c. Employees sick-listed with CMDs and MSDs 	<p>Section C: Realist evaluation on the role of gender on sustainable RTW after ill-health</p> <p>Chapter 4: Research Strategy, Design and Methods</p> <p>Chapter 5: The Realist Evaluation</p> <p>Chapter 6: Results and Findings of the Realist Evaluation</p> <p><i>BAM Doctoral symposium presentation.</i></p>

	after ill-health due to MSDs and CMDs.			
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SECTION B: A systematic review on sustainable return to work
(RTW) after ill-health: Personal and social factors

2. Chapter two: Research Strategy, Design and Methods

2.1 Chapter Introduction

As outlined in the introduction in chapter one, this chapter describes the systematic review process, detailing how included studies were selected, appraised for quality and evidence synthesized. This chapter seeks to address research questions (1) and (2).

2.2 Publication

One paper publication was generated from this review, and it has since been accepted and published (see below for citation). Majority of the contribution of the work in this chapter is the researchers, while the role of co-authors was of supervisory capacity. Supervisors helped with double-checking the sifting, extraction and synthesis process for consistency to ensure inter-rater reliability. The systematic review has been slightly adapted for inclusion in this thesis. However, adaptations have not changed the general content of the published review, but to aid readability in the format of a thesis.

Etuknwa A, Daniels K, Eib C. (2019) Sustainable Return to Work: A Systematic Review Focusing on Personal and Social Factors. Journal of occupational rehabilitation. 15:1-22. Available at: <https://link.springer.com/content/pdf/10.1007%2Fs10926-019-09832-7.pdf>

2.3 Systematic Review

A systematic review aims to sum up the best available studies relevant to a research question (Tranfield, et al., 2003). According to the Campbell Collaboration (2014), it is carried out by using transparent procedures intending to find, evaluate and synthesise the results of relevant research. Therefore, a systematic review in definition is a scientific methodology which identifies, evaluates and summarises findings from relevant literature (Khan, et al., 2011). Gough *et al.* (2012) suggest that problems can either be solved by undertaking new research or by learning from what others have already studied, the latter encompassing the essence of a systematic review. In other words, from conclusions derived from previous studies, new ideas can be drawn upon to resolve problems. Therefore, for this thesis, gaps identified in this review inform the qualitative study presented in section (C).

Studies suggest that all disciplines relating to medicine, including social science and medical education heavily depend on systematic reviews to guide practices and inform decisions (Khan, et al., 2011). Before treatment is declared most effective in improving health outcomes, reviews which summarise this evidence are first taken into cognisance and based on the validity and quality of findings; researchers draw conclusions that help in decision making or encourage further research. These reviews, according to Khan et al., (2011), are useful for

professionals as they provide ways of keeping up-to-date with studies relevant to the practice. In considering a review, these professionals especially pay attention to information relating to the effectiveness, meaningfulness, feasibility and appropriateness of health care interventions (Hemingway & Brereton, 2009).

Therefore it is pertinent that reviews relating to the medical field must be evidence-based and should be based on a peer-reviewed protocol so that it can be replicated if need be (Hemingway & Brereton, 2009). These peer-reviewed reviews are usually accessible in journals, databases and different electronic outlets. A high-quality systematic review according to Hemingway et al., (*ibid.*) thus seeks to;

1. *Identify all relevant published and unpublished evidence*
2. *Select studies or reports for inclusion*
3. *Assess the quality of each study*
4. *Synthesize the findings from individual studies or reports in an unbiased way*
5. *Interpret the findings with due consideration of any flaws in the evidence.*

Based on these processes, strong evidence from research conducted is provided which forms the basis of evidence-based medicine; an approach focused on improving decision making (Khan, et al., 2011).

2.2 Stages for Conducting a Systematic Review

This review was conducted according to Pope *et al.*'s (2007) step by step stages of carrying out a systematic review. They include;

1. Development/Formulation of a research question
2. Development of research protocol
3. Conduct a scoping review
4. Comprehensive literature search
5. Application of inclusion and exclusion criteria to all identified studies
6. Quality assessment of included studies
7. Data extraction
8. Synthesis of findings
9. Reporting of findings and implications
10. Data dissemination

2.3 Review Question

The first step of a systematic review required the formulation of an appropriate research question (Hemingway & Brereton, 2009). According to the Centre for Review and

Dissemination (CRD) (2009), the research question can be framed using the participant, intervention, comparator, outcome and study design (PICOS). However, because my research had no particular comparator, the research question was derived by the participant, intervention, outcome related to the risk posed and study design suitable for addressing it (PIOS) (Strech & Sofaer, 2012; Centre for Review and Dissemination (CRD), 2009). This scheme ensured that all four components were taken into consideration when formulating the research question.

The research question for this review include;

RQ1: Is sustainable RTW facilitated by personal and social factors for employees sick-listed with MSDs and CMDs?

RQ2: What are the personal and social factors common across people sick-listed with both conditions (MSDs and CMDs), that play a role in sustainable RTW?

2.4 Scoping Review

According to Arksey and O'Malley (2005), a scoping review is a process of mapping the existing literature or evidence base in a subject area. Before a systematic review is carried out, it is mandatory to conduct a thorough search of the literature to verify whether there are existing reviews on the proposed topic (Khan, et al., 2011). A scoping review helps to confirm that the proposed systematic review has not already been conducted and to identify other related reviews in the area of interest that will inform this project. According to Armstrong et al. (2011), a scoping review can also inform a systematic review. Given that, findings from a scoping review provide information on studies already conducted in the subject area and possible gaps that need a further investigation that researchers can pursue. Hence the following bibliographic databases have been searched to discard the possibility of an already existing systematic review on the chosen topic 'sustainable return to work after ill-health; personal and social factors', to avoid the issue of duplication; Cochrane Database of Systematic Reviews (CDSR), Business Source Complete, CINAHL, EBSCO Host, Psyc Info, Web of Knowledge, Wiley Online Library, PUBMED, JSTOR and PROSPERO.

Results from eight databases from these searches produced no literature closely related to the chosen topic. However, two databases (Cochrane Review and PUBMED) produced seven studies and six studies, respectively, related to the selected topic. The four studies out of the five identified in the PUBMED database were replicates of studies found in the Cochrane review, making it a total of only nine reviews found related to RTW after ill-health due to CMDs and MSDs.

The aim of Van Vilsteren et al.'s (2015) systematic review was to determine the effectiveness of workplace interventions for preventing work disability among sick-listed workers when compared to usual care or clinical interventions. In the review, ill-health took account of such extreme cases as cancer which deviates from this study's focus. Consequently, even though the study suggested the effectiveness of evaluated workplace intervention on RTW, personal and social factors were not individually measured for as is the case in the current review.

Arends et al.'s (2012) review assessed the effects of a varied number of interventions on return to work. Moderate to low –quality evidence included in this study showed no significant impact of either pharmacological, psychological, physical or employed assistance-based interventions on lasting RTW. This study was intervention focused, as such specific effects of personal and social factors on RTW outcomes were not considered.

Krause et al.'s (1998) review evaluated the effectiveness of modified work programs instigated by employers. Findings suggest that modified work offered by employers facilitated a RTW temporarily and permanently for returning injured workers. Even though results attained the target outcome; RTW as a result of modified work provided by leaders, the study did not evaluate the impact of worker-leader influence. It is this interphase between employees and leaders during the RTW process that this study is interested in and how that impacts on sustainable RTW, hence the need to go ahead with this review, investigating the direct effects of support from leaders.

Additionally, Carrol et al.'s (2010) synthesised studies investigating whether interventions involving the workplace are more cost-effective at helping employees on sick leave return to work than those that do not include the workplace at all. They indicated that stakeholder participation and work modification are more efficient and cost-effective in facilitating a RTW for adults with musculoskeletal conditions than other workplace-linked interventions, including exercise. This study's focus was on the cost-effectiveness of the intervention, as such conclusions on how outcomes translate to the sustainability of RTW is still unclear.

Dewa et al. (2015) conducted a systematic review of the effectiveness of RTW interventions that incorporated work-focused problem-solving skills for workers with sickness absences related to mental disorders. However, this study provided limited evidence that a combination of interventions that include work-related problem-solving skills are effective in RTW outcomes. There was no explicit consideration of personal and social factors. Examination of interventions as pointed out in the study was not detailed; studies included

were methodologically weak, and long-term effects were not examined. Considering this study included only workers with mental health disorders, findings cannot be generalised for workers with MSDs.

Conversely, Franche et al.'s (2005) systematic review on workplace-based RTW interventions considered six intervention factors and its impact on work disability duration, economic analysis and quality of life. These intervention factors include; early contact with the worker by the workplace, work accommodation offer, contact between health care provider and workplace, ergonomic worksite visit, supernumerary replacement and presence of RTW coordinator. Findings provide the evidence base supporting workplace based RTW interventions as an effective means to reduce work disability duration and associated costs. Although this study took account of the impact of leaders on RTW, because included studies only recruited participants with MSDs, effects cannot be extrapolated to individuals with CMDs.

Nigatu et al. (2016) conducted a systematic review and a meta-analysis on interventions for enhancing a return to work in individuals with common mental illness. Their study assessed the effectiveness of the workplace and clinical interventions aimed at improving RTW. These findings are inconsistent with suggestions from previous literature; this review found no evidence supporting the effectiveness of RTW interventions in employees with a CMDs. Therefore, a need for further research to understand this disparity is important.

Most recently, as a follow up from Nigatu et al.'s (2016) study, Mikkelsen & Rosholm (2018) conducted a systematic review and a meta-analysis to collate and update existing evidence for interventions aimed at enhancing RTW for sick-listed workers with common mental disorders. Their findings revealed strong evidence suggesting the effectiveness of interventions inclusive of contact with the workplace, multicomponent interventions and graded RTW. This finding, therefore, deviates from the current review's focus on the role of personal and social factors on sustainable RTW.

Cancelliere *et al.*'s (2016) research is the only review slightly related to this current study. They conducted a systematic review of reviews conducted in the RTW field to identify the prognostic factors associated with positive RTW outcomes. Their research provided strong evidence suggesting that an interplay of factors facilitates RTW. However, these factors were not restricted to personal and social factors, as is the case in this current review. Still, they also evaluated the effectiveness of several interventions as a factor. Additionally, because this study evaluated RTW outcomes across different health and injury conditions, a need for reviews specifically addressing RTW outcomes for MSDs and CMDs arises.

Studies suggest that considering personal and social factors prompt ill-health, they are likely to facilitate or impede sustainable RTW (Kelly, 2012). However, there are currently no systematic reviews, explicitly evaluating the validity of this assertion. All nine studies showed similarities to the proposed research with regards to the evaluated ill-health and outcome measures. However, they vary from the aim of this study which is to assess precisely how personal and social factors such as; support from leaders and co-workers, job crafting and employee's personal characteristics impact on sustainable RTW. It is for this reason that the researcher has decided to continue with the proposed research as planned. See Appendix 13 for a summary table of all nine reviews.

2.5 Protocol

The systematic review was conducted in line with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines (Shamseer, et al., 2015). The protocol was duly developed prior to the review and registered with PROSPERO (https://www.crd.york.ac.uk/PROSPERO/display_record.asp?ID=CRD42016053967) (registration no; CRD42016053967).

According to CRD (2009), the protocol outlines the methods used in the reviews. This process helps to reduce the risk of introducing potential bias into the review in advance. It addresses decisions about the review question, inclusion criteria, search strategy, study selection, data extraction, quality assessment, data synthesis and plans for dissemination. The protocol was however written by the researcher after the scoping review was conducted. It enabled me to produce a Gantt chart detailing the processes involved in the review to ensuring I minimised potential biases in the methods, ensure reproducibility, transparency as well as time management which was a major issue in carrying out this work. Time was managed properly throughout the study.

2.6 Inclusion/Exclusion criteria

According to Khan et al., (2011), the inclusion and exclusion criteria should follow on logically from the review question defined regarding the population, intervention, outcome and study design of interest. The search inclusion criteria included studies that reported on employees returning to work after absence due to MSDs or CMDs (population), the effects of personal and social factors on RTW outcomes (intervention), a sustained RTW after ill-health such as MSDs or CMDs (outcome) and studies of all designs published in English from 1989 to 2017. Out of a need to accurately assess RTW approaches and interventions that have taken into account personal and social factors, the timeframe was extended to include 1989. Even though research as far back as 1989 may not necessarily provide evidence generalizable in today's

work environment, it was considered relevant to include this research because this range included an early, if not the earliest paper that explored the association between multiple personal and social factors and successful RTW (Gallagher, et al., 1989). Overall, only studies which met all the inclusion criteria were included in the final review. This process ensured that decisions made in the selection of studies were free of bias, transparent and reproducible.

2.7 Generating a Search Strategy

In identifying the relevant literature for a systematic review, it is crucial that the search strategy must be sensitive, accurate, thorough and driven by the desire to capture as many relevant studies as possible (Centre for Review and Dissemination (CRD), 2009; Khan, et al., 2011). This strategy ensures that the search is unbiased, reproducible and helps to rapidly and accurately locate the best available and relevant scientific literature that fits into the scope of the review and answers the research questions (Grimani, et al., 2017).

Based on the PIOS strategy, a search strategy was formulated for this review (Centre for Review and Dissemination (CRD) , 2006). Search terms were developed based on the research question and the inclusion/ exclusion criteria. Also, a preliminary search of papers in the related field was conducted to identify text words and index terms used in the papers. A comprehensive search of relevant electronic databases including published and unpublished research, grey literature and reference lists of both primary studies and reviews were conducted with the final list of search terms compiled. Table 2 shows the search terms that I adopted during the search.

Table 2: Search terms used

	POPULATION	INTERVENTION	OUTCOME	STUDY DESIGN
POSSIBLE SEARCH TERMS	•Return* to work employee*	•Leader*	•Sustain* return* to work	•Randomi*controlled trial*
	•Return* to work officer*	•Co-workers	•Bearable return* to work	•Intervention*
	•Return* to work worker*	•Social support	•Endurable return* to work	•Cohort
	•RTW rehab*	•Employee* character	•Sustain* recovery	•Experimental
	•Occ* Rehab*	•Job Crafting	•Back to work	•Randomi*
	•Employee*	•Managers	•Sustain* back to work	•Trial*
	•Absent from work	•Supervisors	•Bearable back to work	•‘Clinical Trial’ [Publication
	•Worker* absence from work	•Colleagues	•Endurable back to work	•Type]
	•Return* to work staff	•Job Re-design	•Workability	•‘Meta- Analysis’
	•Employee* returning from ill- health	•Job Altering		[Publication Type]
	•Worker* returning from ill-health	•Organi* changes		•Quasi-experiment
	•Staff returning from ill-health	•Personal trait		•Systematic Review
	•Employee* with MSDs	•Individual difference		•Evidence synthesis
	•Worker* with MSD	•Supervision		•Observational
	•Staff with MSDs	•Adaptation*		•Qualitative
	•Employee* with depression	•interventions		•Survey
	•Worker* with depression	•Job modification		•Mixed
	•Staff with depression	•Climate		•Quantitative
	•Sickness presence	•Vocational		
	•MSDs	•Rehab*		
•Musculoskeletal disorders	•Supported employment			
•Depression	•Work Adjustment			
•Mental Health issues	•Occupation*			
•Ill-health	Adjustment			
•Time loss from work	•Workplace Intervention			
	•Modified Work			
	•Occupational Intervention			

2.8 Electronic databases

The decision of which electronic database to search was solely dependent upon the review topic. A wide range of databases are available on UEA library site, and as these databases are subject-specific, the search was narrowed down to databases that were subject related to the topic, thus identifying a broad range of relevant reviews.

I selected a total of 13 databases as being pertinent to the research area; Business Source Complete, CINAHL, Cochrane Library, EBOSCO Host, JSTOR, Medline (OVID), Psych INFO, PubMed, Scopus, ScienceDirect, SPORT Discus, Web of Science and Wiley Online Library.

The initial literature search commenced between October 2016 and December 2016, and as reviews were retrieved, it was exported to EndNote and saved in folders assigned to each database. The final literature search commenced between Jan 2017 and March 2017 to ensure no new paper was left out (Centre for Review and Dissemination (CRD), 2009). The search strategy was dependent on the components of the research question (Khan, et al., 2011). Free text words and controlled terms developed were combined in each search column using the PIOS strategy (Khan, et al., 2011).

In developing a list of words for each of the PIOS components, a wide range of synonyms with spelling variations and wildcards were included intending to expand the terms and retrieve as many studies as possible (Khan, et al., 2011; Centre for Review and Dissemination (CRD), 2009). Words in each search column were combined using the Boolean operator 'OR', 'AND' and 'NOT' to create sets of citations from the search terms. Boolean Operator 'OR' retrieved citations where either one or both terms searched in the database were found. Boolean operator 'AND' only retrieved citations, where both terms searched, were found. While Boolean operator 'NOT' retrieved citations that contained only the original word searched while excluding other related terms (Khan, et al., 2011). A wide range of commands and truncation symbols (*? \$) which is database-specific were also incorporated in the search strategy. These truncation symbols were used to search out a variety of possible suffix search terms. The below search strategy was used in Business Complete (via EBSCO Host). Search terms for each PICOS category (population, intervention, outcome and study design) was entered in four search fields on the advanced search screen and combined with the Boolean operator AND and OR with search options set to include smart-text searching mode applying related words, searching within the full text and applying equivalent subjects, published date

(January 1989 to March 2017), publication type (academic journal), and language (English). This search produced 1,188 and 922,586 citations respectively.

Box 1: Business Complete (via EBSCO Host) Search Strategy

1.("return to work" employee* OR return* to work officer* OR RTW rehab* OR "musculo-skeletal disorders" OR "mental health disorders" OR anxiety OR depression OR "absen* from work" OR "sickness absence" OR staff with MSDs OR staff with depression OR "worker returning from ill-health" OR return to work staff)
2.(social support* OR leader* support OR co-worker support OR supervisory support OR managerial support OR colleagues OR employee characteristic* OR job crafting OR job redesign OR job altering OR supervision OR adaptation* intervention OR job modification OR vocational rehab* OR occupation* adjustment OR "workplace RTW intervention" OR "return to work intervention" OR "return to work programme" OR occupational intervention OR modified work OR personal trait)
3.("sustain* return* to work" OR bearable return* to work OR endurable return* to work OR "return to normal work activities" OR "sustainable return to work" OR sustain* recovery OR back to work OR bearable back to work OR work-ability)
4.(Meta-analys* OR best_evidence_review* OR systematic_review* OR random* control* trial OR qualitative studies OR Cohort OR observational studies OR quantitative stud*)

However, because searches were not as straightforward on other databases, as shown above, search strategies were continuously modified to suit the specification of each database for more fruitful results. For example, the JSTOR database had a limit on search terms queried (maximum of 10), as shown in [Figure 1](#). As such, the number of search terms queried was reduced and search with the Boolean operator was amended respectively.

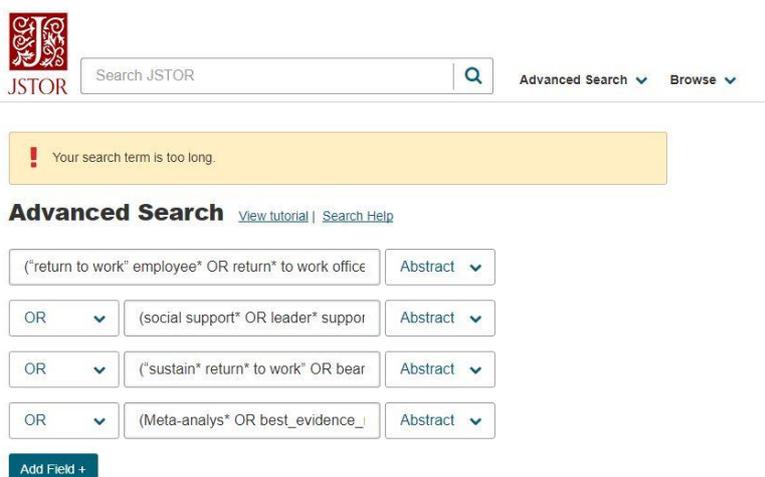


Figure 1: JSTOR Search Result

Unlike the EBSCO Host, Business Complete, MEDLINE (OVID) and CINAHL databases, which make provision for folders where citations retrieved from searches can be saved for ease

of exporting to EndNote, the Wiley Online Library and Cochrane Library had no folders. Hence studies were exported as retrieved per page.

Although a total of 40,276 related to return to work for people with CMDs and MSDs initially returned from the database search. Two hundred twenty-four of these citations were eligible for potential inclusion based on the title and abstract and exported accordingly. See Appendix 1 for a summary of the search result for each database.

2.9 Other Searches

2.9.1 Searching Online Trial Registers

Since randomised controlled trials made up part of the study design eligible for inclusion in the review, online trial registers were searched to identify published, unpublished or ongoing trials related to the research. The www.clinicaltrials.gov was the most useful of register searched as 803 studies were found relating to RTW. However, only ten studies met the inclusion criteria. Amongst the 10, only one trial was completed and published. Even though the remaining nine trials were completed, the results are yet to be posted and published and hence were not accessible for use. Though I was unable to retrieve the one study directly from the register, it was extracted from Google scholar and imported directly to EndNote. However, this study added to duplicated citations already retrieved from other databases.

2.9.2 Searching Online Journals

Only journals relevant to the subject topic were searched. The online journals searched include; American Journal of Industrial Medicine, Canadian Journal of Community Mental Health, Disability and Rehabilitation, European Journal of Public Health, European Journal of Work and Organizational Psychology, Institute of Occupational Safety and Health Journal, International Journal of Disability Management, International Journal of Environment and Health, International Journal of Rehabilitation Research, Journal of Applied Psychology, Journal of Occupational and Environmental Medicine, Journal of Occupational Rehabilitation, Journal of Occupational and Organizational Psychology, Journal of Organizational Behaviour, Journal of Work and Health, Journal of Work and Stress, Quality of Life Research, Scandinavian Journal of Environmental Health, Scandinavian Journal of Management, Scandinavian Journal of Public Health, Scandinavian Journal of Work Environment and Health, Social Science and Medicine and Work. Though each journal had vast information on RTW and sickness absence as independent topics, relevant research papers identified were also among the studies identified in the databases.

2.9.3 Searching Reference Lists

Browsing the reference list of studies identified on the database search helped to identify further studies (Centre for Review and Dissemination (CRD), 2009). This process of identifying studies was most effective on the Science Direct Database. Identified studies yielded a reference list of related studies which met the inclusion criteria and was imported to EndNote. Reference lists of identified papers on other database search only produced duplicated studies that were excluded for critical appraisal.

2.10 Study Selection

I conducted the selection of relevant studies in three stages: (i) Title; (ii) Abstract; and (iii) Full-Text/ Paper screening. A title screening was conducted to retrieve papers specifically reporting RTW outcomes for CMDs and MSDs. At this stage, if the study indicated the RTW outcome for ill-health other than MSDs and CMDs, the article was excluded. Identified citations were further sifted according to the abstract, to select citations eligible for possible inclusion in the review.

In the third stage, I assessed the full text/ paper for quality and relevance to the research question. Where a study did not meet the inclusion criteria, the paper was excluded. All retrieved studies were screened independently by me and 30% each further checked by my supervisors to ensure reliability and transparency in the selection process, consistency in interpretation and eligibility of included studies in the final review.

2.11 Quality Appraisal

Methodological quality of individual studies was assessed using the Critical Appraisal Skill Programme (CASP) Checklist for qualitative and mixed studies (see [Appendix 10](#)) and the checklist of evidence quality adapted from the “Early Intervention Foundation” (EIF) for quantitative studies adapted from Snape et al. (2016) (see Appendix 8 and

Appendix 9). Each aspect of the study was given a quality rating (‘yes’, ‘no’ or ‘can’t tell’) based on the criteria on the checklist (Snape, et al., 2016). Based on the checklist criteria, studies were considered of good methodological quality and therefore included in the review if the answers to all the screening question were ‘yes’. However, a concession was agreed also include studies that recorded a few ‘no’ or ‘can’t tell’ answers based the degree to which an evaluated factor has been shown to have a positive impact on specific outcomes (EIF) and on the relevance of findings, appropriate methodology and rigor in analysis (CASP). As a result, all studies were included in the summary regardless of the methodological quality. I independently assessed the methodological quality of each study using both assessment tools, of which my supervisors checked for consistency to address inter-rater reliability.

The final quality grading for the quantitative studies was based on the grading recommendations assessment development and evaluation (GRADE) approach (Higgins & Green, 2011), the qualitative and mixed studies were based on the confidence of evidence from reviews of qualitative research (CERqual) (Lewin, et al., 2015).

In GRADE, multiple randomized controlled trials (RCTs) with good statistical power converging on reliable effect sizes with narrow intervals are considered as ‘high-quality’ evidence. Well-designed observational studies with good statistical power are considered as ‘low-quality’ evidence. However, GRADE allows flexibility in rating evidence at a higher or lower level depending on a range of considerations. For example, evidence initially rated as ‘high-quality’ can be downgraded due to study limitations, inconsistency of results, indirectness of evidence, imprecision and reporting bias. Similarly, evidence initially rated a ‘low-quality’ can be upgraded to high-quality if there is a very large magnitude of effect, a dose–response gradient, and all plausible biases would reduce an apparent treatment effect (Snape, et al., 2016). In this review RCTs were categorized as very high-quality and upgraded observational studies were categorized as high-quality to aid clear distinction between both study designs. CERqual approach uses a similar approach to the GRADE tool to grade the quality of evidence (Snape, et al., 2016). Qualitative and mixed studies were thus graded very high-quality based on four components. The methodological limitations of the studies contributing to a review finding, relevance to the review question of the studies contributing to a review finding, coherence of the review finding, and adequacy of data supporting a review finding.

Therefore, both GRADE and CERqual approaches were used to inform a final assessment of the quality of the findings of the review, as such, data extraction and evidence synthesis were completed on very-high, high and low-quality studies.

2.12 Data Extraction

A data extraction form was designed using the PIOS (Population, Intervention, Outcome and Study Design) strategy to minimize the possible errors or biases that may occur at this stage (Centre for Review and Dissemination (CRD) , 2006). This data extraction form was designed based on how the research question was formulated with a view to obtaining all the relevant information from included studies (Khan, et al., 2011). This strategy was helpful in gaining a deeper understanding of the evidence to prevent error in interpretation as well as enhanced transparency of the method of analysis (Khan, et al., 2011). Data extraction sheets were thus designed to capture all the necessary study details e.g. author, study design and more detailed

information about the nature of the intervention, personal and social factors and the outcomes. To ensure consistent extraction of necessary information from the studies, a pilot exercise was conducted. I extracted data from ten random papers and discussions on any discrepancies or differences in interpretation of the papers was held with the supervisors to ensure consistent data extraction from all the included articles. Following the pilot exercise, the data extraction sheet was modified to include more information on papers to aid easy understanding and prevent returning to the original paper for clarification (see [Appendix 2](#) for the full data extraction sheet).

2.13 Evidence Synthesis

Once data were extracted, I synthesized the data extraction sheets into an evidence summary table (See [Appendix 3](#)). Since the outcome measures of included studies were very heterogeneous, data was synthesized using narrative synthesis. Hence a series of harvest plots (adapted from (Thomas, et al., 2008)) (see [Appendix 4](#), [Appendix 5](#), [Appendix 6](#) and [Appendix 7](#)) and evidence statements summarizing the quality of evidence (see [Table 4](#)) were developed by the first author based on two distinct categories of ill-health (MSDs and CMDs). These plots are an effective means in visualizing findings in a way that takes the quality of study into account (Barnett, et al., 2012). Each plot consists of three columns representing the three-competing hypotheses (positive effect, negative effect and no effect) and a bar represents each study in each of the columns according to the competing hypothesis results of the study supported. The row represents the domains of the evaluated personal and social factors (support from leaders, support from co-workers, job-crafting and personal characteristics). Based on the included studies, personal characteristics included positive attitude to work and the return to work process, high self-efficacy, younger age, gender, high education, low economic status/income, short-term length of absence and temporary or insecure job contract. The quality of evidence in the review is indicated by the height of the bar with a specific designation on it in each row (H to represent very high-quality studies, U to represent low-quality studies upgraded to high quality based on the GRADE criteria and L to represent low-quality studies, see below). Studies with relatively stronger designs (RCT) are indicated with full-tone (black) bars, and weaker study designs (observational and qualitative/mixed studies) are marked with half tone (grey) bars.

Evidence showing common factors was organized using the International Classification of Functioning, Disability and Health (ICF) framework which is useful for assessing, describing and organizing information on health status and disability across different cultures

and settings (World Health Organization, 2001). This framework was chosen because it has previously been used to evaluate RTW factors across different health conditions (Cancelliere, et al., 2016). The ICF is composed of four broad components: personal (e.g. age, sex), the body functions and structures (e.g. disease injury-related), activity limitation (e.g. history of sickness absence, inability to perform some activities of daily living), and environmental factors (e.g. all factors related to working conditions, work environment, work support and accommodation). However, only personal and environmental factors of the ICF framework was taken into account in this review as evaluated factors did not extend to other components, apart from personal and social factors which are classed under each component respectively.

The level of confidence in the overall body of evidence for each personal and social factor in this review was rated in four categories of evidence (strong, moderate, low and very low confidence) developed from the GRADE and CERQual approach (Snape, et al., 2016). Where there is confidence that a factor impacted on sustainable RTW outcomes, evidence was rated ‘strong confidence’ (high level of evidence). ‘Moderate confidence’ (moderate level of evidence) suggests that an impact may occur but requires further investigation. Level of evidence was rated ‘low confidence’ (low level of evidence) where further research is required and although an effect may occur, there is less confidence than for evidence of ‘moderate confidence’. Where there was insufficient evidence to draw conclusions, evidence was rated ‘very low confidence’ (very low level of evidence). Confidence in the evidence was decided by discussion and consensus by the review authors, by balancing the number of studies showing an effect in a consistent direction and the quality of those studies as indicated in the sections below.

However, in practice, evidence was rated strong where at least 10 studies showed positive effects and no more than three studies showed null effects or where 28 or more studies showed positive effects, no more than five showed null effects and only 1 showed negative effects. Evidence was rated a moderate/low where at least four/three studies showed a positive effect and there were no studies showing null or negative effects. Where there were only two studies showing an effect, even if the effect was consistent, we deemed this a low level of evidence. Evidence was also rated as very low where there were inconsistent or contradictory results, which was where there were no more than four studies showing an effect in one direction and at least one study showing an effect in the other direction.

2.14 Personal and Social Factors evaluated in the thesis

It was the intent of the systematic review to examine the role of employee’s personal and social factors on sustainable RTW outcomes. Personal factors are considered as the personal characteristics of individuals (Spencer & Steers, 1980). So, this could include their sociodemographic details, behaviours and personality. However, social factors, according to Sinokki (2011), is concerned with the social relationships’ individuals hold within environments. While the impact of personal and social factors has not been the main focus of investigation in RTW literature, a wide range of these factors have been taken into account in these studies. Key personal and social factors identified in the systematic review include support from leaders and co-workers, job crafting, attitude, self-efficacy, age, gender, education, economic status/income, length of absence and job contract/security. Definitions used to categorise these personal and social factors as investigated in included studies are detailed in Table 3 below.

Table 3: Definition of personal and social factors used in this thesis

Personal and Social Factors	Definition/description
Support from leaders and co-workers	Support is the level of access employees have to significant relationships of varying quality or strength which provides resources such as; communication of information, emotional empathy and substantial assistance (Kossek, et al., 2011). According to Karasek and Theorell (1990), it is the overall levels of helpful social interactions available to employees at work from both co-workers and leaders. For consistency, managers, line-managers, supervisors, professional health managers, and all superiors responsible for employees will be known as leaders in this study.
Job crafting	Job crafting refers to employees redesigning their job task to fit their motives, strengths and passions (Berg, et al., 2013; Petrou, et al., 2015). This concept of job redesign helps to capture the actions employees independently take to shape, mould and redesign their jobs (Wrzesniewski, A., & Dutton, J. E. , 2001). According to Wrzesniewski and Dutton (2001), by crafting one’s job, individuals are accorded the opportunity to change not just the elements of

	their jobs, but also their relationship with others to redefine the meaning of their work and the social environment of their work.
Attitude	According to Yu (2006), work attitudes consists of employees' identification with the organisation, their devotion to work and work satisfaction. In other words, an employee's perceptions around their ability to identify with the values and mission of the organisation, participation at work and their overall feelings and satisfaction with the evaluation of the work precede a good attitude towards work (Miller, et al., 2000; Kanungo, 1982; Hoppock, 1935).
Self-efficacy	Self-efficacy is the belief about one's ability to accomplish a specific task successfully (Lunenburg, 2011). According to Bandura (1997), a person's sense of capability influences their perception, motivation and performance.
Age	An age which is the number of years a person has lived is considered in two categories in this thesis: younger age (16-45 years) and older age (46 and above).
Gender	As used in the included studies, gender is assumed to refer to the sex of participants especially as the determination of gender was made by participants identifying themselves as either male or female (Pryzgoda & Chrisler, 2000).
Education	This factor describes the educational level attained by employees. Education in the included studies is classed as either a higher or lower level of education. Higher education in this case is considered as university degree and above (Huijs, et al., 2012).
Economic status/income	Economic status or income is defined in the included studies in the context of employee's earnings or household income (Lammerts, et al., 2016).

Length of sickness absence	Length of sickness absence is considered in the included studies as the duration of sick leave. It is classed as either short-term (absence period lasting less than 4weeks (NICE, 2009)) and long term (absence period for four or more weeks (NICE, 2009)).
Job contract/ security	This factor is considered in the context of the type of employment contract. Hence a permanent or temporary contract could translate to job security or insecurity respectively (Huijs, et al., 2012).

2.15 Summary

In this chapter, I have presented a thorough outline of the stages of the systematic review conducted; explicitly detailing how the included studies were searched and selected, appraised for quality and evidence synthesized. The results and analysis, discussions and a summary of the evidence of this review are provided in the following chapter.

3. Chapter Three: Results, Analysis, Discussion and Summary of Evidence of the Systematic Review

3.1 Chapter Introduction

In the preceding chapter, a detailed account of how the systematic review was conducted was presented. How included studies were searched and selected, appraised for quality and evidence synthesised was shown.

In this chapter, findings from the synthesis of evidence in the systematic review are described which would aid in answering research questions **(1)** and **(2)**.

This chapter is divided into two sections; 1. Results and analysis of data according to the evaluated categories from the 79 studies included in this review, and 2. Discussion and summary of evidence.

3.2 Section 1: Results and Analysis

3.2.1 Literature Search

The search strategy identified 40,276 citations related to the research topic on the thirteen databases, online trial registers, grey literature, and reference lists. After duplicate entries, non-peer reviewed published work and studies of foreign languages were eliminated from combined citations from all the databases, 4385 citations were potentially eligible for inclusion in the review.

3.2.2 Selection of Studies

After removing 4161 citations at the title screening stage, 224 citations were left for the abstract screening. Of the 224 citations screened at this stage, 127 were left for the full-text screening stage. Out of 127 full-text articles retrieved, there was a unanimous agreement between my supervisors and me on the decision to include 58 papers and exclude 33 papers. However, there were disagreements on the eligibility of 36 studies evaluating the effectiveness of interventions on RTW outcomes. After further review of each of the 36 papers and in-depth discussions on its relevance or irrelevance, it was finally agreed to include 21 citations (studies that took into account the impact of personal and/or social factors) and exclude 15 citations (studies with no personal and/or social factors in evaluation). Overall, of the 127 full-texted citations, a total of 48 papers were excluded based on not meeting the inclusion criteria. Seventy-nine articles were included in the final analysis. 55 studies of which reported RTW outcomes for workers sick-listed with MSD, while 45 studies reported RTW outcomes for workers sick-listed with CMDs. A flow chart (see Figure 2) was developed to show the transparency of the selection process.

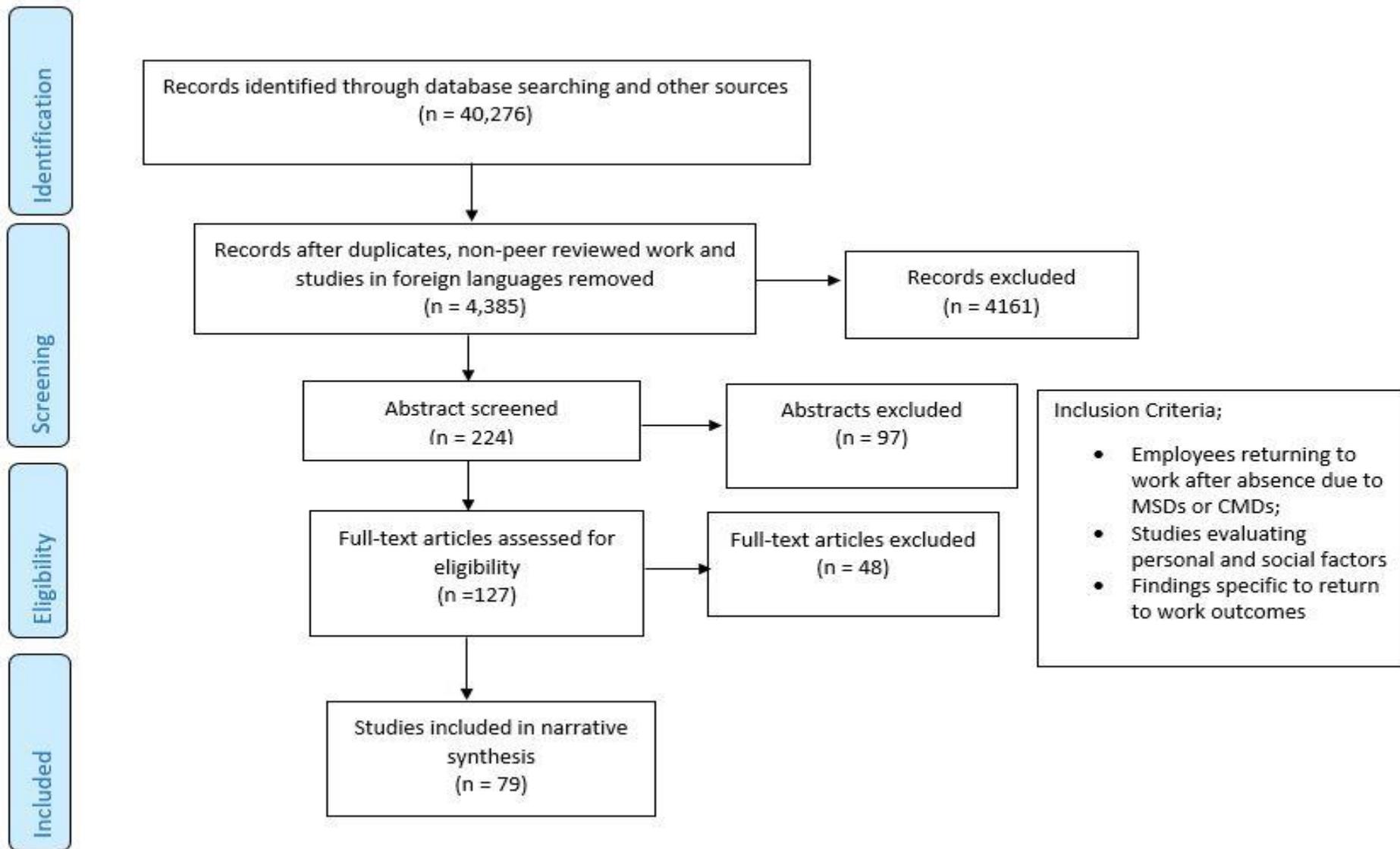


Figure 2: Flow chart of studies eligible for inclusion

3.2.3 Quality Appraisal

Out of the 18 randomized controlled trials that started out as very high-quality studies, one study was downgraded to low-quality as it did not take account of all confounding factors. Out of the 45 observational studies that started out as low-quality studies based on the standard GRADE rating, 42 were upgraded to high-quality studies as they met all the GRADE upgrade requirements. Based on the CERqual rating, out of the 16 qualitative and mixed studies included, one qualitative study was categorized as low-quality as a result of a lack of rigor in analysis and relationship between participants and researcher was not adequately considered (Snape, et al., 2016). The remaining 15 studies were categorized as high-quality because they fulfilled all the assessment criteria (Snape, et al., 2016). Taken as a whole, the quality of included articles reporting RTW outcomes for MSDs and CMDs did not affect the findings. Table 4 summarizes the main findings and the quality of the evidence supporting the main findings

Table 4: Summary evidence statements with GRADE and CERqual ratings

Evidence statement (outcomes)	Rating	Reasoning
Support from leaders plays a role in facilitating sustainable RTW for employees with musculoskeletal disorders (MSDs).	Strong Confidence (high level of evidence)	Seven randomized controlled trials were included, one of which was graded low quality as a result of a high risk of bias. Ten High-quality qualitative studies and one high-quality mixed study based on the CERqual criteria was included. Twenty-three observational studies initially rated low quality using the GRADE system were included. Nineteen of which were upgraded to high-quality studies using the GRADE upgrade criteria and four of which were graded low quality. As such, good quality studies were predominantly evaluated in this study.
Support from co-workers plays a role in facilitating sustainable RTW for employees with musculoskeletal disorders (MSDs).	Strong Confidence (high level of evidence)	Five high-quality qualitative studies and one high-quality mixed study based on the CERqual criteria were included. Eleven observational studies initially rated low quality using the GRADE system were included. Nine of which were upgraded to high-quality studies using the GRADE upgrade criteria and two of which were graded low quality. Although there were no randomized control trials, fifteen out of the seventeen included studies showed consistent positive effects on sustainable RTW.
Job-Crafting plays a role in facilitating sustainable RTW for employees with musculoskeletal disorders (MSDs).	Low Confidence (low level of evidence)	Only three studies (one high quality randomized control trial, one high quality qualitative study and one observational study upgraded to high quality using the GRADE criteria) with consistent effects across all studies were included. Considering the small number of studies, more studies in the area will need to be conducted to produce strong conclusions on its effects.
Personal Characteristics play a role in facilitating sustainable RTW for employees with musculoskeletal disorders (MSDs); Attitude	Strong Confidence (high level of evidence)	One very high-quality RCT and Two high-quality qualitative/ mixed based on the CERqual criteria were included. Eleven observational studies initially rated low quality using the GRADE system were included. Nine of which were upgraded to high-quality studies using the GRADE upgrade criteria and Two of which were graded low quality. Although there was only one randomized control trial, all sixteen included studies showed consistent positive effects on sustainable RTW.
Self-efficacy	Moderate Confidence (moderate level of evidence)	Four observational studies upgraded to high quality studies using the GRADE criteria were included. All studies showed consistent positive effect on sustainable RTW. Regardless of the small number of studies, evidence is promising.

Age	Strong Confidence (high level of evidence)	One randomized controlled trial was included, one low-quality qualitative study and eleven observational studies initially rated low-quality and upgraded to high-quality using the GRADE system were included. All included studies showed a consistent positive effect on sustainable RTW.
Gender	Very Low Confidence (very low level of evidence)	Despite some randomized control trials and large sample sizes, there were conflicting results regarding effects of gender on sustainable RTW for both men and women. Some studies suggest men RTW more sustainably than men, while a few studies suggest otherwise. It, therefore, suggest that it is possible that the effect of gender on sustainable RTW is influenced by an interaction of some factors for both sexes. However, it is unclear what specific factors are involved. Hence the need for further research in this area.
Education	Moderate Confidence (moderate level of evidence)	Five observational studies upgraded to high-quality study based on the GRADE criteria. There were consistent positive effects across all five studies.
Length of Absence	Moderate Confidence (moderate level of evidence)	Four studies with one randomized controlled trial and three observational studies upgraded to high quality study based on the GRADE criteria. There were consistent positive effects across all four studies.
Job Contract/Security	Very Low Confidence (very low level of evidence)	Only two observational studies upgraded to high quality based on the GRADE criteria. More studies would be necessary to draw strong conclusions on its effects on sustainable RTW.
Support from leaders plays a role in facilitating sustainable RTW for employees with common mental disorders (CMDs).	Strong Confidence (high level of evidence)	There were six randomized controlled trials, four and seven high quality mixed studies and qualitative studies according to the CERQual criteria respectively and 1 low quality qualitative studies. Thirteen out of sixteen low quality observational studies were upgraded to high quality studies based on the GRADE system, while three of the remaining observational studies maintained its low-quality grade. Evidence presented is considered promising.

Support from co-workers plays a role in facilitating sustainable RTW for employees with common mental disorders (CMDs).	Strong Confidence (high level of evidence)	Five high-quality qualitative studies, three high-quality mixed study and one low-quality qualitative study based on the CERqual criteria were included. Six observational studies initially rated low quality using the GRADE system were included. Five of which were upgraded to high-quality studies using the GRADE upgrade criteria and one of which was graded low quality. Although there were no randomized control trials, twelve out of the fifteen included studies showed consistent positive effects on sustainable RTW.
Job-crafting plays a role in facilitating sustainable RTW for employees with common mental disorders (CMDs).	Very Low Confidence (very low level of evidence)	Only two observational studies upgraded to high quality based on the GRADE criteria. More studies are required to build strong evidence base in this area.
Personal characteristics play a role in facilitating sustainable RTW for employees with common mental disorders (CMDs); Attitude	Strong Confidence (high level of evidence)	Only one randomized control trial, one high-quality qualitative studies and two high-quality mixed methods studies based on the CERqual criteria were included. Ten observational studies initially rated low quality using the GRADE system were included. Seven of which were upgraded to high-quality studies using the GRADE upgrade criteria and three of which were graded low quality. Twelve studies produced promising evidence with consistent positive effects on sustainable RTW.
Self-efficacy	Moderate Confidence (moderate level of evidence)	Only one randomized control trial and six observational studies upgraded to high-quality studies using the GRADE upgrade criteria and three of which were graded low quality. Apart from one observational study, all six studies produced promising evidence regarding the effects of self-efficacy on sustainable RTW.
Age	Strong Confidence (high level of evidence)	Ten observational studies upgraded to high-quality studies using the GRADE upgrade criteria. One of which was ranked low quality. Studies produced promising evidence of the effects of age on worker's ability to RTW sustainably after ill-health.
Gender	Very Low Confidence (very low level of evidence)	There were conflicting results regarding the effects of gender on sustainable RTW for both men and women. Some studies suggest men RTW more sustainably than men, while a few studies suggest otherwise. It, therefore, suggest that it is possible that the effect of gender on sustainable RTW is influenced by an interaction of some unknown factors for both sexes. Hence the need for further research in this area.

Education	Low Confidence (Low level of evidence)	Four observational studies. Three of which were upgraded to high quality and one maintained the initial low-quality rating based on the GRADE criteria. Although all three studies showed a consistent positive effect on sustainable RTW, evidence is not considered strong.
Economic status/ income	Very Low Confidence (very low level of evidence)	Only two observational studies. One of which was upgraded to high quality based on the GRADE criteria and the other graded low. More studies would be necessary to draw strong conclusions on its effects on sustainable RTW.
Length of absence	Very Low Confidence (very low level of evidence)	Only two observational studies upgraded to high quality based on the GRADE criteria. More studies would be necessary to draw strong conclusions on its effects on sustainable RTW.
Job contract/security	Very Low Confidence (very low level of evidence)	Only two observational studies upgraded to high quality based on the GRADE criteria. More studies would be necessary to draw strong conclusions on its effects on sustainable RTW.
Sustainable RTW for employees with musculoskeletal disorders (MSDs) is dependent on the interplay between multiple personal and social factors.	Moderate Confidence	Only one low quality randomized controlled trial was included. Two mixed studies and one qualitative study graded high quality using the CERqual criteria were also included. Out of thirteen observational studies included, ten were upgraded to high quality studies as a result of meeting GRADE criteria. However, the remaining three maintained the low-quality grade assigned to it by the criteria as a result of the study design. Results suggest that sustainable RTW for employees with MSDs is dependent on an interplay of personal and social factors.
Sustainable RTW for employees with common mental disorders (CMDs) is dependent on the interplay between multiple personal and social factors.	Moderate Confidence	Two randomized controlled trials were included in this evaluation. Four mixed studies graded high quality using the CERqual criteria were also included. Out of twelve observational studies included, eight were upgraded to high quality studies as a result of meeting the GRADE criteria. However, the remaining four maintained the low-quality grade assigned to it by the criteria as a result of the study design. Generally, moderate quality studies were included in this study. Results suggest that sustainable RTW for employees with CMDs is dependent on an interplay of personal and social factors.

3.2.4 Data Extraction

Study Characteristics

A total of 55 studies assessed the effects of personal and social factors on sustainable RTW due to MSDs. The study designs included randomized controlled trials (RCTs) (N =12), observational studies (N =33), qualitative studies (N=9) and mixed methods studies (n=1). Studies that examined whether there is evidence supporting suggestions that personal and social factors impact sustainable return to work (RTW) after ill-health due to CMDs totalled 45. The study designs included RCTs (N =6), observational studies (N =27), qualitative studies (N =8) and mixed studies (N=4). Workers in various occupational sectors returning to work after absence of at least two weeks due to MSDs and/ or CMDs were represented in this review. Average age of study population ranged from 16 to 65 years. Most of the studies (60 of 79) were conducted in Europe (Austria, Denmark, Finland, Ireland, Norway, Netherlands, Sweden, and United Kingdom). Five studies were undertaken in the United States, thirteen in Canada, and one each in Australia and China. Personal factors identified and evaluated included employee's personal characteristics such as: attitude, self-efficacy, age, gender, education, economic status/income, length of sickness absence and job contract/security. Social factors identified and evaluated included support from leaders and co-workers and job-crafting practices.

3.2.5 Evidence Synthesis

Findings from this review are reported in two main categories; first, evidence on the effects of personal and social factors on sustainable RTW after ill-health due to MSDs or CMDs and second, evidence on personal and social factors common to both MSDs and CMDs. Personal and social factors that were common across MSDs and CMDs were determined based on the conclusions drawn from the evidence synthesis for both conditions. Outcomes were described in five groups (positive, negative, inconsistent, inconclusive and no effect). Common personal and social factors across MSDs and CMDs were deduced from consistent evidence from more than one study for both conditions; otherwise, evidence was considered inconsistent. Where the majority of the outcomes (50% or more of the studies reporting a positive RTW outcome) in the review for each factor was in the same direction, evidence was considered consistent (see [Appendix 11](#)). While evidence from studies reporting no positive or negative outcomes were described as of no effect, those from three or less included studies was deemed to be inconclusive. Numerical representation of individual studies shown in the results is reported based on the evidence summary table presented in [Appendix 3](#).

3.2.5.1 Evidence on the Effects of Personal and Social Factors on Sustainable RTW after Ill-Health

The included studies presented a varied level of evidence ranging from strong to very low on the effects of personal and social factors on sustainable RTW for MSDs and CMDs.

Attitude

MSDs: Three very high-quality studies (18, 34, 58), nine high-quality studies (8, 10, 11, 16, 20, 32, 44, 61, 78) and four low-quality studies (3, 23, 24, 46) provided a strong level of evidence supporting the helpful effects of a positive attitude towards work and the RTW on sustainable RTW.

CMDs: While one very high-quality study (18) and one high quality study (11) did not find any association between attitude and sustainable RTW, three very high-quality studies (34, 53, 74), six high-quality studies (10, 16, 32, 55, 77, 78) and three low-quality studies (22, 23, 24) provided a strong of evidence that people with a positive attitude are more likely to RTW sustainably than those with a negative attitude towards work and the RTW process.

Self-Efficacy

MSDs: In four high-quality studies (10, 11, 16, 36), sustainable RTW was associated with self-efficacy, providing moderate level of evidence that employees with a high sense of self-efficacy are likely to RTW sustainably than those with a low self-efficacy.

CMDs: One very high-quality study (72) and seven high-quality studies (10, 11, 16, 36, 45, 77) examined the effects of self-efficacy. Apart from one study (36), all studies provided moderate evidence suggesting that employees with a high-self-efficacy during the RTW process have a greater likelihood of returning to work sustainably than those with a low sense of self-efficacy.

Age

MSDs: One very high-quality study (68), one low-quality study (46) and eleven high-quality studies (15, 16, 28, 32, 33, 36, 48, 50, 61, 69, 78) provided a consistent positive effect of age on ability to RTW sustainably, providing a strong level of evidence showing that younger employees of age ranged between 16 and 45 years have a higher probability of remaining at work after return than the older employees.

CMDs: Across all nine high-quality studies (16, 25, 32, 33, 36, 47, 69, 77, 78) and one low-quality study (62), there is a strong level of evidence that being of a younger age (16–45 years) increases the likelihood of returning to work faster and sustainably compared to being of an older age which contributes to delay in recovery and lasting RTW.

Gender

MSDs: Two high-quality studies (15, 48) reported sustainable RTW in women, while one very high-quality study (58) and three high-quality studies (17, 48, 50) reported sustainable RTW in men. Based on these inconsistencies in the findings, it is unclear which gender of the two is more likely to return to work sustainably after an absence spell, thus instigating the need for the qualitative study presented in section (C) of this thesis. Hence, the evidence presented is considered very low.

CMDs: Two high-quality studies (40, 72) suggests the likelihood of women returning to work more sustainably than men, while two high-quality studies (17, 40) and one low-quality study (62) presented evidence of more sustainable RTW in men. Therefore, as with MSDs, there are inconsistencies in the evidence on sustainable RTW and gender, and the level of evidence is considered very low.

Education

MSDs: Five high-quality studies (16, 36, 50, 54, 78) provided a moderate level of evidence that workers with a higher level of education are more likely to RTW sustainably than those with lower levels of education.

CMDs: One low-quality study (22) indicated the positive impact of a low educational level on sustainable RTW. However, results from three high-quality studies (16, 54, 78) provided contrary evidence suggesting that employees with a higher educational level are more likely to engage with the RTW process which impacts positively on a sustainable RTW. There is therefore very low level of evidence of an association between high educational level and sustainable RTW.

Economic Status/Income

MSDs: There were no studies found to evaluate the effects of economic status/income on MSDs.

CMDs: Results from one high-quality study (47) and one low-quality study (62) indicated that RTW was not a result of recovery from ill-health. Instead, it was influenced by employee's low income/economic status. However, the level of evidence provided is very low as a result of the limited number of studies reporting the effects of economic income/ status on RTW outcomes.

Length of Absence

MSDs: One very high-quality study (68) and three high-quality studies (28, 32, 50) provided results indicating an effect of length of sickness absence, suggesting that to an extent, a short-term absence from work is likely to increase chances of a sustainable RTW. Therefore, there is a moderate level of evidence for this effect.

CMDs: Findings from two high-quality studies (25, 32) showed that the chances of sustainable RTW is heightened for employees out on a short-term sick leave for not more than a year compared to those out of work on a long-term basis. Therefore, there is a very low level of evidence to support the impact of length of absence on sustainable RTW outcomes.

Job Contract/Security

MSDs: In two high-quality studies (36, 48), having a temporary and insecure job contract or working less than 40 h/ week was associated with a sustainable RTW, providing a very low of evidence for this effect, with limited studies to draw definitive conclusions on lasting impacts of return.

CMDs: Two high-quality studies (36, 47) investigating the effects of an employee's job contract/security on sustainable RTW showed that employees who are on a temporary or contract job and working less than 40 h/week are likely to RTW more sustainably regardless of ill-health condition compared to those with a permanent and secure working contract. This evidence was considered very low as a result of the few numbers of studies investigating this effect.

Support from Leaders

MSDs: Forty studies evaluated the role of support from leaders. Fifteen very high-quality studies (6, 13, 19, 27, 30, 34, 38, 49, 51, 63, 65, 67, 71, 76, 79), sixteen high-quality studies (1, 10, 11, 12, 14, 16, 21, 26, 31, 33, 35, 37, 39, 44, 54, 64) upgraded based on the GRADE criteria and 4 low-quality studies (3, 7, 24, 46) found sustainable RTW to be facilitated by support from leaders. Two very high-quality studies (5, 75) and two high-quality studies (8, 78) showed no effects of support from leaders on RTW outcomes. One high quality study (59) showed a negative effect of support from leaders on RTW outcomes. However, evidence synthesis provides a strong level of evidence suggesting that support from leaders does play a role in sustainable RTW outcomes in most instances.

CMDs: Fifteen very high-quality studies (2, 4, 18, 27, 29, 30, 34, 41, 51, 53, 60, 63, 66, 71, 72), eleven high-quality studies (1, 9, 10, 16, 33, 37, 42, 54, 57, 59, 70) and two low-quality studies showed that workers perceived support from leaders as a positive influence on their

ability to RTW sustainably. Three very high-quality studies (56, 73, 74) and two high-quality studies (11, 77) indicated no effects on sustainable RTW. One low-quality study (22) indicated a negative effect on sustainable RTW due to support from leaders. There is therefore strong evidence suggesting the impact of support from leaders on sustainable RTW.

Support from Co-workers

MSDs: Six very high-quality studies (27, 30, 38, 51, 63, 71), seven high-quality studies (10, 11, 12, 16, 20, 31, 44) and two low-quality studies (24, 46) suggest that support from co-workers may have positive effects on sustainable RTW. However, one very high-quality study (59) and one high-quality study (8) provided evidence of no such association. Therefore, there is strong evidence that support from co-workers plays a role in sustainable RTW outcomes.

CMDs: Eight very high-quality studies (18, 27, 29, 30, 51, 56, 63, 71), two high-quality studies (10, 16) and two low-quality study (24, 66) provided results regarding the good effects of support from co-workers on sustainable RTW. However, findings from three high-quality studies (11, 59, 63) suggest that support from co-workers has no effects on sustainable RTW outcomes. Regardless, there is strong evidence suggesting that taking into account the effects of support from co-workers during the RTW process might be beneficial.

Job Crafting

MSDs: Two very high-quality studies (38, 52) and one high-quality study (43) provided evidence suggesting that sustainable RTW may be dependent on the employee's ability to optimize their jobs by applying job crafting practices. However, evidence was considered low as studies were too few to draw a definite conclusion.

CMDs: Only two high-quality studies (9, 40) evaluating the effects of job crafting practices indicated positive effects on RTW outcome, however, providing a very low level of evidence with limited studies to conclude on its impact on a sustainable RTW.

3.2.5.2 Evidence on Common Personal and Social Factors

A summary of the evidence on common personal and social factors associated with sustainable RTW outcomes is presented in [Appendix 11](#).

Common Personal and Social Factors with Positive and Negative Sustainable RTW Outcomes

There was a consistently positive effect of four personal and two social factors on sustainable RTW outcomes for people sick-listed with MSDs and CMDs. Personal factors included a

positive attitude, high self-efficacy, employees of a younger age and a high educational level. Social factors included support from leaders and co-workers.

Even though support from leaders showed a consistently positive effect on sustainable RTW among people sick-listed with MSDs and CMDs in most studies, two studies reported the opposite relationship for both MSDs and CMDs (59, 22). In these studies, contrary to evidence found in many studies, low supervisory support facilitated a sustainable RTW. However, external factors outside of the workplace had an impact on these outcomes.

Common Personal and Social Factors with Inconsistent Sustainable RTW Outcomes

Gender was the only personal factor across all included studies that produced inconsistent effects on sustainable RTW for people with MSDs and CMDs. Reports for MSDs RTW outcomes in one study indicated the possibility of women returning more sustainably than men (15). One study showed a sustainable RTW for both genders (48). While three studies recorded sustainable RTW for men only (17, 50, 58). Reports for CMDs RTW outcomes also showed the same inconsistencies in findings. One study recorded more sustainable RTW among women (77) and two studies considered men more likely to RTW sustainably (17, 62). The contradiction in these results suggests the influence of another factor or factors on these RTW outcomes for both genders, hence the development of research question (3) in this thesis. As such, two interviews will be conducted with participants sick-listed with MSDs and CMDs to aid in unearthing those specific factors that impact sustainable RTW for male and female employees differently.

Common Personal and Social Factors with No Effect and Inconclusive Sustainable RTW Outcomes

Personal factors showing inconclusive sustainable RTW for people with MSDs and CMDs included short-term sickness absence and temporary and insecure job contract. Across both MSDs and CMDs, the effect of job crafting was inconclusive because included studies were too few to infer firmly on their impact, thus warranting the need to investigate further on these effects.

We found a few studies where positive attitude (11, 18), a high self-efficacy (36), support from leaders (5, 8, 75, 78, 56, 11, 73, 74, 77) and support from co-workers (8, 59, 11, 77) showed no effects on RTW outcomes. However, further investigation of these null outcomes showed the influence or absence of other factors which may have impeded expected RTW outcomes. For example, in three studies presence of a positive attitude towards work and the RTW process (25, 43) and a high self-efficacy (44) failed to impact on RTW outcomes due

to the notable absence of social support in the workplace which was in other studies associated with expected outcomes.

3.3 Section 2: Discussion and Summary of Evidence

This section provides a detailed summary of the main findings and conclusion of the systematic review.

3.3.1 Discussion

The main aim of this review was to assess the impact of personal and social factors on sustainable RTW after ill-health due to MSDs and CMDs and to identify commonalities of effects of these personal and social factors between both conditions. Across the literature on facilitators and barriers of RTW, personal and social factors may include a range of concepts not evaluated in this review. However, the evidence presented in this review is only limited to the factors identified in the included studies to influence sustainable RTW outcomes. Overall, sustainable RTW was evident across all RTW interventions or measures involving the personal and social factors evaluated. Effects of assessed personal and social factors were shared across both MSDs and CMDs, and the results were generally in the same direction. This review highlights that personal and social factors play vital roles in facilitating or impeding sustainable RTW after ill-health due to MSDs and CMDs, aligning with Alavi and Oxley's (2013) findings. This may suggest that considering employees' personal and social factors when implementing RTW interventions or programmes will be more beneficial on RTW than modifying or adjusting their job role alone on RTW.

Findings from this review indicate that the effects of personal and social factors are likely to be correlated. Evidence suggests that sustainable RTW may be facilitated by employees having a positive attitude towards work and the RTW process and a high self-efficacy which are boosted by support from leaders and co-workers during the RTW process. This inference is from results from a few studies where the effects of attitude (Brouwer, et al., 2010; De Vries, et al., 2014) and self-efficacy (Huijs, et al., 2012) on sustainable RTW for people with CMDs was inhibited as a result of an absence of support at the workplace. According to Haverlaen et al. (2015), high support from leaders and co-workers could improve the self-confidence and optimism of the returning worker, thus making them feel valued and worthy. This suggests that it is social support that may lead to better attitude and self-efficacy and therefore to better RTW outcomes. However, it is also possible that leaders and co-workers are more inclined to support employees who have a positive attitude towards work and the RTW process and a high confidence in their job competence which in turn impacts on sustainable RTW. The nature of the interaction between these factors is still unclear and should be studied in more detail in the future. Although support in the workplace showed a positive

influence on sustainable RTW, however, across two studies that evaluated support from leaders (Ekberg, et al., 2015; Post, et al., 2005) among individuals with CMDs and MSDs respectively, the evidence did not align with these other findings. Instead, sustainable RTW was facilitated irrespective of the low level of support during the RTW process. These unusual findings can be explained that in these instances, workers returned to work despite being ill in order not to lose their jobs (Ekberg, et al., 2015; Post, et al., 2005).

Job crafting could be beneficial to employees with MSDs and CMDs returning to work after a period of absence. Findings suggested that its effect on sustainable RTW was associated with supportive interactions at the workplace (Bond & Bunce, 2001; Krause, et al., 2001; Johansson, et al., 2006; Jakobsen & Lillefjell, 2014). Employees who felt supported by their line managers and co-workers and were given the opportunity to plan their jobs during the RTW process were more likely to have a high sense of control over their jobs. As a result, they were able to redesign their job tasks in a way that satisfied them, which in turn impacted sustainable RTW outcomes. These conclusions support Wang et al.'s (2017) and McClelland et al.'s (2014) notion of support as an essential antecedent to the effectiveness of job-crafting. They assert that where leaders and co-workers work with employees in a supportive capacity, it is likely to increase the employee's motivation and thereby stimulate their job crafting abilities. However, evidence for the effects of job crafting on sustainable RTW is inconclusive as only a few numbers of studies have investigated this association, as such, it is unclear if other unknown factors have influenced these observed outcomes. Future research should, therefore, investigate the relationship between support from leaders and co-workers and employee's ability to craft their jobs and how that impacts sickness absence. Though included studies did not investigate the impact of collaborative job crafting (team-level job crafting), it might also be beneficial to probe further the effects of collaborative job crafting on RTW.

The effects of younger age, higher education, low economic status, a short-term length of absence, and a temporary and insecure job contract produced evidence suggesting its positive impact on sustainable RTW. Cancelliere et al.'s (2016) findings also identified higher education levels and socioeconomic status as prognostic factors associated with positive RTW outcomes among people with MSDs and CMDs. This review thus verifies that association, suggesting the need to take into account employee's varied personal characteristics when implementing RTW measure for a more sustainable outcome.

Across the studies, younger aged workers were more likely to RTW sustainably than older employees, corresponding with Cornelius et al.'s (2011) findings. Employees of the older

workforce are considered more susceptible to ill-health, as such if they RTW, they had a higher probability of becoming ill again. Sustainable RTW outcomes were more prevalent among employees of a high educational level than employees of a lower educational level in all studies. The reviewed studies discovered that participants who were more willing to participate in RTW interventions were highly educated in all cases, had high quality jobs, stronger job resources, and higher expectations. According to Piha et al. (2009), people with higher education levels are accorded more understanding and knowledge about health-related factors including health behaviours which helps them make healthier decisions in their everyday life and lifestyle which impacts positively on RTW outcomes. The likelihood of sustainable RTW was further increased among people with low income/economic status, temporary/contract jobs. Employees in these categories showed that it was more important to maintain their source of income and keep their job, hence the decision to RTW faster regardless of their health condition to avoid loss of employment as a result of extended absence. Positive effects on sustainable RTW were also identified among employees on a short-term absence from work (Krause, et al., 1998; Conroy, 2017).

These conditions raise concerns about the risk of decisions to RTW while not fully recovered may pose to employees and the cost it may incur to employers. According to Whysall et al. (2017), if RTW is not managed appropriately, this risk is likely to exacerbate existing medical conditions, impair quality of life, invite feelings of ineffectiveness at work and produce a cumulative psychological burden with consequences. As some personal factors like age or gender are not adjustable, employers have the responsibility to ensure they understand employees' conditions and provide adequate preventive measures to support them on RTW.

Results on the effects of gender were inconsistent. Previous studies have often identified men as the most likely to RTW sustainably (De Rijk, et al., 2008; Lydell, et al., 2009; Opsahl, et al., 2016). Men are considered to be more willing to engage in the RTW process because they attribute more importance to their work (Laisné, et al., 2013). However, in this review, we found some studies that reported that women were more likely to RTW more sustainably than men (Crook & Moldofsky, 1994; Volker, et al., 2015), while other studies showed that men were more likely to RTW sustainably (De Rijk, et al., 2008; Lydell, et al., 2009; Opsahl, et al., 2016; Roelen, et al., 2012). The discrepancies in these findings suggest the influence of additional factors on RTW outcomes. It is, therefore, unclear if the effects of gender vary based on factors such as the sector these individuals work in or the organizational culture in the workplace. Moreover, it is possible that factors that influence RTW outcomes for

men and women vary, hence the need for conducting the qualitative study presented in **Section (C)** of this thesis to aid in understanding precisely the factors that affect RTW outcomes for both men and women.

This review revealed common personal and social factors associated with a positive, sustainable RTW outcome for people sick-listed with both MSDs and CMDs. They included a positive attitude, high self-efficacy, younger age, higher education, and support from leaders and co-workers. Rather than tackling MSDs and CMDs separately, recognizing these common factors will be a beneficial step for employers in implementing a holistic RTW approach/intervention for both conditions. According to Naylor et al. (2016), if the integration of mental and physical health does not form a significant component of programmes, it would be a significant missed opportunity.

3.3.2 Conclusions

Personal and social factors play a role in facilitating sustainable RTW after ill-health due to MSDs and CMDs. However, sustainable RTW does not appear to be the result of a single factor. Instead, sustainable RTW seems to be influenced by an interplay of multiple factors. Here the most consistent evidence for sustainable RTW was found for support from leaders and co-workers, positive attitude, high self-efficacy, younger age and higher education levels.

The inconsistencies in the effects of gender observed in the review will be further investigated in the following chapter to aid in understanding what factors impact sustainable RTW for both male and female employees sick-listed with MSDs and CMDs.

To conclude this chapter, find below a summary of how this systematic review answered its research questions.

RQ1: Is sustainable RTW facilitated by personal and social factors for employees sick-listed with MSDs and CMDs?

Evidence presented in the review shows that sustainable RTW is facilitated by an interplay of multiple personal and social factors. The most consistent evidence suggests that sustainable RTW may be facilitated by employees having a positive attitude towards work and the RTW process and a high self-efficacy which are boosted by support from leaders and co-workers during the RTW process. While other factors such as age, education, and economic status/income, appeared to also play a role in sustainable RTW outcomes, conclusions on the effects of job crafting, gender, economic/income, length of absence and job contract/ security could not be drawn as a result of too few included results and inconsistencies in the outcome.

RQ2: What are the personal and social factors common across people sick-listed with both conditions (MSDs and CMDs), that play a role in sustainable RTW?

The review identified commonalities across factors that facilitated positive, inconsistent and inconclusive sustainable RTW outcomes for people sick-listed with both MSDs and CMDs. Factors that impacted positive RTW outcomes included positive attitude, high self-efficacy, younger age, higher education and support from leaders and co-workers. Factors that produced inconclusive outcomes consisted of short-term length of absence, temporary and insecure job contracts. At the same time, gender showed inconsistent RTW outcomes across both conditions and will be further investigated in section (C).

SECTION C: A Realist Evaluation on the Role of Gender on Sustainable RTW after ill-health

4. Chapter four: Research strategy, design and methods

4.1 Chapter introduction

As established in the systematic review in chapter (3), the inconsistencies in findings regarding the effect of gender on sustainable RTW warrants further investigation to understand what specific factors, for whom and under what conditions they influence RTW outcomes differently for men and women. As such, to address the research question (RQ3) developed for this study in chapter (1), a realist evaluation within a longitudinal qualitative study was conducted.

RQ3: To what extent does gender play a role in facilitating sustainable RTW outcomes during the RTW process for people sick-listed with CMDs and MSDs?

In this chapter, I will provide details of the methodological approach for this study. The reasoning behind investigating identified gaps within a qualitative study, using a realist evaluation approach and the appropriateness of the realist evaluation framework will also be presented. I also describe in this chapter the research paradigm and methodology, the basic concepts of the realist evaluation approach and the data collection phases, the study design and the methods for case recruitment and selection. Finally, I outline the aims of the present study.

4.2 Rationale for the study

This qualitative study builds upon findings from the systematic review in chapter two. The study aimed to evaluate the role of personal and social factors (support from leaders and co-workers, job-crafting, age, gender, attitude, self-efficacy, education, economic status/income, length of sickness absence and job contract/security) on sustainable RTW after ill-health such as MSDs or CMDs. Evaluated personal and social factors consisted of factors identified within the studies included in the systematic review. Findings from the systematic review presented inconsistent evidence regarding the effects of gender on sustainable RTW. As empirical evidence in some studies showed that men were more likely to RTW faster and sustainably (Opsahl, et al., 2016; Roelen, et al., 2012; Lydell, et al., 2009; De Rijk, et al., 2008), others showed that women were most likely to RTW sustainably compared to men (Volker, et al., 2015; Crook & Moldofsky, 1994). It is therefore evident that while gender plays a role in sustainable RTW outcomes, it is, however, likely to be influenced by other unclear factors for both genders that are not fully understood in the findings of the systematic review. Gender in this study is referred to as the sex of participants, especially as the determination of gender was made by participants identifying themselves as either male or female (Pryzgodna & Chrisler, 2000).

According to Hunt and Annandale (1993), although some of the assumptions explaining the difference in RTW outcomes for men and women reflect the reality of gender divisions of labour, they are very rarely tested qualitatively. The first qualitative study to apply a gender lens investigated its effect on RTW processes after a work-related mild traumatic brain injury (Stergiou-Kita, et al., 2016). However, while findings from this study showed that gender impacts RTW experiences in multiple ways, it is unclear if these results can apply to people sick-listed with MSDs and CMDs. It is for this reason that this present study is conducted to explore in more detail key assumptions around specific RTW factors to understand the role gender plays in facilitating a sustainable RTW for people sick-listed with MSDs or CMDs. By studying the perspective of both sexes, this study will address this identified gap in knowledge. Therefore, this gap in evidence regarding what factors impact sustainable RTW for male and female employees sick-listed with MSDs and CMDs warrants an exploratory approach to data collection. An exploratory form of data collection will, therefore allow the use of open-ended questions from which new ideas and generalisations about the area under investigation can be generated (Given, 2008).

Therefore, a realist evaluation within a qualitative inquiry was conducted to explore the experiences of employees sick-listed with MSDs and CMDs to determine what specific factors, for whom and under what circumstances RTW outcomes are influenced differently for men and women. A realist evaluation approach is adopted for this present study, to attempt to answer the research question specifically around what works within the RTW process, for whom (male or female) and under what circumstance RTW outcomes are facilitated (Pawson & Tilley, 1997). According to Pawson and Tilley (1997), outcomes occur as a result of the activation of different mechanisms in a program activity in a different context. Hence, within a realist evaluation framework, the four key concepts that aid in explaining how a programme or process works are: context, mechanism, outcome and the context-mechanism-outcome configuration. Therefore, in this present study, initial RTW theories will be developed apriori deductively from the systematic review and inductively from interviews with managers who coordinate the RTW process before the main data collection with RTW study participants. Theory in a realist evaluation describes how a program or process is expected to lead to its outcome and under what conditions it should do so (Pawson & Tilley, 1997). In a realist evaluation, a programme or process is assumed to be a theory incarnate. As such, whenever a program is implemented, it is testing the theory around what is likely to cause change, even though that theory may not be explicit (Westhorp, et al., 2011). Therefore, one of the tasks of a realist evaluation is to make

the theories within the program explicit by developing clear theories on how, for whom and under what circumstances the programme might work (Westthorp, et al., 2011). However, there is some debate in the social sciences about the term “theory”, and distinctions between theory (Sutton & Staw, 1995). According to Marchal *et al.* (2016), the difference between theory in realist evaluation and other kinds of theory-based evaluation approaches is that a realist theory specifies what mechanisms will generate the outcomes and what features of the context will affect whether or not those mechanisms operate. In this study, the theory clearly outlines how and under what circumstances specific factors influence or facilitate employee’s sustainable RTW outcomes. Identified theories will be constructed within the context-mechanism-outcome (CMO) configuration to aid in clearly defining how and under what circumstances specific factors and gender play a role in facilitating sustainable RTW outcomes during the RTW process. Data collection will, therefore, aid in testing the validity of CMO constructed theories.

4.3 Research Paradigm and Methodology

According to Snape and Spencer (2003), there are three distinct ontological positions, materialism, idealism and realism. Materialism claims that there is a real-world, but only material features such as economic relations or physical features of the world hold reality. Idealism holds the view that reality is only comprehensible through the human mind and socially constructed meanings. Finally, the third, realism, asserts that there is an external reality, which exists independently of one’s beliefs or understanding about it and in which experiences are triggered by underlying mechanisms and structures (Bhaskar, 1975).

According to Pawson and Tilley (1997), realism’s distinctive feature is that it places importance on underlying generative explanations and uses such explanatory approaches to advance scientific knowledge. This research adopts a realist epistemological stance and employs a realist evaluation methodology which is a variant of realism (Doi, et al., 2017).

4.3.1 Realist Evaluation

Realist evaluation is an approach grounded in realism, which asserts that both material and the social worlds are real and can have effects; and that it is possible to work towards closer understandings of causes of change (Pawson & Tilley, 1997). It is a form of theory-driven evaluation which focuses on building, testing and refining theories regarding casual mechanisms and how these interact with the individual’s agency and social context to produce the outcomes (Fletcher, et al., 2016; Mirzoev, et al., 2016; Pawson & Tilley, 1997). In other words, theories of how a program or a process works to cause change are explicitly defined by developing clear theories, which are then tested during data collection. According to Pawson

and Tilley (1997), data collection should not only focus on the program impact, or the process of implementation, but also on the specific aspects of the program context that is likely to impact on outcomes, and about the specific mechanisms that might be creating observed changes. It is for this reason the RTW process is evaluated in this present study to consider contextual factors that facilitate or impede RTW outcomes for sick-listed men and women.

A realist evaluation approach is considered appropriate for this study because it acknowledges the importance of context in understanding why, for whom and how interventions, processes and strategies work (Rycroft-Malone, et al., 2008). According to Doi *et al.* (2015), realist evaluation is useful in understanding why an intervention, programme or process produces dissimilar outcomes when implemented in a different context. However, it is worth noting that the focus of evaluation in this study is not only the RTW process but also to understand the varied factors that play a role in facilitating the RTW process and how that impacted on a sustainable RTW for returning workers. As such this approach will aid in understanding the varied RTW experiences and the different factors that impacted RTW outcomes differently for individuals in different population groups (e.g. men, women and organisation) (Pawson & Tilley, 1997). The realist evaluation approach used in this study consists of a realist synthesis of existing literature (based on the systematic review in **Section B**) and empirical data collection using the semi-structured interview to identify new theories and refine old theories established from the literature (Birch, 2015). As such, this method will aid in identifying, testing and refining CMO configurations to develop an empirically based programme theory explaining facilitating factors of RTW and the role of gender plays. See [Figure 3](#) for an overview of the realist evaluation cycle in determining what works, for whom and in what circumstances.

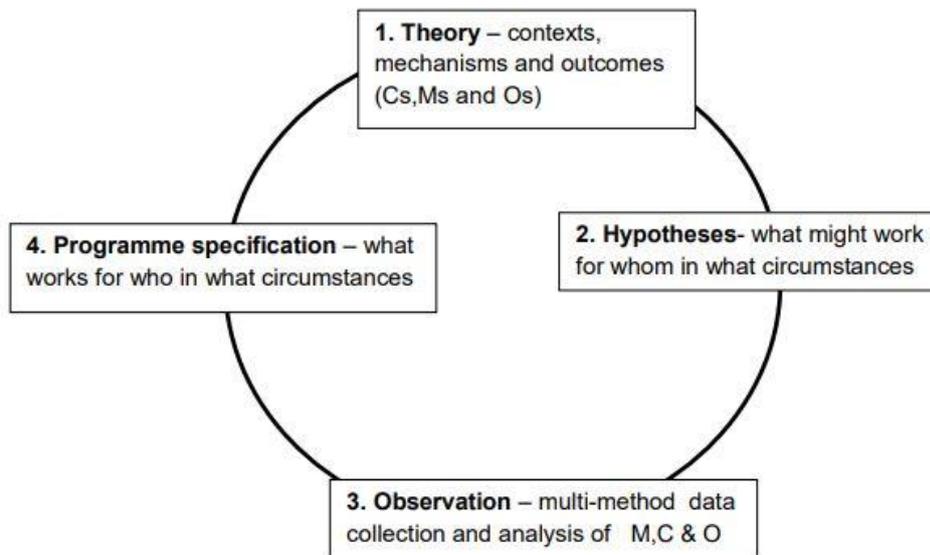


Figure 3: Overview of the Realist Evaluation Cycle

Basic concepts in explaining realist evaluation

Realist evaluation stresses four key concepts in explaining and understanding how a programme or process work (Pawson & Tilley, 2004): context, mechanism, outcome and context-mechanism-outcome configuration.

Context

Context refers to the circumstances or situation under which programme mechanisms become active (Pawson & Tilley, 2004). It is the features of participants, organisation, staffing, history, culture, beliefs, etc. that are required to set off the mechanism (or which prevent intended mechanisms from being initiated) (Westhorp, et al., 2011). According to Pawson and Tilley (1997), context is utilised in a realist evaluation to address the issues of ‘for whom’ and ‘in what circumstances’ an initiated programme or process will work. Context features could include individual’s capacities, interpersonal relationships, institutional settings or the wider infrastructures relevant to the programme being explored (Birch, 2015).

Mechanism

A mechanism is a response that a programme activity or process prompts in the reasoning and behaviour of participants (Birch, 2015). Pawson and Tilley (2004) describe this concept as the process upon which subjects interpret and act upon the intervention scheme. In other words, actions taken directly or indirectly by participants in the implementation of the RTW process represent the ‘mechanism’ in this study. Mechanisms could be either change in a person’s beliefs, values, intentions, decisions, meanings predicted to be created by the programme

context conditions (Birch, 2015), or it could be people's choices and capacities (Pawson & Tilley, 1997).

Outcome

Outcomes are the expected or unexpected changes in behaviour thought to occur as a result of the activation of different mechanisms in different contexts (Birch, 2015; Pawson & Tilley, 2004). According to Pawson & Tilley (2004), realist evaluation is not dependent on a single outcome measure to deliver a verdict on a programme; it takes many forms as such programmes should be tested against a range of output and outcome measures. It is for this reason that the outcome measure for this study will not be restricted to sustainable RTW, but to a range of RTW outcomes as identified in the study (e.g., RTW after sick leave, delayed RTW, poor RTW outcomes, failed RTW, and sustainable RTW).

Context mechanism outcome configuration

The CMO configuration is the assumption or preposition that states what it is about a programme that works, for whom and in what circumstances (Linsley, et al., 2015). According to Linsley *et al.* (2015), using this configuration aids in understanding how a program works with an explanation of why the outcomes developed as they did and how the programme was able to respond to underlying mechanisms and in what context. Realists assert that mechanisms may remain latent until activated to produce desired outcomes in a specific circumstance (context) (McEvoy & Richards, 2003). That is, the effects of the mechanism are dependent upon the context, and where no relevant contextual feature presents itself, mechanisms are not activated; hence, no outcome produced (Higgins, et al., 2015). For example, Lederer et al.'s (2012) study suggest that compared to men, the likelihood of a delay in RTW (outcome) on account of not engaging the RTW process early (mechanism) is higher among sick-listed women. However, not engaging the RTW process early (mechanism) was assumed to be as a result of female workers being domestically active during sick leave, which aggravated their ill-health (context) (Crook & Moldofsky, 1994). This suggestion implies that in the absence of the context, "being domestically active", the pace of recovery would have quickened, thus activating the mechanism, "early engagement with the RTW process", leading to eventual RTW (outcome). Therefore, showing how a contextual feature influences the activation of a mechanism to produce an outcome. This interaction sums up how CMO configurations are constructed in this study. Therefore, the basic realist evaluation (CMO) model adopted for this study (Pawson & Tilley, 1997) can be expressed as:

Context + Mechanism = Outcome

However, a workplace RTW process category will be introduced to this model to establish the association between the RTW process in place at the workplace and the desired sustainable RTW outcome. According to Herepath *et al.* (2015), it has become imperative within the realist inquiry to define the programme/intervention/process and add it to the context- mechanism -outcome formula (CMO). Thus, including the RTW process as a focus of investigation in this present study will aid in understanding what about the RTW process works, for whom, how and in what broader circumstances sustainable RTW outcomes are achieved during the process (Herepath, et al., 2015). Therefore, evaluating the RTW process to identify the CMO configuration will aid in unearthing how context affects or influences the various mechanisms, leading to the desired outcome. As such, the CMO configuration explaining the facilitating or impeding factors of RTW outcomes is presumed to be only activated during the RTW process.

Hence, this present study investigates the below research question:

RQ3: To what extent does gender play a role in facilitating sustainable RTW outcomes during the RTW process for people sick-listed with CMDs and MSDs?

4.3.2 Realist Evaluation Phases

In seeking to build initial theories, test and refine them as is the goal of realist evaluation, this present study was conducted in three main phases; theory gleaning, theory refining and theory consolidation (Manzano, 2016; Doi, et al., 2015). This approach allowed a detailed and rich exploration of the context, mechanisms and outcomes at an individual level to understand what factors and under what circumstances RTW is facilitated for both men and women (Roberts, et al., 2013).

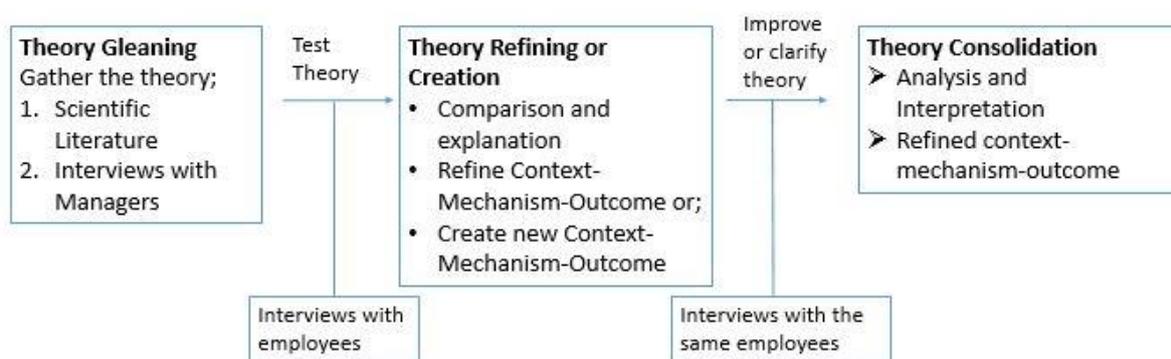


Figure 4: The realist evaluation phases, and data sources modified from Doi *et al.* (2017) & Manzano *et al.* (2016)

Hence both the data collection and analytical processes were conducted and reported within these three main phases. As shown in [Figure 4](#), the theory gleaning phase allowed for the

gathering of theories around how gender plays a role in the RTW process to facilitate or impede sustainable RTW from two main sources: the systematic review in section (B) and interviews with line-managers. Theories were constructed with the CMO configuration and tested by conducting semi-structured interviews with participants. Data were analysed within the theory refining phase to aid in confirming, refining or creation of new theories based on the CMO configurations. Final theories were further tested by conducting a second interview with the same participants to either clarify ideas developed or improve upon established theories. In the theory consolidation phase, final theories were analysed, interpreted and consolidated with appropriate CMO configuration.

4.4 Strategies and methods of realist evaluation

On the one hand, Pawson and Tilley (1997) suggests that a realist evaluation can be conducted using a quantitative or qualitative methodology; however, the hypothesis being tested and the availability of data determines the method of data collection and analysis. On the other hand, Marchal *et al.* (2016) argue that realist evaluation is method-neutral; i.e., it does not impose the use of one or two particular methods. However, realist evaluations conducted to date have often adopted both quantitative and qualitative methodologies with quantitative data being focussed on context and outcome and qualitative data on generative mechanisms (Marchal, et al., 2016). Additionally, a case study design is often employed, where cases are selected purposively to enable testing of initial theories in all its dimension (Marchal, et al., 2016).

In this study, a longitudinal qualitative method was utilised to aid uncovering the underlying explanations of how specific factors are activated within a context to achieve sustainable outcomes. If a quantitative research strategy were adopted, it would have been impossible to fully explore the depth and richness of participant's views, experiences and perceptions needed to answer the research questions posed. Hence, while the context of how outcomes are achieved may be uncovered within a quantitative strategy, depth of understanding around the mechanisms that led to the outcome, which can only be unearthed within a qualitative design, would be left unexploited.

4.4.1 Longitudinal qualitative study

A longitudinal qualitative design embodies a range of mainly in-depth interview-based techniques which involves returning to participants to understand and explore changes that have occurred over a period and the processes associated with these changes (Farrall, 1996). However, the longitudinal nature of this study is not only targeted at providing a nuanced understanding of how a phenomenon, perspectives or experiences changes over time, which is

the traditional goal of longitudinal studies (Carduff, et al., 2015), but to clarify and solidify theories identified in the first interview (Manzano, 2016). Hence, second interviews will accord the opportunity to build upon new ideas identified in the first interview. This study will allow the researcher to chart not just if the RTW program works or not, but also why it worked or failed to work for both male and female employees sick-listed with MSDs and CMDs (Farrall, 1996). In other words, it will allow the researcher to explore the context and mechanisms that instigate an outcome (Pawson and Tilley, 1996).

Interviews are considered the most effective qualitative data collection method (Newman, 2018). According to McLeod (2008), a good example of an interview question is usually semi-structured and open-ended. This approach allows the respondents to talk in some depth, choosing their words, while also helping the researcher to develop a real sense of the person's understanding of the situation. Therefore, the interview process is an opportunity to explore the meaning of the research topic for the participant, which would aid in the construction of a situated explanation around what factors impact RTW outcomes and the role gender plays (Qu, 2011).

4.4.2 Collective case study design

A case study was considered the most appropriate design suited to this study especially as the focus of the study was to answer a “how” and “why” questions, identify the contextual conditions relevant to the phenomenon under study and understand the boundaries between the phenomenon and the context (Baxter & Jack, 2008). According to Reynolds and Wills (2012), where little is known, a case study approach has traditionally been used by researchers as an exploratory method, thus making this design appropriate as little is currently known about the varied gender-specific factors that impact a sustainable RTW for the sick-listed employee. In this study, because the same research question(s) or aims are examined across cases within a number of contexts, using identical methods of data collection and analysis, I chose a collective case study design (Mills, et al., 2010).

This research was a study of several cases that are linked together through a common issue or other similarities (Goddard, 2012). Where a case is defined as a phenomenon of some sort occurring in a bounded context (Miles & Huberman, 1984). Bounded in the definition of a case, therefore, indicates who will and who will not be studied in the scope of this study. The case in this study was referred to the employees sick-listed with common mental health disorders (CMDs) and musculoskeletal disorders (MSDs)” considered within the context of the

workplace RTW process. According to Baxter & Jack (2008), it would be impossible to have an accurate picture of the phenomenon under investigation without considering the context within which it occurred.

Case Selection

Participants for this study were purposively sampled to maximise rigour about the inclusion of target groups that would aid the ease of applicability and transferability instead of generalizability. The target group were workers in the public services industry, because work-related illnesses/injuries are more prevalent in public service industries such as education, health and social care, public administration, and defence (HSE, 2015). It is important to note that the initial intention was to recruit participants from a single public services organization as they represented the target population. However, recruitment was slow, and the target number was not easily attained, leading to the decision to consider participants from other organisations and locations. This decision was taken mainly to reach a larger pool of participants who not only represent the target group but also meet all the inclusion criteria.

Case recruitment was made by approaching two gatekeepers in two organisations which represented the target population. The term gatekeeper is used to refer to individuals who can arbitrate access to a social setting (Saunders, 2006). An interim face to face meeting was arranged to state the aims of this present study and its potential contributions to not only the work and well-being evidence-based practice but also the benefits to the organisation concerning addressing sickness absence issues relating to MSDs and CMDs. Two more meetings were held after that, to identify the inclusion criteria, mode of contact, the anonymity of participants and how to negotiate access to the workplace during data collection. I purposively sampled participants using an intentionally broad inclusion criterion. Participants for this study were restricted to;

Employees who were returning or have returned to work after ill health due to musculoskeletal disorders and common mental health disorders.

The gatekeepers of both organisations liaised with the workplace Union to send out an organisation-wide newsletter carrying information about the research and soliciting the participation of interested employees who met the inclusion criteria. Interested employees were required to contact the researcher via email for participation. The involvement of Union was aimed at helping to establish a trust relationship with employees which informed decisions to participate in the research. According to Anitha and Pearson (2013), the main aim of the Union

is to protect and advance the interest of its members, therefore their involvement in the recruitment process guaranteed employees the safety and benefits of participation.

Based on Stergiou-Kita *et al.*'s (2016) recommendation for a sample size larger than 10-15 for a more in-depth enquiry, this present study aimed to recruit 20-30 sample participants'. This sample size would also maximize the ability to collect longitudinal data at two-time points and accommodate for attrition issues with this participant population. While there is no set number of interviews to attain saturation within a qualitative enquiry, common professional practice situates that 20-30 is a sufficient number of interviews (Manzano, 2016). However, saturation is does not apply to realist evaluation studies. The reason is that theories are not retained, refined or discarded through saturation obtained in a double-digit number of qualitative interviews but through relevance and rigour (Pawson, 2013). As such the assumption about how things work may be gleaned, refined or consolidated not necessarily just in a second interview, but also as a result of digging for nuggets of evidence (Pawson, 2006).

A total of 22 participants (15 women and 7 men) aged 30-50 years and sick-listed with MSDs and CMDs were recruited from September 2017 to August 2018 from a local county council with identifier organisation one, and a higher education institution with identifier organisation two. Eleven participants reported being absent for CMDs, eight participants for MSDs and three for both MSDs and CMDs. See [Table 5](#) below for the case descriptions. All participants were provided with information packs containing an information sheet on the research and a consent form according to the ethical requirement of the university. All consent forms were duly signed and returned prior to data collection. See

Appendix 16 and [Appendix 17](#) for the recruitment pack.

Table 5: Case Descriptions

Cases	Age	Job title	Duration of absence	Gender	Health condition	Job level	Marital status	Caring responsibilities	Organisation	Working hour per week	Contract type	Years of service
001-F-40+	Over 40	Assistant practitioner	11 weeks	Female	MSDs + CMDs	Non-Managerial	Married	-	Org 1	30	Part-time	12 years
002-F-30+	37	Assistant practitioner	Unassigned	Female	MSDs + CMDs	Non-Managerial	Married	1	Org 1	37	Full-time	5 ½ years
003-M-40+	Over 40	Higher development	5 ½ months	Male	CMDs	Non-Managerial	Married	2	Org 1	37 ½	Full-time	9 years
004-F-40+	Over 40	Personal assistant	3 months	Female	CMDs	Non-Managerial	Separated	-	Org 1	37	Full-time	2 years
005-F-40+	Over 40	Lecturer	6 months	Female	CMDs	Non-Managerial	Married	-	Org 2	35	Full-time	10 years
006-M-40+	53	Lecturer	14 weeks	Male	MSDs	Non-Managerial	Married	2	Org 2	37	Full-time	10 years
007-F-40+	67	Business support officer	4 months	Female	MSDs	Non-Managerial	Married	2	Org 1	21hrs mins	45 Part-time	26 ½ years
008-F-40+	Over 40	Public health comm. manager	6 weeks	Female	MSDs	Managerial	Married	1	Org 1	37 ½	Full-time	6 years
009-M-40+	Over 40	Work-based learning coordinator	7 months	Male	CMDs	Non-Managerial	Married	-	Org 2	37 ½	Full-time	10 years
010-F-30	30	Planner	4 weeks	Female	CMDs	Non-Managerial	Separated	2	Org 1	30	Part-time	4 years
011-F-40+	Over 40	Public health	5 months	Female	CMDs	Managerial	Married	5	Org 1	37 ½	Full-time	5 years

012-F-30+	37	comm. Manager Healthcare lecturer	6 weeks	Female	MSDs	Non-Managerial	Divorced	2	Org 2	28	Part-time	10 years
013-F-40+	40	Residential children's practitioner	10 weeks	Female	MSDs	Non-Managerial	Divorced	1	Org 1	37 ½	Full-time	5 years
014-F-40+	40	Public health officer	2 weeks	Female	MSDs	Non-Managerial	Married	-	Org 1	37	Full-time	3 years
015-F-40+	40	Over Social worker	4 months	Female	CMDs	Non-Managerial	Married	-	Org 1	18 ½	Part-time	5 years
016-F-40+	40	Over Social worker	9 weeks	Female	MSDs	Non-Managerial	Single	1	Org 1	37 ½	Full-time	8 years
017-F-40+	40	Business support assistant	5 weeks	Female	MSDs	Non-Managerial	Single	-	Org 1	22	Part-time	5 years
018-M-40+	40	Over Networks safety and sus. Manager	4 months	Male	CMDs	Managerial	Single/ Cohabiting	-	Org 1	37	Full-time	25
019-M-30+	39	Senior curator of history	6 weeks	Male	CMDs	Non-Managerial	Single/ Cohabiting	-	Org 1	45	Full-time	12 years
020-M-40+	44	ICT manager	2 months	Male	MSDs	Managerial	Married	-	Org 1	37	Full-time	9 years
021-F-40+	40	Over PA/Support team manager	3 months/ 5 weeks	Female	CMDs	Non-Managerial/Managerial	Married	-	Org 1	37	Full-time	4 ½ years
022-M-40+	40	Service dressing engineer	5 ½ months	Male	CMDs	Managerial	Married	1	Org 1	37	Full-time	5 years

4.5 Study Aims

The choice of a realist evaluation approach aimed to identify explanatory links of the contextual factors and mechanisms during the RTW process that contribute to sustainable RTW for both men and women. Findings will therefore, become useful to employers and policymakers in implementing more effective return to work strategies tailored to employee's specific needs. The RTW process here is the process within which employee negotiates re-entry with the employer or RTW coordinator and an agreed plan is implemented to aid a successful RTW after sick leave period (Healthy Working Lives, 2019). Hence the RTW process was evaluated in this present study as factors that either facilitate or impeded RTW outcomes are activated during this process. To address the research question (**RQ3**), I formulated three aims as shown below;

1. Analyse the RTW processes at the workplace and identify the factors that facilitate or impede RTW outcomes.
2. Using the results of objective 1, compare factors across men and women to identify similarities and differences in factors that influence RTW outcomes.
3. Using results from objective 1 and 2, develop an in-depth understanding of the role of gender in facilitating a sustainable RTW after ill-health due to MSDs and CMDs.

4.6 Summary

Presented in this chapter is a detailed discussion of the rationale for choosing the realist evaluation approach within a longitudinal qualitative study. The methodological underpinnings of this study, the realist evaluation concept, the collective case study and the selection process, along with the aims of the study have been described in much details in this chapter. While the realist evaluation approach has been briefly introduced in this chapter, the data collection and analytical process within the realist evaluation phases will be presented in more detail in the following chapter.

5. Chapter five: The Realist Evaluation

5.1 Chapter introduction

Chapter (5) of this thesis provides a detailed account of the realist evaluation phases (theory gleaning, theory refining and theory consolidation) as highlighted in the previous chapter.

The realist evaluation phases in this chapter are organised as follows. In section 5.2, I describe how initial RTW theories were developed from the literature review and interviews with managers within the theory gleaning phase, along with a table showing how theories were constructed within the CMO configuration. As the literature review in this present study was intent on constructing what is already known about the role of gender on sustainable RTW as presented in chapter (3), and to understand how and under what condition it influences RTW outcomes. The interviews highlighted the perceptions of RTW coordinators on key factors that facilitate RTW outcomes during the RTW process. I also describe how the topic guide was developed and piloted, and the data collection process in this section. Section 5.3 presents the data analytical processes within the theory refining phase; how themes are developed and compared with initial theories to aid either refining or creation of new theories is detailed. I also provide details of the second data collection process in this section. The theory consolidation phase is detailed in section 5.3. In this section, I explain the final analytical process and how theories capturing the phenomenon under investigation is consolidated based on their CMO configuration.

Details of the ethical approval and provisions, the trustworthiness, validity and reliability of the study is also presented in this chapter. My reflections on the data collection process conclude this chapter.

5.2 Phase 1: Theory Gleaning

According to Manzano (2016), identifying theories on how a programme works in a realist evaluation can be tentatively articulated through a wide range of strategies such as the literature review or expert panels. Engaging stakeholders is also useful in unpacking these theories in a realist evaluation (Doi, et al., 2017). As such, theories for this study were first gathered deductively from a thorough systematic review of literature reporting on the effects of gender on sustainable return to work (see Chapters 2 & 3), and then inductively from inferences from managers who are responsible for the RTW process. Informal semi-structured interviews were undertaken with five managers to explore the implementation of the RTW process and what factors influence employee's decisions to return to work or facilitates a sustainable RTW.

After gathering relevant theories and constructing them based on the CMO configuration, a topic guide for interviews with employees was further developed and piloted.

5.2.1 Literature Review

The body of evidence surrounding the effect of gender on sustainable RTW is limited. While there are relevant contributions to the literature in this subject area, it is not explicit on the specific interaction of factors that influence sustainable RTW outcomes differently for men and women and under what conditions. However, Black and Frost's (2011) review suggests that decisions to stay at work, go on sick leave, return to work or not are often influenced by advice, financial circumstances, decisions of the employee and the state of employee's health. It is unclear all or some of these factors impacts on both gender's return to work outcomes. The identified literature evaluating the role of gender on sustainable RTW suggests eight factors explaining the facilitators of RTW. These factors include domestic pressures, awareness of workplace health services, the importance of work, employee's health characteristics, adequate rehabilitation and treatment, workplace support, recognition of condition and work adjustment.

Domestic Pressures

Crook and Moldofsky (1994), when evaluating the likelihood of injured workers (MSDS) returning to work or remaining on work-disability, observed that women were less likely to return to work after one year. However, on return to work, studies showed that compared to male, females had a higher probability of remaining at work. In suggesting an explanation for these findings, Crook and Moldofsky theorise that in the case of women, social pressures, family expectations and acceptable family role alternatives such as being a homemaker and a mother may have played a part in the delay of returning to work after a disability. Findings from Ahlgren and Hammarström's (1999), study also showed that women compared to men, had a higher probability of putting in long hours of housework a day during sick leave which complicates their rehabilitation process. Hence, the need for this present study to obtain clear explanations for observed outcomes.

Similarly, Lederer *et al.*'s (2012) investigated the gender differences in personal and work-related determinants of return to work after a long-term disability. In this present study, reasons why women returned to work later than men was based on the double-burden theory (Nilsen, et al., 2017). This theory asserts that women were more likely to experience more prolonged disability from exposure to both paid and domestic work. Therefore, strengthening previous suggestion that while women are on sick leave, they are still domestically active, which infringes on time to lasting RTW (Casini, et al., 2013; Ahlgren & Hammarström, 1999).

However, some studies may argue that the issue of work and home interference is not solely attributed to women alone, but men also, mainly as these factors constitute the dominant life roles for most employed adults in contemporary society (Montgomery, et al., 2003). Thus, both men and women are increasingly concerned about the conflicts experienced in fulfilling the demands and responsibilities of their roles at work and home (Montgomery, et al., 2003).

Workplace health services

A workplace health and safety program provided within the workplace by contracted services is a definite plan of action designed to prevent ill-health/injuries (Canadian centre for occupational health and safety (CCOHS), 2015). According to Fit for work (2015), these services provide employers with advice and guidance around making reasonable adjustments to employees working conditions. It is, therefore, the employer's responsibility to consult with employees in the development, implementation and monitoring of the program as, the people doing the work are responsible for creating a healthy and safe workplace (Work Safe NB, 2014). Lederer *et al.* (2012) investigated the gender differences in personal and work-related determinants of return to work after a long-term disability. Even though the time to RTW was similar between men and women, personal and occupational factors influencing RTW differed by gender. Specifically, awareness of workplace health and safety program was found to facilitate an RTW among women. Assumptions explaining the difference in RTW outcomes included the assertion that women had a higher propensity to seek information and care about work injury than men have and therefore are more likely to benefit from it the program. According to Stergiou-Kita (2016), women tend to be more proactive in requesting multiple opinions that might be helpful for their full recovery, unlike men who do not challenge the recommendations of medical specialists. Finding is consistent with De Rijk's (2008) study which found men with mental complaints hesitant and less likely to seek qualified help compared to women. Findings from Edlund's (2001) study showed that as employers showed more interest in supporting male employees, women are, therefore, inclined to take greater responsibility for their rehabilitation. According to Ritterl *et al.* (2018), the evidence surrounding gender is mixed. While some authors suggest that women are more critical of healthcare services than men, some have produced evidence suggesting that women are more satisfied with received healthcare services than men (Ritterl, et al., 2018). Furthermore, results from a Norwegian survey showed that compared to men, women were found to be more frequent users of healthcare services (Statistics Norway, 2007). Ritterl *et al.* (2018) argue that men's less frequent use of healthcare services may be as a result of their eagerness to return to

work because they associate being useful with doing meaningful work rather than obliging healthcare activities provided for their recovery.

Work Importance

Findings from Laisné *et al.*'s (2013) study to determine the capacity of biopsychosocial variables to predict active involvement in the RTW process, showed that gender and high expectation of worker's capacity to resume work was the highest predictor of RTW outcomes. Injured workers who were more likely to be engaged in the RTW process at two months were men, as they were those who had higher expectations about their capacity to resume work and those for whom work was more important compared to women. The finding aligns with Ahlgren & Hammarstrom's (2000) findings which showed that compared to women, men exhibited stronger motivation to work which impacted on their RTW outcomes. Laisné *et al.*'s (2013) study suggests that demographic and psychosocial factors that affect pain, and functional health status varies according to gender. In their study, baseline predictors of poor work outcome at 2-month follow-up were being female, having low work recovery expectations and attributing lower importance to work. These findings suggest the need to investigate further to better understand the potential influence of gender on work disability. Likewise, Opsahl *et al.* (2016) reported that men with higher expectancies of RTW had a higher odds ratio of returning to work compared to women. According to Opsahl *et al.* (2016), this study produced surprising outcomes. Considering women in the study had a significantly higher education than men, and more men were smokers compared to women; as previous studies have shown that those with higher education are more likely to RTW after sickness absence due to musculoskeletal complaints. It was, therefore, expected that compared to men, women were more likely to place more importance on work, and by so doing, be more motivated to RTW to work earlier. However, this was not the case, which, therefore, suggests the influence of some unclear prognostic factors. It is unclear if what defines work importance for both genders vary; hence, the difference in RTW outcomes.

Health Characteristics

There is a general assumption across some studies that the ability to RTW is dependent on the health characteristics of individuals (Johansson, et al., 2006; Engström & Janson, 2007). This assumption also postulates that unlike men, a lack of early improvement predicts lower lasting RTW rates for women (De Rijk, et al., 2008). In the Netherlands, it is assumed that women, unlike men, are more likely to wait until they have completely recovered from ill-health before returning to work. In contrast, men are inclined to RTW even though they are not thoroughly

recovered (De Rijk, et al., 2008). However, the validity of this assertion is yet to be fully investigated.

De Rijk *et al.* (2008) also investigated the gender differences in RTW patterns among workers on sick leave. Findings showed a longer time to lasting RTW for women than men who were predicted either by the presence of at least one long-term disease, lack of early improvement in health or a change in diagnosis. Similarly, findings from De Rijk's (2008) study explains women's delay in lasting return to work as a result of reported changes in diagnosis, particularly significant changes between the broad categories of complaints. Some studies suggest that comorbidity in workers with musculoskeletal complaints decreases the likelihood of a RTW (Opsahl, et al., 2016; Franche & Krause, 2002). The link between these disorders (MSDs and CMDs) and comorbid symptoms have since been established (Baek, et al., 2015); however, there is no sufficient evidence strengthening the assumption that more women than men are prone to comorbidity which impacts negatively on RTW outcomes.

Recognition of Condition

Findings from De Rijk's (2008) study suggests that men with MSDs were more likely to RTW sustainably than men with mental complaints. It was assumed that men with CMDs were less likely to disclose information about their condition and receive adequate help contrary to women who were more open and acknowledging of their condition. Some suggest that men's reluctance to disclose their mental disorder or seek health care may be grounded in societal expectations (Mental Health Foundation, 2019). For these men, conceding to mental illness would be considered a weakness in today's society, which is contrary to traditionally masculine characteristics like strength, stoicism, dominance and control (Seidler, et al., 2016). Hence, it may be logical to assume that men's refusal to acknowledge or disclose their mental health issues is grounded in their need to avoid being seen as weak. However, there is still research suggesting that men would access and seek help if help provided met their preference, was engaging, meaningful and easily accessible (Seidler, et al., 2016).

Treatment and Rehabilitation

Health professionals play an essential role in sickness absence management. Employees are generally expected to provide certification from a health professional (usually a GP) who provide rehabilitation, recommending continuous or extended absence from work (Black & Frost, 2011). However, Black and Frost's (2011) review identified issues surrounding early access to health services and the cost of receiving rehabilitation, suggesting its likely impact on RTW outcomes. While treatment and rehabilitation legislations are not gender-specific;

however, there appear to be differences in treatment services provided to men and women, based on observed RTW outcomes (Ahlgren & Hammarström, 1999). Studies suggest that the variance in the rate of return to work among men and women may be attributed to the fact that men receive adequate treatment and more suitable rehabilitation compared to women (Edlund, 2001; Ahlgren & Hammarstrom, 2000). According to Ahlgren & Hammarstrom (2000), whereas some authors attribute the variance on women's inability to make sufficient demands upon their employers, others suggest that rehabilitation personnel would always give priority to men because their work is of higher status.

Similarly, a study conducted by Franche and Krause (2002) identified early improvement as a predictor of early RTW. Their study suggested that compared to men, women were less likely to interpret and manage their symptoms adequately than men because of less adequate care they receive (Franche & Krause, 2002). Speculations are suggesting that this may be a result of the fact that employers are keener to approve more expensive rehabilitation measures for men because men earn higher wages and sick leave benefits than women (Ahlgren & Hammarstrom, 2000).

Workplace Support

An important aspect of the RTW process is the role played by the workplace leaders (Amir, et al., 2010). Supervisors who communicate positively with returning employees can significantly reduce the duration of disability, while negative contact with these employees is likely to impede the success of the RTW process (McGuire, et al., 2016). According to Nielsen *et al.* (2013), few studies have investigated the link between gender and supportive encounters with leaders in the workplace even though the issue is prominent. Some authors argue that common mental disorders are likely to influence women's experience of supportive encounters in the workplace more negatively than men because they usually receive more support in their personal life than at work (Bansal, et al., 2000). As such, women would translate their personal life expectation for support to the workplace, and when such expectations are not met, they are disappointed, thus, influencing their willingness to RTW (Bansal, et al., 2000). Other scholars found that women compared to men were less likely to participate in a sickness absence interview with their employer and less likely to consider the employer as supportive and respectful (Nielsen, et al., 2013; Laisné, et al., 2013), thus reducing the possibility of early RTW. Findings from Nielsen *et al.*'s (2013) study on encounters between workers sick-listed with common mental disorders and return-to-work stakeholders suggests women's lack of

participation to be as a result of feeling like their supervisors during the RTW process did not help them, listen to them or show sympathy to their situation.

Bansal *et al.* (2000) argue on the possibility of the gender of supervisors playing a role in these findings. Their study suggests that male supervisors are less tolerant of women with mental health issues, and as a result withhold support from them, as opposed to men of whom they show and offer more tolerance and support respectively. Bansal *et al.* (2000), however, suggested a need to conduct further research on this suggestion for clarification. Similarly, Ahlgren and Hammarstrom's (2000) findings showed that men, unlike women, felt more supported and listened to on RTW. On the other hand, Stergiou-Kita *et al.*'s (2016) study revealed that both men and women participants working in a feminine-dominated workplace reported more positive RTW experiences than those employed in male-dominated environments. These findings were reported for people returning to work after mild traumatic brain injury. As such, it may be considered inapplicable to people with MSDs or CMDs. However, the suggestion was also corroborated in Bansal's (2000) study which showed that male supervisors might be less tolerant to expressions of emotions displayed by women, which affects the amount of support provided to women.

Work Adjustment

According to Black and Frost (2011), employers are not required by law to manage sickness absence in any particular way. However, under the [Equality Act 2010](#), employers are required to adjust the workplace or working conditions to facilitate early return to work for temporarily or permanently disabled employees (Krause, et al., 1998). Studies suggest the effectiveness of work adjustment; however, it is uncertain how many employees have access to these opportunities. Findings from a study conducted by the Mental Health Foundation (2009), suggests that employees who do not receive any adjustments or are offered unsuitable adjustments are often left with low self-esteem and confidence, feeling unable to cope with the workplace and with a negative attitude towards their organisation and their job. Thus, highlighting the link between providing adequate work adjustments and employee's work attitudes and self-efficacy during the RTW process. Findings from Edlund's (2001) studies showed that returning employees had difficulties asking for work modifications as they felt employers were not sufficiently involved in their return to work process. However, where work adjustments were provided, men were favoured over women. According to Edlund (2001), the employers were keener to adjust the working places for men than for women, thus reducing the likelihood of women to remain at work sustainably after sick leave. On the one hand, these

studies advocate the influence of gender on the provision of work adjustments to employees returning to work. On the other hand, McGuire *et al.*'s (2016) study make a case for the likelihood of leaders to provide work accommodations for employees in the RTW process in circumstances where there are disability management policies and practices in place in such organisations.

Summary of the literature review

The review identified eight key factors explaining the differences in RTW outcomes for men and women sick-listed with MSDs and CMDs: domestic pressures, workplace health services, work importance, health characteristics, recognition of condition, treatment and rehabilitation, workplace support and work adjustment. Based on these factors, initial theories will be developed, constructed within the CMO configuration and tested. Identified assumptions appear to be closely linked to findings from the systematic review regarding the interplay of personal and social factors that play a role in RTW outcomes. However, some of these factors also appear to be instigated before and during the RTW process. The RTW process involves several stakeholders to include; the sick-listed employees and their line-managers (Dekkers-Sanchez, et al., 2011). As such, along with conducting interviews with sick-listed employees, line-managers who coordinate the RTW process will also be interviewed to aid in unpacking key ideas around how the RTW process works, and factors that facilitate successful RTW.

5.2.2 Interviews with line-managers

According to Pawson and Tilley (2004), stakeholders in a realist evaluation study are the key sources for eliciting initial theories about a phenomenon. As such, determining the assumptions of a programme or process under investigation is considered the fundamental principle in a realist evaluation (Doi, et al., 2017).

Stakeholders approached in this study were line-managers in the workplace whose responsibility was coordinating the RTW process and implementing RTW strategies for sick-listed workers. According to Pawson and Tilley (1997), by engaging these leaders from the outset, the engine of the method becomes an exchange of meaning between the researcher and the program participants. Six-line managers were approached; however, only four of those managers had experience coordinating and implementing RTW strategies for employees sick-listed with MSDs and CMDs. As such, four line-managers in-charge of the RTW process from organisation 1 were recruited to provide a quick background information on what to focus on in the case interviews with RTW cases (for longitudinal data collection). See [Table 6](#) below for characteristics of interviewed line-managers. While there is no standard sample size for this

phase of interviewing, four was considered sufficient to unpack relevant assumptions which would inform the data collection process (Doi, et al., 2017). In keeping with the goal of interviewing line-managers within a realist evaluation framework, a topic guide was developed. According to Pawson and Tilley (1997), interviews with stakeholders should only be constructed to collect particular information that those group of stakeholders have.

Hence, while these line-managers might not necessarily be clear about the gender differences in RTW factors for returning employees, they provided relevant and consistent accounts of the RTW process and perceptions around key factors that impact RTW outcomes, having worked closely with sick-listed employees during the RTW process. Developed interview questions, therefore, explored the accounts of line-managers on the implementation of RTW processes, and their perceptions on how the RTW process works and the factors that influence a successful and sustainable RTW for employees sick-listed for CMDs and MSDs. In this regard, questions like “*explain how the return to work process works, and the role of managers*” was asked (see [Appendix 14](#) for the full list of topic guide for managers). Information provided would be considered useful in conducting a comparative analysis across male and female participants for clarity on the gender-specificity of factors that influence RTW outcomes (Ragin, 2008).

Table 6: Line-manager descriptions

Line-manager	Gender	Department	Working hours	Years of service	Educational level	Organisation
001-F-40+	Female	Public health commissioning	37 ½	10	University	1
002-M-40+	Male	ICT Technology	37	9	University	1
003-F-40+	Female	Support Unit	37	4 ½	High School	1
004-M-40+	Male	Network safety and sustainability	37	25	University	1

5.2.3 Data collection and analysis

Informal semi-structured interviews were conducted with the four line-managers in their place of work. Interviews lasted between 5 and 10 minutes, as this was just a means to gather information on what areas to focus on in the case interviews. The interviews were audio-recorded and transcribed. Data collection was focussed on identifying the main factors underpinning sustainable RTW; as such, a content analysis was undertaken. The content analysis aimed to identify themes that were mentioned by more than two line-managers. The

final analysis, therefore, identified three frequently mentioned themes underpinning sustainable RTW, which was then categorised into main themes. Identified themes include; good quality RTW process, finance and workplace support.

Good quality RTW process

Some of the key elements of a good quality RTW process for disability prevention includes; provision for work accommodation, a competent supervisor, suitability of RTW strategy for returning worker, and employers working in collaboration with healthcare services to aid an informed RTW decision-making (Institute for Work & Health , 2007).

In the accounts of all managers, a good quality RTW process was identified as a key facilitator of sustainable RTW for employees who have been sick-listed by all managers. According to the managers, a phased return is the most commonly implemented work accommodation for employee's returning to work from long-term absence. However, two managers believed that it is more effective when implemented with flexible working options;

“It's just kind of incrementally built up each week and I personally would disperse that with other flexible working options such as working from home, cause I know that one of the things that probably prevents people coming back to work soon ... You know, as soon as they could in this environment is knowing as soon as you come back into the office, it's like you never went away, phased return or not the work is piled up and the work is back at you like a ton of bricks, and so I think that probably keeps people away for longer”. (001-F-40+)

The above extract suggests that effectively implementing an appropriate RTW strategy requires competence on the part of managers. Additionally, one manager suggested that a manager's level of understanding on the nature and cause of employee's ill-health plays a significant role in the manager's ability to put in place the most effective preventive measures on the employee's return. These managers were suggesting that competence is heightened by having a good understanding of employee's conditions along-side their limitations.

“I think having a clear and full understanding of the underlined reasons and causes for the problems, whether they are work-related or non-work-related. And there needs to be a fully supported process for particularly the person who is experiencing the problems in order for them to understand and be able to know what the causes in contribution are”. (003-F-40+)

It is crucial to ensure the RTW process put in place for returning workers facilitates the transition back to work and prevents a relapse. However, it is counterproductive when the root causes of ill-health, especially if they are work-related are not identified and removed. Consequently, two managers noted that while it is important to implement the most appropriate RTW strategy for sick-listed employees, where clarity on workload is not clearly communicated, it may impact negatively on employees' ability to return sustainably. The interviewed managers argued that because fear over workload is a likely barrier to return to work for workers who have been on long-term sickness absence, it is important to reassure these returning workers of the team-based nature of the workload on their return. This reassurance would be effective in assuaging their fears and ease transition back to work, which in turn impacts on a successful RTW.

“I think it’s reassurance of workload for a lot of my team, because they can be worried about their workload. So, it’s reassuring them that it’s ok, it’s not affecting their job and encouraging them to relax. I suppose that is people’s biggest fears, they’re gonna feel like their letting the team down, just making sure they’re realising that you’re part of this, you understand what’s going on, you’re working with them and it’s just being empathetic.” (002-M-40+)

One manager noted that current cuts in the public sector translate to fewer hands available to carry out task customarily carried out by a team of people. Therefore, as workload increases for workers whose responsibility is to cover for absent workers, fear over what is left to be done on return and guilt over adding to the workload pressure for colleagues is instilled in the returning worker. Therefore, strengthening arguments surrounding the impact reassuring these employees on successful RTW. A RTW plan is, therefore, thought to be effective if managers have a good understanding of the nature and cause of employee's ill-health and are able to provide strategies tailor-made to employees. Strategies to ease the transition back to work may consist of flexible working options and other accommodations suited to the returning employee, while also ensuring they are not overwhelmed with excessive workload.

Finance

Across all managers interviewed, motivations to RTW could be majorly heightened by employee's financial status and not necessarily recovery from ill-health.

“But money is always going to be a factor.” (003-F-40+)

However, according to these managers, the effects of finance on RTW is dependent on who is the main financial provider at home. Where an employee is a primary provider at home, this is likely to motivate early RTW irrespective of ill-health, as extended absence may be costly.

Workplace Support

The theme workplace support was also identified in the systematic review as an important factor, thus strengthening suggestions around the role of leaders and co-workers in the workplace in either impeding or facilitating RTW outcomes. However, it is unclear what elements differentiate helpful support from unhelpful support. The accounts of all managers revealed that the dynamics between managers and staff was perceived as a critical facilitator of a successful RTW after ill-health. One manager implied that as a manager, having a good relationship that does not necessarily revolve around work alone with staff influences one’s ability to offer the best help and support during the return process.

“You know, I think having that relationship with the team. I’ve got a relationship with my team in that I do know what they are doing and what’s going on in their lives……. They’ve all got very different lives but having that understanding and having that constant communication helps. And I think when you’ve got managers who are absent from their team, that’s when it can be difficult, the relationship isn’t there. So, I think the manager’s relationship with the staff is really important.” (002-M-40+)

In other words, it is assumed that fostering a good relationship with workers as a line manager could be a facilitator of good support. A good relationship in this context is considered in the sense of good rapport and good knowledge of employee’s work and situation. However, it is an open question whether environments that thrive on strict and formal manager-staff relationships would fail on delivering a successful return to work outcomes for returning workers.

5.2.3 Initial RTW theories

Overall, eight main themes were identified from literature (domestic pressure, workplace health services, work importance, health characteristics, recognition of condition, treatment and rehabilitation, workplace support and work adjustment), and three from the interviews with workplace managers (good quality RTW process, finance, and workplace support). However, the theme “workplace support” identified in both the literature and interviews was considered

as one, and as a result, ten final themes were consolidated. Themes were thoroughly explored to unearth the assumptions underpinning what factors, how and under what circumstances RTW outcomes are facilitated, and from it, 13 initial theories were developed. The theme “domestic pressures” is supported by theory one. “Awareness of workplace health and safety programme” theme is related to theory two. Theory three is associated with the theme “work adjustment”. The theme “work importance” is covered by theory four. “Health characteristics” is supported by theory five. Theory six is covered by the theme “recognition of condition”. The theme “treatment and rehabilitation” is supported by theory seven. Theory eight is related to the theme “finance”. “Workplace support” is supported by theories nine, ten and eleven. Theories twelve and thirteen are covered by the theme “good quality RTW process”.

Domestic pressure

1. Women are less likely to engage with the RTW process early, as a result of being domestically active during absence which contributes to delay in recovery and eventual return to work.

Workplace health services

2. Women who are aware of the workplace health and safety programs, are more likely to engage with the RTW process, which in turn facilitates lasting return to work.

Work adjustment

3. Employers are keener to provide work adjustments, for men compared to women, which impacts on employee’s confidence in the organisation and their ability to do their job, thereby increasing the chances of sustainable RTW for men and poor RTW outcomes for women.

Work importance

4. Compared to women, men are more likely to engage with the RTW process at the workplace, as they have high expectations and place more importance on work, which facilitates sustainable RTW.

Health characteristics

5. Unlike men, women are more likely to wait until full recovery before engaging with the RTW process as a result of co-morbidity or changing health complaints, which contributes to delay in RTW.

Recognition of condition

6. Men with CMDs are less likely to RTW sustainably as they are not willing to open-up about their ill-health and seek adequate help.

Treatment and rehabilitation

7. Men receive more adequate and more suitable rehabilitation compared to women, which increases their chances of recovery and their likelihood of returning to work early and sustainably.

Finance

8. Finance influences motivations to participate in the RTW process even when not fully recovered for employees who are the primary financial providers at home which impacts on sustainable RTW.

Workplace support

9. When the employer is considered not supportive and respectful, women, are less likely to participate in the sickness absence interviews, compared to men, thus reducing the possibility of sustainable RTW.
10. Male supervisors are considered unsupportive by women as they are intolerant of emotional displays shown by women, thus infringing on their ability to RTW sustainably.
11. Line-managers who have a good relationship with sick-listed employees are likely to be more supportive of employees during the RTW process, which impacts on sustainable RTW.

Good quality RTW process

12. Individual managers who have the relevant skills and knowledge, a high level of understanding regarding employee's nature of condition, and who are willing to effectively phase employee's return and also consider other flexible working options to help ease of transition back to work, are more likely to successfully implement good quality RTW processes which impacts on sustainable RTW.
13. Reassuring workers of their workload during the RTW process is effective in assuaging fear and assisting in easy transition back to work, which in turn impacts on successful RTW.

Constructing initial theories based on the CMO configuration

Based on the distinct definition of each CMO strand (context, mechanism and outcome), portions of initial theories were categorised accordingly, as shown in [Table 7](#) below.

Table 7: Initial RTW theories with CMO configurations

Initial theory	Context	Mechanism	Outcome
1. Women are less likely to engage with the RTW process early, as a result of being domestically active during absence which contributes to delay in recovery and eventual return to work.	Being domestically active during absence	Women are less likely to engage with the RTW process early	Delay in recovery and eventual return to work
2. Women who are aware of the workplace health and safety programs, are more likely to engage with the RTW process, which in turn facilitates lasting return to work.	Women who are aware of the workplace health and safety programs	Engage with the RTW process	Lasting return to work
3. Employers are keener to provide work adjustments, for men compared to women, which	Men compared to women	1. Impacts on employee's confidence in the organisation and their ability to do their job	Increasing the chances of sustainable RTW for men and poor RTW outcomes for women

<p>impacts on employee's confidence in the organisation and their ability to do their job, thereby increasing the chances of sustainable RTW for men and poor RTW outcomes for women.</p>		<p>2. Employers are keener to provide work adjustments</p>	
<p>4. Compared to women, men are more likely to engage with the RTW process at the workplace, as they have high expectations and place more importance on work, which facilitates sustainable RTW.</p>	<p>Having high expectations and placing more importance on work</p>	<p>Men are more likely to engage with the RTW process at the workplace</p>	<p>Facilitates sustainable RTW</p>
<p>5. Unlike men, women are more likely to wait until full recovery before engaging with the RTW process as a result of co-morbidity or changing health</p>	<p>Women are more likely to wait until full recovery</p>	<p>Before engaging with the RTW process as a result of co-morbidity or changing health complaints</p>	<p>Delay in RTW</p>

complaints, which contributes to delay in RTW.			
6. Men with CMDs are less likely to RTW sustainably as they are not willing to open-up about their ill-health and seek adequate help.	Men with CMDs	Not willing to open-up about ill-health and seek adequate help	Less likely to RTW sustainably
7. Men receive more adequate and more suitable rehabilitation compared to women, which increases their chances of recovery and their likelihood of returning to work early and sustainably.	Being Male	Receive more adequate and more suitable rehabilitation compared to women	Increases chances of recovery and likelihood of returning to work early and sustainably
8. Finance influences motivations to participate in the RTW process even when not fully recovered for employees	1. Finance 2. When not fully recovered 3. Employees who are the primary financial providers at home	Influences motivations to participate in the RTW process	Impacts on sustainable RTW

who are the primary financial providers at home which impacts on sustainable RTW.			
9. When the employer is considered not supportive and respectful, women, are less likely to participate in the sickness absence interviews, compared to men, thus reducing the possibility of sustainable RTW.	When the employer is considered not supportive and respectful	Women, are less likely to participate in the sickness absence interviews, compared to men	Reducing the possibility of sustainable RTW
10. Male supervisors are considered unsupportive by women as they are intolerant of emotional displays shown by women, thus infringing on their ability to RTW sustainably.	Male supervisors are considered unsupportive by women	They are intolerant of emotional displays shown by women	Infringing on their ability to RTW sustainably

<p>11. Line-managers who have a good relationship with sick-listed employees are likely to be more supportive of employees during the RTW process, which impacts on sustainable RTW.</p>	<p>Line-managers who have a good relationship with sick-listed employees</p>	<p>Likely to be more supportive of employees during the RTW process</p>	<p>Impacts on sustainable RTW</p>
<p>12. Individual managers who have the relevant skills and knowledge, a high level of understanding regarding employee's nature of condition, and who are willing to effectively phase employee's return and also consider other flexible working options to help ease of transition back to work, are more likely to successfully implement good quality RTW processes which impacts on sustainable RTW.</p>	<p>Individual managers who have; 1. The relevant skills and knowledge, 2. A high level of understanding regarding employee's nature of condition, 3. Who are willing to effectively phase employee's return and 4. Consider other flexible working options to help ease of transition back to work</p>	<p>Are more likely to successfully implement good quality RTW processes</p>	<p>Impacts on sustainable RTW</p>

<p>13. Reassuring workers of their workload during the RTW process is effective in assuaging fear and assisting in easy transition back to work, which in turn impacts on successful RTW.</p>	<p>Reassuring workers of their workload during the RTW process</p>	<p>Effective in assuaging fear and assisting in easy transition back to work</p>	<p>Impacts on successful RTW</p>

5.2.4 Developing and Piloting the Interview Topic Guide

According to Frances *et al.* (2009), developing interview topic guides is an important first step in the construction of the interview process, and it is determined by the nature of the research aims and objectives of the study stated in chapter 4. The guide helps an interviewer direct the conversation towards the topic and issues under inquiry (Kennedy, 2006). The guide was designed in such a way as to allow participants the opportunity to express their views as it relates to the phenomenon under investigation. However, because topic guides are semi-structured, new questions outside of the topic guide can be further interrogated as they emerge in participants' accounts.

Insights obtained from the key factors and theories that impact sustainable RTW identified from the systematic review and interviews with managers informed the design of the interview topic guide. These factors included domestic pressures, workplace health services, work importance, health characteristics, recognition of condition, treatment and rehabilitation, workplace support, work adjustment, finance and good quality RTW process. For each of these identified factors and defined theory, I developed broad questions that would accord me the opportunity to hear about participant's experiences and thoughts on how that impacted RTW outcomes for them, which would aid in testing the validity of the theories. According to Agee (2009), questions that are explicitly mapped to the theory helps to focus the inquiry but at the same time anticipate discoveries about the participants' notions. For example, the literature suggested that women were less likely to RTW early and sustainably because they were actively engaging their domestic responsibilities during absence. Hence, questions around the negative impact of "domestic pressure" on recovery and eventual RTW was designed to probe three main aspects to validate this notion; 1) if participants were domestically active during absence, 2) If they were not active, what kind of help was available during absence and 3) if being active impacted recovery and eventual RTW. While points 1 and 3 may be directly aligned with the theory, aspect two was designed to aid in uncovering if people were domestically active by choice or as a result of no help or support during the period of sick leave. Considering the nature of the conditions under evaluation (MSDs and CMDs), I assume that being domestically active could be nearly impossible due to the extreme pain associated with MSDs or lack of motivation for activities related to CMDs. Therefore, a level of critical analysis was applied in constructing these questions to ensure depth in ideas uncovered to validate the theory and thereby achieve the research aims. However, the topic guide was also tailored to generate new ideas apart from those obtained from literature and managers with a

final question asking for other factors that impact sustainable RTW. (See Appendix 15 for employee interview topic guide). The supervisory team subsequently reviewed the topic guide on matters pertaining to language, appropriateness, wording and relevance. Following this review, the topic guide was approved and piloted.

According to Kim (2010), a pilot study is a small-scale feasibility study conducted in preparation for the main study to ensure the methods or ideas would work in practice. It accords researchers the opportunity to make relevant adjustments and revisions in the main plan (Kim, 2010). It is also defined as a pre-test for a particular research instrument such as a questionnaire or interview guide (Janghorban , et al., 2014), where the interview guide is applicable in this study. As such, the topic guide for RTW employees sick-listed with MSDs and CMDs was piloted prior to the collection of the main data. Baker (1994) recommends a minimum of 10-20 per cent of the actual sample size for pilot studies. With this in mind, six participants (three men and three women) among friends and colleagues working within the target population (public sector) were recruited and interviewed. Having duly provided participants with information about the research aims and benefit, and also obtained informed consents, five face to face interviews were conducted at a conducive work location convenient for the participants, and one telephone interview was conducted which lasted between 10 and 20 minutes. While participants were aware of my research goals, they were unaware that the interview was a pilot exercise. This approach was to ensure the seriousness and depth of information provided by participants. Even though I audio-recorded and transcribed interviews, I did not code or analyse data as the aim of the pilot was to test the topic guide, as well as perfect my interviewing skills.

While participants were generally able to comprehend and answer the questions, various issues were highlighted and rectified in the topic guide as a result of the pilot. Responses across all six respondents for ten questions out of the 48 topic guides revealed issues around repetition which resulted in modification of these questions. For example, under the topic RTW process, participants provided the same answers for the below questions, showing that they understood it to mean the same thing. As such, the topic guide was amended to exclude question two.

1. What challenges did you fear you would encounter when you returned to work?
2. How difficult did you think it was to return to work? What made it difficult?

Consequently, a play-back of the initial interviews revealed that I missed numerous opportunities to probe or prompt further on ideas raised by participants. As a result, the topic guide was modified to allow the usage of more probes or prompts such as “why do you suppose so?” or “tell me more about that” where the need arose. In the subsequent interviews, I was

able to pay attention to those probing opportunities and take a cue from the participant's line of thoughts to probe further. On the whole, this pilot exercise provided me with the unique opportunity to improve my interviewing and probing skills as well as provide grounds for a self-assessment of my ability to practice qualitative inquiry which would enhance the credibility of this study (Janghorban , et al., 2014). Reviewing the audio recordings after each interview, therefore aided in assessing my interviewing skills, identifying weaknesses, thus offering an opportunity to improve in subsequent interviews.

5.2.5 Research ethics

Prior to the start of this study, ethical approval was obtained from the Ethics Review Board of the Norwich Business School of The University of East Anglia. All participants were provided with information packs containing an information sheet and consent form (see Appendix 16 & Appendix 17). Individuals who returned the consent forms agreed to participate in the research. Because of the sensitivity of the topic area, all interviews were conducted in a conducive and private office space at either the participant's or researchers' professional environment at a scheduled time and date based on participant's preference.

I applied identifiers that captured the age and gender of participants to ensure anonymity in-line with the ethical requirements agreed at the onset of this study. While some studies may argue that such identifiers are impersonal (*Saunders, et al., 2015*), participants felt more assured of their anonymity with an identifier, hence the reason identifiers were used over pseudonyms to distinguish participants in this study. The decision to use identifiers ensured confidentiality and also allowed participants to share freely.

Considering the sensitive nature of the health conditions in evaluation, and how discomfoting some experiences may be to relieve, participant's information document provided at the start of the data collection process made provisions for participants to cease from participation or stop the interview in the event that they felt uncomfortable in the direction of questioning. Participants were also asked continuously during the interview if they were comfortable providing more detailed accounts, and they were also aware that they were under no obligation to answer questions they were not willing to share. One participant was particularly offered the opportunity to stop the interview as relieving the experience made her emotional. However, she declined the offer and instead asked for a few minutes to compose herself, after which interviewing continued. Overall, all participants answered questions

without reservations as they believed in the benefits of the findings from my research would pose to sick-listed employees.

Finally, the ethics application outlined that repeated interviews will be conducted with the same participants. Therefore, participants were duly informed of the longitudinal nature of the data collection process and were willing to engage in the research entirely. The longitudinal nature of the data collection allowed participants to re-engage with their accounts of events to confirm correct interpretation or offer more clarity to issues, thus strengthening the reliability of finding of this study.

5.2.6 One to one interview with participants

The initial theories developed were tested by conducting face-to-face semi-structured interviews with 22 participants sick-listed with MSDs and CMDs between May and September of 2018, and the majority of interviews lasted an hour. However, in some cases, it was shorter due to different factors personal to participants (e.g. other work commitments). Interviews were conducted at two agreed main locations at the participant's convenience; participant's or researcher's workplace. Interviews were audio-recorded, transcribed and anonymously labelled.

5.3 Phase 2. Theory Refining

In this phase, data were analysed, and theories generated from the data to aid comparison with initial theory.

5.3.1 Data Analysis

Data analysis in this study was conducted iteratively, and transcripts were analysed using thematic analysis method. NVivo software was considered the most appropriate analytical tool for this study as it accommodates a large volume of data. Also, in keeping with the objectives of this study, it would allow a comparative analysis via categorising gender. The NVivo software package was used to organize the data and obtain rigour during analysis (Hilal & Alabri, 2013). According to Beazley (2007), using NVivo enables the researcher to work more methodically, more thoroughly and more attentively.

The thematic analytical method chosen for this study was a hybrid approach that incorporated both the data-driven inductive approach and the theory-driven deductive approach (Fereday & Muir-Cochrane, 2006). This hybrid approach was chosen over other analytical techniques because it allowed the context, mechanism and outcomes components of realist evaluation to be integral to the deductive analytical process while allowing for the emergence of themes from the data using inductive coding (Doi, 2012). In other words, themes were easily

spotted in the data using this approach as a result of CMO configured theories developed a priori in section 5.2.3.

The initial analytical stages in this study were guided by Ferriday and Muir-Cochrane's (2006) stages of deductive and inductive thematic analysis; developing the code manual, testing the reliability of codes, summarising data and identifying initial themes, applying templates of codes and additional coding, connecting the codes and identifying themes and corroborating coded themes. However, at this stage of testing the initial theory, I employed an abductive form inference. In theory-driven research, the deductive analysis would require comparing data back to the initial theory identified, and data that do not align with the initial theories are often excluded from the analysis (Meyer & Lunnay, 2012). On the contrary, abductive inferences are complementary to deductive inferences, which would allow for a more comprehensive analysis of theoretically-driven data (*ibid.*). In this case, data that do not align with initial theories, become significant for generating new theories (abduction) in keeping with the discussions of the findings. This approach aided the progression from a presumptive definition through to an evidence-informed refinement of explanations (Herepath, et al., 2015) on the factors that impact on a sustainable RTW after ill-health for both male and female employees which was under investigation.

A code manual¹ was developed prior to data analysis based on the CMO elements generated from the nine key RTW factors identified in the literature and interviews with managers, to provide a clear trail of evidence for the credibility of this study (Fereday & Muir-Cochrane, 2006). As such, to preserve the richness of the phenomenon under investigation, these nine factors formed the main codes, and themes were defined and described based on the CMO configuration (Boyatzis, 1998). The code manual, therefore, served as a data management tool for organising segments of text within the data that were either related or similar, to aid ease of interpretation (Miller, 1999).

Following the realist evaluation approach, data coding² on NVivo was focused on highlighting portions of data reflecting the CMO structure explaining the factors that impacted RTW outcomes for sick-listed employees, after which they were coded accordingly on appropriate main codes. However, by a process of open coding³, new codes were created when new ideas outside of the initial nine main nodes were identified. New codes were further

¹ A collection of codes generated in a study.

² A coding is the process of labelling sections of a data that provides meaning and can vary from descriptive to inferential (Miles & Huberman, 1984).

³ Open coding is a process of generating new ideas or concept from the data (Braun & Clarke, 2006).

evaluated across transcripts of existing main codes to ensure codes did not apply to the text. Overall, a total of twenty main codes were initially developed; however, I further explored of the codes by re-reading the extracted text to gain clarity of meaning and to identify overlaps between the codes, so that the coding manual could be simplified. This process of coding involved decisions about codes that made the most analytical sense to merge or create as sub-codes to existing main codes were related in properties and dimension (Charmaz, 2006). For example, the code “*finance*” was revised and created as a sub-code of “*work-importance*” because it represented one of the reasons participants considered work as important. While the code “*work adjustment*” was merged with “*good quality RTW process*” as it was identified in the text as a component of the RTW strategy. This process of revising codes was continually conducted throughout the coding process until a final coding framework consisting of fifteen main codes, and twenty-nine sub-codes was developed (See Table 8). By this process, the data was reassembled to create coherence in the emerging theme⁴ and provide a means to weave the story back together (Charmaz, 2006; Glaser, 1992). Themes were identified within cases and compared across cases to confirm the validity of themes. Therefore, through the constant comparison and iteration to both data and the literature, thirty themes were developed. These themes were those that offered more explanations on “how, why and under what circumstance” a sustainable RTW is achieved. Themes identified within the data showed that while key factors impacted sustainable RTW outcomes, however, these factors also facilitated two more RTW outcomes; RTW after sick leave and poor RTW which was evidenced in either a delayed RTW or a failed RTW. Hence, the data analytical process resulted in conceptualising the codes into three broad categories based on the RTW outcomes identified in the themes; 1. Factors that motivate or influence a return to work after a sick leave period. 2. Factors that impact on the sustainability of RTW. 3. Factors that impede sustainable RTW or contribute to poor RTW outcomes. In order to ensure identified themes were representative of the original data (Fereday & Muir-Cochrane, 2006), transcripts were re-read, after which a comparative method was applied to compare nodes to identify similarities and differences within the transcripts of the participants in keeping with study aims 2 and 3 below.

Aims 2: Using the results of objective 1, compare factors across men and women to identify similarities and differences in factors that influence RTW outcomes.

⁴ Themes are patterns of meaning found within an information that describes and organises the possible observations and interpretation of aspects of the phenomenon under investigation (Boyatzis, 1998)

Aim 3: Using results from objective 1 and 2, develop an in-depth understanding of the role of gender in facilitating a sustainable RTW after ill-health due to MSDs and CMDs.

As a result of the findings from the interrogation of themes, theories were developed based on the CMO configuration. Initial theories were then tested against data developed CMO configurations. When data did not fit with the CMO configuration of initial theories, initial theories were either refined or new theory generated abductively to capture the true explanation on factors that facilitated a sustainable return to work for people sick-listed with MSDs and CMDs. A second interview was further conducted with the same participants to clarify interpretations.

Table 8: Final coding framework

Categories	Main Codes	Sub-Codes
Factors that motivate or influence a return to work after sick leave period.	Treatment and rehabilitation	Adequate Treatment Inadequate Treatment
	Contact during absence	
	Recognition of Condition	
Factors that impact on sustainability of RTW	Work Importance	Work-keep active Work-evidence of achievement Work-Finance Work-identity Work-love of the job Work-social Interaction
	Workplace Motivating Factors	Fear of job loss-progression Sick leave guilt Fear of Increasing workload Pressure to RTW
	External Support	Spousal-family support GP Support MP Support
	Good quality RTW process	Effective RTW strategy Competence of Individual managers.
	Workplace support	Gender of line-managers.
Factors that contribute to poor RTW outcomes	Workplace health services (WHS)	
	Self-management	
	Domestic pressures	Home chores/activities Personal-external factors
	Impact of RTW on Rehabilitation	
	Extended Absence	

	Workplace factors	Risk	Organisational/ departmental changes Nature of job Workload clarity Toxic workplace culture Lack of senior management support
	Health characteristics		

5.3.2 One on one interviews with participants

Semi-structured interviews were conducted with 20 participants from two months after the first round of interviews, lasting between December and May of 2019, and interviews lasted between 10 and 35 minutes. The timeframe between both interviews for most participants exceeded two months as a result of settling on a date that was convenient for the participant. While there is no fixed time interval for conducting longitudinal interviews, Terminotics (2013) suggests that the determination of time interval should be sufficient to examine relevant change from one point to another. A trajectory approach to choosing a two months interval between the two interviews was, therefore, considered a sufficient enough time to complete analysis of all transcripts and theorizing of all themes identified. The goal of the second interview was not to compare changes at the two-time points, but rather to aid clarification of my understanding of participant's experiences raised in the first interview and to sense-check my theorizing with participants. The longitudinal nature of these interviews provided data that was used to improve the developed theories. While transcripts could have been sent to participants for clarification of developed ideas, a second interview allowed the researcher to tailor the interviews to each participant and provide opportunities to probe further unclear ideas to gain insights into what, how and under what circumstances factors influenced RTW outcomes (Farrall, 2006). As such, the researcher, by this, was able to make explicit links between participant's experiences and the key RTW facilitating and impeding factors (Neale & Flowerdew, 2003). These links, according to Neale and Flowerdew (2003), become relevant for policy and practice, thus demonstrating the growing interest in the contribution that qualitative longitudinal research adds.

Of the 20 interviews conducted, fifteen were face-to-face, and five were telephone-based. It is argued that the absence of visual cues as a result of conducting telephone interviews is likely to result in loss of contextual and nonverbal data, which compromises rapport, probing, and interpretation of responses (Novick, 2008). However, because the

longitudinal nature of the second interview was not merely to observe changes in perspective, but rather to clarify ideas, non-verbal cues were not as important as key ideas were already established in the first face-to-face interview. Hence, including telephone interviews as a method of data collection in the second interviews was deemed appropriate. Two participants were unreachable for the second interviews; however, the information provided in the first interviews were rich enough to draw inferences in the final analysis. Interviews were audio-recorded and transcribed verbatim. See [Table 9](#) for interviews completed by each participant.

Table 9: Interviews completed by each participant

Case Organisation	Cases	No. of Interviews	Total duration of interviews in minutes	1 st Interview date and location	2 nd Interview date and location
Organisation one	001-F-40+	2	47:55	26/04/18/ S	22/10/18/S
Organisation one	002-F-30+	2	59:18	30/04/18/ S	21/01/19/ S
Organisation one	003-M-40+	2	40:18	09/05/18/ U	06/03/19/ U
Organisation one	004-F-40+	2	41:13	14/05/18/ S	11/10/18/ S
Organisation one	007-F-40+	1	20:55	16/05/18/ S	-
Organisation one	008-F-40+	2	36:31	18/05/18/ S	04/02/19/ S
Organisation one	010-F-30	2	1:18:50	04/06/18/ U	02/10/18/ S
Organisation one	011-F-40+	2	42:27	11/06/18/ S	01/10/18/ S
Organisation one	013-F-40+	2	31:17	29/06/18/ U	21/02/19/T
Organisation one	014-F-40+	2	30:45	06/07/18/ S	27/09/18/ S

Organisation one	015-F-40+	2	1:27:10	05/11/18/ U	18/02/19/ U
Organisation one	016-F-40+	2	50:48	06/11/18/ S	22/03/19/ S
Organisation one	017-F-40+	2	47:09	15/11/18/ S	07/03/19/ U
Organisation one	018-M-40+	2	1:02:53	19/11/18/ U	11/03/19/U
Organisation one	019-M-30+	2	46:04	20/11/18/ U	10/05/19/T
Organisation one	020-M-40+	2	46:26	10/12/18/ U	08/05/19/T
Organisation one	021-F-40+	1	35:10	10/12/18/ S	-
Organisation one	022-M-40+	2	57:43	12/12/18/ S	07/03/19/T
Organisation two	005-F-40+	2	1:3:45	15/05/18/ S	08/11/18/ S
Organisation two	006-M-40+	2	42:13	15/05/18/ S	08/11/18/ S
Organisation two	009-M-40+	2	1:7:50	25/05/18/ S	09/11/18/T
Organisation two	012-F-30+	2	39:33	28/06/18/ S	21/11/18/ S

Where F = Female, M = Male, S = Site, U = University and T = Telephone.

5.4 Phase 3. Theory Consolidation

In this third phase, final theories corroborated by participants in the second interviews, and the theories more worthy of consideration were finally fine-tuned (Manzano, 2016). Based on the clarifications from the last interviews, the context-mechanism-outcome of the theories was finally refined to capture the precise explanations surrounding the factors that influence the participant's ability to return to work sustainably. However, because this analysis identified a number of unexpected outcomes, a final analytical process was conducted; axial coding. Final codes in this stage were reassembled and grouped into categories based on their properties and

outcomes. This method of coding provided a means to create coherence in the final analysis and properly weave the story back together (Glaser, 1992).

5.5 Trustworthiness, Validity and Reliability

According to Baxter and Jack (2008), case study designs employs varied strategies that promote the credibility and validity of the research. Hence, during analysis, I ensured enough detail was provided, which aided in reflecting upon the method that was employed in choosing the sample, how the text extracts were selected for use in writing the report and how the coding categories were established. To ensure the reliability of set data to proceed with the analysis and interpretation, I employed a process of blind double-coding (Baxter & Jack, 2008; Miles & Huberman, 1984). Two observers, I, along with a colleague in the same field independently read six random interview transcripts, created separate coding labels and made the judgement on it by comparing both coding labels. While inter-person differences such as communication style, expertise, gender or perceptions of differential skills may very well impact the choice of coding labels for my colleague and I (Boyatzis, 1998), a comparison of these labels showed similarities and a consensus was reached without disagreements on the final coding labels selected.

Triangulation was employed to gather data through different methods, after which it was compared against one another. I ensured that the data was validated by participants in the last round of interviews. This process of validation was done by sharing the theorised CMO configuration with participants to allow participants the opportunity to clarify the accuracy of interpretation. According to Holloway & Todres (2003), while thematic analysis is flexible and a handy analytical tool, its flexibility can lead to inconsistencies and a lack of coherence when developing themes from the data set. Applying a realist evaluation methodology, therefore, promoted consistency and cohesion during the process of theme development.

5.6 Reflections of the role of researcher and the impact on participants, research design and data collection process

According to Palaganas *et al.* (2017), because qualitative research comes with changes and complications in many ways, the act of reflexivity becomes necessary which accords researchers the opportunity to acknowledge those changes, and how the changes impacted the research process.

The initial intention was to recruit participants from a single public services organization as they represented the target population. However, recruitment was slow, and the

target number was not easily attained, leading to the decision to consider participants from other organisations and locations. This decision was taken mainly to reach a larger pool of participants who not only represent the target group but also meet all the inclusion criteria.

Considering the sensitivity of the health conditions under investigation in this study, I was a bit nervous and unsure how participants would perceive my probing questions, and how that could potentially impact the quality of information the provided. However, it was important that I built a good rapport before each interview to make them feel comfortable and in a safe space. I achieved that by asking them more general questions relating to the weather, their family life and other interests. I gave them a bit more detail about my research motivation and the relevance of my current study, which was a very effective tactic in stirring their interest and making them very relaxed before starting the interview. Established rapport allowed participants the freedom to openly share their experiences and thoughts on the RTW process and the factors that facilitated sustainable RTW for them. Most interestingly, all participants expressed keen interest in the findings of my work and the need to share those with their organisation as they believed it would be of benefit. I was also careful to be sensitive to participant's emotions during the and not probe further. For example, one participant became emotional while recounting her experience of sickness absence due to CMDs. I gave her time to compose herself and offered to stop the interview if it was impossible to handle and she refused and insisted on continuing.

During the interviews, I was careful to pay attention to probe further on topics that would be relevant in answering the research questions. Along with audio recording every interview session, I ensured I took notes of key ideas against each topic guide for each participant. At the end of each interview, I compiled a summary of the interview session for each participant to help me organise my thoughts and stay focussed during and after the interview. I found that this was very useful during my analysis as I was very familiar with information across participants and could very easily connect ideas to participants.

One of the major challenges I faced during transcription was difficulty in clearly hearing each recording for participants with strong British accents. Before now, I considered myself one with very good hearing ability, but working on audio materials for a few participants who fell into this category made me realize that it takes a lot more to hear. I, therefore, ensured that I conducted transcription in a sound-proof environment and made the most of audio tools such as reducing the playback speed while listening. Though this was time-consuming and extended my transcription duration, it was very effective in helping me pick up every word that was

slurred over as a result of participant's accent. It is for reasons such as this that the second round of interviews was useful not only to aid validation or revision of conclusions drawn from these transcripts but also to confirm that audio recordings were accurately deciphered.

According to Sargeant (2012) researcher's own biases and beliefs relative to the phenomenon under study must be made explicit, and, when necessary, appropriate steps must be taken to reduce their impact on the quality of data collected, e.g., by selecting a neutral "third party" interviewer. However, this was not necessary as this thesis is an independent work. Additionally, going into the data collection process with outlined postulations from literature about the interaction of factors that facilitate RTW outcomes for both men and women, aided effective probing to uncover clear explanations to the assumptions gathered in the literature. While my position did not impact the research, it could be argued that my gender or ethnicity could have influenced the participant's willingness to either be open or not. Notably, it is possible that being female may have had restrictions on my ability to interview male participants in much depth effectively. These were some of the concerns I had going into this research. However, although it is not certain if my ethnicity discouraged openness or being female encouraged more female participants to share their world with me, it is important to note that I took necessary steps through rapport-building tactics earlier mentioned to put my participants at ease before each interview to get the best out of their experiences. The rapport-building approach allowed the participants to relax and see the process merely as a discussion with a friend and not an interrogation. It also aided in generating participant's interest in my work which prompted their offer to recommend their colleagues for inclusion in the research.

5.7 Summary

In this chapter, I have described the data collection and analytical processes within the three phases of the realist evaluation cycle. Due to the theory-driven nature of realist evaluation, a review of scientific literature on the role of gender on RTW outcomes and interviews with line-managers who coordinate the RTW process was conducted. This process of gathering data aided the identification of key factors that impact RTW outcomes, and consequent development and construction of initial RTW theories within the CMO configuration. These CMO constructed theories informed the data collection and analytical phase of this study. In the following chapter, I present the results and main findings of the study.

6. Chapter six: Results and main findings of the realist evaluation

6.1 Chapter Introduction

The goal of the recruitment process in this study was to include participants who could provide an articulate account of the RTW process and perceptions on the key factors that facilitated or impeded a sustainable RTW. Interviews conducted was intended to test the validity of the initial theories with CMO configuration developed in chapter 5 (see [Table 7](#)). This chapter aims to bring together initial theories and those identified from the data, in order to construct appropriate CMO configurations that would explain the key factors that impact RTW outcomes and the gender differences across these factors.

This chapter begins with a presentation of emerging themes based on the three main RTW outcomes identified in the data analysis in Section 5.3.1. Results will show how theories developed from themes were retained, refined, discarded, created and finally consolidated. I explored the participant's individual, circumstantial, and organisational properties that may explain what, how, and under what circumstances RTW outcomes were either facilitated or impeded for sick-listed employees during the RTW process. This exploration addressed the present study's **Aims 1**: Analyse the RTW processes at the workplace and identify the factors that facilitate or impede RTW outcomes. A comparative analysis of themes across the participants was also carried out to determine the gender differences across these themes, which addresses **Aims 2**: Using results of objective 1, compare factors across men and women to identify similarities and differences in factors that influence RTW outcomes; and **Aims 3**: Using results from objective 1 and 2, develop an in-depth understanding of the role of gender in facilitating a sustainable RTW after ill-health due to MSDs and CMDs. The main findings of this realist evaluation are also presented in this chapter, followed by the conclusion of the realist evaluation. This present study has generated a detailed and practical understanding of factors or a combination of factors that influence sustainable RTW that will become useful to policy-decision makers and employers in implementing effective RTW strategies tailored to sick-listed employee's needs.

6.2 Themes

Themes were generated using a hybrid approach of deductive, inductive and abductive inferences. As a result, a total of fifteen main codes were developed and grouped into three main categories based on the RTW outcome identified in the data; 1. Factors that motivate or influence a return to work after a sick leave period. 2. Factors that impact on the sustainability of RTW. 3. Factors that impede sustainable RTW or contribute to poor RTW outcomes (See

Table 8). Initial theories cited within these three categories will be referenced in number based on the list of initial RTW theories presented in Table 7, and refined. New theories will be referenced as **R** and **N**, respectively.

6.2.1 Factors that motivate or influence return to work after a sick leave period.

This category describes themes identified within the data that either impacted recovery or influenced decisions to return to work after an absence period.

Treatment and Rehabilitation

This theme was initially identified deductively from literature (see chapter 5 pg. 69). Based on the CMO configuration, it was anticipated that;

- 7. Men (context) receive more adequate and more suitable rehabilitation compared to women (mechanism), which increases their chances of recovery and their likelihood of returning to work early and sustainably (outcome).**

I, therefore, explored the perspective of all participants on the adequacy of the treatments and rehabilitation they received during the absence period and how that impacted on recovery and RTW. Across the participants, treatment and rehabilitation services were provided by the GP/NHS, other services (private or charity), including those services contracted by the workplace. Perceptions of the adequacy of treatment received were grouped into two categories, as suggested by participants. They included; adequate and inadequate treatment-rehabilitation.

Adequate Treatment

Contrary to the literature, nineteen accounts of cases (male = 6, female = 13) in both Org. 1 and Org. 2 agreed that they received adequate treatment for their condition, which impacted positively on recovery and eventual return to work. Generally, these participants believed early access to adequate treatment helped in recovery, thus increasing their chances of an RTW.

“... And so, she encouraged me to go back to the GP to initiate a new referral to Orthopaedics who then said, ‘oh yeah, you’re right actually, it’s not moving because there’s a bit of bone in the way’. And so, they arranged a reparatory surgery last year. And then the Physio that I had following that was brilliant. Best Physio I’ve ever had (Laughing). And I think because he was so good that did help me get back to work. ... The second NHS Physio I had was brilliant. He was good. If I had had him the first time, I might not have ended up in that pickle.” (002-F-30+, MSDs+CMDs)

“The Treatment, oh yes! 100%! My Doctor was absolutely amazing and gave me as much time as I needed. They were not in any hurry to push me back to work. They offered me

medication and they kept offering medication which I refused to have. I didn't want to go down anti-depressants route or anything like that. So, I'm not depressed, I'm just not in a good place. And I saw them regularly every month for a review for my you know, sick form thing. ... So I had to have quite intensive rehabilitation to get that better. I had Cognitive Therapy and a support worker working with me.” (005-F-40+, CMDs)

“Oh, my consultant was fantastic. The NHS has been brilliant. I'm sure that all the Physiotherapists they would love you to be able to come in every day and spend time with you, but they don't just have the resources, but it is what it is. It's the NHS. But the way I was treated was fabulous.” (006-M-40+, MSDs)

Inadequate Treatment

Even though participants recognised the adequacy of treatment they received, accounts of 10 females and four male participants identified its inadequacy, pointing out certain drawbacks in the treatment process, which they believed impacted on their ability to get help quickly and recover. Drawbacks common across these participants were long waiting times for treatment appointments, insufficient treatment slots, and lack of follow-ups after treatment. Male and female participants sick-listed for CMDs predominantly raised issues around waiting lists and insufficient treatment slots leading to a delay in treatment appointments, which impacted on recovery time and time to RTW. Most of these participants associated long waiting times and insufficient slots with the current cuts in the NHS. However, the alternative services available to these individuals (private services), were considered costly, and hence, they decided to wait out till an appointment was secured.

“Yeah and the waiting times... you know, for the people to get into what effectively is the best starting point, which is talking therapies and the waiting times in some areas are ridiculous. I know some of them are slightly better, but the price becomes so financially reliant in terms of ticking boxes to get the funding through to support the contract that you've taken on blah, blah, blah with you know the business type bit. People are being afforded six sessions and they're supposed to be better. How does that work? Subsequent to that, one of the issues that you have around that is that the mental health service in this country are at full stretch. So, you've got to be prepared to wait. It took me, I think it was about 5 or 6 months before I started maybe sort of external mental health support programme, which in this case was group sessions, CPD group sessions. The alternative of course is private therapy but then I don't know if anybody has mentioned it, but you know, it's not cheap. The difficulty going back is if you're experiencing something like that, where do you go to get help now? And the

truth of the matter is, unless you've got money, you're in trouble. You gonna have to wait. So, you've got to find a way of managing that.” (009-M-40+, CMDs)

“You know unfortunately, the NHS, the way it is you can't access treatment and the counselling quick enough. For me, I think I would have come back quickly had I had counselling earlier. The counselling I had was really effective. ... because obviously you know I had 50% pay and then no pay, had I have been able to access or afford some private counselling for one session a week or something, I may have got back earlier. I felt the counselling was very important to get my head in the clearest of space with the medication and to get me well again. So, I think that that would be quite an important factor.” (004-F-40+, CMDs)

In the case of participant 022-M-40+ who like many others couldn't afford the private services but was able to solicit for help and eventually got funding to receive proper treatment which he considered very adequate and contributed to his recovery and eventual RTW.

“Yes, it was quite a struggle getting the test, but it shouldn't have been but I know that the Mental Health facilities in Norfolk and Suffolk went through a change I think in 2012, and they had to find lots of cuts which has had quite a negative impact on mental health in parts of the County.... But it's only the fact that I made a fuss that I got the test that I needed and funded. Not exactly sure where the funding came from exactly... I was dealing with an officer there who was able to help and get me support. And I think the test was funded through that to get a private Psychological Clinic to do the test. And I gained that and I'm able to feel a little bit more confident in mind.” (022-M-40+, CMDs)

Follow-up drawbacks were frequently raised among a few female employees sick-listed with MSDs. Participants who had to wear either splints or broken toe boots complained about the lack of follow-up appointments by their doctors to check-in and clarify for how long they could wear the aids.

“The difficulty that I had with that was I never had any follow up appointment from them and so I felt like I didn't know when I needed to take the splint off, when would be a good time? I didn't sort of have that and I didn't get the results until I really pushed for them.” (014-F-40+, MSDs)

It could therefore be inferred that contrary to Ahlgren and Hammarström's (1999) suggestion that men receive more adequate and suitable treatment and rehabilitation compared to women,

both men and women were generally satisfied with the treatment and rehabilitation they received. It could be argued that had this study included a balanced number of male and female participants; findings could have been different. However, participants by making similar consistent references to the nature of treatment provided with regards to both adequacy and inadequacy of treatment and its impact on both recovery and RTW indicates that the law around treatment and rehabilitation within the UK is not gender specific. Therefore, suggesting that irrespective of the number of male and female participants included in this study, perceptions around treatment and rehabilitation provided for people sick-listed with MSDs and CMDs would still go in the same direction. Hence initial **theory 7** on treatment and rehabilitation will be refined (R) to read as follows;

R7. When employees sick-listed with MSDs & CMDs (context) can access and/ or afford adequate and suitable treatment and rehabilitation early on in their absence period (mechanism), it increases their chances of recovery and their likelihood of returning to work early (outcome).

Contact during Absence

This theme was generated inductively. While this theme may closely be linked to the theme “workplace support” generated deductively, it is considered as a distinct theme because it evaluates the provisions for the support extended to sick-listed employees during the absence and just before a return, and how that precedes a seamless negotiation back to work.

It was observed that participants considered being contacted by a representative of their organisation during absence instrumental to successful RTW. Contact during absence as recounted by these participants benefits them in different ways. It accords them the opportunity to keep up to date of developing events at work, provide updates on the progress of their recovery and discuss the RTW process in general with either their line manager, HR, the Union or any representative nominated by the organisation to make these contacts. However, in line with the policy of the organisations, contacts can only be made based on consent from absentee with clarification on the mode of contact; face to face, email or telephone, depending on the nature of their condition.

“I think, because they ask you ‘do you want to be contacted by email or how do you want to be contacted?’ And I just wanted them to email me updates if needed, because I know I could choose what to look at or not to look at it. I think the thing I struggled with then and generally is that if I’m ill then I don’t want to talk to them. I find it hard to use words and

communicate, because I think probably if I say out loud to them, I'm kind of admitting it, maybe. And also, when I'm at that point, I can barely speak without crying anyway, because I am very open with them. I did explain to them why it is you know." (010-F-30)

As shown in the above extract, while others may be able to accommodate being contacted, due to the severity of the condition, others may not be. Hence, organisations position in emphasising the need to ensure consent from participants are obtained before reaching out. However, for those who gave approved consent, contacts during absence were considered either helpful or unhelpful based on who made contact, the quality of the conversation and how it impacted their motivation to RTW. According to participant 020-M-40+, helpful contact during absence is instigated by a supportive and trustworthy individual who reaches out to absentees. As such, when conversations during contact are devoid of work pressures and in a more supportive capacity; focusing on how individuals are feeling and recuperating, participants believe it makes them feel comfortable, valued, cared for, and sets the pace for them to return to work.

"I had a couple of text from my colleagues and that was really nice just... you know, saying 'hope you're ok, missing you' and that was enough to think it's really nice, I feel like I can go back. Rather than it's a huge thing about walking in the door." (004-F-40+)

"... The times when people did bother to just send an email actually made me feel really good. And I don't know how wishy washy that is you know, but it just makes you feel more valued." (015-F-40+)

"I mean not calling to say 'oh I'm calling to check in on you and how you're doing... and then while we're on, do you have any idea about this report etc. But calling to genuinely check on people and not mount the pressure of work on them generally sets the pace for them to come back. That way they feel comfortable." (020-M-40+)

Where participants were contacted by managers they believed contributed to the ill-health, it was considered unhelpful.

"Although I feel that my manager then didn't follow duty of care for me. So, for her to check in and see how I was, I didn't want to speak to her because it was through her lack of support and insight and ... she acknowledge herself that she was out of her depth. And so, for her to be ringing me up and asking me how I was wasn't helpful." (011-F-40+)

The above shows that it is important for employers to nominate the right person to make

contacts with employees to avoid aggravating them or worsening their condition. Participant 018-M-40+ opted for an email form of contact during the absence from the outset. However, he asked to have no further contacts until a neutral representative (Union) was nominated to take over communications during absence because he found the contents of those emails unhelpful and unsupportive, which consolidates the role the quality of conversation plays. It was also observed that the few participants who had no contacts during their episode of absence expressed feelings of isolation and neglect, which, in turn, influenced their motivation to RTW negatively.

“You know we are supposed to work as a team, and someone goes off sick and you’re forgotten about.... I was dreading coming back because I didn’t know how the people will be, how they are going to react.” (007-F-40+)

“I think what’s been better this time is that three of my colleagues have really supported me over the last four months, and so we’ve had like you know meeting up for coffee regularly and just by doing that made the first day coming back a lot easier. They were there as well, they made sure they were in on my first day, so that just made it easier. I remember coming back last year when I was off and I hadn’t had that kind of contact with people and I came in on my first day and I was hardly anybody there, my manager wasn’t there, and it just felt really awful.” (016-F-40+)

The above extracts highlight contrasting experiences of participants who had contacts or no contacts during the absence. Therefore, implying that contacting sick-listed employees during the absence period sets the pace for their return to work. It allows employers to ascertain employee’s capability to put in place an effective RTW measure on their return. However, the contact must be made by a trusted and supportive nominee, and the quality of conversation should leave employees feeling cared for and valued and not necessarily blamed for a higher workload or include pressure to return. All participants widely held this view. As such, there was no evidence of gender or organisational differences across participants. Hence the new (N) theory on contact during absence reads as follows;

N. When absent employees are contacted during absence by a trusted and supportive nominee (context), it instigates in employees’ feelings of being cared for and valued (mechanism), which in turn motivates their decision to RTW (outcome).

Recognition of Condition

This theme was initially identified deductively from literature (see chapter 5 pg. 69). From the realist framework, it was anticipated that;

- 5. Men with CMDs (context) are less likely to RTW sustainably (outcome) as they are not willing to open-up about their ill-health and seek adequate help (mechanism).**

This assumption was therefore explored from the perspective of all participants with CMD, the extent to which being open about their condition impacted getting adequate help, recovery and sustainable RTW.

One female and three male participants sick-listed with CMDs raised issues around the impact of either disclosing or not disclosing their mental health issues, especially to healthcare providers on adequate care. Accounts of participants revealed that their ability to disclose or open-up about conditions was dependent on their disposition; either in denial or acknowledgement and acceptance of their mental health conditions. According to female participant 010-F-40+, being in denial over her mental state impeded her ability to get help and recover fully. In her case, she refused to accept that she was struggling with mental illness, and as such would not seek help during the absence, thus leading to an early RTW despite her condition. However, her premature return triggered a reoccurrence and further absence period, where she finally acknowledged her condition and received the right help. On the other hand, participant 009-M-40+ from the onset recognised his condition, admitted that he needed help and sought help. According to him, being open to his treatment providers about his condition was beneficial.

“... I started to feel that I couldn't cope with what was going on life-wise, particularly the job. And then you know background information about relationships. You know, that wasn't working as well as it could have done. Just got to this place where you go 'where do I turn? Where do I turn?' ... And when something like that happens, that's the moment I thought I need help, I just need to do something quick, otherwise I'm gonna be (whistling with downward hand motion) gone. So fortunately for me I recognised it in myself and knew that I need to do something.” (009-M-40+)

“... I felt this time they were really good and then I think it's because I was more honest with the Occupational Health people. But it was better resolved. If you're not honest, then it's not going to be resolved as well as it could. You're going to be in the same repetitive patterns, aren't you? But it's hard to be honest.” (021-F-40+)

The above extracts suggest that when people sick-listed with CMD acknowledge their condition and are open to their care providers about their conditions, they are likely to receive the most effective treatment plan which would impact recovery and eventual RTW. Therefore, because the gendered assumptions around the theme recognition of condition were not established, the initial theory on recognition of condition will be refined to read as follows;

R6. When people sick-listed with CMDs are acknowledging of their condition and open with their health providers (context), it impacts the quality of care provided (mechanism), which plays a role on recovery and RTW (outcomes).

Work Importance

This theme was initially developed deductively as a single theme (see chapter 5 pg. 68) and it describes the extent to which participants view their job as important, and how that could influence decisions to RTW even when recovery is not fully attained. Based on the CMO configuration, it was anticipated that;

- 3. Compared to women, men are more likely to engage with the RTW process at the workplace (mechanism), as they have high expectations (context) and place more importance on work (context), which facilitates sustainable RTW (outcome).**

I, therefore, explored the accounts of participants to determine the extent to which work was considered important, and how work importance potentially impacts on sustainable RTW.

The accounts of all participants in both organisations revealed that the way people feel about their job and the importance they place on it is very likely to impact decisions to either return to work or not. However, work importance across these participants was considered in six distinct sub-themes according to how it impacts their life. These sub-themes include work to keep active, work as evidence of accomplishment, work as their identity, work as a means for social interaction, work for the love of the job and work as a source of finance.

Work to keep active

This theme describes participants that were physically active during the absence period despite ill-health. Nine participants (3 men and 6 women) attested that their very active personality was crucial to decisions to RTW whilst still not fully recovered. Even though more women appeared to hold their view, however, the gender construct on this could not be established as the few numbers of men in this study may have played a role in the difference. However, more people sick-listed with MSDs than CMDs happened to fall under this category. Below,

participants 014-F-40+ highlighted possible reasons why returning to work might be desirable when recovery is not fully attained.

“I’m not the sort of person to sit still. I’m active (laughing). I think that ... yeah. I feel like ... I suppose because when you break a bone, you’re not exactly ill yourself. So, I think it’d probably would be different if I’d actually felt debilitated from some sort of illness. But because with all intent and purposes I was quite well, and you know it’s just uncomfortable and disabling that I felt like probably I could do some form of work. I wanted to be at work and felt just frustrated by the injury, rather than debilitated by it. So yeah, I was quite keen to come back to work. So, you know, probably in retrospect I think about now, I probably did come back a bit too early, but that was all my own doing.” (014-F-40+)

The above extract does suggest that even though people’s active personality plays a part in their desire to be back at work early, ability to RTW while not fully recovered is dependent on the nature of the condition. In other words, if participants were bedridden such that they were physically and mentally unable to engage with work, an active personality is less likely to push them back to work. According to participant 20-M-40+ who was absent for an upper back injury, there is difficulty in sitting still and doing nothing at home when one is still physically and mentally healthy to be working. Hence, work for these workers is where they put their active personality to use and being absent for an extended period becomes frustrating and eventually drives them back to work. Participants 017-F-40+, 009-M-40+ and 006-M-40+ implied that the inability to engage their active nature is likely to impact on their mental health, hence the need to RTW as soon as possible.

Work as evidence of accomplishment

Four women in both organisations referenced seeing their work as evidence of their educational accomplishments, which was a driving force to returning to work. The educational level attained across participants in this category ranged from BSc to PhD degree.

“I did three years of training to get my teaching degree and I wasn’t prepared to throw that away cause that was very, very hard for me. I’m dyslexic, so that whole process of learning was really, really hard. So, I wasn’t prepared to let anybody take that away from me. So, it was a driving force.” (005-F-40+)

“I studied long and hard to get the qualifications I’ve got to get me here. So yeah, it’s very, very important to me to be at work.” (008-F-40+)

The above extracts show women's resilience in pushing through their condition to be at a job they believed they earned. Additionally, three of those participants were of managerial level or have held managerial positions before the absence. Thus, suggesting how their job level could have influenced RTW, especially in a labour market where managerial roles are not distributed evenly across men and women. However, the above suggests that compared to men, women are more likely to be driven to RTW to fulfil the role they believed they earned from the years of training.

Work as sense of identity

Accounts of ten cases (5 men and 5 women) sick-listed with CMD and MSDs acknowledged that because their job is important to their sense of identity, they are more likely to push for RTW.

"I would say it's very important. It's a big part of my life. Partly because of the job I do. I really enjoy my job. But I feel connected to it, I don't want to go elsewhere. So, to me, I wouldn't want to risk it at all so that makes it even more important for me to go back." (020-M-40+)

"It's really important to my sense of identity and I really enjoy what I do. I studied long and hard to get the qualifications I've got to get me here. So yeah, it's very, very important".
(008-F-40+)

The accounts of these participants imply that working has become a part of who they are as a person, a part of what makes them feel normal as participant 004-F-40+ highlights. As such, being absent from work due to ill-health threatens that sense of worth attached to their identity and thereby instigates decisions to RTW. The effect of the importance of work to employee's sense of identity and how that facilitates RTW is a view held by both male and female participants.

Work for social interaction

Seven women attested to the fact that they saw work as a means to social networking which played a paramount role in decisions to RTW.

"I came back because I wanted to... For me also, it's the social. I'm an adult who lives on her own with two children, so for me also it's the social area of that as well. Although I would say it's probably quite rare. It's a rare thing that people go to work for. So yeah for me the social interaction was very important." (012-F-30+)

“I mean, where I am, I’m really lucky. I have some awesome people on my desk and so that actually does make you want to come back to work because sometimes being with these people is actually like not socializing” (002-F-30+)

The above suggests that compared to men, women are more likely to form friendships at work and those relationships form part of the reasons they look forward to being at work.

Work for the love of the job

Accounts of seven women and five men on work importance highlighted loving what they do as a job contributed to decisions to return to work.

“The difference is that now I don't find it as difficult to come to work because I'm actually enjoying what I do. There was a period before that when I wasn't enjoying what I was doing.”
(009-M-40+)

“Oh yeah, definitely. If you don't like your job, I think you could easily say ‘I'm not ready to come back’ (laughing). But yeah, definitely.” (013-F-40+)

I found that his views on how enjoying the job influences decisions to RTW were widely shared across both men and women participants sick-listed with CMDs and MSDs. It, therefore, implies that where employees do not like the job, they may be less inclined to RTW earlier than they should.

Work as source of finance

The theme finance was initially developed as a single theory from interviews with managers at the workplace who handle the RTW process (see chapter 5 pg. 75), and it was anticipated that;

- 8. Finance (context) influences motivations to participate in the RTW process (mechanism) even when not fully recovered for employees who are the primary financial providers at home (context) which impacts on sustainable RTW (outcome).**

However, because participants identified finance as the reason high importance is placed on work, the theme finance was merged with work importance as a sub-theme.

All participants in both organisations attested to the fact that their financial position was and could be one of the significant factors that influence decisions to return to work at a period they were not fully recovered.

“If I'm honest the issue was I was pushing myself to come back because I knew I would end up going down to half pay and I tried to get some clarification before I went off sick

regarding disability leave and they are basically being told by HR that the only day that classes as disability leave is the day of my operation. So not the recovery or the rehabilitation afterwards. So, it's just very conscious that at some point I was going to go down to half pay” (016-F-40+, Org. 1)

“... Partly because there's the financials ... so there's a time-scale how long they will pay you for. So, I said 'well I'm gonna try and go back to work', because obviously I think I'm gonna start going onto half pay. So, I had to come back regardless really.” (006-M-40+, Org. 2)

The above extract shows that while finance was a motivator for RTW, half-pay policies within the workplace was a contributing factor to the effects of finance as a means to return to work. In both organisations, the sickness absence policy makes provision for the reduction of pay depending on years of service, type of contract, and absence duration. As such, employees who feared the risk of half-pay as a result of extended absence made a conscious decision to return even though they were not fully recovered.

“The finance issue wasn't an issue because I was only off for six weeks. I'm on a permanent contract, so we get I think it's something like 6 months of full pay, then it goes down to half pay and eventually drops off. Obviously, I was only off for 6 weeks”. (012-F-30+)

The above extract shows that participant's duration of absence was below the half-pay cut off; as such, no financial pressures was motivating RTW. This perception was consistent with other participants who were not driven by the half-pay policy to return. It, therefore, shows the role an organization's sickness absence policy plays on early RTW and presenteeism. Participant 011-F-40+ suggested that, while half-pay policy plays a role, people who are likely to be motivated by it are employees who are the primary financial contributor at home. According to her, “with finances, it depends on where you are, either the breadwinner or not, because where you're the major financial contributor, being away for too long may not be an option”, as was the case with her. She could not afford to be away and on half-pay, especially with children to care for and bills incurred. Further exploration of the accounts of all participants confirmed participant 011-F-40+'s argument. These participants acknowledged being main contributors at home, and the difficulties of handling a range of financial responsibilities with

no alternative finances to cover the deficit that comes with half-pay, thus making returning to work a necessity. Therefore, initial **theory 7** on finance being a motivating factor for RTW is validated.

“I’ve got to come back to work regardless really cause I can’t afford to be on half-pay. That’s the only reason. Nothing else (Giggling). I know they say health is important, but you’ve got two children to support you know, mortgage, you’ve got to come back to work.” (007-F-40+)

There were a few participants who were of the view that even though they were to slip into half-pay, returning to work while not recovered would still not be an option, seeing as their health was their priority.

“I don’t know, because I wasn’t in that position obviously because of how sick pay goes for much longer than that. I’d like to think that it wouldn’t have affected that, that my primary objective would have been my own recovery because what I was really conscious of was the fact that I have to... like with this shoulder, manage it for a long time after I’m retired.” (008-F-40+, Manager)

Participants with this view appeared to hold managerial positions, which may suggest that people who hold managerial positions are paid higher wages, and as such, are not necessarily under any financial pressures that would warrant the need to RTW earlier than they should as shown in the below extract.

“Well, the financial aspect is always there but I don’t think in my personal circumstances it’s absolutely essential that I work now. You know I don’t have a mortgage to pay anymore.” (018-M-40+, Manager)

The accounts of participants, to a great extent, confirms the role of work importance on decisions to RTW. However, factors such as age and persisting ill-health are likely to wane people’s desire to be at work, and thereby lessen the level of importance they place on work.

“I suppose I’m highly motivated at work, but I suppose as I get older, so like I’m 56 in a couple of weeks’ time and I just sort of think that probably work is not as important to me as what it was when I was in my 20s. But because you know, I sort of feel that I’m probably

getting to the end of my working life. And although I like to feel like I do a good job, I don't probably feel as ... I'm happy over this job." (014-F-40+, MSDS)

"I do (emphatically) enjoy my work. I enjoyed my work more like a year or so ago. And I always did enjoy it but it just ... I think everything you know; I definitely went downhill on my motivation and my you know, my desire to be there. (Sighing) It just felt a bit like flogging a dead horse at one point... you know, if you're in a good place then it's just work isn't it? But you know if other things are playing on your mind it's just something else that can add some pressure in, I guess." (003-M-40+, CMDs)

Notwithstanding the position held by these participants on their lack of motivation to be at work, their financial responsibilities and the need to keep active influenced decisions to RTW.

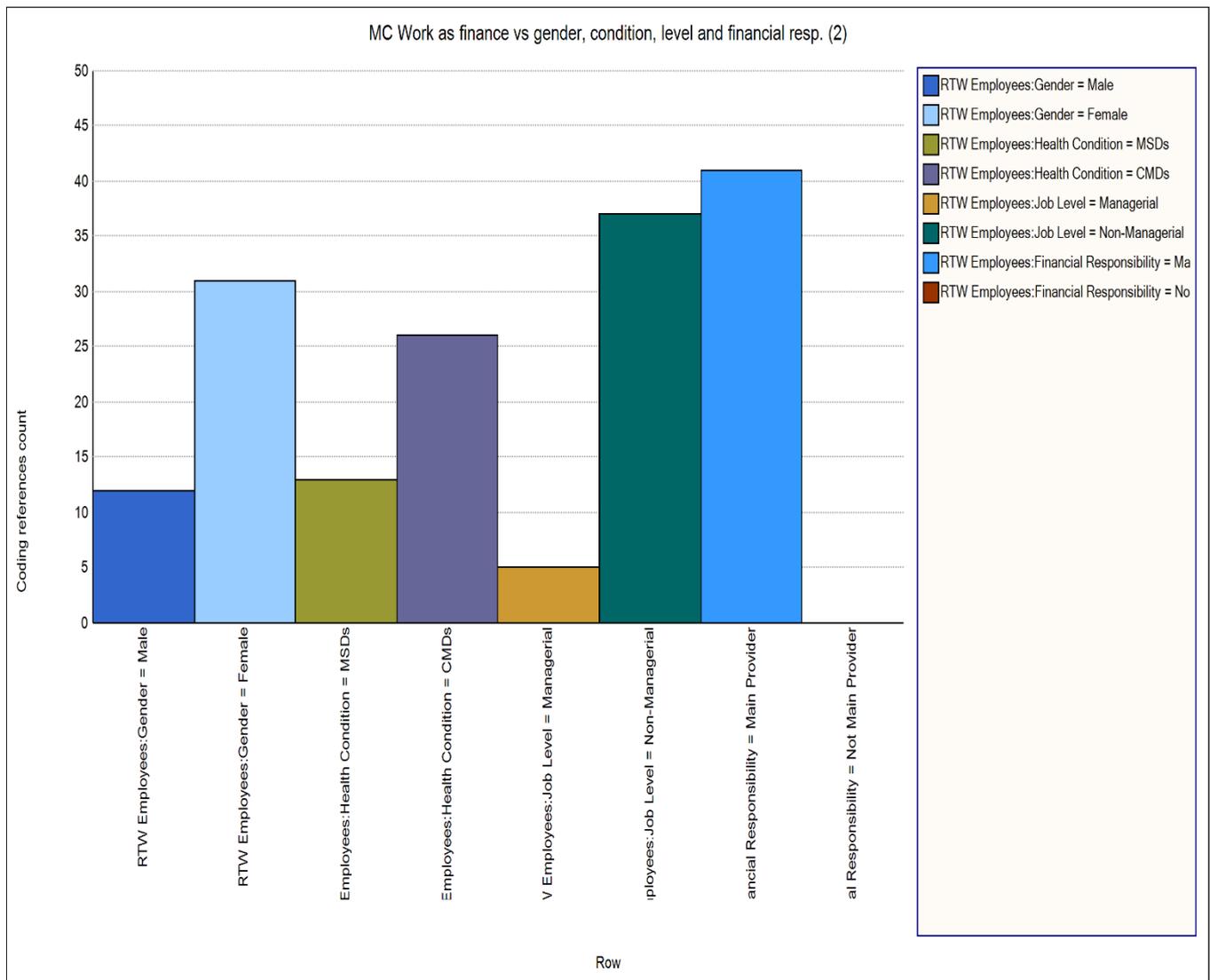


Figure 5: RTW motivated by finance in different employee context

Overall, Figure 5 above depicts how motivations to RTW due to finances is influenced by the participant’s job level and financial responsibility/ position. Additionally, perceptions on the effects of finance on RTW outcomes, as shown in Figure 5 does not appear to be gender-specific.

Summary of Work Importance

Though findings to an extent align with the initial **theory 4** on how work importance influences decisions to RTW early, Ahlgren and Hammarstrom’s (2000) assumption that compared to women, men placed more importance on work did not hold. Both men and women widely shared the impact of work importance on RTW. The theory on finance was duly confirmed from the accounts of participants. Hence it will be retained. Consequently, while some gender-specific elements of work importance were identified, others were motivated by the nature of the illness. Therefore, the initial theory on work importance will be refined to read as follows;

R4. Employees are motivated to engage the RTW process even when they are not fully recovered (mechanism), as a result of the level of importance they place on their job and the personal factors surrounding them (mechanism) (context), thus facilitating a RTW (outcome).

The new theories based on the distinct sub-themes of work importance identified will read as follows;

N1. People sick-listed with MSD, who have an active personality (context) are more likely to engage the RTW process even when they are not fully recovered (mechanism), thus facilitating an early RTW.

N2. Women who are of a higher educational level and holding a leadership position are more likely to engage in the RTW process whilst not fully recovered out of a need to prove oneself and to prove that they are deserving of their attained position, thus facilitating early RTW.

N3. More women than men are likely to form strong social networks within the workplace which in most cases forms the basis for engaging the RTW process early thus facilitating RTW.

Workplace Motivating Factors

This theme was developed inductively from the data set. It describes work-related issues or pressures that motivate the participant's decision to RTW. An exploration of the accounts of participants in this study revealed that certain workplace factors influenced decisions to return to work while not fully recovered or remain in unsupportive situations after RTW without complaints. They included: fear of job loss or progression, sick leave guilt, fear of increasing workload and pressure to RTW.

Fear of Job Loss or Progression

Fear of job loss or progression was discussed among three female participants and two male participants sick-listed with CMDs in organisation one, showing no gender disparity. The accounts of these participants suggest that the fear of job loss or difficulty in progression was the driving force for RTW. Considering the complexity of mental health issues, and how the classification of absence period for these cases was long-term, worry over job security may be justified.

“I was concerned it might go against me when I went for the job; the fact that I'd had so much time off because I'd had three months off. Obviously, it goes on your record. ...I

wouldn't have probably come back quicker if I would not have had that worry in my head constantly.” (004-F-40+, org. 1)

Consequently, two of these employees were willing to accommodate unsupportive behaviours or unhelpful work accommodations from the fear of being perceived as incompetent, which might result in job loss.

“There’s not a lot of support. It’s that fine balance, because if I did start to go and say ‘I need help, I think you should do something for me...’ I worry would that then penalise me and then I start to go on a ‘well, she’s not fit for work, get her gone’. So, it’s really tricky to know how much do you say you’re struggling and how much don’t you? So, I just go on with it, I do the job as best as I can, and if my back act up, I just take pain-killers.” (002-F-30+, org. 1)

“That’s the added implication in my work, it’s the probation period. So, it’s a lot of steps. I mean she, my line manager did say ‘you know, I realise its added stress on what you’re going through to have to kind of face the prospect of a potential loss of job.... So, I kind of feel like I have to go in no matter what because of the probation.” (010-F-30)

Of the two participants, one held a temporary job contract, and the other being newly employed, was still in the probationary phase of their employment. Therefore, their insecure job contract impacted on their ability to demand adequate support. A comparison with participants in organisation two showed that people with CMDs were all permanent contract staff and a lot more conscious of their condition, hence the boldness in speaking up when they were backed into situations that threatened their health. The difference in outcome shown in the below extract strengthens the link between job security and demands for adequate support.

“The pressure is starting to build up again and I do have to keep saying to them ‘I’m not allowed to do that; you know I’m not allowed to do that because I will become ill again’. So yeah that side of things I don’t think is a 100%, if I’m honest.” (005-F-40+, Org. 2)

Sick leave Guilt

More female (seven) than male (one) participants in both organisations spoke about how the guilt of letting the team down motivated their RTW (see [Figure 6](#) below). Letting the team down was consistently spoken in reference to colleagues within their working team, picking up their workload in their absence, especially in teams struggling with a shortage of staff.

“When you are a teacher, if you go off sick, even if it’s just like with a migraine or a stomach bug or a flu or something, it’s something that gnaws away at the back of your head that actually I’m putting more pressure on because it’s always picked up within a team. They don’t ship somebody else in to do it... I do think that is part of the drive to get you back.”

(005-F-40+, Org 2)

“I think probably not wanting to let my manager down would be an influence as well. Because you know we work in small teams so not having ... you know so even though we work within a big department in a big council, there are very small teams. So, if one person is missing, that does have an impact on what’s being done.” (014-F-40+, Org 1)

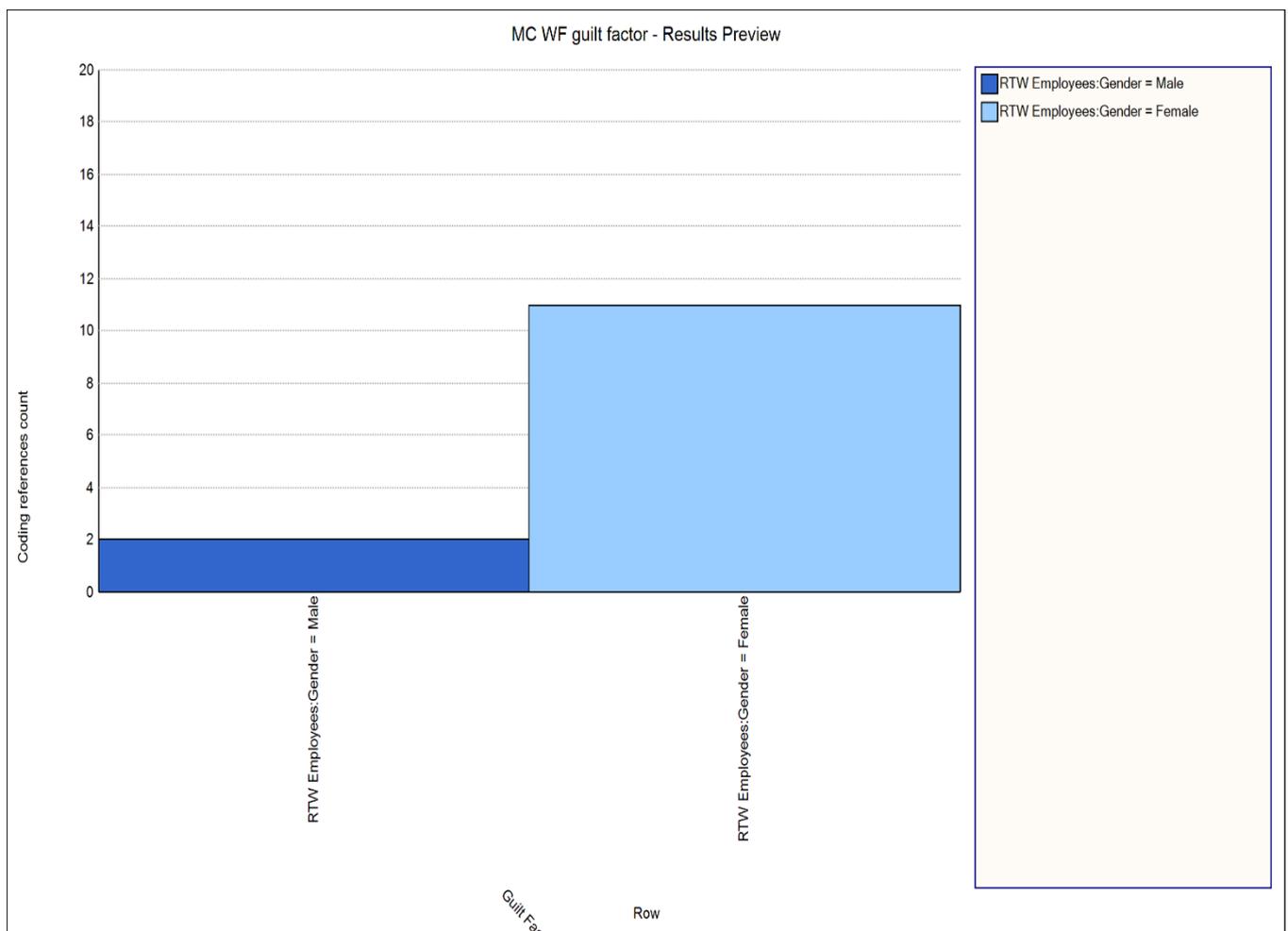


Figure 6: Gender differenced in the effects of sick leave guilt on RTW

005-F-40+’s reference to her role as a teacher suggests that people who work in pressure prone jobs or teams as a result of a shortage of staff within a team are likely to feel guilty over adding

to their colleague’s existing pressure. Therefore, out of consideration for their colleagues, an early RTW is instigated.

Fear of increasing workload

This theme was derived inductively, and it describes how the fear of accumulating workload during absence influences early RTW irrespective of recovery status. More men than women were of the view that the fear of an increasing workload is likely to instigate a RTW in-spite of not being fully recovered (see Figure 7 below).

“I think initially I should have probably taken the time off, and so it was too easy for me to keep saying I will try and come back to work because I had that workload and it's the fear of the workload. You know, when you know that nothing else is being picked up and there’s lots to be done, so you're desperate to come back to work...” (020-M-40+).

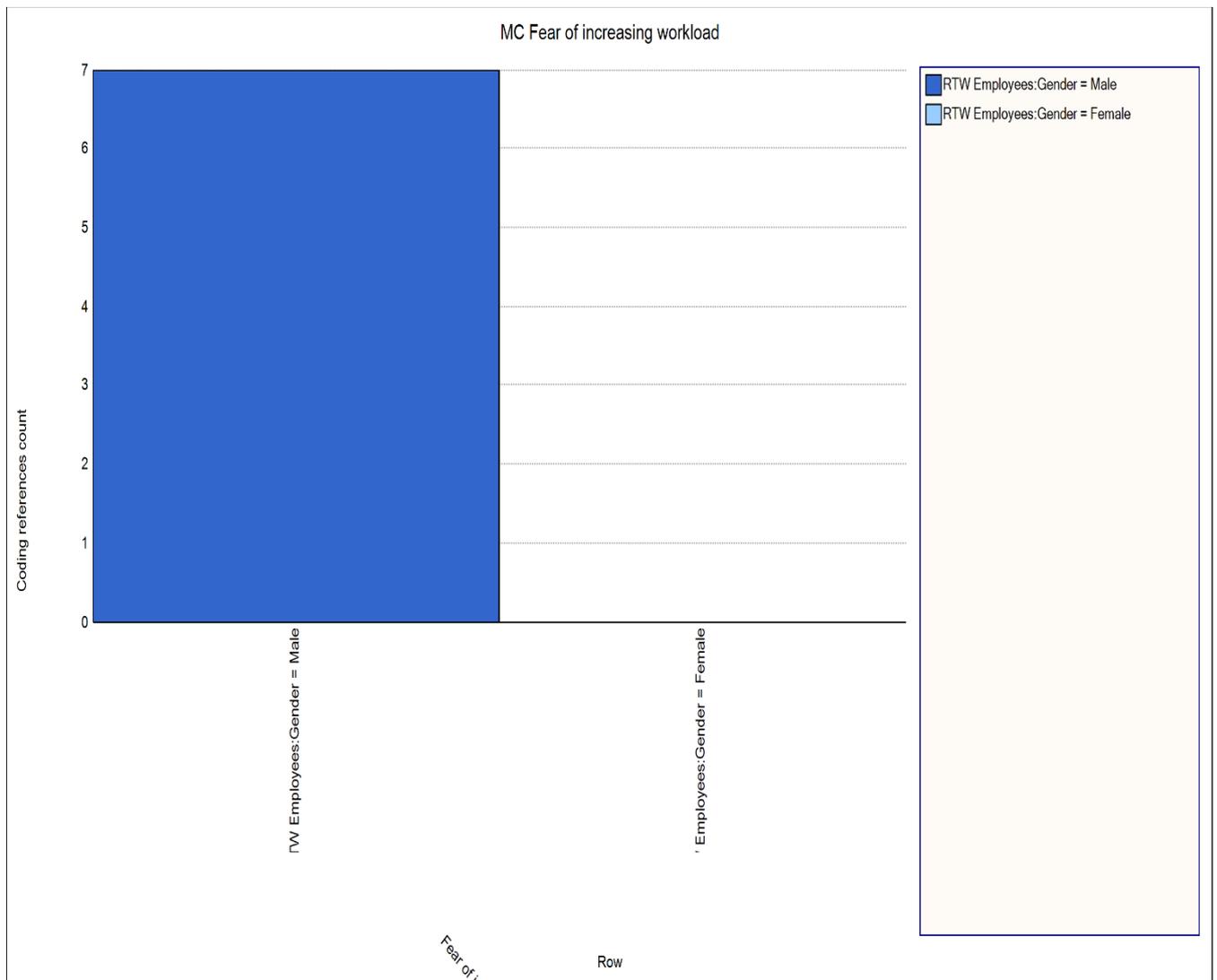


Figure 7: Gender differences in the effects of fear of increasing workload on RTW

In all these cases, participants reported not having a replacement to cover their role during absence, and as a result, the workload was left unattended to until their return. According to participant 019-M-40+, the longer one is away on sick leave, the more the work piles up, hence the decision to RTW earlier than necessary. These participants are thus suggesting that the status of employee's workload has a high tendency of pushing individuals back to work before recovery is fully attained. These findings show that workload was a more important motivator for men compared to women.

Pressure to RTW

In eight cases (five women and three men) of both organisations, the role of employers in pressuring RTW when they were not necessarily recovered enough to return was highlighted. In organisation two, participants who felt pressured to RTW were sick-listed with CMDs, while those in organisation one was sick-listed with MSDs. Participants absent for CMDs in organisation two had more extended absence periods (6-7months) compared to people with MSDs, which might explain their employer's impatience in allowing them further time away to recover.

“HR department here was involved and my manager. They were pushing quite hard to get me back sooner than my support team felt I should be coming back. So that added more pressure which actually didn't help my condition.” (005-F-40+, CMDs, org. 2)

Participants sick-listed with CMDs in organisation one also recorded longer absence period (2-5^{1/2} months) compared to those sick-listed with MSDs. However, there were under no pressure from their employers to return, suggesting a lack of understanding on the part of employers from organisation two in handling issues around mental health.

In organisation one, having no replacements, the nature of the job, or the role they held were the common explanations behind the pressure from their employers to return.

“I did feel sort of quite pressured to come back because it was appraisal time of the year and there was nobody else to pick the appraisals for my team. So, I was getting that sort of ‘when are you coming back? When are you coming back?’” (008-F-40+, MSDs, org. 1)

“I think they were keen for me to come back because I haven't got a replacement. There's nobody else that does my job. Uhm... so they were kind of like ‘just come back and do what you can... if you can do an hour a day, it's gonna help’... I think there's a big demand on you

particularly which cuts into... public sectors have had a lot of cuts. It's the same everywhere. Where you use to have teams of people doing things, nowadays we are finding it's just one. It's only that one person. So, if you're not in, nobody else knows your job." (020-M-40+, MSDs, org. 1)

As shown above, issues around a lack of replacement workers to cover sick-listed worker's workload during absence were common reasons employers pushed for their return. As pointed out by participant 020-M-40+, this is as a result of staff cuts within the public sector, thus putting employers in a position where they are no longer able to cater for support services. However, perceptions of being pressure to RTW due to a lack of resources to make provisions for a replacement during absence was more common among people who held managerial and team-leading roles, suggesting that the job level of employee in organisation one plays a role. Therefore, it could be inferred that compared to employees of no managerial position, it would cost the organisation more to find a replacement of managerial level, hence the need to pressure them back to work.

Summary of workplace motivating factors

While workplace motivating factors such as sick leave guilt and fear of increasing workload appear to be gender-specific, being pressured to RTW, and a fear of job loss-progression appeared to be influenced by employee's ill-health. Therefore, new theories on workplace factors as a facilitator of initial RTW after absence period will read as follows;

N1. Sick-listed female employees (context) are more likely to be overwhelmed by guilt of letting the team down which instigates decisions to engage the RTW process early (mechanism), thus facilitating a RTW (outcome).

N2. Sick-listed male employees who have no replacements during absence (context) are likely to return to work early in spite of not being fully recovered (outcome) from the fear of an increasing workload (mechanism).

N3. Employees sick-listed with CMDs who have been absent for an extended period (context), are more likely to be either pressured to RTW by organisations who lack proper understanding about mental health issues or RTW out of a fear of job loss-progression (mechanism), thus facilitating a RTW after sick leave.

N4. Employees who hold leadership positions with no replacements during absence (context) are more likely to be pressured by their employers to engage the RTW process early as no other person can do their job (mechanism), thus facilitating RTW (outcome).

External Support

This theme was developed inductively from data. This theme describes the support systems of participants outside of the workplace. Across the accounts of all participants, external support was considered more as a mechanism linked to securing adequate treatment and recovery. External support included; spousal-family support, GP support, and MP support.

Spousal-family support

The accounts of six male and eight female participants showed that they found their spouses, partners, grown children or other family members generally supportive during their absence spell. However, perceived support varied by condition (MSDs & CMDs). Across the accounts of participants, people sick-listed with CMDs appeared to benefit more from emotional support, which took the form of encouragement and helping them keep a healthy regimen.

“I was fortunate enough I had the wherewithal and I'm very lucky to be married to a very qualified and extremely experienced psychotherapist. Who pushed me on and said you know ‘well get down to the gym and sort it out, get on with it.’” (009-M-40+, CMDs).

“I've got really supportive husband. He's very encouraging as well, you know. He can see when I'm getting lower in mood and he'll stay calm... you know.” 001-F-40+, CMDs)

While people sick-listed with MSDs appeared to benefit from physically related support, which took the form of help with chores, mobility and other physically tasking activities.

“So, I'm quite reliant on like my husband and my daughters for things like household chores, the vacuuming, the bending, and the lifting side of things. So yeah, it's a barrier at home, but within that barrier, things can be done you know, like I've got a very supportive family who can help.” (002-F-30+, MSDs)

“...it's quite like I've got a good family, so my wife was able to drive me around as much as she hated doing it. She was able to take me to places. I've got a decent family life and without the pressure of work there...” (006-M-40+, MSDs)

GP support

While the theme GP support may be closely linked to the theme “*treatment and rehabilitation*”, the role of GPs as described by participants as separate from the adequacy of treatment and rehabilitation obtained. Discussions about GP support captured matters relating to referrals, advice and strategies around securing adequate treatment and rehabilitation and proper

management of ill-health before and during the sick leave period, and after the RTW process. In most of the cases, treatment received was not provided by the GP, but by specialists at the general hospital. Hence the theme GP support was considered in terms of the nature of support offered and its perceived benefits. Perceived support from GP across participants was viewed differently among men and women. On the one hand, four men viewed GP support in the capacity of competence of the GP.

“I think again I think I've said before I think I was fortunate that I've had a GP who seemed to be... she seemed to have a pretty off-the-shelf strategy. So I suspect that she's dealing with similar cases every day of the week and has adopted a very proactive ready strategy to put in place, clear expectations on the employer ‘this is a situation, this is what you need to be doing’ I don't know whether everybody would be fortunate to have a GP with the same proactive interest in it.” (018-M-40+)

Four women, on the other hand, perceived GP support in the capacity of the adequate care and consideration shown during the treatment and rehabilitation period.

“The Treatment, oh yes! 100%! My Doctor was amazing and gave me as much time as I needed. They were not in any hurry to push me back to work. They offered me medication and they kept offering medication.” (005-F-40+)

While there appears to be no gender difference in the perceptions of eight participants around the benefits of having a supportive spouse-family and GP on recovery, this effect seems to play a role in re-entry back to work after a sick leave period.

Therefore, new theory on external support will read as follows;

N. Sick-listed employees benefit from support external to the workplace (e.g., spouse, family and general practitioner), which plays a role on adequate care received and recovery, thus facilitating RTW.

6.2.2 Factors that impact on the sustainability of RTW

Accounts of participants suggest that themes in this category play a role in facilitating the sustainability of employee's return.

Good Quality Return to Work (RTW) Process

This theme was initially developed from interviews with managers who handle the RTW process at the workplace (see chapter 5 pg. 73). It was anticipated that;

11. Individual managers (context) who have the relevant skills and knowledge, a high level of understanding regarding employee's nature of condition, and who are

willing to effectively phase employee's return and also consider other flexible working options to help ease of transition back to work, are more likely to successfully implement good quality RTW processes (mechanism) which impacts on sustainable RTW (outcome).

However, because work adjustment was identified as a component of good quality RTW within the transcript, **theory 3** on work adjustment was merged with the theme good quality RTW process, and it was, therefore, anticipated that;

3. Employers are keener to provide work adjustments (mechanism) for men compared to women (context), which impacts on employee's confidence in the organisation and their ability to do their job (mechanism) thereby increasing the chances of sustainable RTW for men and poor RTW outcomes for women (outcome).

Perceptions of employees were, therefore, explored to understand the RTW process and how it impacts on sustainable RTW.

Effective RTW Strategy

According to all participants in both organisations one and two, the RTW interview/meeting is a mandatory process within the policy of the organisation, line-managers arrange that with sick-listed employees on the first day of return or as soon as they RTW. These meetings are aimed at determining employee's stage of recovery, restrictions/ limitations and their needs regarding what services or resources would help the RTW process go smoothly. After which a return to work plan or strategy appropriate for returning worker is agreed upon based on recommendations from the medical consultant/GP or occupational health service. In some cases or organisations, the presence of representatives from human resources (HR) department, occupational health (OH), and other services are required in the RTW meeting to ensure the right course of action is implemented. Across all participants, RTW strategies implemented included; a phased return, flexible working options such as a change in job task or role and workstation adjustment or provision of workstation accessories specifically for people with MSDs.

All participants agreed that a properly implemented RTW process plays a role in sustainable RTW outcomes. However, seventeen of these participants believed that the RTW strategy implemented on their return to work was effective, particularly those who had a phased return or flexible working options. A cross-section of these participants showed that the effects of RTW strategies varied across condition and length of absence. Table 10 shows the classification of participants based on their condition and length of absence and agreed RTW strategy.

Table 10: Classification of sickness absence period and RTW strategy

RTW Employees	Duration of Absence	Health Condition	RTW Strategy	Class of absence
Cases\\001-F-40+	11 weeks	MSDs + CMDs	Phased Return	Long-term
Cases\\002-F-30+	5 weeks	MSDs + CMDs	Flexible working options	Short-term
Cases\\003-M-40+	5 ½ months	CMDs	Phased Return	Long-term
Cases\\004-F-40+	3 months	CMDs	Phased Return	Long-term
Cases\\005-F-40+	6 months	CMDs	Phased Return	Long-term
Cases\\006-M-40+	14 weeks	MSDs	Phased Return	Long-term
Cases\\007-F-40+	4 months	MSDs	Phased Return	Long-term
Cases\\008-F-40+	6 weeks	MSDs	Flexible working options	Short-term
Cases\\009-M-40+	7 months	CMDs	Phased Return	Long-term
Cases\\010-F-30	4 weeks	CMDs	Flexible working options	Short-term
Cases\\011-F-40+	5 months	CMDs	Phased Return	Long-term
Cases\\012-F-30+	6 weeks	MSDs	Flexible working options	Short-term
Cases\\013-F-40+	10 weeks	MSDs	Phased Return	Long-term
Cases\\014-F-40+	2 weeks	MSDs	Flexible working options	Short-term
Cases\\015-F-40+	4 months	CMDs	Phased Return	Long-term
Cases\\016-F-40+	9 weeks	MSDs	Phased Return	Long-term
Cases\\017-F-40+	5 weeks	MSDs	Flexible working options	Short-term
Cases\\018-M-40+	4 months	CMDs	Phased Return	Long-term
Cases\\019-M-30+	6 weeks	CMDs	Flexible working options	Short-term
Cases\\020-M-40+	2 months	MSDs	Phased Return	Long-term
Cases\\021-F-40+	3 months/ 5 weeks	CMDs	Phased Return	Long-term
Cases\\022-M-40+	5 ½ months	CMDs	Phased Return	Long-term

Participants with MSDs classed as short-term absentees benefitted from flexible working options.

“So, I came back, worked here and that didn’t work terribly well and then they said you could work from home for a few days. That really helped until I could sort out how to get to work better”. (014-F-40+, MSDs & 2weeks absence)

According to the above participant, due to her inability to manage the pain and work effectively on initial return to work, the option to work from home was agreed, which she found was a more effective approach for her. Other flexible working options offered across other participants included a few days off within the week, choice of working in the mornings or afternoons, light duties (i.e. fewer demanding tasks) and half-days while still within their full-time contract until employees felt recovered enough to handle their full contractual duties.

I think what was helpful was the fact that I could work shorter hours and I got to choose them. And what I mean by that was I was offered.... You know, if I was going for half a day, would I prefer to do the morning, or would I prefer to do the afternoon. Because some... for me I chose the mornings because I get up and do the school runs anyways and I found that come the afternoon I was sore... So, for me that was really helpful. (012-F-30+, MSDs & 6weeks absence)

On the other hand, participants classed as long-term absentees were of the view that returning on a phased return was beneficial. Components phased within this strategy included reduced hours, reduced days, reduced workload, change in job role or level. A combination of these phased components was implemented for participants with both MSDs and CMDs and was gradually built up within a 4-6weeks period until full-time status was attained. Unlike flexible working options, a phased return allowed participants to start on non-contractile hours and gently increased over the agreed period. This phased strategy according to participants was very effective as it accorded them the time to gently get back into the work mode as a result of having been absent for an extended period and out of touch with how things work and the operational changes that may have occurred during their absence.

“...getting your body used to sitting in an office all day because it’s so different. So even though you might have physically been able to do things at home but not mentally able to cope with people and situations, you’re sort of being busy but it’s not the same as actually sitting in an office is it, staring at a screen all day. So, I think that takes time and they just build the hours that slowly and by usually the fourth week you’re nearly back to full time and you’ve coped with coming in early and going home later”. (021-F-40+ CMD & 3months, 5week)

“Because you know I’d been off for a while. I think I was off for six or seven months, so to come back in a couple of days a week to start off with you know, ... I think it was a couple of days a week to start off with, and then that built over say six weeks back up to a full full-time role. It was... it made life easy... how can I describe? It meant that I didn't feel that I was under immediate pressure to perform, to take on board everything that was going on”. (009-M-40+, CMD & 7months)

The above extracts show that the flexible nature of the RTW strategies adapted for each participant is what they found most helpful in settling back into the work environment. According to participant 012-F-40+, if she suddenly went straight away to full-time hours and tasks on return, it would have been too much to handle. It could most likely have worsened her condition, resulting in a further absence period. Therefore, implying that a RTW plan, exempt of a phased strategy for people who have been absent for an extended period, has a high likelihood of failing, which in turn triggers a recurrent absence episode. However, all participants stated that a phased return has a higher tendency of benefitting them if implemented in a supportive capacity and with better communication with the employee. Additionally, the importance of taking account of employee’s needs and limitations at the point of return was also highlighted.

“I think it works by better communication and getting a clearer picture of what somebody can do when they come back rather than you go to occupational health, they say phased return, so your manager sits down with you and you work out the pattern of phased return and then off you go. Whereas, when you're sitting down and talking about the phased return it needs to include ‘how are you emotionally, and physically, what can you do?’” (016-F-40+, CMD)

This account highlights the importance of proper management of the RTW process and how detrimental it could be to employees if poorly managed. Evidence of impacts poor management on RTW outcomes was echoed across participants who returned on a phased return or flexible working option but found the process ineffective. Coincidentally, all participants in this category were absent for CMDs, and they agreed that return to work was challenging and impacted negatively on them. According to them, RTW failed because the process was poorly managed and they felt unsupported throughout the process, thus, strengthening the benefits of

a good quality RTW process in helping employees gently ease back to work. On the other hand, participants 019-M-40+, 022-M-40+ and 015-F-40+ all absent for CMDs pointed out that having their return to work process managed by managers or within the environment they believed was the root cause of their mental issues contributed to their failed return.

“Initially when I came back to this office it worked well. But it failed completely in that I was put back into the office and the situation where it was originated. So, in many respects that was, looking back on it being brutal, it was a failure because I was back in the source of the problem” (022-M-40+)

The above extract implies that employees feeling supported during the RTW process is very vital, and establishing the source of employee’s condition might be beneficial in implementing more effective strategies. The supportive element of the line-manager is a new addition to the theory, showing that unsupportive line-managers are unlikely to demonstrate commitment in executing effective RTW strategies for returning employees. However, it becomes problematic when issues are not work-related, and measures implemented for an employee becomes counter-productive. This was the case with participant 010-F-40+ (CMD) whose stress and depression were triggered as a result of relational issues at the home front. While a return to work plan was put in place on her initial return, problems at home were still on-going which continued to aggravate her condition, resulting in a failed RTW and an eventual recurrent absence episode. So far, the accounts of these participants on the effectiveness or ineffectiveness of RTW strategies for sick-listed employees validate **theory 12** to an extent; however, it provides more transparent explanations on what influences the efficiency of RTW strategies.

Competence of Individual Managers

The theory of good quality RTW process also highlighted the relevance of having a competent line-manager implement the RTW process, hence perceptions of participants on the impact of the competence of their line-managers on effective implementation of RTW strategies were fully explored. All participants reported that the effectiveness or ineffectiveness of RTW strategies is dependent on the competence of line-managers handling the process.

“And even though I had a phased return back to work, my manager at that point did not tell me anything about Wellbeing. She didn’t send me to Wellbeing or nothing. I didn’t find that she was experienced to handle my return back to work. It was more like ‘well, you have to

come in 35 hours a week and I had to go in from Monday to Friday nine to five. So, this time when she said, 'I'm going to send you to Wellbeing' and I was like 'Oh, why is that?', and she said because it's a really good service and it was a really good service. So, I think it depends not because they have the right things in place, but I think not every manager is doing what they should be doing." (013-F-40+)

The above extract shows that effective RTW strategies are not dependent on an organisation having the right plan in place, but more about managers doing what is expected of them in the area of proper management. However, where line-managers do not have the competence to handle or manage the RTW process, efforts at sustaining RTW may be futile.

"...The manager who I was working with at the time during my return was far better equipped to deal with people in my position and people with some mental health issues. The manager back where I was in my substantive role had absolutely zero ability in my opinion and I think others as well deal with that kind of situation." (022-M-40+)

"I was lucky in the fact that you know I said I'd like to do mornings and then you know, sort that out and she was flexible. I don't think it's like that in every department. I know there have been people who have returned to work and it's very much 'you're here or nothing'. And typically, what then happens is they work too much and then they go off with stress or go off with a worse condition. So, for me, I think it was my actual line manager who... obviously following HR's advice but worked out what we needed to do." (012-F-30+)

The above extracts show that where managers do not have the experience or competence in managing the RTW process, a failed return is more likely. It also points out a difference in work cultures in different departments within the same organisation, suggesting the need to unify RTW processes across the organisation to attain more effective outcomes. Consequently, participants indicated that the competence of managers is contingent on the level of understanding of employee's condition and its broader impact, which is mostly influenced by support from other services in implementing a suitable strategy. According to them, it stirs empathy on the part of the line-managers and impacts their ability to implement beneficial strategies in a supportive capacity.

“It was me feeling confident that the manager understood me as a person and understood my condition... I think it helped them understand better what support they needed to put in place.”

(022-M-40+)

“I think it obviously depends on what your managers have to deal with if you like,But I think because they have the Occupational Health and the HR and their guidance and obviously the HR team and the Wellbeing team would have dealt with a lot more situations with people’s mental health situations. I think they’re supported by the other members of the organisation, so they are able to support you. Even if they might not understand your situation that they haven’t dealt with any mental health issues themselves, I think they’re supported enough that they can be empathetic” (021-F-40+)

The above extracts, therefore, show that when managers have a better understanding of employee’s condition and its wider impact, they are more empathic towards the sick-listed employee, and better equipped to provide the most appropriate RTW strategy. However, some participants fear that managers knowing their medical history may be disadvantageous. Participant 018-M-40+ believes that when managers are aware of an employee’s history of depression or other mental conditions, they could construe that to be an explanation behind specific episodes in the workplace, which was what happened in his case.

“They’ll probably be a limit on how much I disclose because I’d be worried. I know how the team works and I know that if I made a big thing, that might put my job on the line and the word they probably use is ‘Occupational Health Out’. That would be my concern, would they go ‘you’ve got a back problem, you’re telling me it’s painful at the minute, off you go!’ That would be my concern.” (002-F-30+)

Issues around stigmatization and discrimination is also a concern for these participants if employers were to have full disclosure on their condition, as shown in the above extract. Nonetheless, while some may hold these fears, they agree on the impact of knowledge of their condition on the level of support accorded them, thus, contributing to the implementation of effective RTW strategies which participant 021-F-40+ stresses made her feel happy and confident in doing her work. Overall, as highlighted in **theory 12**, the impact of a competent

line-manager on implementing an effective RTW strategy is justified in the accounts of these participants.

Summary of good quality RTW process

Figure 8 below highlights the non-gendered general perceptions of participants on the impact of good quality RTW process on a sustainable RTW. The 100% y-axis only shows the coding reference count for male and female participants.

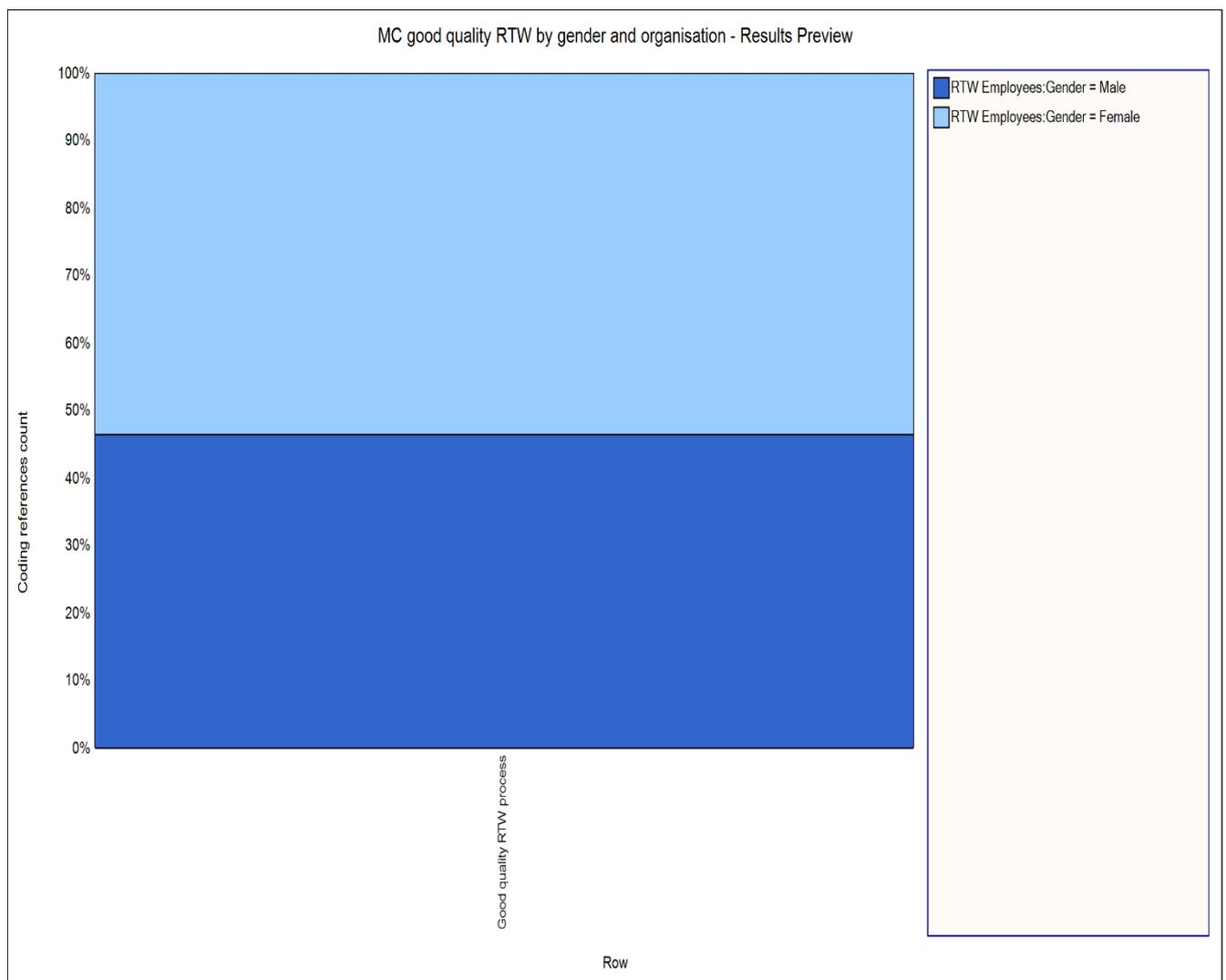


Figure 8: Participants' perceptions about the impact of a good quality RTW process on a sustainable RTW

Evidence also suggests no organisational differences in perceptions about the impact of a good quality RTW process; however, the difference in effects across both organisation, shown in

Figure 9 below is influenced by the number of recruited participants.

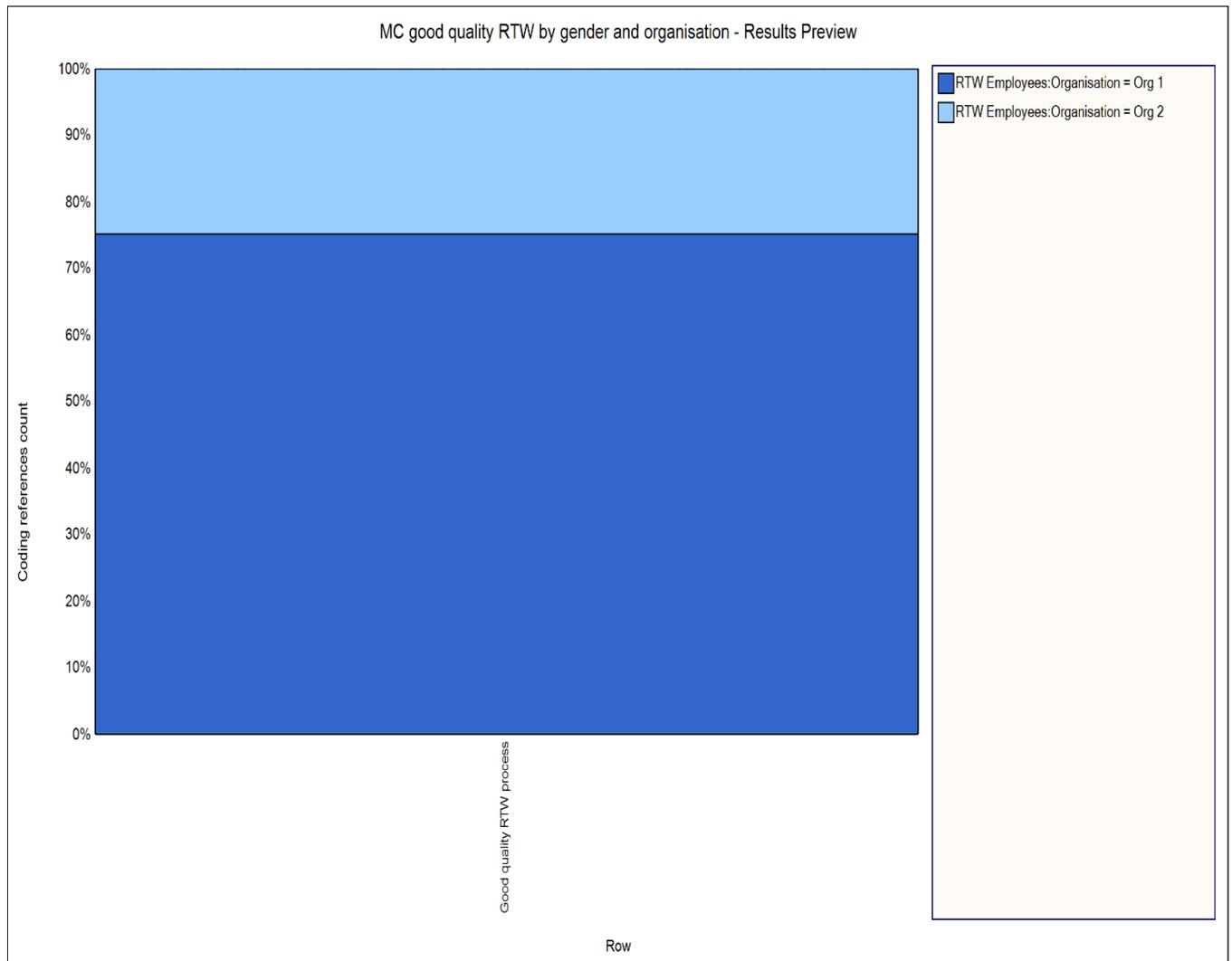


Figure 9: Organisational perceptions about the impact of a good quality RTW process on a sustainable RTW

Instead, the views on its benefits are widely shared among both male and female participants sick-listed with MSDs and CMDs. While these findings support the initial theories, **theory 12** of good quality RTW process will slightly be updated to include further explanations about the key elements of a good quality RTW that impacts sustainable outcomes. Therefore, initial **theory 12** will read as follows;

A competent and supportive manager, working in collaboration with other health services within the organisation (context) is likely to increase in level of understanding about employee’s condition and best RTW approach to adopt, as well as be more empathic towards employees (mechanism). As a result, they can successfully implement an effective RTW strategy (mechanism) which boosts employee’s self-efficacy, thus impacting on sustainable RTW (outcome).

Consequently, contrary to Edlund's (2001) assertion that work adjustments are more likely to be offered to male employees than women, work adjustments were provided to both male and female employees where required within the RTW strategy agreed on for their transition back to work. Hence **theory 3** will be discarded as the element of work adjustment is duly captured in **theory 12**.

Workplace Support

This theme was initially identified apriori from literature and interviews with managers (see chapter 5 pg. 70 and 75). It was anticipated that;

- 9. When the employer is considered not supportive and respectful (context), women, are less likely to participate in the sickness absence interviews, compared to men (mechanism), thus reducing the possibility of sustainable RTW (outcome).**
- 10. 10. Male supervisors are considered unsupportive (context) by women (context) as they are intolerant of emotional displays shown by women (mechanism), thus infringing on their ability to RTW sustainably (outcome).**
- 11. 11. Line-managers who have a good relationship with sick-listed employees (context) are likely to be more supportive of employees during the RTW process (mechanism), which impacts on sustainable RTW (outcome).**

These theories were initially focused on workplace support. However, an exploration of the accounts of participants showed that experiences of supportive encounters for sick-listed individuals extends beyond the workplace during and after the absence period with varied outcomes and as a result, plays a role in their RTW outcomes. Hence a new theme; external support emerged, which was previously discussed in **section 6.2.1**.

Across both organisations, one and two, workplace actors that participants believe played a supportive role in their successful RTW included; co-workers, line-managers, higher management, Union, HR and OH. As earlier established within the RTW process, the role of OH, HR and Union were closely linked to the support provided to line-managers in implementing an appropriate RTW plan for participants. However, all participants believe that the supportive role of their line-managers was considered vital in their ability to successfully RTW. According to participant 022-M-40+, his relapse under the management of an unsupportive manager even within a supportive working team is proof of how crucial managerial support is in helping sick-listed participants return sustainably. Therefore,

suggesting that one's ability to RTW successfully is heavily dependent on the manager who manages the RTW process.

“But definitely, I think had I had a manager who was obstructive, I don't think I would have got back as quickly as I did. I wouldn't have probably come back quicker if I had that worry in my head constantly. But my line-manager was supportive at the time.” (004-F-40+)

However, when asked what a supportive manager looked like, participants consistently described supportive managers as someone they could trust, respect, easily approach and have good communication.

“...For me she's been really helpful, and I think it's that respect that even if we haven't worked together on projects, I know that people respect her, you know that I respect her professionally and the work that she produces. So that you know that goes a long way... if something does go wrong you know I know that she'll... I can trust her to find out the truth or will really kind of communicate with people. So, I think yeah trust, respect and communication are the other three really big things for me.” (019-M-30+)

While most participants agree that the support of their co-workers and line-manager impacted a sustainable RTW, however, how participants perceived the nature of support they experienced during the RTW process varied by gender. Across the male participants sick-listed with MSDs and CMDs, perceived support appeared to be in relation to colleagues picking up their workload.

“My colleagues have always been great as well. Very supportive. I know they covered a lot for me whilst I was off. ... If you've got a supportive team, you know that if you need any help with anything when you get back, somebody will give it to you. You know that they are not going to expect you to be what you were before you went off.” (006-M-40+, MSDs)

“But also, not just taking my work off me you know. It's like ... So, they've been supporting me and working with me. ... That's been good. That's been good. You know I'm able to call people up and discuss things and say you know, 'can you just do this one for me?'” (003-M-40+, CMDs)

On the contrary, perceptions of support for women were more of emotional support than around physical aid provided, thus aligning with literature. For example, good and thoughtful communication, how people behaved towards them and how that made them feel.

“My immediate manager was very kind to me... most of my colleagues were quite helpful”

(005-F-40+)

“The support I had made me feel quite lucky to be where I am...” (004-F-40+)

“I mean I work in a really good team; everybody was you know, concerned...” (014-F-40+)

“When I met people from my team, they were supportive, they were welcoming and sort of checking that you’re ok; “I’m glad to see” you sort of thing.” (016-F-40+)

Overall, all participants are of the view that having a considerate, kind and helpful team made them feel valued, cared for and welcomed, resulting in their ability to settle in comfortably, thus significantly easing their transition back to work. The strengths of the positive impact of working in a supportive team on RTW is highlighted among participants who agree that where support is perceived to be lacking within a team before RTW processes are initiated, and they have a bad relationship with their line-managers; they may be more inclined to extend their absence period until a better support system is in place.

“So, I probably could have had longer off, but I knew that I wanted to come back and also, I knew that my boss, my manager was very supportive. I think had I had not thought that, perhaps I wouldn’t have come back so early.” (012-F-30+)

“Yes! I think I might have been off longer had I known before-hand that I wouldn’t get the right support. So, I’m applying for other jobs because I don’t feel supported and I think other places hopefully would be better.” (019-M-30+)

“So obviously if you’ve got ... if you haven’t got a good relationship with your manager, and also, I think sometimes if you had anxiety still within that, I don’t think you’d want to walk back in.” (004-F-40+)

As shown in the above extracts, participants would much rather have extended their absence period had they known they would not be satisfactorily supported during the RTW process. Also, having a good relationship with managers appeared to influence RTW outcomes, thus lining up with **theory 11**. Overall, contrary to **theory 9**, perceptions of the effects of a supportive and unsupportive employer during the RTW process was widely held by all participants, showing no gender disparity.

Gender of Line-manager

Table 11 below shows the classification of participants in both organisations and the gender of their managers. Participants with two managers (male and female) are captured as female/ male in the table. The sub-theme “gender of line-manager” was generated as accounts of participants suggests a link between the gender of line-managers and their supportive abilities.

Out of 16 participants who found their line-managers supportive, 12 of those managers were female, and four were male. However, even though participants who found their male line-managers supportive were all male, other male participants also reported unsupportive experiences with male line managers, thus contradicting **theory 10**. The consistency in the overall account of these participants, therefore, suggests that while female managers are better suited to support male and female employees, male line managers may not.

“We had weekly catch ups when I came back just to see if I was coping, she wouldn’t put much on me in case. Uhm... it’s me that’s took on more which is nice because I feel a bit more in control. But I think had I not have had such a helpful manager; I wouldn’t have come back as early.” (004-F-40+)

“...my immediate manager although young she’s very adept at being a very good manager and she’s very encouraging and supportive and she knows me well enough. I’ve worked with her now for 10 years. So that she was also you know very down the line and played by the book, but in the back of her mind was ‘how could we get Peter back to work?’ and how could we use these skills and what have you...?, which is why the additional role came up. So, I credit her with being the catalyst for a successful return.” (009-M-40+)

Table 11: Classification of participants showing the sex of manager

RTW Employees	Gender of Participant	Organisation	Gender of Manager
Cases\\001-F-40+	Female	Org 1	Female
Cases\\002-F-30+	Female	Org 1	Female
Cases\\003-M-40+	Male	Org 1	Male
Cases\\004-F-40+	Female	Org 1	Female
Cases\\005-F-40+	Female	Org 2	Female/Male
Cases\\006-M-40+	Male	Org 2	Male
Cases\\007-F-40+	Female	Org 1	Female
Cases\\008-F-40+	Female	Org 1	Female

Cases\\009-M-40+	Male	Org 2	Male
Cases\\010-F-30	Female	Org 1	Female
Cases\\011-F-40+	Female	Org 1	Female
Cases\\012-F-30+	Female	Org 2	Female
Cases\\013-F-40+	Female	Org 1	Female
Cases\\014-F-40+	Female	Org 1	Female
Cases\\015-F-40+	Female	Org 1	Female
Cases\\016-F-40+	Female	Org 1	Female
Cases\\017-F-40+	Female	Org 1	Female
Cases\\018-M-40+	Male	Org 1	Male
Cases\\019-M-30+	Male	Org 1	Female/Male
Cases\\020-M-40+	Male	Org 1	Male
Cases\\021-F-40+	Female	Org 1	Female
Cases\\022-M-40+	Male	Org 1	Male

Out of 16 participants who found their line-managers supportive, 12 of those managers were female, and four were male. However, even though participants who found their male line-managers supportive were all male, other male participants also reported unsupportive experiences with male line managers, thus contradicting **theory 10**. The consistency in the overall account of these participants, therefore, suggests that while female managers are better suited to support male and female employees, male line managers may not.

“We had weekly catch ups when I came back just to see if I was coping, she wouldn’t put much on me in case. Uhm... it’s me that’s took on more which is nice because I feel a bit more in control. But I think had I not have had such a helpful manager I wouldn’t have come back as early.” (004-F-40+)

“...my immediate manager although young she’s very adept at being a very good manager and she’s very encouraging and supportive and she knows me well enough. I’ve worked with her now for 10 years. So that she was also you know very down the line and played by the book, but in the back of her mind was ‘how could we get Peter back to work?’ and how could we use these skills and what have you...?, which is why the additional role came up. So, I credit her with being the catalyst for a successful return.” (009-M-40+)

Female managers were perceived to show these participants genuine care by regularly checking in to ensure workload aligned with their limitations, which boosted self-efficacy. In some cases, participants said these line-managers encouraged them to take a break or go home where they established difficulties with coping. The strength of this argument is heightened in the cases of participant 005M-F-40+ and 019-M-40+ sick-listed with CMDs, who had very challenging encounters with their male managers resulting in further absence period. However, having to deal with female managers in the course of their RTW changed the dynamics of the communication and relationship leading to better outcomes. They both confirm that their new female managers were more attentive, empathetic and understanding of their conditions.

“... Because I’ve been through sickness absence myself, so I try to be mindful of it when other people are coming back to work and have been out of the office for a while.” (008-F-40+)

As shown above, participant 008-F-40+, who is a manager suggests that having experienced sickness absence first-hand plays a role in how she manages the RTW process for sick-listed employees in her department. Suggesting that own experience of RTW due to ill-health by managers is likely to impact their ability to show empathy and effectively help to return workers. However, these assumptions were not fully explored because the interview with the participant was in the capacity of her as a returning employee and not as a manager.

Summary of workplace support

Even though elements of the initial theories on workplace support appeared to be confirmed in the account of participants, however, perceptions of support on the part of women and the inability of male line-managers to manage the RTW process was not fully supported. There was a consensus on the effects of having a supportive manager during the RTW process on sustainable RTW outcomes. Hence **theory 11** on the impact of having a good relationship with line-manager on adequate support will be retained, while **theories 9** and **10** will be refined as follows;

R9. Employees are more likely to engage the RTW process (mechanism) when they feel supported, valued and cared for at the workplace (context), which results in their ability to settle in comfortably, thus significantly easing their transition back to work and impacting on sustainable RTW (outcome).

R10. Female line-managers are considered more likely to be supportive and suited to handle the RTW process for both male and female employees (context) compared to male line-managers, as they hold a more positive attitude, are more caring and willing to help

employees during the RTW process (mechanism), which boosts employees' self-efficacy, thus leading to their ability to RTW sustainably (outcome).

Workplace Health Services

This theme was developed deductively from literature (see chapter 5 pg. 67), and based on the CMO configuration, it was anticipated that;

- 2. Women aware of the workplace health and safety programs (context), are more likely to engage with the RTW process (Mechanism), which in turn facilitates lasting return to work (outcome).**

The perspectives of both male and female participants were, therefore, explored to determine the extent to which gender impacts on engaging with health services within the workplace.

Workplace health services (WHS) in this study are contracted health services that work in partnership with organisations to prevent ill-health and absence issues that impact an employee's ability to work. Across all participants, these services included Wellbeing Services, IPRS, Norfolk Support Line, Vilidium Counselling Services and Occupational Health Services. However, participants from organisation two reported having access to Occupation Health Services contracted from the NHS only, thus highlighting the wide range of services available to sick-listed individuals in Organisation one.

All participants in both organisations recounted awareness of the WHS. However, more women than men in organisation one who availed themselves of these services, found it beneficial.

“I think the most helpful thing for me was the work Wellbeing Service and it was the telephone calls.” (011-F-40+, CMDs)

“You know, they referred me via IPRS to have some back physiotherapy and that was great.” (001-F-40+, MSDs)

Generally, ten participants in organisation one who engaged with these services believed it was good, and that service providers were very supportive and helpful. In organisation two, three participants (male = 1 and female = 2) engaged with WHS. However, only two participants sick-listed with CMDs found these services useful and beneficial, and their care providers supportive and helpful. However, this was not the case with person sick-listed with MSDs in the same organisation.

“...when I went to the Osteopath, the very much kind of ... I had to show the range of movement you know, bend side to side or forward to backwards. I was expecting that because Occupational Health is a Nurse. So, I was expecting that and there was nothing. It was very

much 'sit down. How do you feel? What is your return to work plan? ... I very much expected it to be like 'ok what happened to your back? Can you show me?' But I didn't feel it was very medical (laughing)." (012-F-30+, MSD)

As shown above, participants with MSDs believed that the session with the Occupational Health Services on RTW was ineffective, especially as it was more conversational and lacked physical examination of their physical condition. Her perceptions were corroborated by participant 006-M-40+ of the same organisation who chose not to engage Occupational Health for the same reasons. It clearly suggests that provisions made available in this organisation are more tailored to cater to the needs of people with CMDs than MSDs.

Male participants in organisation one who did not engage with the WHS at work had issues bothering around a need for more specialist support, confidentiality, inefficiency, and other alternative support.

"There is the Norfolk Line which is a mechanism there which some people can use but I didn't really engage with it ... really I was more focused on my own diagnosis and trying to get more specialist help, more specialist support. So, I wanted the right tools in my toolbox to fight and engineer my own effective solution." (022-M-40+)

It, therefore, appears that decisions not to engage the WHS by these male participants were made on the basis of the complex nature of health condition and a lack of trust in the available services to deliver effective solutions to their health issues, thus influencing the need to seek paid or funded health services outside the workplace.

Even though the general opinion on engaging with WHS was of its usefulness and how instrumental it was to their recovery process, a seven of these participants in organisation one identified drawbacks in the services they received which are believed may have impacted on a quick recovery. Drawbacks consistent across all participants was insufficient sessions and inconsistent service providers. Across services provided for people sick-listed with either CMDs or MSDs, participants were restricted to only six sessions.

"So, I had telephone counselling, but it could have been longer for me. Because we had to have it in six weeks batches and if you went over the six weeks, you could go back to them, but it had to be a different issue. And I could have done probably with 10 weeks, a bit more. It's that whole thing about being too rigid about whether you'd give six sessions, you know. If

they had had that flexibility within their contract in this big organisation that might have been better for me.” (011-F-40+)

As shown in the extract above, six sessions within six weeks were considered insufficient time frame to attain the level of recovery participants expected. It implies that it might be beneficial for employers to allot these provisions on a case-by-case basis, depending on the nature of the employee’s condition. Especially as in some cases, health services provided at the workplace might be the only form of treatment they find effective. Participants sick-listed with CMDs who engaged the telephone counselling complained of inconsistency issues relating to the service providers. According to participant 004-F-40+, talking to different counsellors on different occasions felt too much and frustrating, especially as you would have to start all over in presenting your case. She suggests that it would be more effective if one person handled their case for consistency and trust. Overall, as depicted in [Figure 10](#) below, more women than men who were aware of the WHS and who engaged these services found WHS beneficial and instrumental to their recovery process. Hence these findings align with the initial **theory 2** and will be retained.

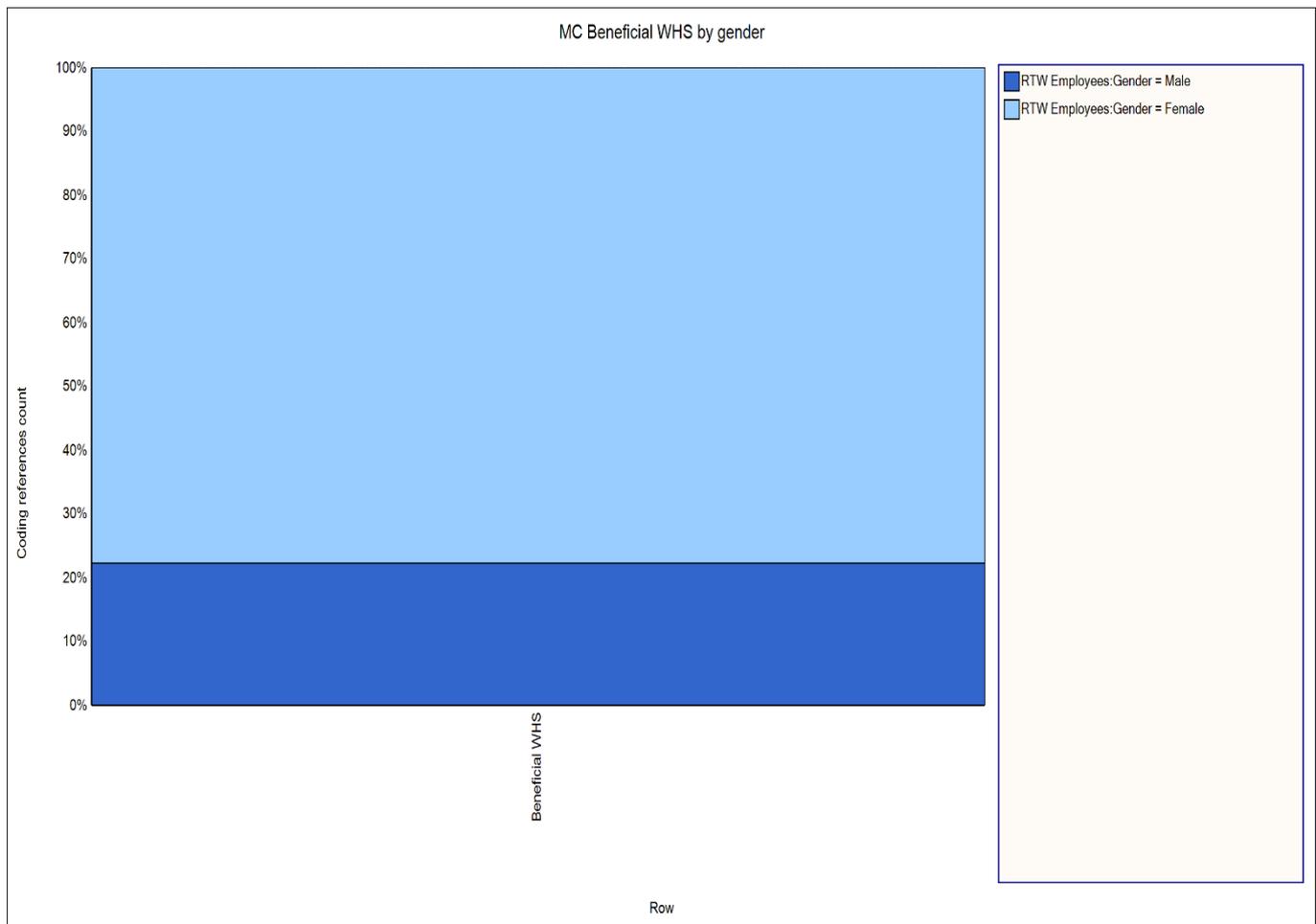


Figure 10: Participants who engaged the Workplace Health Services

Self-Management

This theme describes the proactive health-promoting activities, decisions or behaviours participants engaged in to actively manage their condition (Lorig & Holman, 2003) which impacted on a sustainable RTW. Nineteen participants (male =7 and female =12) sick-listed with MSDs and CMDs unreservedly acknowledged that they had to take responsibility for their health by self-managing their condition both during and after the absence period. These activities were either medical, emotional, role changes, behavioural or lifestyle changes or physical activities such as sports.

“Well, I’m no longer going to Physio. So, I took on my own programme. I spoke to two of my Physios prior to finishing and they gave me a host of different things that I could do going forward. I’ve just done that myself. But if I had still needed to go to Physio, then it would have been difficult.” (006-M-40+)

Across these cases, in circumstances where returning to work was likely to impede regular treatment or rehabilitation sessions, assigned treatment slots had been exhausted or dissatisfaction with the treatment plan, participants took their initiative to consider alternative measures to monitor and manage their condition. Participant 015-F-40+ when asked why her source of recovery was more self-help, she strongly justified her decision to self-help, expressing her unhappiness bitterly with the treatment plan the NHS offered. According to her, it left her thinking her health was her responsibility, hence the decision to make more healthy choices and engage in more healthy behaviours to manage her condition and increase her chances at recovery. According to her, engaging in those sporty and outdoorsy activities boosted her recovery.

“I’m trying to be proactive because I’ve had so many problems with my joints and ... My back...I’ve got to lose weight; I gave up smoking six years ago. I put on 3-stone and then I just stayed quite happily at Oh, it’s actually 3 and half stone (Laughing). And I was quite happy you know, but now I’m really thinking I’ve got to lose weight for my own health reasons. Well I try to do. Honestly if you knew how painful my knees and things were, and I still go out you know, for long walks so I won’t let it beat me... I really try to push myself”
(001-F-40+)

This extract suggests that when these participants self-manage their conditions, they have a good understanding of the nature of their conditions, the risk factors and its implication, and as such can easily take responsibility for their health. In other words, when an individual understands their condition and knows the possible triggers for it, they are more likely to make more healthy choices to benefit them health-wise.

“I’ve learnt to read my body. So, if my IBS is in a flare up, I know that ... whereas it was constantly in a flare up and it was just like oh it’s just annoying because I’ve got too much work to do. Whereas now I know that if it flares up, then I have to stop and have a look at everything. So now I have learnt how to read my body.” (005-F-40+)

However, none of these participants attests to full recovery at the point of RTW and is not particularly confident that recovery can be fully attained. However, these self-help activities

accord them the opportunity daily to live with and manage their condition to a level that is reasonably bearable that they can accommodate work without restrictions.

“There’s a point where mentally I knew I had to shift and kind of push myself to come back to work because I want to be working...” (016-F-40+)

For people with CMDs, self-management appeared to be a better and more sustainable alternative compared to medication and to be able to take charge of their health was considered beneficial. According to Participant 019-M-40+, in some cases, the medication made things worse, hence his decision to refuse antidepressants offered by the GP to get an opportunity at self-managing. While the theme self-management was not gender-specific, accounts of participants show that self-management is a useful tool to attain sustainable RTW for people sick-listed with CMDs and MSDs, mainly as recovery is never achieved at the time of return. Hence a new theory on self-management will read as follows;

N. Employees sick-listed with MSDs and CMDs who have a good understanding of the nature of their condition (context), and its risk factors are likely to engage in self-management practices (mechanism) which impacts on recovery and a sustainable RTW (outcome).

6.2.3 Factors that impede sustainable RTW or contribute to poor RTW outcomes

In this category, themes were identified across the accounts of participants in relation to challenges participants experienced on RTW as well as factors that either impeded a RTW or effectiveness of RTW strategies which led to poor RTW outcomes

Domestic Pressures

The theme domestic pressure was identified deductively from literature (see chapter 5 pg. 66). Based on the CMO configuration, it was anticipated that;

- 1. Women who are domestically active (context) are less likely to engage with the RTW process early (mechanism), which contributes to delay in sustainable return to work (outcome).**

I, therefore, explored the perspective of all participants on the effects of domestic pressures on a sustainable RTW. Across the participants, domestic pressures were considered in two broad categories; home chores/ activities and personal-external factors. As such, perceptions of the effect of domestic pressure is, therefore reported in these two main categories.

Personal-External Factors

Four participants (male = 2 and female = 2) from both organisations sick-listed with CMD acknowledged that on-going personal or external issues during absence impacted on their recovery and contributed to a delayed RTW. Personal or external factors across these cases included being a caregiver, relational/family issues, grief, and financial issues.

“My life outside of work at the time that I struggled was not ideal. So, you know, personal level relationships, lifestyle-wise etcetera you know” (009-M-40+)

“I felt like I couldn’t rest because I had to help my mum, and so I didn’t get the time that I needed to actually relax or just take ownership of what was going on inside me.” (010-F-30)

The above extract suggests that while sick-listed individuals with CMD are given time-off for treatment and recovery if the conditions at home are not ideal, treatment would be counterproductive as root-causes or contributing factors are persisting. In other words, having a more stable social environment is likely to accord individuals the opportunity to manage their condition more effectively.

Home Chores/ Activities

The effects of being domestically active at home whilst absent due to ill-health were perceived to be either positive or negative across participants sick-listed with either MSDs and CMDs. Participants (male and female) sick-listed with CMDs found that a physically demanding task such as; cleaning, gardening, running errands, working on side-projects, walking the dog, taking care of the kids, helped to take their mind off their issue, which impacted on recovery.

“I was walking back and forth to Homebase and getting fencing materials for my garden. So, I was... because I wanted to have a project so that I wasn’t just you know, sitting and watching movies or whatever. So, I had something to do to keep my mind off you know, the pressures and stress of work and also give me that feeling of ‘I’ve accomplished something with that time’. So, I haven’t just wasted six weeks or whatever it turned out to be. So yeah, I was more active than what I am normally because I was doing a lot of work, a lot of carrying back and forth.” (019-M-30+)

“I was good because I didn’t stay in bed till 10 o’clock in the morning or anything like that. I didn’t! I was out every morning, and walked the dogs, and you know went to the gym or

whatever I was gonna do today. So, it was brilliant. Absolutely brilliant. From that point of view, it also helped my recovery (Laughing).” (009-M-40+)

While people with MSDs considered physically tasking activities as opportunities for physiotherapy.

“Other than you have those additional pressures like needing to do the school runs, so that drive to get driving again is a lot stronger because you can’t rely on other people for too long. So, if it did affect it, I think it was probably in a positive way. And also because of recovering from a musculoskeletal injury, a lot of it was things like wanting to go to the pool, but you can turn that into a family outing, you know what I mean? So, I could take him swimming and I could be doing some physio exercise like squats and stretches and he wouldn’t know that I was actually doing my physio.” (008-F-40+).

However, four women sick-listed with both conditions (MSDs and CMDs) found being domestically active during sick leave challenging and disruptive to the recovery process. However, a closer look at characteristics of these participants showed a similar pattern of the circumstance surrounding them; either being a single, divorced or separated parent to very young children and no external support from friends or family.

“I think my disability and my recovery is certainly impacted by being a single parent and therefore you know when you're doing a job and you're going home, and you still got to do all those other things...” (016-F-40+)

“I’m a single parent, so I am very domestically active (laughing), yes... all I could do was to get up in the morning in my pyjamas to drive my children to school..., and I’ll pick them up... So, I mean, it was very difficult.” (012-F-30+)

Across these cases, there was a consistent acknowledgement of the support and help they received from friends and family during their spell of absence. It, therefore, implies that impacts of the demands of homework on recovery during absence are dependent on the support available at home during an absence period. Hence, as suggested by Montgomery’s (2003), it could be inferred that the same circumstance (being a single, divorced or separated parent of

young children with no external support) could also apply to male employees given our current contemporary society. Thus debunking the generalised assumption that the negative impact of home interference is only attributed to women (Crook & Moldofsky, 1994; Ahlgren & Hammarström, 1999; Casini, et al., 2013). Hence the **theory 1** on the effects of domestic pressures will be refined to read as follows;

R1. Sick-listed employees who are a single, divorced or separated parent to very young kids and have no help with domestic chores during sick leave (context),) are less likely to engage with the RTW process early (mechanism), which impacts negatively on recovery, leading to a delay in return to work (outcome).

Newly identified theory relating to personal and external factors will read as follows;

N. Employees' sick-listed with CMD (context) are less likely to engage with the RTW process early, as a result of persisting personal or external issues (mechanism) which delays recovery and eventual return to work (outcome).

Impact of RTW on rehabilitation time

This theme was identified inductively from the data, and it describes how returning to work impacts negatively on rehabilitation time for participants in both organisation one and organisation two. Seven participants sick-listed with MSDs who required physiotherapy were of the view that coming back to work impeded their ability to continue with physiotherapy, which was scheduled during working hours. These participants having been absent for a period, had returned to work not fully recovered, and as such, still required consistent rehabilitation time to attain full recovery.

“...That’s probably the only downside of being back into work. Wherein when I’m not in College and I am at home, I will do my own physio 4 or 5 times a day. Can’t do that when you’re back at work.” (006-M-40+)

According to participant 016-F-40+, as told by the HR in her organisation, sick leave period is classed as the period of surgical operation. As such, the recovery and rehabilitation period required afterwards are not factored into the duration of absence granted to individuals.

“If I’m honest the issue was I was pushing myself to come back because I knew I would end up going down to half pay and I tried to get some clarification before I went off sick

regarding disability leave and they are basically being told by HR that the only day that classes as disability leave is the day of my operation. So not the recovery or the rehabilitation afterwards.” (016-F-40+, MSDs)

According to these participants, there is a lack of understanding on the part of HR regarding the distinction between recovery from surgery and on-going rehabilitation after surgery which requires time just as well.

“But what I didn’t factor in was the rehabilitation that would be needed afterwards. So, what a long haul that was gonna be. And so, I think if I’d had been aware of that maybe that’s an improvement that could be made from the NHS perspective you know, because they must be aware that rehab takes a lot of time and effort and that should potentially be put on your radar. Because I could have then discussed it with my line manager and said you know, it’s not just about the recovery from surgery is one thing but the on-going rehabilitation is another thing entirely and that’s the thing that takes the time.” (008-F-40+)

As shown in the above extracts, it is clear that rehabilitation for employees connotes action of recovery after treatment procedures through such programmes as physiotherapy. It appears that employers do not consider recovery time in their rehabilitation plan but are keener to help people manage their condition while at work. In line with this assumption on the influence of sufficient absence period for rehabilitation leading to full recovery, participant 008-F-40+ attests to extending her absence period. According to her, this was to avoid jeopardising her rehabilitation time by coming back to work which positively impacted on her ability to attain a high level of recovery and work functionality. Therefore, showing that when an employee’s absence period does not accord them sufficient rehabilitation time, there is a high tendency that they will return to work not fully recovered with negative consequences. Consequences such as dealing with the limitations of their conditions at work and being unable to continue with their rehabilitation programs (physiotherapy). While not every employee may be able to succeed at extending their absence period without repercussions like the above participant, it might be beneficial to these employees if employers accorded them reasonable time for rehabilitation on their return until full recovery is attained. The issues surrounding the negative impact of RTW on rehabilitation time for employees does not appear to be gender-specific, as both male and female participants sick-listed with MSDs and requiring consistent

physiotherapy for full recovery hold this opinion. Conversely, neither is this an organisational issue, as employees in both organisations have the same view. Hence a new theory on the impact of RTW on rehabilitation time will read as follows;

N. *When employees with MSDs requiring physiotherapy (context) return to work, rehabilitation time is likely to be impacted (mechanism), which hinders full recovery, thus contributing to poor RTW outcomes (outcome).*

Extended Absence

This theme describes what participants considered a contributing factor to challenges experienced at RTW, which could lead to poor RTW outcomes. Eight participants across both organisations acknowledged the risk of extended absence and the challenges it poses on return, as well as the benefits of early RTW.

“... I think when I first came in, I was going home before lunchtime, I was coming in and going straight home again a few hours later. Just a couple of hours was enough. But I think it's important to get people back in the office as soon as you can even if it's for a few hours because the longer you leave it, the harder it becomes.” (020 M-40+, MSDs)

“I kind of forced myself. I was worried that if I had any more time off then I would get too used to it and then you know, ‘would I ever return?’ I didn't want to you know... then make myself worse by being off longer. So no, I didn't feel 100% but I thought if I could do half time and I could see how I feel and then I could easily ease myself back in. I still don't feel 100%, but uhm... yeah, I just didn't want to make it worse really.” (019 M-30+, CMDs)

However, more men (n = 6) than women (n= 2) found the initial return to work overwhelming, even with a helpful return to work strategy in place and were thus unable to cope within the agreed working hours during the RTW process. The above extract also indicates that the sooner individuals return to work, the more accustomed they are to the work environment and task, building up their resilience against difficulties, which leads to a successful RTW in the long run. However, more discussions around showing resilience by pushing through the challenges RTW posed was raised among the female participants. According to participant 004-F-40+, while being cognisant of the negative impact of an extended absence, it took a conscious effort on her part to push through the difficulties.

“I returned full-time but within a phased return for six weeks which I found very difficult. The phased return was very helpful, but I was so tired because of having stayed long off work and medication. That was a huge factor. I could have quite easily not come back within that time, but I really pushed through it and I can see how some people may not be able to.” (004 F-40+, CMDs)

This emphasis on self-push may suggest that individuals who are not aware of the implications of an extended absence on disability and as such are not inclined to push themselves against challenges during the RTW process are likely to relapse and extend their absence period.

“I’m quite self-managing I suppose, and I was left to do as I felt fit. So initially I came back after four days off and lasted 20 minutes and decided ‘this isn’t working, I can’t cope’. My head was pounding. I think I then came back another two weeks later and survived another few hours and thought ‘I can’t do this’. I then tried again, did some work from home and my head just wouldn’t allow me to focus and then I decided I needed a few weeks off.” (020 M-40+, MSDs)

The above shows that while some people can push through difficult situations with the RTW process, others cannot, and as such are likely to be overwhelmed by the pressure, thus leading to a failed RTW. Therefore, employees returning to work after a long period of absence cannot be expected to push beyond their capabilities in handling difficulties experienced during the RTW process, as this is likely to cause more harm than good. However, it is important to note that more people with CMDs than MSDs with a history of extended absence experienced challenges on RTW. A closer observation of participants who were absent for an extended period who experienced no challenges on return, especially those sick-listed with CMDs revealed their consistent acknowledgement of the sufficient time away they had, and their satisfaction with the initial change in job roles or task accorded them on return.

“But it was a bit after that when we were deciding that I’m coming back and that was acceptable to the world sort of thing and that process from that point on to the moment when I sort of started my new job really, my new role was well managed. I think in terms of the actual process of arriving back at work, and what we put in place supported by my line manager, I couldn’t argue with it. I really couldn’t, because the bent over backwards really to make it as gentle as possible so that I can build up a level of robustness and be able to manage what was coming. o it was ... I thought it was very considerate particularly of my line manager to say ‘I think what you need to do is this; which is step out of it for a couple of

months, breathe, pick up on what's going on rather than just go in and we expect you to do it'. That worked really well.” (009 M-40+, CMDs)

“So literally and then I had a couple of weeks off which was nice, lovely weather. I had a nice relaxed time and then came back to work. So actually, coming back full-time has been fine for the last you know, since I've come back...” (003 M-40+, CMDs)

This experience begs the question of “*what sort of RTW strategy was put in place for participants who found the process of RTW challenging?*” Participants sick-listed with MSDs within this category cited that they had more physical challenges relating to the nature of their disability and how that impacted the use of resources than with the RTW process, which they found helpful.

“It is actually very helpful because it means that you're not dropped straight back into things. So, it's actually beneficial in that sense..... I only had physical challenges in the sense that because I still don't have full movement of my right arm, things like using a white board is a challenge. If I've got more stuff to carry, I've got to buy a bag that has wheels, so I can wheel everything around.” (006-M-40+, MSDs)

While those sick-listed with CMDs indicated that they were offered flexible working options in a phased return scheme which involved reduced working hours within their full-time contracted roles. Which means that while their working hours were reduced, which was considered helpful by most, these workers were still expected to manage their full-time workload which they found difficult to handle on initial return to work.

“It was just half days for... I don't know how many weeks. Three or four weeks. And then I sort of on my own accord just slowly started building it back up to full-time. But yeah, that was part of the problem that I came back to over 900 emails and then ... so I had all that backlog to get to and then obviously I had to still attend to full-time workload.” (019 M-30+, CMDs)

The above extracts imply that people with CMD who have been absent for an extended period are likely to experience difficulties during the RTW process if RTW strategies do not include

certain components. Such components as a change of job role or task along with flexible working options on initial return and a sufficient rehabilitation time which in-turn impacts on a sustainable RTW outcome. However, more men than women identified these challenges suggesting the gender-specificity of this theme. Hence the new theory on extended absence will be formulated as follows;

N. When RTW strategies are exclusive of adequate work accommodations and a sufficient rehabilitation time (mechanism), being absent for an extended period (context) is more likely to impede sustainable RTW (outcome) for men, compared to women.

Workplace Risk Factors

It has been established that the implementation of a good quality RTW strategy plays a huge role in facilitating sustainable RTW for people sick-listed with MSDs and CMDs. However, within this process, key workplace factors were identified within the accounts of participants as obstructions to the effectiveness of RTW strategies. These factors included organisational/departmental changes, nature of the job, workload clarity, toxic workplace culture and lack of management support.

Organisational/ Departmental Changes

Five females and one male participant sick-listed with MSDs and CMDs perceived organisational changes during the return to work process as disruptive, thus, negatively impacting adequate support and implementation of the right RTW measures.

“I think there’s a lot of changes happening in my team and manager changes as well which makes it probably difficult for anything to be implemented. They have been under a lot of stress with various different changes in terms of management and all sorts of different changes within departments, so they probably haven’t been as proactive as they might have been other times. So yes, they probably could have been a lot more supportive... So yes, they probably could have been a lot more supportive, but I probably haven’t stressed it enough, maybe. But I do know they are going through a lot of changes...” (002-F-30+, MSDs & CMDs)

“Oh, the restructuring is a nightmare... When I came back, we had a return to work interview which went ok. But coming, our database just changed from what it was before. So, I came back mid of April, and my colleagues already started using the new database in January. So,

I had to do a lot of online training which was quite challenging and testing and then you had to repeat that again. So, it was very stressful, and I found it extremely stressful and I didn't find really a lot of support at all. So, all these plays in as well and played on my sick leave."

(015-F-40+)

Organisational changes as recounted by these participants resulted in such changes as working processes, working team, databases, and management. According to these participants, having to re-acquaint themselves with these changes poses a challenge to their ability to ease back into work during the RTW process, as it is considered extra effort expended. As highlighted above, the effects of organisational changes also translated to no implementation of appropriate RTW measures which participants found challenging. In the case of participant 008-F-40+, who is a manager, her line-manager was changed at the time of return after her first episode of absence. As such, there was no manager in place to carry out due RTW processes on her behalf, thus adding to the challenges she experienced. This account indicates that due RTW process is likely to be neglected in periods of changes, which is likely to impact the quality of support provided for employees, thus contributing challenges these employees face, leading to poor RTW outcomes. Overall, perceptions of the effects of organisational/ departmental changes, as shown in the number of accounts was gender-specific.

Nature of the Job

The accounts of thirteen participants (nine women and four men) suggest the negative impact of the nature of their job on poor RTW outcomes.

"You know, because they keep giving you all loads of stuff, paper works and folders and then you have to go and go and get these like thirty packs of folders from big old heavy boxes. You also have to put it in the car and then you'd also need to get it out of the car. Uhm... you know how do you manage that? ...They need to take into account the weight, the logistics of getting your trolley in and out of the car, things like that. How would the job impact on my condition? I made it clear that obviously I do have a back complaint in terms of the moving and handling but I don't think the really fully took that on board because I would still probably be expected to do some moving and handling" (002-F-30+, MSDs)

As shown in the above extract, issues around how the nature of participant 002-F-30+'s job impacts her back condition was not taken into account in her RTW strategy, which made working challenging for her. However, within the same organisation, the recognition by the

line-manager that to constantly typing would aggravate participant 007-F-40+'s hands and arm injury led to the decision to lessen her typing task until full recovery was attained. According to her, this was very effective in allowing her ease back into work.

“I’m in constant pain with my arms. It affects the use of my hand and my arms. I type mostly all day constantly. But I have been given other task like photocopying and scanning to give myself a break from the typing... They were good.” (007-F-40+)

People sick-listed with CMDs suggest that it might be more beneficial to assign them more physical or manual task on RTW. Tasks that require less mental engagement as that aggravates their condition.

“When I’m at work, it doesn’t quite work the same way. I just kind of relax a bit and everything kind of overwhelms me. So maybe if I was a Farmer or a Gardener or you know doing something quite manual, or working in a Tuna factory or something, I would have been able to ... I probably wouldn’t have been affected so much because I would have just been able to do mindless work. But at work, you’re having to actually think things through, process them...” (010-F-30, CMDs)

As shown in the above extract, the nature of her job required thinking things through which she found overwhelming, given her condition. However, had she been working in a manually-based role, requiring little or no mental exertion, RTW would have been seamless. According to Participant 018-M-40+ (CMDs), it helps to have an environment where in many ways your state of mind is not the thing that you are focusing on, thus suggesting that physically engaging people sick-listed with CMD might be a good strategy for recovery and good RTW outcomes. Hence, where an employee’s task is solely mind-engaging, it might be useful to also consider including some physically engaging task that might take their minds off their condition and in turn, aid successful RTW. However, this theme was not regarded as gender-specific, but rather a function of the ill-health.

Workload Clarity

The theory on workload clarity was initially identified within the initial theory heading “good quality RTW process”, and it was anticipated that;

13. Reassuring workers of their workload during the RTW process (context) is effective in assuaging fear (mechanism) and assisting in easy transition back to work (outcome), which in turn impacts on successful RTW (outcome).

However, perceptions around workload appeared to be considered in association with poor RTW outcomes among seven female and three male participants. One of the most consistent concerns of female participants on RTW seemed to be issues around workload. For some of these participants, discussions around workload on RTW are not broached, which leaves them uncertain about what they can do and what they cannot.

“So, I think managers need to just do a bit more in terms of that, making contact and trying to help that first week really, the first day to make sure people do feel valued and feel as if... and don't feel overwhelmed when they come in. ... I think it could be better simply by better communication and getting a clearer picture of what somebody can do when they come back rather than you go to occupational health they say phased return so your manager sits down with you and you work out the pattern of phased return and then off you go.” (016-F-40+)

This extract suggests that where conversations around workload are raised, challenges posed by individuals handling more workload than their current state of recovery can accommodate on RTW could be easily assuaged. According to participant 011-F-40+, she felt like she was left to handle the difficult task which she found overwhelming, and eventually resulted in a relapse. Like the phased return structure, it is most effective to increase employee's workload on return gradually to avoid overloading them with more than they can handle on return.

The very few male participants who raised challenges associated with workload were of managerial level. In their case, participants believed that holding a managerial role and working under a manager who did not know his work or who was perceived as unsupportive may have obstructed the opportunity to hold discussions around workload.

“But I think probably what I didn't do with my manager was sit down and look at the work that I've got on because they probably don't know the work that I've got, and they trust me to do that. If it was somebody a lower level within my team, I would be sitting down with them and saying 'alright what have you got now? What do we need to get done? Actually, we'll take that away' ... you know remove some of the pressure for them. Because they're going to be very much. I can do them all and want to get back to work. So, it's about saying 'well I actually I don't want that done now, you know and you taking that away. So, I didn't get that but that's probably because of a lack of ... my manager isn't IT at all you know. He's a fire

fighter. So, we don't have that relationship that I have with my team where I understand what they are doing, and I can have that conversation.” (020-M-40+)

The accounts of these participants show that more women than men worry about workload issues at the point of return. The perception of these participants, therefore, stresses the importance of clarifying employee's workload on the first week of RTW. However, where this is not clearly communicated, participants are likely to feel overwhelmed, which could impact negatively on RTW outcomes. While this interpretation aligns with the anticipated initial theory, however, the gender-specificity of effects has been highlighted. Hence **theory 13** on reassuring participants of their workload will be refined to read as follows;

R13. Reassuring female employees of their workload during the RTW process (context) is effective in assuaging fear (mechanism) and assisting in easy transition back to work (outcome), which in turn impacts on successful RTW (outcome).

Toxic Workplace Culture

The theme toxic workplace culture describes the unsupportive experiences of participants that could impede a sustainable RTW. Perceptions of lack of support during the RTW process across twelve participants appeared to be focused on how they were made to feel and the quality of interpersonal relationship among colleagues and line-managers. Participants who held these views included seven women and five men. Participants who felt neglected, ignored and unwelcomed on return, believe that it contributed to a decline in health. According to participant 011-F-40+, because her colleagues and line-manager were not much help during her initial return, it resulted in a recurrent absence episode. Their experiences, therefore, draws on the impact of working within a supportive team and how that can be beneficial.

Across the accounts of participants, unsupportive encounters during the RTW process was as a result of poor work cultures taking the form of a lack of communication, poor reception on return to work, feelings of isolations, workplace conflict and stigmatisation/ discrimination.

“But being not so integrated in the team that is something I just accept that. I find it sometimes painful, allowing me feel what I feel, but I feel like I can't change it really...”

(015-F-40+, CMDs)

“... The flip side of that is this glass ceiling and you’re perceived to be a bit flaky. So how do you minimise that? Because you’ve had a bleep (mental break-down), that you’re a bit flaky and that you can’t do your job.” (011-F-40+, CMDs)

“It’s difficult because as I said then, going back to this previous line manager and you know after I got back last time and then dealing with this person who I could have put in a complaint with. So, it’s basically being line-managed by the person who was the problem and so I suppose it was an unusual case in that respect.” (019-M-30+, CMDs)

As shown in the above extracts, perceptions of discrimination/stigmatisation, isolation and workplace conflict were commonly raised among nine out of the twelve participants sick-listed with CMD. This theme was consistently raised as a major risk factor among people with CMDs, therefore, stressing the importance of making people with CMDs feel included, accepted, listened to and not necessarily singled out as a result of their condition at the point of RTW, as this would be helpful in the easy transition back to work. Perceptions across participants on the impact of support across organisations were also explored, and a difference of work cultures in different departments within the same organisation was apparent, which may explain the inconsistencies in RTW outcomes within organisations.

“In my experience with what I’ve had, it was very good. I think that it’s unique to me. I’m almost thankful for what I’ve got because I recognise that this isn’t standard and I don’t see it elsewhere within the organisation or ... it’s in places, I mean there are pockets of really good behaviours. But you see other working environments, other businesses, you know your colleague work at places, and everyone is under a lot of pressure. I don’t see this across there.” (020-M-40+)

While some departments foster a supportive environment, others do not, which breeds feelings of blame, isolation, perceived discrimination and encourages conflicts.

“When I returned last time, it was almost like ‘this is your fault’. You know, it was almost like you know, I had an appraisal and the issue was mine.... It was not to do with work, it was mine. And I felt a bit aggrieved about that.” (003 M-40+, CMDs)

When employees are expected to return to these toxic environments, it increases the likelihood of a failed return, especially among people with CMD. According to participant 019-M-40+, his anxiety and depression were aggravated as a result of having his then manager whom he had grievances with handle his return to work process. The account of these participants

suggests that a toxic environment plays a role in poor RTW outcomes, and line-managers who have on-going conflicts with returning workers may not be the best people to handle their RTW process. It might be more beneficial to consider alternatives such as an assigned RTW coordinator or a change of department for the employee as was the case with some participants.

Lack of Senior Management Support

Across both organisations, there is a general notion of the lack of support from senior management in the RTW process. Support from higher management is considered across participants in the form of policies or approved accommodations or working options during the RTW process to facilitate a seamless transition back to work. However, perceptions of senior management support vary by organisation.

In organisation one, participants sick-listed with MSDs agree that the RTW process would move more smoothly and effectively if management were committed to upholding their duty of care by providing necessary aids and accommodations to support them. In participant 002-F-30+'s case, even though her direct line-manager was emotionally supportive, she felt she was limited in the sense that approvals for working from home option and workstation modification could only be effected by management. And as such, where that was refused, her line-manager could only sympathise, and not necessarily manage her challenges, which she found unhelpful.

“For example, if I say, ‘my back’s bad, driving is typical, can we consider the working from home because let’s face it, you haven’t even answered me from January’ (Laughing). It will be... I will ask the service management and then I’m pretty certain the answer will be NO! So, it is kind of blocked. So, the line manager is lovely, she’ll listen to you, but they are very restricted in what they can do to help. So, 9 out of 10 times it’s blocked.” (002-F-30+)

For this participant, this indicated management’s indifference in ensuring her health and wellbeing at work. The emphasis on management’s lack of commitment to supporting sick-listed employees, therefore, suggests that while good quality RTW plans may be in place for sick-listed employees, where requests to implement agreed working strategies are denied by management, sustainable RTW may not be easily attainable by these returning workers.

In organisation two, issues around lack of managerial support and ineffective RTW processes appeared to be echoed only among people sick-listed with CMDs.

“And I actually asked for help because I could feel that I was starting to become physically and mentally quite weak and I didn’t want to let people down again and my boss was horrendous. Instead of supporting me, he actually made the situation worse. So no, I don’t think there’s been any change to the organisation’s opinion of mental health illness. I still think that they don’t know anything about it to be honest, and I’m not really sure, I’ve not seen any evidence to show that they are even interested.” (005-F-40+)

These positions draw on the general perceptions of participants on the role of management-levelled leaders on their ability to get the necessary help that would impact on sustainable RTW. While the role of managers during the RTW process has been established as crucial by all participants, accounts of participants reveal vast differences within organisations on how the RTW process is managed, especially for people with CMDs, which may explain the inconsistencies in outcomes. While participants from organisation one believe that their organisation has a high level of understanding of mental health issues and that appropriate tools are in place to support them, participants in organisation two do not share the same views. According to participant 005-F-40+ (organisation two), her previous absence for a hysterectomy surgery was very effectively managed. She believes management understood the nature of her condition and as a result, understood her limitations, as opposed to her much recent absence due to stress and anxiety. In her opinion, there is a general lack of understanding across the organisation on mental health issues which impacts on the level of support provided within the organisation. All other participants in the same organisation share the same views and how being in the education sector may be an explanation for the ineptitude on the part of management in effectively managing absence rate due to mental issues. Although the RTW process in organisation two is more attuned to CMDs than MSDs, there is still a perceived lack of understanding in effectively managing issues relating to CMD. Participants all agree that in the education sector, particularly, the levels of expectations placed on them by their employers increase dramatically, which puts them in a lot of pressure. According to these participants, employers are oblivious to the fact that while some people can handle the pressure, others find it tough to cope with and as such require necessary support.

“I think that employer’s lack of understanding of what you actually go through when you have had a break-down or a burn-out or any kind of mental illness linked to your job makes it

very, very hard. Their expectations don't change at all and there is no effort made to protect other staff from going through it which I find really frustrating.” (005-F-40+).

In participant 009-M-40+'s view, the issue is not so much as how employers in the education sector understand mental health issues and respond better, but more about how they are contributing to it. Hence, he suggests that when employers within the educational sector recognize their role in contributing to mental issues, then that might be a first step towards addressing matters around management's understanding of mental health issues and providing better support for employees. It shows that higher management support hinges on their level of understanding about ill-health, which precedes the provision of the most appropriate aids or accommodations for a sustainable RTW.

Summary of workplace risk factors

Overall, on the one hand, the effects of organisational/ departmental changes appeared to be the only gender-specific workplace risk factor identified in the accounts of participants. On the other hand, the impact of a toxic workplace environment, the nature of the job, and a lack of higher management support appeared to be dependent on either the health condition of employees or other organisational factors. Hence new theories on these workplace factors will be formulated as follows;

N1. Compared to men, sick-listed female employees who RTW during periods of organisational/departamental changes (context) are more likely to experience challenges during the RTW process as a result of poorly implemented RTW strategies (mechanism), thus impacting on poor RTW outcomes (outcome).

N2. When employees sick-listed with CMD return to toxic working environments (context) during the RTW process (mechanism), it is likely to aggravate their condition, leading to a failed RTW (outcome).

N3. During the implementation of the RTW plan for sick-listed employees, when certain factors such as the nature of employee's job is not properly taken into account (context), RTW strategies are bound to be poorly effected (mechanism), and a result, poses challenges for employees which impedes sustainable RTW (outcome).

N4. Employee's sick-listed with CMDs (context) are likely to benefit from physically-engaging task on initially return (mechanism), as this facilitates smooth transition back to work, recovery, and eventual sustainable RTW (outcome).

N5. When there is a general lack of understanding on ill-health and the RTW process is not fully supported by higher management within the organisation (context), it impedes effective implementation of appropriate measures for returning workers (mechanism), which reduces the likelihood of employees attaining a sustainable RTW (outcome).

Health Characteristics

This theme was initially identified deductively from literature (see chapter 5 pg. 68). The theme describes how employee's health characteristics relating to comorbidity and recovery impacts their ability to RTW. Based on the realist evaluation framework, it was anticipated that;

5. Unlike men, women are more likely to wait until full recovery (context) before engaging with the RTW process (mechanism) as a result of co-morbidity or changing health complaints (context), which contributes to delay in RTW (outcome).

I, therefore, explored the perspective of all participants to ascertain how participant's health characteristics impact recovery and eventual RTW.

More women than men reported the presence of one or more additional health issues co-occurring with their primary condition of either MSDs or/and CMDs, which they believe kept them off for an extended period.

"...but you know I knew I wasn't very well, I was getting really bad headaches, tension headache. They were really bad, and I never really had them before. So, it's affected me physically, which it wasn't before and that's what kept me off for that long amount of time..."

(010-F-30)

In the case of participant 001-F-40+, evidence of the impact of comorbidity on extended absence was confirmed in the comparison between the duration of absence in her first and second episode of absence.

"So, the first time ever my back was gone, so hmm. I think it was about May, my back went, and I was off for three weeks. This time my back went, and I got the fatigue with that and I was off nearly eight weeks. So, it shows the difference doesn't it?" (001-F-40+)

As shown in the extract above, the introduction of a new condition exacerbates the condition, resulting in prolonged absence period. However, as pointed out by these participants, it is important to note that the issue surrounding comorbidity in most cases is as a result of the nature of the illness.

“I think a lot of it is to do with what you’re off work with. I mean I’ve had two incidence of being off work and returning. One was medically, because I had an operation, and that was a much easier return ... than when I was off with a break-down because of work-related stress. So, I think it makes a big difference.” (005-F-40+)

The above extract suggests that different conditions come with various changes in diagnosis or category of complaints and in some cases with unintended complications which takes a toll on recovery time and RTW. However, it was observed in the accounts of all participants in both org. 1 and 2 that no one reported attaining full recovery at the point of RTW.

“Yeah, Yes! I wasn’t fully recovered, but I was recovered enough that I felt that I could now fit work into my life as well as doing the recovery. Does that make sense?” (008-F-40+)

“So no, I didn’t feel 100% but I thought if I could do half time and I could see how I feel and then I could easily ease myself back in. I still don’t feel 100%”. (019-M-30+)

Participants absent with CMD agree that because full recovery might not really be attained, especially as CMD is an on-going struggle, as such returning at a stage that condition can be managed could be beneficial.

“Mine, I returned when I was able to manage it, because I think your road to recovery is quite a long way.” (004-F-40+, CMD)

“...And because really you are ready to go back, I think when you start your phased return you won’t be a 100%. You can’t really until you sort of got used to being back at work.”
(021-F-40+, CMD)

All participants said that they had reached a stage in their recovery where they felt they were able to accommodate work. While these employees were not fully recovered, they were recovered enough to manage work while still recovering. Therefore, while the gender-specificity of the theme health characteristics as anticipated was not identified, the impact of the nature of the illness on comorbidity was established. As a result, the initial **theory 5** on health characteristics will be refined to read as follows;

R5. Depending on the severity of the nature of illness, people with MSDs and CMDs (context) are likely to report co-morbidity or changing health complaints during absence (mechanism), which contributes to a delay in recovery and eventual RTW” (outcome).

6.3 Review of Consolidated theories

As a result of validating CMO configurations with accounts of participants, 30 theories explaining what factors impact RTW outcomes, for whom and under what circumstances were developed. See Appendix 18 for the full list of consolidated theories. Out of the thirteen initial theories (as listed in the tables below), one theory was discarded (theory 3), four were supported and hence retained (theories 2, 8, 11, and 12), and eight were refined (1, 4, 5, 6, 7, 9, 10 and 13). Eighteen new theories were developed from emerging themes.

6.3.1 Initial Theory discarded

	CMO RTW theory	Original theme
3	Employers are keener to provide work adjustments (mechanism) for men compared to women (context), which impacts on employee’s confidence in the organisation and their ability to do their job (mechanism) thereby increasing the chances of sustainable RTW for men and poor RTW outcomes for women (outcome).	Work adjustment

6.3.2 Initial Theory retained

	CMO RTW Theories	Original theme
2	Women aware of the workplace health and safety programs (context), are more likely to engage with the RTW process (mechanism), which in turn facilitates lasting return to work (outcome).	Workplace health services
8	Finance (context) influences motivations to participate in the RTW process (mechanism) even when not fully recovered for employees who are the primary financial providers at home (context) which impacts on sustainable RTW (outcome).	Finance
11	Line-managers who have a good relationship with sick-listed employees (context) are likely to be more supportive of employees during the RTW process (mechanism), which impacts on sustainable RTW (outcome).	Workplace support
12	A competent and supportive manager, working in collaboration with other health services within the organisation (context) is likely to increase their level of understanding about employee’s condition and best RTW approach to adopt, as well as be more empathic towards employees (mechanism). As a result, they can successfully implement an effective RTW strategy (mechanism) which boosts employee’s self-efficacy, thus impacting on sustainable RTW (outcome).	Good quality RTW process

6.3.3 Initial theory refined

	CMO RTW Theories	Original theme
1	Sick-listed employees who are a single, divorced or separated parent to very young children and have no help with domestic chores during sick	Domestic pressures

	leave (context) are less likely to engage with the RTW process early (mechanism), which impacts negatively on recovery, leading to a delay in return to work (outcome).	
4	Employees are motivated to engage the RTW process even when they are not fully recovered (mechanism), as a result of the level of importance they place on their job and the personal factors surrounding them (mechanism) (context), thus facilitating a RTW (outcome).	Work importance
5	Depending on the severity of the nature of illness, people with MSDs and CMDs (context) are likely to report co-morbidity or changing health complaints during absence (mechanism), which contributes to a delay in recovery and eventual RTW (outcome).	Health characteristics
6	When people sick-listed with CMDs are acknowledging of their condition and open with their health providers (context), it impacts the quality of care provided (mechanism), which plays a role on recovery and RTW (outcomes).	Recognition of condition
7	When employees sick-listed with MSDs & CMDs (context) can access and/ or afford adequate and suitable treatment and rehabilitation early on in their absence period (mechanism), it increases their chances of recovery and their likelihood of returning to work early (outcome).	Treatment and rehabilitation
9	Employees are more likely to engage the RTW process (mechanism) when they feel supported, valued and cared for at the workplace (context), which results in their ability to settle in comfortably, thus significantly easing their transition back to work and impacting on sustainable RTW (outcome).	Workplace support
10	Female line-managers are considered more likely to be supportive and suited to handle the RTW process (context) compared to male line-managers, as they hold a more positive attitude, are more caring and willing to help employees during the RTW process (mechanism), which boosts employees' self-efficacy, thus leading to their ability to RTW sustainably (outcome).	Workplace support
13	Reassuring female employees of their workload during the RTW process (context) is effective in assuaging fear (mechanism) and assisting in easy transition back to work (outcome), which in turn impacts on successful RTW (outcome).	Good quality RTW process (Workload clarity)

6.3.4 New theories formulated

S/N	CMO New RTW theories	Original theme
1	Employees' sick-listed with CMD (context) are less likely to engage with the RTW process early, as a result of persisting personal or external issues (mechanism) which delays recovery and eventual return to work (outcome).	Domestic pressure (personal/external issues)
2	People sick-listed with MSD, who have an active personality (context) are more likely to engage the RTW process even when they are not fully recovered (mechanism), thus facilitating an early RTW.	Work importance (keep active)
3	Women who are of a higher educational level and holding a leadership position are more likely to engage in the RTW	Work importance (evidence of achievement)

	process whilst not fully recovered out of a need to prove oneself and to prove that they are deserving of their attained position, thus facilitating early RTW.	
4	More women than men are likely to form strong social networks within the workplace which in most cases forms the basis for engaging the RTW process early thus facilitating RTW.	Work importance (social interaction)
5	When absent employees are contacted during absence by a trusted and supportive nominee (context), it instigates in employees' feelings of being cared for and valued (mechanism), which in turn motivates their decision to RTW (outcome).	Contact during absence
6	Sick-listed female employees (context) are more likely to be overwhelmed by guilt of letting the team down, which instigates decisions to engage the RTW process early (mechanism), thus facilitating an RTW (outcome).	Workplace motivating factor (sick leave guilt)
7	Employees sick-listed with CMD who have been absent for an extended period (context), are more likely to be either pressured to RTW by organisations who lack proper understanding about mental health issues or RTW out of a fear of job loss-progression (mechanism), thus facilitating a RTW after sick leave (outcome).	Workplace motivating factor (pressured to RTW and fear of job loss-progression)
8	Employees sick-listed with CMD who have been absent for an extended period (context), are more likely to be pressured to RTW by organisations who lack proper understanding about mental health issues (mechanism), thus facilitating RTW.	Workplace motivating factor (pressured to RTW)
9	Sick-listed male employees who have no replacements during absence (context) are likely to return to work early despite not being fully recovered (outcome) from the fear of an increasing workload (mechanism).	Workplace motivating factor (fear of increasing workload)
10	Sick-listed employees benefit from support external to the workplace (e.g., spouse, family and general practitioner), which plays a role on adequate care received and recovery, thus facilitating RTW.	External support
11	Employees sick-listed with MSDs and CMDs who have a good understanding of the nature of their condition (context), and its risk factors are likely to engage in self-management practices (mechanism) which impacts on recovery and a sustainable RTW (outcome).	Self-management
12	When employees with MSDs requiring physiotherapy (context) return to work, rehabilitation time is likely to be impacted (mechanism), which hinders full recovery, thus contributing to poor RTW outcomes (outcome).	Impact of RTW on rehab
13	When RTW strategies are exclusive of adequate work accommodations and a sufficient rehabilitation time (mechanism), being absent for an extended period (context) is more likely to impede sustainable RTW (outcome) for men, compared to women.	Extended absence
14	Compared to men, sick-listed female employees who RTW during periods of organisational/departmental changes (context) are more likely to experience challenges during the RTW	Workplace risk factor (organisational/departmental changes)

	process as a result of poorly implemented RTW strategies (mechanism), thus impacting on poor RTW outcomes (outcome).	
15	When employees sick-listed with CMD return to toxic working environments (context) during the RTW process (mechanism), it is likely to aggravate their condition, leading to a failed RTW (outcome).	Workplace risk factor (toxic working environment)
16	During the implementation of the RTW plan for sick-listed employees, when certain factors such as the nature of employee's job is not properly taken into account (context), RTW strategies are bound to be poorly effected (mechanism), and a result, poses challenges for employees which impedes sustainable RTW (outcome).	Workplace risk factor (nature of the job)
17	Employees sick-listed with CMDs are likely to benefit from physically engaging task on initially return, as this facilitates smooth transition back to work, recovery, and eventual sustainable RTW.	Workplace risk factors (nature of the job)
18	When there is a general lack of understanding on ill-health and the RTW process is not fully supported by higher management within the organisation (context), it impedes effective implementation of appropriate measures for returning workers (mechanism), which reduces the likelihood of employees attaining a sustainable RTW (outcome).	Workplace risk factor (lack of management support)

6.4 Gender differences in factors that impact RTW outcomes

A comparison of identified themes revealed that while male and female participants held similar views on factors that either facilitated or impeded RTW outcomes after ill-health, a few gender-specific factors were identified (See [Figure 11](#) below). Findings showed that both male and female employees are likely to RTW in spite of ill-health for reasons such as the importance placed on work, which is considered as a means to keep active, source of finance and from love for the job. Contrary to the initial theory suggesting that adequate treatment and rehabilitation was more available for men, both genders believed having adequate treatment and rehabilitation played a role in their ability to RTW early. Additionally, a fear of job loss-progression, having external support and an effective communication channel during absence and before RTW was also generally considered helpful for ease of RTW by male and female participants. On the one hand, having a good RTW process, a supportive work environment and employee's ability to self-manage their condition impacted positively on sustainable RTW for both genders.

On the other hand, workplace factors such as toxic work culture, nature of the job and lack of managerial support contributed to a failed return. Even though there was a consensus across both gender on the role of having a supportive GP and workplace plays in facilitating RTW outcomes, perceptions on the nature and type of support considered beneficial varied

across gender. As helpful GP support for male participants was considered in the capacity of the competence of the GP in suggesting effective treatment and rehabilitation strategies, helpful GP support for female participants was assessed in relation to adequate care and consideration shown during the treatment and rehabilitation period. Consequently, while workplace support involving help with managing workload was perceived as beneficial by male participants, good support in the workplace was perceived as more emotional than physical by women. Hence, women benefitted more from support displayed in the form of good and thoughtful communication and a display of caring behaviours which made them feel valued.

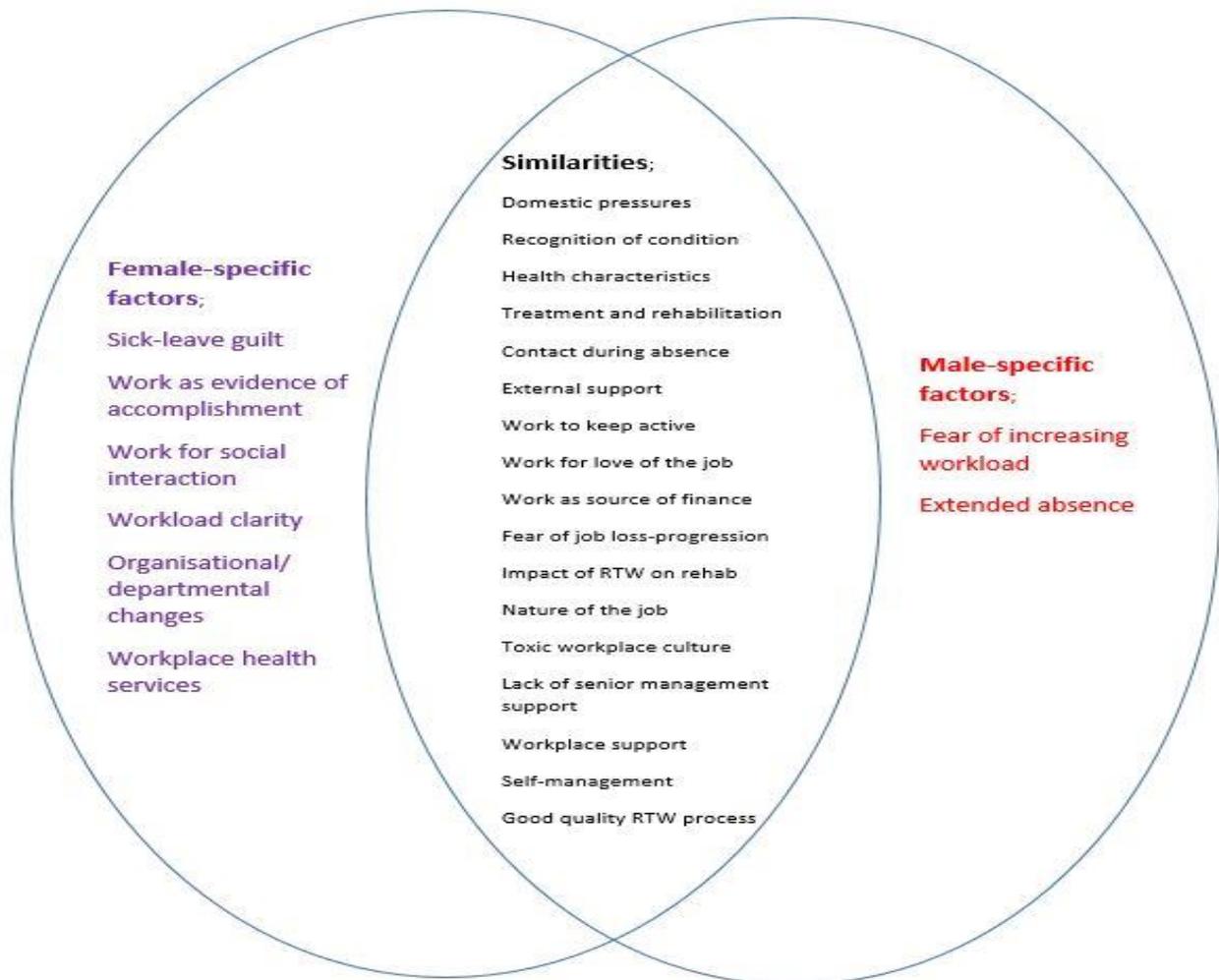


Figure 11: Gender similarities and differences in RTW factors

Health characteristics such as comorbidity were initially assumed to impact a delayed RTW for only women. However, this was manifested in both male and female participants. Conversely, assumptions about the role of gender arguments on domestic pressures and recognition of condition and how that impacts RTW outcomes were not corroborated. Women were assumed to be less likely to RTW early as a result of being domestically active during absence which negatively impacts speedy recovery. This study revealed that while domestic

pressures, to a certain extent, affected RTW outcomes, this was consistent with women who were single or divorced young children and no help at home with home chores. However, I chose not to generalise the effects of domestic pressures on this category of women as no male participant included in this study represented the category (single, divorced, have young children and no help with home chore during absence). This decision was based on the notion that the same effects of being domestically active during absence could be experienced by men who also fit the category. Literature also suggested that men were less likely to be open about their CMDs, and by so doing lose out on adequate care, thus impacting RTW negatively. It also was not verified in the accounts of participants. Rather one woman of a younger age recounted being in denial of her CMDs, which impeded adequate treatment. Male participants sick-listed in this study were older, and they appeared to be more open about their condition and willing to receive necessary help for recovery. Therefore, suggesting that age is more likely to be an influencing factor to an individual's ability to be open about their CMDs and willing to receive adequate care. It is for this reason that this factor was not considered gender-specific, as further research is required for verification.

Nine gender-specific factors were identified in the themes. More specific factors that influenced initial RTW for female participants included; having guilt over being on sick leave, seeing work as evidence of accomplishment and an opportunity for social interaction. As being aware of and engaging the workplace health services impacted sustainable RTW for these women, factors such as organisational/ departmental changes and lack of workload clarity at the point of return contributed to a failed return. For men, a fear of increasing workload motivated decisions to RTW and being absent for an extended period posed RTW challenges which contributed to poor RTW outcomes. It is, therefore, possible that a wide range of other factors could impact men and women's RTW outcomes. However, gender-specific factors captured in this study were only based on the experiences of participants included in this study.

6.5 Organisational similarities and differences

The accounts of participants also revealed similarities and differences across both organisations included in this study that could have played a role in the outcomes reported (see [Table 12](#) below). Our findings showed both organisations shared a standard approach to managing the RTW process and implementing appropriate strategies as informed by necessary support services. However, what organisation one had over organisation two was a wide range of support health services to depend on for relevant guidance. Notably, workplace health services in organisation two, though found lacking, appeared to be more attuned to people with CMDs, thus leaving people with MSDs inadequately catered for. Across both organisations, having the

support of management seemed to inform the provision of adequate accommodations for sick-listed workers. However, compared to organisation two, senior management in organisation one appeared to be more supportive of participants sick-listed with CMDs, which impacted on favourable outcomes.

Consequently, for both organisations, sustainable RTW outcomes were impacted by a supportive and competent line-manager working in collaboration with support services, alongside fostering a supportive work culture. However, employees in both organisations were mostly motivated to RTW from the organisation’s inability to provide additional support staff to cover periods of absence. Therefore, meaning that workload was either covered by co-workers or accumulated until employee’s return, hence decisions for early RTW.

It was particularly interesting to observe that while employees in organisation one who had been absent for an extended period were motivated to RTW from fear of job loss or progression, employees in organisation two had more job security despite more prolonged periods of absence. However, for participants in organisation two, extended absence, which was common among people with CMDs, instigated pressure from employers to RTW, which would explain their lack of understanding around mental health issues observed in the accounts of participants in this organisation. Even though participants absent for extended periods in organisation one experienced pressures to RTW, these participants were absent for MSDs.

Table 12: Similarities and differences between organisational cases

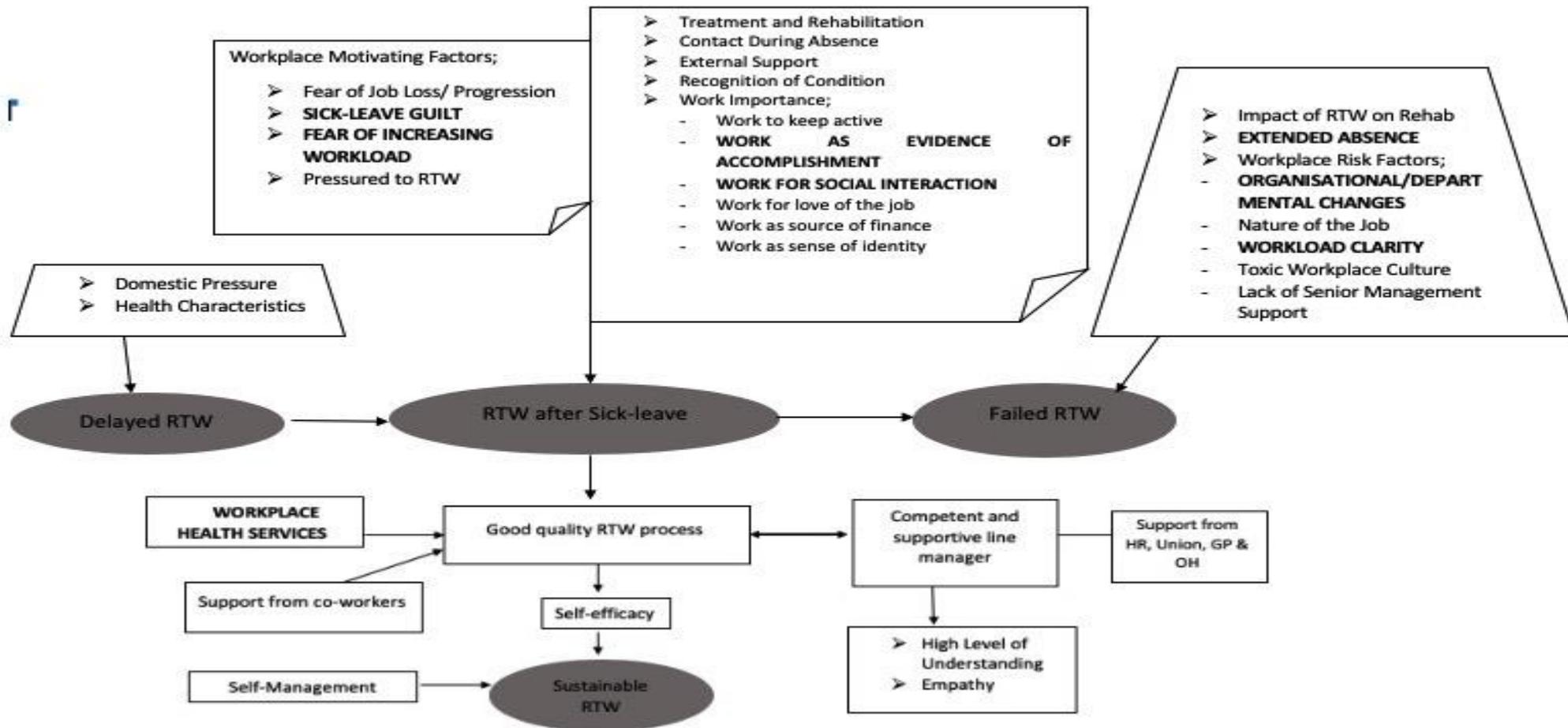
Organisation one	Similarities	Organisation two
Multiple support health services	RTW interviews	One support health service (Occupational Health)
Good understanding of CMDs	RTW managed by direct line-manager	Lack of understanding of CMDs
Supportive senior management	Work accommodations dependent on senior management approval	Unsupportive senior management
Workplace health services attuned to both MSDs and CMDs	Supportive and competent line-manager – Support health services collaboration for agreed RTW strategies	Workplace health services attuned to CMDs
Fear of job loss or progression due to extended absence	RTW strategies (phased return and flexible working options)	Job security
Employees with MSDs pressured to RTW	Different work cultures within organisation	Employees with CMDs pressured to RTW
Contacting employees during absence is allowed based on consent	No provisions for support staff during absence	Contacting employees with CMDs during absence is prohibited

	(workload covered by co-workers)	
		General organisational-related workload issue recognised as a contributing factor to poor health and wellbeing.

6.6 Explanatory model showing the interplay of factors that impact on RTW outcomes

To engage in further interpretation and embedding of the themes, I developed a model showing a meaningful representation of the interaction of factors and their varied effects on RTW outcomes (Suter, 2014). As illustrated in [Figure 12](#), three main RTW outcomes were identified within the data; initial RTW after a period of sick leave, sustainable RTW and poor RTW outcomes (including a delayed RTW and failed RTW), and these are represented by the grey-coloured oval shapes. As factors that impacted these RTW outcomes are displayed in the white-coloured rectangular, trapezoid and folded corner shapes, the gender-specific factors are represented by the bold text in caps. This model demonstrates how varied workplace, individual circumstances, environmental and other personal factors influenced or motivated initial RTW after sick leave period. These factors included; treatment and rehabilitation, weather, contact during absence, recognition of condition, work importance, some workplace factors and external factors. However, poor RTW outcomes classed as either a delayed RTW or failed RTW are also depicted in the model to show specific factors that hindered initial RTW and contribute to a failed RTW after initial RTW. As shown in the model, factors that contributed to a delay in RTW included domestic pressures and health characteristics, and those that contributed to a failed RTW were a reduced rehabilitation as a result of RTW, having been absent for an extended period and other workplace factors. This model, therefore, highlights important factors that play a role in the three primary RTW outcomes identified which employers would find useful when implementing RTW strategies. Finally, the interaction of key factors that facilitate or play a role in sustainable RTW outcomes is shown in the model. These factors include; a good quality RTW process, competent and supportive managers, workplace support, workplace health services and self-management. Consistent with findings highlighted in the systematic review in **chapter 3**, this model demonstrates that sustainable RTW is not a product of a single factor; instead, it is a product of multiple factors.

Figure 12: Developed explanatory model showing factors linked with RTW outcome



Key: RTW outcomes are indicated by the grey coloured oval shapes, factors that impact sustainable RTW, RTW after sick-leave and Poor RTW outcomes are represented by text in the white coloured rectangular, folded corner and trapezoid shapes respectively, and text in bold caps represent the gender-specific factors.

6.6 Main Findings of the Realist Evaluation

In this study, 13 evidence-based initial theories were developed, tested, discarded and refined and 18 new theories were identified using qualitative data from interviews with 22 employees who had returned to work after ill-health due to MSDs and CMDs. These theories provide in-depth realist explanations for answering the research question (**RQ3**); to what extent does gender play a role in facilitating sustainable RTW during the RTW process for people sick-listed with CMDs and MSDs? To answer the research question, I formulated three main aims focussed at identifying explanatory links of the contextual factors and mechanisms during the RTW that contribute to sustainable RTW for both men and women. **Aims 1**, focussed on identifying the factors that either facilitated or impeded RTW outcomes during the RTW process. The analysis identified a total of 30 themes which was grouped in three main categories based on their impact on three different RTW outcomes discovered; initial RTW after a sick leave period, sustainable RTW and poor RTW outcomes (delayed RTW and failed RTW) (see Table 8). This finding led to **Aims 2**, which was focussed on comparing identified RTW factors across both genders to determine similarities and differences. The comparative analysis of the data showed that while some factors that impacts RTW outcomes varied across men and women, in general, both male and female participants displayed shared perceptions on factors believed to impact all RTW outcomes. Engaging the workplace health services, sick leave guilt, fear of job loss-progression, lack of workload clarity at the point of return and seeing work as evidence of achievement and a place for social interaction impacted RTW outcomes for women. For men, a fear of increasing workload and extended absence played a role in RTW outcomes. Finally, **Aims 3** required an in-depth understanding of the role of gender in facilitating sustainable RTW. Based on the result of aims 2, a significant finding of this study is that the effects of gender were only observed on initial RTW after a sick leave period and poor RTW outcomes, and not sustainable RTW, thus aiding in addressing **RQ3**.

Sustainable RTW for people sick-listed with MSDs and CMDs was found to be predominantly dependent on a good quality RTW process at the workplace. The inconsistencies in RTW outcomes among participants within the same organisation validated the positive effects of a good quality RTW process on sustainable RTW. Accounts of participants revealed similarities and differences within and across organisations on how RTW processes were managed and how that impacted RTW outcomes. However, implementing an effective RTW strategy was contingent on having a competent and supportive manager manage the RTW process for sick-listed individuals. The competence and supportive ability of RTW

coordinators or line-managers were shown to be heightened when they worked in collaboration with other support services such as occupational health, HR and GP. Therefore, findings emphasise the importance of unifying RTW processes within organisations by training, educating and equipping line-managers with the right tools to implement effective RTW strategies which would, in turn, produce more consistent RTW outcomes in the same organisation. However, a major finding in this study was the identification of components of the RTW process that were effective in facilitating a sustainable RTW for individuals classed as either short-term or long-term absentees.

6.7.1 Factors that motivate or influence return to work after a sick leave period

Treatment and Rehabilitation

All participants believed that early access to adequate treatment helps in recovery thus increasing their chances of a RTW, strengthening Black and Frost's (2011) arguments on the impact of early access to health services on RTW outcomes. However, where there is a delay in receiving the necessary treatment, recovery time is delayed, and absence period extended. It could, therefore, be inferred that contrary to Edmund (2001) and Ahlgren and Hammarström's (1999) suggestions that men receive more adequate and suitable treatment and rehabilitation compared to women, included sample in this study had people with roughly equal levels of satisfaction. Participants by making similar consistent references to the nature of treatment provided with regards to both adequacy and inadequacy of treatment and its impact on both recovery and RTW indicates that provision of treatment and rehabilitation within the UK is not gender-specific. Meaning that irrespective of the number of male and female participants included in this study, perceptions around treatment and rehabilitation provided for people sick-listed with MSDs and CMDs would still go in the same direction.

Inadequacy of treatment was mostly associated with people sick-listed with CMDs, suggesting that there are more adequate treatment and rehabilitation provisions for people sick-listed with MSDs. Results from this study draw attention to the poor-quality mental health care services available to cater to the needs of people living with CMDs. Perceived poor-quality mental health care revolved mainly around the insufficiency and delay in accessing adequate care during and after a period of absence. According to Jacobs (2017), the mental health care sector has, in recent times, been under tremendous financial pressures. Mental health care providers are undertaking large-scale cost reduction programmes which have shown to impact on the quality of care provided for patients negatively, thereby indicating that the insignificant reductions in the incidence rate of mental health conditions in the UK are as a result of the

nation's poor quality mental care system (HSE, 2015). Issues around a delay in securing treatment appointments were also identified across most of the participants within the study as a contributing factor to an extended absence, thus inhibiting RTW. Waiting list issues have been flagged in previous studies (Anema, et al., 2002), showing that this is still an on-going problem that could likely explain the insignificant reductions in days lost to work due to MSDs and CMDs (Health and Safety Executive (HSE), 2015). This study shows that more people depend on government services and are not willing to engage the alternative (private care), which is considered costly. Hence, the need to provide timely and adequate care for sick-listed individuals cannot be overemphasized enough.

Contact during absence

According to HSE (2010), keeping in contact with employees during absence is a key factor in helping employees to RTW after sickness absence. Being contacted is considered beneficial when employees are not pressed to come back to work too early, however, without contact, it is suggested that absentees may feel increasingly out of touch and undervalued (Health and Safety Executive, 2010). All participants widely held this view; as such, there is no gender or organisational differences across participants. Participants believe that contacts during absence by a trusted and supportive person nominated by the organisation makes them feel comfortable, valued, and cared, which sets the pace for a successful re-entry into work. Where absentees were not contacted, feelings of isolation and neglect was bound to be stirred, which negatively influences motivations to RTW. This finding is supported by Nordqvist et al.'s (2003) notion that contacting sick-listed employees is a central aspect of successful RTW.

Furthermore, suggestions that were keeping in contact with employees while absent impacts on the implementation of effective RTW measures was supported in this study (HSE, 2004). Participants agreed that contact during absence accords employers the opportunity to ascertain their needs and by so doing effect beneficial measures on their return. However, contact during absence is dependent on an employee's preference and must not be enforced. Securing employee's consent to contact them during absence was considered a necessity. While some sick-listed individuals are happy to entertain a visit or a call, others might find it unhelpful depending on the nature or severity of their condition, as was the case in this study. Unhelpful contacts were viewed in relation to the quality of conversations when connections were made. The HSE (2004) therefore, advocates for the need to establish participant's preference on being contacted, means and frequency of contact as well as and the need for conversations to be devoid of pressures to RTW.

Recognition of condition

Contrary to De Rijk's (2008) suggestion that men with CMDs are more unlikely to open up about their condition and seek help, all men in this study appeared to be very aware of their ill-health and deliberate about the help and support they sought. However, it could be argued that the age factor of these men (40 and over) may play a part in their ability to embrace the realities of their situation without giving in to the societal demands on their masculinity suggested by Seidler et al. (2016). In other words, compared to men aged over 40, men aged below 40 are more likely to give in to societal pressures. Although this finding to a certain extent agrees with De Rijk's (2008) suggestion that one's ability to open up about their mental issues determines the adequacy of help provided, the male factor was not verified. Incidence of refusal to acknowledge health condition and open up to health providers was only reported among a woman aged 30, which may strengthen suggestions on the link between age, societal pressures and disclosure of mental health issues. Even though findings from Oliver et al.'s (2005) study suggests that young people, especially young males, sick-listed with CMDs, are less likely to seek help. However, because there is currently limited literature in this area, there is still a need for further research to clarify the link between age, recognition and disclosure of condition and help-seeking behaviours.

Work Importance

The initial theory on work importance suggested that compared to women, more sick-listed male employees were likely to RTW early in spite of their stage of recovery, as a result of the level of importance they place on their work (Ahlgren & Hammarstrom, 2000). Though work importance was identified in this study as a significant motivator for RTW, findings contradict Ahlgren and Hammarstrom's (2000) suggestion, as both male and female participants shared this view. However, work importance appeared to have a broader meaning beyond higher expectations and motivation to work captured in Laisné *et al.* (2013), and Ahlgren and Hammarstrom's (2000) work. Consistent with previous studies on the meaning and values people with disability ascribe to work, this study uncovered the key underlying factors behind participant's motivation to work which influences decisions to RTW (Saunders & Nedelec, 2014). The importance of work was talked about in the context of the values and meanings participants place on work and how those values act as motivating factors to RTW while not fully recovered. These values were expressed in six distinct levels; work as a source of finance, work as an identity, work as a means for social interaction, the love of the job, work as evidence of accomplishment and work to keep active.

Work importance for people sick-listed with MSDs and CMDs has previously been considered holistically with little depth to the broader values associated with it. Therefore, this study's detailed breakdown of the varying values and meanings that encapsulates "work importance" as a RTW factor is a new addition to this field of work. Even though male and female participants expressed some shared values placed on work (work as a source of identity, finance, an opportunity to keep active, and something they loved doing), only female participants talked about how they saw their jobs as evidence of their accomplishment and an opportunity for social interaction, and how that motivated decisions for early RTW. Accounts of these women revealed their resilience in pushing through their condition to be at a job they believed they earned. However, because most women in this category held either head of the unit or managerial roles, some might argue that their drive to RTW may also be embedded in the inequality in the labour market relating to few executive roles being held by women (Maume, 2004; Cotter, et al., 2001). As such, women in senior positions who have high levels of educational attainments, compared to men are more likely push for a RTW even when not fully recovered out of a need to prove oneself, and to prove that they are deserving of their attained position. These findings contradict Opsahl *et al.*'s (2016) suggestion that more men with higher work expectancies of RTW had a higher odds compared to women, even with significantly higher education of returning to work. Additionally, unlike men, women were more likely to form friendships at work, and those relationships formed part of the reasons they chose to RTW. This finding aligns with Onemu (2014) and Peterson's (2004) suggestion that compared to men, with or without incentives, women are more likely to find and value social relationships within the workplace. This shared views by women on further exploration does not appear to vary by age or marital status.

Work as a source of finance was the most consistent theme identified across all participants either as a facilitating or likely facilitator of RTW. Financial motivations to RTW was found to be influenced by the organisation's sick-pay policy and employees' financial position. In both organisations, sickness absence policy made provision for the reduction of pay depending on years of service, type of contract, and absence duration. As such, employees who feared the risk of half-pay as a result of extended absence felt the need to RTW even though they were not fully recovered. Participants who were considered as the primary providers at home, and who had no alternative source of income to support their financial responsibilities made this category. Therefore, being a primary provider clearly explains the motivations behind the impact of employee's income on RTW in Lammerts *et al.*'s (2016) and

Roelen *et al.*'s (2012) study. However, this finding is evidential of the role of an organization's sickness absence policy plays on early RTW and presenteeism, thus solidifying Baker-McClearn's (2010) suggestion on the link between organisational and individual factors on presenteeism. The issue of finance appears to cut across employees sick-listed with all types of condition. In Stergiou-Kits *et al.*'s (2016) study, which focused on RTW for people with mild traumatic brain injury, personal finance was also identified as a significant factor in people's decisions to RTW while not fully recovered. The consistency of these findings shows how workplace policies indirectly enable employees to place a higher value on work than health, especially when they are not financially secure, which is counterproductive.

Workplace motivating factors

Although perceptions about the influence of workplace factors on decisions to return to work while not fully recovered were evenly distributed across male and female participants, specific workplace factors varied by gender. Workplace factors included fear of increasing workload, guilt factor and fear of job loss-progression. Issues around fear of job loss or fear of having a slimmer chance at job progression as a result of extended absence from work were a few male and female participants with temporary job contracts or in the probationary phase of their employment in organisation one. These participants were willing to accommodate unsupportive behaviours or RTW earlier than they should, to avoid the likelihood of a potential job loss. Employee's status of employment in this study explained the reason behind their unwillingness to be vocal in asking for help, thus strengthening earlier suggestions on the impact of a lack of job security on RTW outcomes for sick-listed employees (Huijs, et al., 2012; Lederer, et al., 2012). It also explains why participants in organisation two did not hold these same views, as all participants in this organisation held permanent positions and were willing to demand adequate support.

Only male participants admitted to engaging the RTW process early from fear of an anticipated increase in workload in their absence. Having no temporary worker in their absence meant that their workload was left unattended. Hence, to avoid an insurmountable pile of work, returning to work irrespective of their stage of recovery was considered necessary. Some studies suggest that more men than women are likely to experience high levels of work-life conflicts which tends to impact on their inability to disconnect from work fully (Hammig, et al., 2009). This suggestion could easily explain findings in this study, especially as across women, issues around workload, though acknowledged, were not considered motivating factors to return. The link between fear of impending workload during absence and decisions

to RTW has not been widely explored, as such a need for further research would add to knowledge in this area. While recruiting a temporary staff is advisable, especially for long-term sick-listed individuals, covering the cost incurred on recruiting temporary staff and sick-listed employee are employers' major struggles (Caine, 2015). Issues on cost could explain why participant's employers recruited no replacement workers in their absence.

Consistent with Stahl and Stiwne's (2014) findings, sick leave guilt was acknowledged among women participants as having an influence on decisions to RTW earlier than necessary. Feelings of guilt across these participants was expressed about colleagues picking up their workload in their absence. Hence, decisions to RTW for these women came from a place of sympathy, owing to issues around too few hands within the working team to pick up the workload. Unlike men, who were motivated by worry over workload, female employees were more concerned about the wellbeing of their colleagues. In their view, colleagues within an already pressure-prone job would be overwhelmed with the additional workload, hence their decision to RTW early.

Perceptions of being pressured to RTW as a result of a lack of replacement was more common among people male and female participants who held managerial and team-leading roles, suggesting that the job level employees hold plays a role on RTW. This finding contradicts findings from Ekberg *et al.*'s (2015) study, which suggested that employees in higher positions are accorded more recovery time to facilitate a full recovery. However, Ekberg *et al.*'s (2015) reported findings were based on the perspective of employers, thus showing that assumed reality from an employer's view differs from actual lived realities of absent employees. In one organisation where temporary staff were not recruited, holding a managerial role for these participants meant that no one within the working team was qualified to handle their responsibilities, hence the pressure from their employer to return. As such decisions to oblige RTW demands were born out of duty to the employer and not recovery, which could set a dangerous premise in cases of a failed return along with further complications to ill-health. While participants pressured to RTW in organisation one was sick-listed with MSDs, those in organisation two were sick-listed with CMDs with more extended periods of absence, which was considered a result of lack of understanding on the part of organisation two. Knowledge around the fact that mental health issues are often complex and as such, could take more extended periods of absence compared to physical conditions (CIPD, 2011). While it is important for sick-listed employees to RTW early as it is of benefit to their physical and mental health (Waddel & Burton, 2006), allowing sick-listed employees, especially those sick-listed

with CMDs, sufficient time to attain some level of recovery might prove to be of greater worth to organisations. This study shows that more workplace factors than recovery plays a role in facilitating speedy RTW for people with CMDs and MSDs.

External Support

Most participants recognised the role supports the received external to the workplace played in facilitating adequate care and treatment during the sick leave period and how that impacted on both recovery and a RTW. Across these participants, external support received during the absence period was provided by spouse-family, GP and MP. The theory on social capital suggests that the social resources of an individual are critical to their ability to cope with external stressors, particularly relating to recovering from an ill-health. These social resources include individual's access to social support (Green, et al., 2019). According to Cohen and Wills (1985), social support offers the opportunity to provide dependable interpersonal relationships to individuals that result in social inclusion, reassurance, guidance, and material aid. While the participant's account agreed with this assertion, however, perceptions of external support appeared to vary by gender and condition. According to Prang *et al.* (2015), physically-based support may be the preferred type of support for the improvement of physical health. This assumption was confirmed in this study as people sick-listed with MSDs found that they benefitted from more physically-related support which took the form of help with chores and mobility.

Consequently, people with CMDs found emotional support taking the form of encouragement, reassurance and support with keeping healthy regimen helpful and thus supporting Nasser and Overholser's (2004) findings of the association between emotional support and lower levels of mental health issues. It, therefore, suggests that because helpful support hinges on the type of a person's condition, providing emotional care for example to an MSD sick-listed individual may be considered patronising as reasons for absence is physical and not mental. These findings will be relevant in providing care-providers with a clear guide on the type of support people sick-listed with MSDs and CMDs find beneficial, thus impacting on a speedy recovery and eventual RTW. Perceptions of GP support varied according to gender. While men considered the supportive role GPs in the context of their competence to adequately provide an effective treatment solution, women, on the other hand, perceived GP support in the context of adequate care and consideration shown during the treatment period. Contrary to Boreham *et al.*'s (2002) suggestion that men have lower access to social support from family, friends and the community, our study showed no gender difference in social

support participants received. However, Boreham's report did not clarify if findings apply to single, divorced or married men, as such, it is unclear if these socio-demographic factors impact.

6.7.2 Factors that impact on the sustainability of RTW

Good quality RTW process

The positive effects of a good quality workplace RTW process on facilitating a sustained RTW are consistent with the broader RTW literature, (Cullen, et al., 2018; Cancelliere, et al., 2016). However, what this study identified was the components of an effective RTW process that impacted a sustainable RTW for both short-term and long-term sick-listed employees. Across all participants in the two organisations, RTW processes were managed by participant's direct line-managers. However, findings showed that where managers lacked competence, exhibited unsupportive behaviours and failed to work in collaboration with support services such as Occupational Health, HR, GP, Union, RTW strategies were poorly implemented, which contributed to a failed RTW. Thus strengthening findings from Corbière *et al.*'s (2019) recent scoping review which emphasizes the complexity of the RTW process which includes multiple stakeholders and the need for RTW coordinators to maintain a working alliance between all RTW stakeholders to facilitate RTW processes.

Working in collaboration with support services during the RTW process was shown to accord line-managers the opportunity to receive appropriate recommendations, which in turn enhanced their knowledge, boosted empathy and thereby equipped them with the know how to implement an effective RTW strategy. The effectiveness of this approach to RTW management for sick-listed employees is consistent with findings from previous studies (Thompson, et al., 2003). A phased return and other flexible working options outside a phased structure were identified as the most consistent strategies adopted within the RTW process by managers, to help returning workers transition to work with ease. Where a phased return is an arrangement whereby employees return to their full-time duties and hours at work on incremental stages over a defined period (Ruane, 2015). While flexible working options are an agreed way of working that suits employee's needs within their full-time contract (GOV.UK, 2014). However, findings showed that the effectiveness of a phased return strategy or other flexible working options hinges on the specific work component phased or work accommodations provided for employees based on the nature of their illness. For example, phasing the number of days or working hours of participants while still expected to carry out their full-time roles was considered ineffective. These findings support that of Noordik *et al.*'s

(2011) study, which showed that workers who returned to work had reduced working capacity due to their mental and physical symptoms. However, the RTW strategies implemented placed them in a position where they exceeded their working capacity, contributing to negative RTW outcomes. The findings presented in this study emphasizes the importance of understanding employee's condition, establishing what employees can or cannot accomplish on return to work, and gradually build it up within the phased structure.

Many organisations define the short and long-term absence differently. Hence for this study, short-term absence was defined as absence period lasting not more than six weeks, and long-term absence as absence period for more than six weeks. Participants classed as short-term absentees benefitted from flexible working options. Components of flexible working options included; working from home, a few days off within the week, light duties (i.e. less demanding tasks) and half-days within a full-time working contract until recovery. All participants classed as long-term absentees were of the view that returning on a phased return was beneficial. Components phased within this strategy included reduced hours, reduced days, reduced workload, change in job role or level. Accounts of participants show that taking account of the length of absence of employees impacts the effectiveness of RTW strategies. Hence, reasons, why previous studies have consistently demonstrated favourable RTW outcomes for short-term sick-listed individuals, could be explained by this findings (Engström & Janson, 2007; Heijbel, et al., 2006; Gallagher, et al., 1989).

However, this study highlights the complexity of implementing an effective RTW plan; as such, the requirement of a competent line-manager in managing this process is justified. Consequently, this study revealed different RTW outcomes within the same organisation owing to differences in managerial style and competence. Therefore, to achieve consistent RTW outcomes within the same organisation, there is, an urgent need to train and educate line-managers on effective implementation of RTW strategies. Additionally, contrary to Edlund's (2001) assertion that work adjustments are more likely to be offered to male employees than women, in this study, work adjustments were provided to both male and female employees where required within the RTW strategy agreed on for their transition back to work.

Workplace Support

Consistent with previous studies, we found that workplace support, most especially co-worker and line manager support played a key role on sustainable RTW outcomes, which reiterates the importance of fostering a supportive work environment suggested in the systematic review (see **Chapter 3**). The strengths of the positive impact of working in a supportive team on RTW was

highlighted among participants who agreed that, where support was perceived to be lacking within a team before RTW processes were initiated, they may be more inclined to extend their absence period until a better support system was in place.

The gender-specific perceptions of the nature of workplace support and how the gender of RTW managers impact successful RTW for employees are the new addition to knowledge. While support at work was established as a condition for successful RTW for these participants, however, the nature of support received varied across men and women. As men considered support in the context of help with their workload, perceptions of support for women were more emotional than physical aid provided; for example, good and thoughtful communication, how people behaved towards them, and how that made to feel. Our findings have previously shown that men are likely to RTW early as a result of fears over increasing workload, implying that where help around their workload is provided on their return, this level of support is considered more tangible than emotional support. On the contrary, women appear to be keener on the relational aspects of support, especially as they value relationships more within the workplace compared to men (Peterson, 2004). So, making them feel accepted, welcome, checking in on them, and generally making them feel cared for and valued are considered tangible elements of good support that facilitate successful RTW for them. Therefore, strengthening Nielsen *et al.*'s (2013) suggestion that where women do not feel listened to, helped or sympathised with during the RTW process, it impacts negatively on RTW outcomes. Findings from this thesis, therefore, suggests that while support is considered crucial in the RTW process, for it to yield the desired outcome, the nature of support provided must be regarded as beneficial and adequate by the recipient. The impact of helpful and unhelpful workplace support has previously been researched, and their findings agree with our findings on the benefits of providing supports that recipients perceive as helpful (Gray, 2018; Glaser, et al., 1999; Viswesvaran, et al., 1999). Hence, it would be a missed opportunity for employers in achieving successful RTW for returning employees to adopt a “*one size fit all*” workplace support approach without taking account of what men and women consider helpful.

Findings also tended to suggest that the gender of line-managers plays a crucial role in the provision of excellent and tangible support during the RTW process. Participants who reported sustainable RTW outcomes attributed their outcomes to having a supportive and empathetic line manager, and participants had female line-managers, strengthening findings from Amir *et al.*'s (2010) study on line-managers' attitude to people sick-listed with cancer on RTW. Their results showed that female managers hold more positive attitude than male

managers towards people sick-listed with cancer and are more willing to help them maintain normality on return.

In this study, what separated female managers from male managers was their personal touch to managing the RTW process beyond workplace procedures. Participant's perceptions of their female line-manager's approach to supporting them were observed by expressions of genuine care and empathy shown through regular check in to ensure workload aligned with their limitations, encouragement to take breaks or go home where difficulties with coping were established. While this finding may corroborate Bansal *et al.*'s (2000) assumption about men's lack of supportive capabilities, however, their views on male line-managers being more supportive of male employees sick-listed with CMDs was not supported. More male participants with CMDs in this study reported unsupportive encounters with their male line-managers. Even though findings may be indicative of male managers not being suited to handling RTW processes for sensitive conditions as suggested by Amir *et al.*'s (2010), it may be contentious to generalise on their incompetence, mostly as there were also a few reported cases of unsupportive encounters with female managers by participants. Implying that while being female may be advantageous to an extent, offering good support may be dependent on individuals and their ability to be caring and empathic. Alternatively, a manager's ability to provide good support to sick-listed employees could be as a result of own personal experiences of absence due to these conditions (MSDs or CMDs) or from acquired skills of prior experience of handling RTW processes for people with related conditions. This assumption is based on the fact that some managers raised this as influencing factors to their ability to be empathetic and supportive.

Nonetheless, there is a need for further research in this area to ascertain the impact of the gender of line-managers on good support during the RTW process. Overall, more women than men and more people sick-listed with CMDs than MSDs in both organisations gave accounts of unsupportive experiences in the workplace during the RTW process. The strength of the evidence supporting the initial theory that women are less likely to participate in the RTW process due to unsupportive encounters is, therefore, weakened as both men and women shared this same view (Laisné, et al., 2013; Nielsen, et al., 2013). Consequently, consistencies in unsupportive encounters among people sick-listed with CMDs suggests that organisations are still behind on how to manage mental health issues in the workplace effectively.

Workplace health services

More female than male participants in organisation one engaged the health services within the workplace, which was considered beneficial and instrumental to recovery, thus impacting sustainable RTW. While organisation one had a wide range of different services contracted by the organisation, organisation two had fewer which was considered inadequate especially as services in their experience were more tailored to the needs of people sick-listed with CMDs than MSDs. Although the proactive behaviours of women seeking out helpful services are well documented in the literature (Stergiou-Kita, et al., 2016; Lederer, et al., 2012; De Rijk, et al., 2008), Edmund *et al.*'s (2001) suggestion that women's self-seeking behaviour is motivated by employers being more interested in supporting male employees was not supported. Both male and female participants expressed awareness of the workplace health services either before absence or after an absence period. However, as reported by Ritterl *et al.* (2018), more women than men expressed satisfaction with the services used. Decisions not to engage these services by male participants were made based on the complex nature of health condition, and a lack of trust in the available services to deliver effective solutions to their health issues, therefore, influencing the need to seek paid or funded health services outside the workplace. Even though workplace services were generally considered helpful and supportive by female participants, drawbacks such as insufficient counselling or physiotherapy sessions and inconsistencies with counsellors among people with CMDs were highlighted. According to these participants, restrictions to six sessions lessens their chances of speedy recovery and having to deal with different counsellors at different points was disruptive to the recovery process. Complaints about the impact of these restrictions stress the need for employers to be more flexible with the provision of services, taking account of the complex nature of these health conditions. Additionally, ensuring the availability of more consistent service providers for people sick-listed with CMDs will play a role in speedy recovery and sustainability of return.

Self-management

All Participants sick-listed with MSDs and CMDs acknowledged that being proactive by taking responsibility for their health in the form of self-managing their condition both during and after absence helped attain recovery, thus impacting on sustainable RTW outcomes. These activities were either medical, emotional, role changes, behavioural or lifestyle changes or physical activities such as sports. Self-managing behaviours were especially useful for participants who feared that returning to work was likely to impede regular treatment or rehab sessions, assigned treatment slots had been exhausted or dissatisfaction with a treatment plan. Hence the need to

take own initiative on alternative measures to monitor and manage their condition to a level that is reasonably bearable and can accommodate work without restrictions. In line with Summer *et al.*'s (2014) findings, accounts of participants in this study suggest that taking responsibility for one's health in the absence of adequate or accessible health services empowers sick-listed individuals with a better understanding of their conditions, the risk factors and its implications. However, the delay in securing treatment appointment in NHS raised by all participants may also explain the participant's need to self-manage. While all participants benefited from self-managing their conditions, people with CMDs particularly found it to be a better and more sustainable alternative to medication and other treatment plans. The position of participants sick-listed with CMDs could be explained by Davidson's (2009) assumption that people with CMDs are not attracted to professionally-led care which seems to lend responsibility rather than sharing it. Consequently, McCulloch's suggestion that people sick-listed CMDs are likely to return with a reliance on medication and poor self-medication along with other issues was supported in this study, as participants with CMDs who refused medication displayed better self-managing behaviours.

6.7.3 Factors that impede sustainable RTW or contribute to poor RTW outcomes

Domestic pressures

The adverse effects of domestic pressures on women ability to RTW early have been widely researched with conflicting conclusions. While some studies suggest that their domestic responsibilities heighten women's inability to attain speedy recovery during absence period at home (Lederer , et al., 2012; Ahlgren & Hammarström, 1999; Crook & Moldofsky, 1994), others believe that work and home interference constitutes a dominant role of employed adults in contemporary society. As such, it is not solely attributed to women alone (Montgomery, et al., 2003). In this study, domestic pressures were talked about in two main categories; home chores-activities and personal-external factors. While being physically active by carrying out home chores or other activities during sick leave was generally considered beneficial for people with both MSDs and CMDs, a few participants reported a negative impact on recovery and early return to work. This negative impact was only reported among female participants who were either single, divorced or separated parent to very young children and had no external support from friends or family. It, therefore, implies that the impacts of the demands of homework on recovery during absence are based on sick-listed individual's home situation during absence. Hence, as suggested by Montgomery's (2003), it could be argued that the same circumstance (being a single, divorced or separated parent of young children with no external

support) could also apply to male employees given our current contemporary society. Additionally, because participant pool was exclusive of men of these categories (being a single, divorced or separated parent of young children with no external support), the strength of evidence regarding the impact of domestic pressure is weakened. Therefore, giving scope for further research with a more inclusive target group to draw stronger conclusions.

Having on-going personal or external issues during absence was found to negatively impact on recovery for male and female participants sick-listed with CMD, thus contributing to a delayed RTW or failed RTW irrespective of effective workplace RTW strategies. In other words, where conditions at home are not ideal, treatment would be counterproductive as root-causes or contributing factors are persisting. Findings align with Summerfield's (2000) assertion that an individual's recovery from mental illness is grounded in their social recovery. Social recovery here is defined as people's ability to live a meaningful and contributing life with minimal social disruption while experiencing mental illness (Warner, 2004; Tew, 2013). Meaning that having a more stable social environment is likely to accord individuals the opportunity to manage their condition more effectively, where this is not attainable, the risk of aggravating mental condition is high. While it is difficult for employers to control employee's external stressors, the need to take a holistic approach to manage RTW is imperative. A management approach that recognises the importance and interaction of work and home problems could be beneficial (HSENI, 2019). According to HSENI (2019), strategies such as being sympathetic and proactive in communication with employees, providing flexible working options, providing supportive services in-house and recommending outside support can work effectively to improve morale, reduce sickness absence, increase productivity and commitment and retain employees sick-listed with CMDs, who are dealing with external issues. However, bridging the interaction of people's home and work problems may be a "*slippery slope*". As such, caution is advised especially as some employees may not be comfortable discussing their mental health and home issues with their employers for various reasons (career advancement, privacy, stigmatisation, etc.). Hence involving a specialist in this process may be beneficial in ensuring confidentiality and building employee's trust in the motives of their employers.

Extended Absence

More men sick-listed with CMDs compared to women acknowledged that being absent for an extended period posed challenges for returning workers. This finding, therefore, strengthens Henderson *et al.*'s (2005) and The Mental Health Foundation's (2009) assertion that extended

absence is associated with a reduced probability of RTW for people sick-listed with CMDs. Hence the inference that extended absence is the most important predictor of work disability for this category of sick-listed individuals (Koopmans, et al., 2007).

Accounts of participants showed that while some participants are aware of the dangers of extended absence, others are not, and are not likely to give in to early return to work because of the complexity of the nature of the illness. Accounts of participants who forced themselves to early return indicated that the sooner individuals RTW, the more accustomed they are to the work environment and task, building up their resilience against difficulties, which leads to a successful RTW in the long run. Thus strengthening the assertion that work is an important component for a speedy recovery after ill-health and that work is generally beneficial for physical and mental health (Alavi & Oxley, 2013; Waddel & Burton, 2006). Some participants who experienced challenges referred to the conscious effort and push they exerted on themselves to return while being cognisant of the negative impact of an extended absence. This emphasis on self-push may suggest that individuals who are not aware of the implications of an extended absence on disability and as such are not inclined to push themselves against challenges during the RTW process are likely to relapse, contributing to further absence period. Hence resilience might not be a universal mechanism to overcome the difficulties of RTW associated with extended absence as people have different personality traits, and as such are likely to react differently in challenging circumstances or situations (Fleeson, 2004).

Additionally, issues around the implementation of ineffective RTW strategies were identified across participants who expressed difficulties in the RTW process which contributed to a failed RTW. This finding strengthens suggestions around the importance of implementing appropriate workplace RTW strategies, taking account of employee's length of absence period, and how that is likely to facilitate sustainable RTW outcomes. While issues around extended absence were mostly discussed among the male participants, it is unclear if it can be implied that compared to men, women are more resilient to challenges; considering more women than men talked about the effort they exerted in pushing through the difficulties. Consequently, while Kelly *et al.*'s (2008) suggestions on women being more to use coping strategies to change their emotional responses to a challenging situation could easily explain these findings, there are too few studies on this to draw definite conclusions. Therefore, giving scope for further research in this area for clarity.

Impact of RTW on rehabilitation time

This study showed that all participants at the time of RTW were not fully recovered as a result

of either influence from workplace policy, personal factors or the need to reduce the risk of long-term disability from further absence period. However, early return to work was shown to have its pitfalls, especially among people requiring continued rehabilitation time to attain full recovery. Participants sick-listed with MSDs who required physiotherapy were of the view that coming back to work impeded their ability to continue with rehabilitation sessions which in most cases were scheduled during working hours. Accounts of participants revealed the distinction between treatment period and rehabilitation period, which most organisations do not take account of when drafting sick leave policies. According to Kennedy & Callaghan (2004), the term “rehabilitation” holds different connotations to employers and employees. For employers, helping employees RTW and regain their capacity or adjust to disability following ill-health is considered rehabilitation (Kennedy & Callaghan, 2004). While participants believed rehabilitation connotes actions of recovery after treatment procedures through such programmes as physiotherapy. While employers, according to these participants, do not consider recovery time in their rehabilitation plan, they are keen to help people manage their condition while at work. It could be argued that this is counterproductive in the sense that expecting people with severe physical conditions requiring actual recovery to be able to conduct work tasks to RTW earlier than required is likely to worsen their condition and trigger a relapse. There is, therefore, a need for employers and health care personnel to consider both recovery and rehabilitation period in the sickness absence timeframe granted employees with MSDs. Taking account of these timeframes will accord them sufficient time to attain full recovery before return to work to avoid worsening the condition on RTW. Alternatively, according to them, access to rehabilitation sessions after return, while also providing appropriate workstation accommodations to reducing the risk of the job to their condition might be beneficial to achieving a sustainable RTW.

Health characteristics

Issues around the impact of employee’s health characteristics on RTW was discussed under two main topics to include comorbidity and recovery. Previous studies suggest that unlike men, women are more likely to wait until full recovery from ill-health before RTW (De Rijk, et al., 2008) and that this could be as a result of women being more likely to report comorbidity, thus impacting on delayed RTW. However, while more women than men in this study reported delayed return as a result of comorbidity, contrary to De Rijk *et al.*’s (2008) assumptions that women wait till full recovery before RTW, both male and female participants returned to work while not fully recovered. According to participants, returning to work was more out of a

necessity or surrounding circumstances, instead of recovery from ill-health, suggesting that they are more ill workers at work than recovered, thus increasing the issue of presenteeism in the workplace which studies have shown becomes detrimental to both the employee (prolonged disability) and the organisation (productivity loss) (Johns, 2009). All participants said that they had reached a stage in their recovery where they felt they were able to accommodate work. So, while these employees were not fully recovered, they were recovered enough to manage work while still recovering. However, few female participants sick-listed with MSDs and CMDs who reported comorbidity during absence explained that delayed RTW was dependent on the severity and nature of their illness. Meaning, different conditions come with various changes in diagnosis or category of complaints and in some cases with unintended complications which takes a toll on recovery time and RTW. According to Beak *et al.* (2015), MSDs and CMDs in previous studies have been observed to be frequently accompanied by comorbid symptoms, which suggests that comorbidity may not be a gender-specific issue. Consequently, the issue of comorbidity is often associated with the elderly (Davis, et al., 2011); however, there is no clinical evidence suggesting the same link to women, thus making this assumption contentious.

Workplace risk factors

According to Ekberg (1995), understanding the risk factors within the workplace and the ability to identify and alter them is the basis for an effective RTW program. The link between workplace factors and a successful RTW has long been studied and impeding workplace factors such as low job grade, high job stressors, reorganisational stress, the threat to unemployment, unemployment etc. have been flagged (Blank, et al., 2008). However, in this study, five main workplace factors that impeded either the effectiveness of RTW strategies or a sustainable RTW for people sick-listed with MSDs and CMDs were identified. Workplace factors included; organisational or departmental changes, nature of the job, workload clarity, toxic working environment and lack of management support.

Returning to work during periods of organisational or departmental changes was found to be disruptive and impacted negatively on adequate support and effective implementation of effective RTW strategies for participants, leading to poor RTW outcomes. For example, changes requiring a change of line-manager meant that returning workers had no line manager to manage the RTW process, and as such RTW for these individuals was “*business as usual*”, which had negative impacts on RTW outcomes. This finding aligns with results from Caveen *et al.*'s (2006) study, which showed the link between organisational changes and increased disability claims. According to Kearns *et al.* (1997), times of organisational restructuring

requires a need for better communication on issues, identification of risk elements and maintenance of the support system within the organisation. Where these are neglected, as shown in the study, proper channels during RTW is likely to be boycotted. In this study, one participant of managerial level reported a lack of implementation of RTW strategies during a period of organisational change involving a change of her direct line-manager. The absence of a line-manager to follow due RTW process impacted negatively on RTW outcome. Employers may be inclined to assume that sick-listed managers are knowledgeable in handling RTW processes, hence providing an interim line-manager may not be necessary as they can manage their return without challenges. It, therefore, suggests that an employee's job level is likely to impact negatively on due RTW process during periods of organisational change, thus contributing to poor RTW outcomes. However, the link between job level and ensuring due RTW process is effected during organisational changes was not pursued in much detail in this study. Moreover, conclusions on this assumption cannot be drawn as not all managers made this link, thus giving scope for further research on this.

Consistent with previous studies, a participant's nature of the job was found to impact on sustainable RTW outcomes (MacKenzie, et al., 1998). Understanding ill-health and how the nature of the job impacts might be a practical approach to implementing beneficial RTW strategies, as suggested by participants. A good model of taking account of participant's nature of job and ill-health was demonstrated in a case where the line manager's recognition that participant's typing job task aggravated participant's hand and arm injury. Recognition of participant's struggles led to the decision to lessen typing task until recovery was attained, which in turn impacted on a sustainable RTW. Therefore, it shows that where proper accommodations are not considered for participants, it makes working challenging, and ultimately aggravating condition until a relapse.

There is growing literature on the negative impact of toxic workplace culture (Chu, 2014). However, the direct effects of toxic workplace culture on failed RTW has not been researched in much depth. In this study, toxic workplace cultures were demonstrated in the form of unsupportive encounters during the RTW process which participants sick-listed with CMDs particularly viewed as how they were made to feel and the quality of interpersonal relationship among colleagues and line-managers. While some departments promote a supportive and respectful environment, participants in other departments experienced issues around isolation, conflicts, discrimination and stigmatisation which impacted negatively on health outcomes leading to relapse and recurrent absence episode. Findings thus explain the

inconsistencies in RTW outcomes within the same organisation as a result of the difference in work cultures. Findings from this study also magnify the importance of making people feel included, accepted, listened to and not necessarily singled out as a result of their condition, as this would be helpful in a smooth transition back to work. It is therefore essential to maintain a supportive but not intrusive or judgmental communication with returning workers throughout the RTW process. The account of these participants suggests that toxic environments play a role in poor RTW outcomes, and also, that line-managers who have on-going conflicts with returning workers may not be the best people to handle their RTW process. It might be more beneficial to consider alternatives such as an assigned RTW coordinator or a change of department for the employee as was the case with some participants. Additionally, fostering a supportive workplace culture is likely to instigate healthy behaviours within the workplace, which in turn impacts positively on RTW outcomes.

Issues around lack of workload clarity and how it impacted on sustainable RTW outcomes were commonly raised among female participants. Therefore, contradicting findings from Lederer *et al.*'s (2012) study which showed that compared to women, male workers were more likely to raise perceived workload issues because men are more likely to be exposed to heavier workloads. Our findings were justified in that while both male and female participants expressed concerns with their workload, more men than women were comfortable seeking out help from colleagues with their workload. Women in this study believed that clarifying the expectations regarding the workload to be covered on initial RTW is paramount to successful outcomes. And as such, where RTW interviews failed to discuss issues around workload, participants were left to manage full-time workload, which posed challenges and resulted in detrimental effects on their health. It is therefore important that RTW interviews include discussions around workload and what is expected of participants as to where this is not communicated, participants are likely to feel overwhelmed, which could impact negatively on RTW outcomes.

A general lack of senior management support was identified across both organisations as a significant contribution to the implementation of poor RTW strategies. Lack of support from higher management was considered across participants in the form a lack of understanding which is reflected in the way RTW is poorly managed and how it contributed to poor RTW outcomes. For these participants, while their line-managers were supportive, their efforts at helping them secure the right accommodation to facilitate sustainable RTW was stifled by management. As organisation one raised issues around management's refusal to

approve recommended accommodations during the RTW process, organisation two raised concerns around ineffective RTW structures for people sick-listed with CMDs, even though the RTW process was more attuned to CMDs than MSDs. According to participants from organisation two (a college), there is a general lack of understanding of mental health issues across the education system, which impacts negatively on the level of support provided during absence and RTW. The accounts of these participants suggest that working within the education sector may be an explanation for the indifference on the part of management in effectively managing absence rate due to mental issues. It is thus aligning with the Office for National Statistics (2018) recent report showing that the education sector among other public sector organisations has the most notable sickness absence rates.

Additionally, the National Education Union (2019) suggests that mental ill-health is one of the most significant causes of sickness absence in the education sector, and absence issues are often associated with excessive workloads. Our finding shows that while management is unaware of how they contribute to the risk of the job to their health, it impedes the effectiveness of RTW measures, primarily when fundamental root causes such as workload pressures, are not eliminated. It is, therefore, evident that management support hinges on their level of understanding about ill-health, which precedes the provision of the most appropriate aids or accommodations for a sustainable RTW. Therefore, supporting Baril *et al.*'s (2003) suggestion that the success of RTW programs hinges on management's commitment to the health and safety of its workers. In other words, when organisation fully understands the gravity of these conditions (MSDs & CMDs), and its broader impacts to both the employee and the organisation (Henderson, et al., 2005; Chartered Institute of Personnel and Development, 2010), they would appreciate the importance of helping employees RTW sustainably.

Although returning worker's psychosocial factors have been shown to impact RTW outcomes, workplace factors play more critical roles in the sustainability of RTW (Soklaridis, et al., 2010). Hence the need for employers to ensure the right course of actions, taking account of likely risk factors within the workplace, are put in place for people sick-listed with CMDs and MSDs.

6.7 Conclusions

The research question (**RQ3**) for this present study concerned the extent to which gender plays a role in sustainable RTW for people sick-listed with CMDs and MSDs during the RTW process. Even though findings showed that gender played a role in facilitating or impeding RTW outcomes, however, RTW outcomes impacted was only limited to initial RTW after sick

leave and poor RTW outcomes and not sustainable RTW. Additionally, views on factors that impact sustainable RTW appeared to be widely shared by both male and female participants. Sustainable RTW after ill-health was, however, found to be mainly facilitated or impeded by organisational factors such as a good quality workplace RTW process.

This study identified critical components of workplace RTW processes that facilitate a sustainable RTW for employees who have been sick-listed on a short-term or long-term basis. A competent and supportive line-manager working in collaboration with other support services was found to be instrumental in implementing effective RTW strategies. However, where employees' nature of the illness, level of recovery at the point of return and limitations are not taken into account in the RTW approach, a failed return is inevitable.

Even though this study has identified several areas for further research, which in itself is considered useful in advancing the knowledge base in this area, many grey areas regarding the gender influences on RTW outcomes have been brought to light. Furthermore, findings from this thesis will provide scope for the implementation of more effective RTW processes that is likely to facilitate a sustainable RTW, thereby reducing the country's insignificant absence rate due to MSDs and CMDs.

To conclude this second study, find below a summary of how it achieved its aims.

Aims 1: Analyse the RTW processes at the workplace and identify the factors that facilitate or impede RTW outcomes.

An analysis of the RTW experiences of participants showed that many personal, social and organisational factors play a role in facilitating or impeding three main RTW outcomes; RTW after a period of sick leave, sustainable RTW and poor RTW outcomes (a delayed and failed RTW). Factors that influenced or motivated decisions to RTW after a period of sick leave included; treatment and rehabilitation, contact during absence, recognition of condition, work importance, workplace motivating factors (fear of increasing job loss/progression, sick leave guilt, fear of increasing workload and pressured to RTW) and external support. Poor RTW outcomes were influenced by domestic pressures, extended absence, the negative impact of RTW and workplace risk factors (organisational/departmental changes, nature of the job, workload clarity, toxic workplace culture and lack of senior managerial support). Factors that either played a role or facilitated a sustainable RTW were good quality RTW process, awareness of workplace health services, workplace support and self-management.

Aims 2: Using the results of objective 1, compare factors across men and women to identify similarities and differences in factors that influence RTW outcomes.

While some gender-specific factors were identified as motivators to RTW after periods of sick leave, other influences such as organisational factors and nature of employee's ill-health also played a role in RTW outcomes. Showing that factors that facilitate RTW outcome for men and women might not be specific to their gender, but in most cases may be circumstantial. However, factors that impacted RTW outcomes for female participants included; engaging workplace health services, work as evidence of achievement, work for social interaction, sick leave guilt, and workload clarity. For men, a fear of increasing workload and extended absence played a role in RTW outcomes.

Aims 3: Using results from objective 1 and 2, develop an in-depth understanding of the role of gender in facilitating a sustainable RTW after ill-health due to MSDs and CMD.

The role of gender identified in this study was only evident in motivating decisions to RTW after the sick leave period, which in some cases impacted poor RTW outcomes and not sustainable RTW. However, findings from this study showed that sustainable RTW for people sick-listed with CMDs and MSDs is predominantly dependent on organisational factors such as a good quality RTW process implemented by a competent and supportive line-manager. Hence, where effective RTW strategies are not in place for returning employees, the likelihood of a failed RTW is high.

SECTION D: Thesis Conclusion

7. Chapter seven: Discussion and Summary of Thesis

7.1 Chapter introduction

The findings of this thesis are discussed in this final chapter. In this chapter, I will place the thesis in perspective by summarising the meaning and relevance of the findings of this thesis. This will be followed by the strengths and limitations for study one and two, the overall implication for policy and practice, theoretical contribution and research implication, a set of recommendations and the conclusion of this thesis.

A multi-method design consisting of a systematic review and a realist evaluation within a qualitative study was adopted to systematically investigate the role of employees' personal and social factors on sustainable RTW after ill-health due to CMDs and MSDs. Three main research questions (**RQ**) informed this investigation; **RQ1** and **RQ2** were developed for the systematic review and **RQ3** for the qualitative study. **RQ1** and **RQ2** aimed at determining if sustainable RTW is facilitated by personal and social factors and the commonality across factors for people sick-listed with both conditions (CMDs and MSDs). Findings showed that sustainable RTW is facilitated by an interplay of personal and social factors and that factors are shared across both conditions. However, based on gaps identified in the systematic review, **RQ3** was developed to establish the extent to which gender plays a role in sustainable RTW during the RTW process. While findings from the qualitative study identified the impact of key gender-specific factors on RTW outcomes, however, their effects were not evident on sustainable RTW. This thesis highlights several contributions to scholarly knowledge on sustainable RTW for people sick-listed with CMDs and MSDs and will be presented in more details in section 7.6.

7.2 Sustainable RTW after ill-health due to MSDs and CMDs

Findings from this thesis show that while personal and social factors play a role in RTW outcomes for individuals sick-listed with MSDs and CMDs, a sustainable RTW for these individuals is mainly facilitated by organisational factors.

Alavi and Oxley's (2013) suggestion that more sustainable RTW outcomes would be achieved when employee's personal and social factors are taken into account during the implementation of RTW interventions was justified in the systematic review. More specifically, the review highlighted the positive effects of a supportive environment during the RTW on employee's work attitude and self-efficacy and how that facilitates a sustainable RTW. The role of these factors (support from leaders and co-workers, positive attitude and self-efficacy) in facilitating sustainable RTW outcomes is consistent with previous studies

(Haveraen, 2013; De Vries, et al., 2014; Huijs, et al., 2012; Brouwer, et al., 2010). However, it is still unclear the direct interaction of these factors resulting in sustainable RTW outcomes. Does support from a leader and co-worker boost in employees a positive attitude and high self-efficacy, or are employees with a positive attitude and high self-efficacy more likely to be supported by leaders and co-workers which in-turn influences a sustainable RTW? Further research is, therefore, required for clarity.

Promising evidence suggesting the positive effect of job crafting practices on sustainable RTW was also shown in the systematic review. While the role of job crafting on sustainable RTW has not been studied in much depth, findings show that supportive workplaces that encourage autonomy in carrying out job tasks might benefit more from the positive effects of job crafting (Wang, et al., 2017; McClelland, et al., 2014). Consequently, consistent with previous studies was the effects of being of a younger age, having a high education, low economic income/ status, a temporary job contract and being absent on a short-term basis on RTW outcomes (Cancelliere, et al., 2016; Gallagher, et al., 1989).

The systematic review also produced inconsistent evidence around the effects of gender on sustainable RTW; while some studies showed that men were more likely to RTW faster and sustainably (Opsahl , et al., 2016; Roelen, et al., 2012; Lydell , et al., 2009; De Rijk, et al., 2008), some showed that women were most likely to return to work sustainably compared to men (Volker, et al., 2015; Crook & Moldofsky, 1994). As the disparity in these findings suggested a variance in the factors that influence RTW outcomes for men and women, it was unclear if these factors were merely gender-specific or organisational. It is for this reason that a realist evaluation within a qualitative study was conducted in the second study, to understand the interaction of factors at play regarding the effects of gender.

Findings from this study identified three main RTW outcomes impacted by varied factors; RTW after sick leave, sustainable RTW and poor RTW outcomes (delayed RTW and failed RTW). While gender-specific factors were identified in the data, these factors only played a role in facilitating initial RTW after sick leave and poor RTW outcomes and not sustainable RTW as expected. For women, on the one hand, being aware of the workplace health services, seeing work as evidence of accomplishment and as a means for social interaction, having guilt over being on sick leave, having a fear of job loss or progression as a result of extended absence impacted initial RTW after sick leave. On the other hand, a lack of workload clarity impacted negatively on their outcomes after initial RTW. For men, a fear of increasing workload while on sick leave motivated decisions to RTW and having been absent

for an extended period posed challenges to successful RTW. The role of gender, as observed in this study, therefore, aligns with Stergiou-Kita *et al.*'s (2016) assertion that gender impacts RTW experiences in multiple ways. The disparity in these factors for both genders reveals how different their experiences are individually or at the workplace, and how that can influence decisions to RTW even when recovery is not fully attained. Thereby suggesting that where experiences are somehow shared for both genders, shared factors would in-turn facilitate RTW outcomes. However, while some of these factors can be adjustable, some factors relating to the nature of employees' ill-health, such as being absent for an extended period, are not. Additionally, even though male and female participants widely shared the effects of a supportive workplace, their perceptions on the nature of support considered beneficial varied. While women benefitted more from emotional aspects of support relating to relationships within the work environment, and how valued they felt, male employees, benefitted more from physical support relating to effectively reducing the burden of their workload.

Sustainable RTW in this study was shown to be majorly driven by organisational factors during and after the RTW process. Findings revealed that both organisations, to a great extent, adopted best practices as suggested by HSE (2004) in managing RTW. Across both organisations, most employees were contacted during absence, employee's ill-health status was reviewed with the GP, and RTW discussions were held to agree on the best RTW strategies to adopt for the sick-listed individual. However, effective implementation of RTW strategies appeared to be dependent on a competent and supportive line manager working in collaboration with other support services available at the workplace, which is consistent with Corbière *et al.*'s (2019) findings. The role of these support services was to ensure line-manager was clear about the employee's nature of the illness, where they were in their recovery, and employee's restrictions with regards to what they can do, thus informing an appropriate RTW strategy for the employee. As sick-listed employees classed as short-term absentees benefited from an RTW strategy that offered flexible working options, long-term absentees benefited from a phased RTW strategy. However, where RTW initiatives were not fully supported by senior management in the organisations, implementation of effective strategies for sick-listed employees was impeded, which in turn hindered sustainable RTW, suggesting that while line-managers may have the capability and needed help in developing and implementing an effective RTW strategy that would benefit returning employee, where required resources and facilities are not approved by management, the likelihood of a failed RTW is high.

Consistent with findings from both studies in this thesis is the revelation that RTW after a period of absence is more likely to be facilitated or influenced by employee's personal, social or organisational factors rather than from recovery from ill-health. All participants in the qualitative study confirmed that recovery from not attained at the point of RTW, showing that there are unhealthier than healthy workers at the workplace, which contributes to the issue of presenteeism. Presenteeism refers to a situation where people continue to work while unwell and therefore, not functioning in their full capacity (Kinman, 2019). Consistent with findings from the systematic review and previous studies, job status/security, financial responsibilities, sickness absence policy, and fear of job loss were some of the factors identified in the qualitative study to encourage presenteeism (Miraglia & Johns, 2016; Kim, et al., 2016; Johns, 2010; Munir, et al., 2008). While presenteeism as a risk a factor to sustainable outcomes was not directly interrogated in this study, especially as participants saw returning to work despite ill-health a necessity, its effects and implications cannot be overlooked. According to Miraglia and Kinman (2017), presenteeism is becoming increasingly prevalent with varying financial implications to employers. However, it is assumed that provided ill-health is not contagious or debilitating; the benefits may outweigh the costs (Kinman & Wray, 2018). In the case of this study, there was a high likelihood of participants withholding the full details of their recovery stage and work functionality to maintain their job and financial status at the cost of their ongoing recovery and cost to employers, especially when adequate workplace supportive strategies are not in place. Evidence around the effects of presenteeism in some studies have been observed in the area of delay of recovery, the risk of ill-health progressing into a more chronic condition, impaired productivity and eventual relapse resulting in further absence (Niven & Ciborowska, 2015; Johns, 2011). However, it is important to note that while presenteeism is a deliberate action by employees, in most cases, it is motivated by organisational factors. In this study, for example, financial motivations to RTW prematurely was influenced by workplace sickness absence policy requiring a cut in pay depending on the absence period and years of employment. Therefore, when employers take account of their role in contributing to presenteeism and provide more adequate support structures for employees, presenteeism or its effects are likely to be curbed.

This thesis has identified a wide range of factors (personal, social, and organisational) and elements of a good quality RTW strategy that facilitates or hinders RTW outcomes and sustainable RTW as a whole. These factors will inform the implication for policy and practice detailed in section 7.5.

7.3 Strengths and Limitations of study 1

The review process had the aim of being thorough, transparent and reproducible, and the critical appraisal method allowed for the inclusion of high-quality papers. A wide range of study designs was included to avoid an overlook of evidence that is often considered too weak for inclusion. However, it is possible that the selection approach adopted in this process could have increased the risk of selection bias which may have resulted in the exclusion of potentially relevant studies. It is also possible that some studies that would have been relevant to this review have not been identified because of them being unpublished. Additionally, the decision to exclude books and studies not published in English because of cost in translation may also have introduced language bias. Despite these potential limitations, the robustness of evidence in the review was enough to draw strong conclusions on the effects of personal and social factors on sustainable RTW.

One of the strengths of this review lies in the methodological build-up. Reporting the effects of a variety of personal and social factors and identifying the commonalities between conditions may have introduced a degree of complexity to the analytical process. Harvest plots were developed for ease of synthesis and visual display of evidence to support competing hypotheses about the impact of evaluated factors on sustainable return to work for both conditions separately. This graphical method of synthesising findings adapted from Thomas *et al.* (2008) seemed very useful to synthesise evidence across multiple sources.

Though adequate precaution was taken at each step of the systematic review to prevent any possible bias, it is still subject to limitations which could influence conclusions drawn. According to Khan *et al.* (2011), to minimise bias and error, a minimum of two researchers and a peer reviewer would be necessary. However, while this work required an independent effort, inter-rater checks from my supervisors was a strength of this review which ensured reliability in the interpretation of findings and reduced the potential for bias or errors.

7.4 Strengths and limitations of study 2

Gaps identified in the systematic review informed this study, therefore, highlighting the strength and validity of this study, which also makes findings from this study of significant relevance.

A major strength of the qualitative study is found in the extensive longitudinal nature of data collection and analysis, which allowed the generation of rich data that aided a nuanced understanding of the phenomenon under investigation. While the longitudinal design of this study was not designed to observe changes over time, it allowed clarity of specific links or relationships associated with identified outcomes.

Using the realist evaluation is a great strength of this study as it is a robust and analytical method that is particularly suitable for understanding practical implications. To my knowledge, this is the first study employing a realist evaluation lens to understanding the role of gender in the interplay of factors that impact RTW outcomes for people sick-listed with CMDs and MSDs. This approach aided the construction of meaningful context-mechanism-outcome configurations that provided insights explaining key factors and their influences and how it impacts on RTW outcomes. Additionally, a prior literature review and interviews with line-managers within the realist evaluation design accorded me the opportunity to gain in-depth insight of specific factors that impact RTW outcomes and the role gender plays, thus aiding the design of a useful interview guide. Consequently, the deductive and inductive approach to data collection made room for the generation of new ideas not captured in much depth in literature. A case study approach also adds to the strength of this study as it enabled triangulation which therefore ensures the validity of this study (Yin, 2009). Also, to ensure the quality of the data collected, the interview was piloted before data collection. Additionally, realist evaluations are purely deductive approaches, as such, modifying it to include an inductive analytic approach was a strength of this study. This approach enabled the emergence of new ideas which provided robust explanations to the effects of a wide range of factors on RTW outcomes that could have been omitted using a deductive approach alone.

Another strength of this study lies in the inclusion of two different organisations and people with both temporary and permanent contracts and short-term and long-term absence history. This inclusion aided useful comparison of RTW approaches across these organisations, resulting in the determination of the most effective RTW strategies for people of either short-term or long-term absence period, and how job contracts impact RTW outcomes.

Some limitations were identified in this study. A limited number of 22 participants were recruited for this study. At the same time, there are no standard rules on sample size in qualitative studies, repeated interviews with the same participants provided enough data for triangulation of accounts. As such convergent findings across many participants were identified, strengthening conclusions of this study (Yin, 2009). While a total of twenty-two participants were interviewed, having more female participants (15) compared to men (7) may raise contentions about the accuracy of findings in this study. However, there is evidence showing that more women than men in the public sector are likely to be sick-listed, thus explaining the difficulties in recruiting sick-listed male participants for this study (Office for National Statistics, 2014). The difficulty in recruiting male participants, therefore, increased

the likelihood of recruitment bias in this study. However, this was mitigated by extending recruitment into two organisations, thus aiding the validity of findings and ease of generalisation within the public sector setting.

Face-to-face semi-structured interviews were conducted with all twenty-two participants in the first interviews. Still, three telephone interviews were conducted in the second interview with three participants based on request. While this could have introduced a certain level of respondent bias, this was mitigated using triangulation which took the form of validating interpretations across participants. Novick (2008), argues that the absence of visual cues via telephone is likely to result in loss of contextual and non-verbal data and could compromise rapport, probing and interpretation of responses. However, loss of such data due to absence of visual cue in telephone interviews did not apply to this study as the longitudinal nature of data collection (second interviews) was for clarity of ideas already generated in the first interviews, and not generation of new ideas. Hence a telephone interview was therefore considered adequate for second interviews. Additionally, the loss of two participants in the second interviews to resignation did not impact the reliability of interpretation drawn from information provided in the first interview. As such, to enhance interpretive reliability, further triangulation was conducted by way of continually comparing generated data within and across cases.

7.5 Implication for policy and practice

Several practical implications for both policy and practice have been identified in this thesis. While main findings highlight the role of employee's personal and social factors on re-entry to work after a period of absence, the role of organisational factors on the sustainability of return is magnified.

Given that employee's personal issues may not be controllable by employers, organisational factors are; hence employers must enforce their duty of care (Health and Safety at Work Act (HASAWA), 1974) in ensuring that adequate measures are in place to support employees sick-listed with MSDs and CMDs. However, while the implementation of effective RTW measure hinges on a competent and supportive line-manager working in collaboration with other support services, line-manager's effectiveness is contingent on management's approval of required accommodations and aids for returning employees. Management that fails to buy into the mantra of "*healthy workers*" would be a stumbling block to sustainable RTW outcomes. As such, I recommend that policymakers also consider ways to guide leaders at all levels of organisations. The guidance could: outline the supportive role of line managers and

other key workplace professionals (e.g., human resources professionals, occupational health providers) during the RTW process; train these key workplace professionals on the RTW process and how to effectively manage and support returning workers; and outline ways to facilitate line managers in providing necessary support. According to Dewa *et al.* (2014), adequately training these workplace professionals is considered a pivotal aspect to best practices in effectively managing RTW for sick-listed individuals. Particularly training line-managers regularly would aid the unification of practices, thus reducing the inconsistencies in RTW outcomes within the same organisation observed in this study. It is also important for senior management to be duly informed or educated on the nature and impact of CMDs and MSDs, as this is likely to aid a more sympathetic response towards the provision of required resources during the RTW process, especially as the productivity of the organisation is dependent on these employees. A monitoring/follow-up system should be set-up by employers and carried out by contracted support services (e.g. Occupational Health, wellbeing team) to ensure line-managers have relevant skills and understanding to effectively manage the return to work process for people sick-listed with MSDs and CMDs. Findings also revealed the impact of workplace sickness absence policies (sick-pay and sickness absence triggers) on untimely RTW, which could be detrimental when effective RTW strategies are not in place to manage on-going ill-health. It is therefore crucial for employers to operate a flexible policy that manages RTW for sick-listed workers on a case by case basis, taking account of the nature and complexity of employee's condition and allows employees' enough time for recovery without consequences. Organisations with such policies are likely to expel undue pressures on sick-listed employees to RTW prematurely, thus reducing the risk of aggravating health condition.

Findings from this thesis provide a detailed understanding of helpful strategies that will be useful in tailoring RTW programs (considering risk factors for both genders) to meet men and women's potential specific needs. According to Lederer *et al.* (2012), tailoring RTW interventions/programs to men and women's specific needs and obstacles and focusing on the modifiable risk factors could increase the chances of lasting RTW in both groups. For example, as findings suggest the gender differences in perceptions of the nature of support considered helpful, workplace support should try to identify elements of the work that would ease the transition to work for both men and women. In this case, male participants will benefit more from support around the workload. In contrast, women would benefit more from an environment that makes them feel cared for and valued through effective communication and occasional follow-up on their progress.

Additionally, this study discovered issues around workload and the nature of the job that impacted negatively on RTW outcomes. Findings revealed that people sick-listed with CMDs are more likely to benefit from RTW strategies that physically engages employees instead of mind-engaging strategies or roles that are considered aggravating to their mental condition, hence, considering this approach would serve as a useful strategy for employers in retaining people with CMDs and reducing the likelihood of a relapse. The issue of workload was recognised as a motivator for early RTW and a risk factor to a failed return. Workload expectations must be clearly communicated to sick-listed employees before and immediately after sickness absence period to relieve undue pressure that could aggravate their ill-health. The benefits of gradually building an individual's workload within a phased return have been highlighted in this thesis; hence, more sustainable RTW outcomes could be attained if RTW coordinators or line managers adhered to this approach.

Effective management of the RTW process in organisation one compared to organisation two was attributed to the availability of a wide range of support and health services within the workplace. This study showed that because most participants could not afford private healthcare in the face of NHS delays, they were heavily reliant on services provided within the workplace. It is therefore important for employers to consider the benefits of healthy employees to the bottom-line of the organisation, and in effect, invest in quality and affordable health services to support and retain sick-listed workers. While some authors may argue on the underestimation of the indirect cost of providing these services to employers (Kessler, et al., 1999), the benefits accrued in the form of reduced sickness absence rates, reduced cost on absence and overall productivity far outweigh the assumed cost. In other words, investing in providing adequate health services in the workplace is likely to facilitate sustained recovery for both returning sick-listed workers and employees working while ill. The effects of the provision of these services on recovery would, in turn, foster a healthy environment, keep people at work and contribute to an organisation's bottom-line. However, it is important to note that this approach is likely to benefit employers who are keen on retaining workers on a long-term basis.

A significant deterrent to ease of transition back to work was identified as a toxic working environment. The need for employers to foster a supportive working environment cannot be overemphasized enough. An environment that makes employees feel valued cared for and not ignored, discriminated upon and blamed for condition plays a critical role in improving work attitudes and self-efficacy, which in turn facilitates retention at work. Where

these supportive behaviours are not promoted within the workplace, it breeds conflicts which contribute to poor team dynamics which this study has shown to have adverse effects on RTW outcomes. Existing RTW programmes will, therefore, need to encourage more supportive interactions between leaders and co-workers and returning workers during the RTW process (HSE, 2004), especially as this could have a direct effect on sustainable RTW, as well as an indirect impact through enhanced returners' attitudes toward work and self-efficacy.

Finally, this study also identified issues around the delay in receiving treatment and the inadequacy of treatment for people sick-listed with CMDs, which impacts negatively on recovery and sickness absence duration. If these issues persist, the likelihood of significantly reducing the prevalence of CMDs in the country is low. There is, therefore, a need for the government to urgently assess current mental health services, and put in place more adequate, accessible and efficient services to aid timely treatment and recovery for people with CMDs.

7.6 Theoretical contribution and research implication

Alavi and Oxley (2013) asserted that when research concentrates more on learning about factors associated with sustainable RTW, significant gains in RTW programs will be achieved. This thesis addresses this call by contributing evidence towards understanding the role of various factors that facilitate a sustainable RTW for workers sick-listed with MSDs and CMDs.

The evidence clearly outlining the specific components of the RTW strategies that are effective in facilitating a sustainable RTW for people with either short-term or long-term sickness absence duration is a significant contribution to the RTW literature. On the one hand, short-term sick-listed employees appeared to benefit from other flexible working options outside of a phased structure which took the form of working from home, a few days off within the week, light duties. On the other hand, long-term sick-listed employees benefitted from a phased return strategy with such components as reduced hours, reduced days, reduced workload, and a change in job role or level. Findings from this thesis suggest that the length of absence should inform decisions around appropriate strategies for more sustainable outcomes.

This thesis progresses our understanding of the common personal and social factors that facilitate RTW outcomes for people with CMDs and MSDs. Across both conditions, for example, workplace support, a good work attitude, high self-efficacy, a good quality RTW process and self-management appeared to play a role in sustainable RTW. This finding is a new contribution to the RTW literature which has not been addressed to date, as it proposes the cost-effectiveness of implementing more integrated/ holistic approaches to managing ill-health due to CMDs and MSDs at the workplace.

Scholarly knowledge on the effects of different factors on the three identified primary RTW outcomes (initial RTW after a sick leave period, sustainable RTW and poor RTW outcomes) is also advanced in this thesis. First, factors found to influence initial RTW after a sick leave period included treatment and rehabilitation, contact during absence, recognition of the condition, workplace motivating factors, work importance and external factors. Second, a good quality RTW process, workplace support, workplace health services and self-management facilitated a sustainable RTW. Third, factors that contributed to poor RTW outcomes included domestic pressure, extended absence, the impact of RTW on rehabilitation and workplace impeding factors. Effects of varied factors or interventions have previously been investigated on successful RTW after ill-health as a single outcome. Hence, identifying distinct categories of outcomes in this thesis is a new contribution to the RTW literature.

Finally, this thesis progresses our understanding of the role of gender in RTW outcomes and perceptions of the nature of helpful support. First, eight gender-specific factors were found to play a role in initial RTW after a sick leave period and poor RTW outcomes. For women, the factors included engaging the workplace health services, work as evidence of achievement, work for social interaction, sick leave guilt, fear of job loss or progression and workload clarity. For men, the factors were extended absence and fear of increasing workload. Second, perceptions of the nature of helpful support from the workplace and GP appeared to vary across men and women. While women benefitted more from the emotional aspects of support relating to relationships within the work environment, and how valued they felt, male employees, benefitted more from physical support relating to effectively reducing the burden of their workload. The effects of gender on RTW after sickness absence due to CMDs and MSDs to my knowledge has not been empirically tested, hence this is a new contribution to the gender literature on RTW.

[7.7 Recommendation for future research](#)

The review revealed several gaps in the currently available evidence. Most notable is a lack of sufficient literature evaluating the effects of job crafting, economic status, length of absence and job contract/security on sustainable return to work, making it challenging to draw confident conclusions. Hence, it would be useful to conduct further research in these areas to aid clear conclusions regarding its effects.

Although the realist evaluation approach to the qualitative study aided in unpacking explanatory context in which varied factors impacts RTW outcomes that would prove useful to employers and policy decision-makers, this research identified areas that provide scope for

further research. Concerning the theme “recognition of condition”, it was established that the ability of participants with CMDs to access adequate care is dependent on their willingness to acknowledge their condition and be open about it to their care providers. However, while the male context was not supported (De Rijk, et al., 2008), an age context (younger age) to openness about mental issues was identified as a possible explanation. Hence future research should focus on clarifying the link between the age of people sick-listed with CMDs, acknowledgement of condition and openness with care providers which impacts the quality of support provided.

For the impact of an extended absence on sustainable RTW, further research should examine the relationship between being male with a history of long-term absence and poor coping strategies. In this study, while a good number of male and female participants were considered long-term absentees, only male participants reported experiencing challenges in handling the pressures of work during the RTW process. It is, therefore, argued that women’s ease of transition back to work, despite challenges may be as a result of their ability to employ coping strategies to change their responses to challenges (Kelly, et al., 2008). However, because there is no sufficient literature to support this explanation, the need for more investigation would add to this knowledge.

There is no evidence on how an individual’s job level impacts on the implementation of due RTW process during periods of organisational changes, hence the need for future research in this area. While this study’s finding shows that the absent line-manager who returned during a period of organisational change (a change of manager) had the experience of poor RTW management, it is unclear whether this outcome was coincidental or representative of actual workplace practice. Hence further research in this area will aid in validating the assumed link between job level and due RTW process during periods of organisational changes.

Finally, an interpretative model explaining the role of identified factors on different RTW outcomes was developed in **chapter 6**. Therefore, future research (quantitative study) could be conducted to test the validity of defined relationships between factors and outcomes. This thesis provides a good number of sustainable RTW theories that could be tested using a variety of methods across a range of organisations.

7.8 Conclusion

This thesis has provided a significant contribution to the previously limited knowledge base around the role of different personal, social, and organisational factors on a sustainable RTW

after ill-health due to CMDs and MSDs that was very limited. MSDs and CMDs have consistently been recognised as the most common causes of sickness absence in developed countries. However, their shared similarities in health characteristics and psychosocial risk factors are often not considered when deploying RTW measures. As a result, relevant personal and social factors are not considered, which would explain the insignificant reductions in old and new cases of absence due to MSDs and CMDs. Helping people with CMDs and MSDs RTW after a period of sick leave is complex; therefore, this thesis focused on understanding how different factors interplay to achieve sustainable RTW outcomes, which is of interest to employers. A multi-method study consisting of a systematic review and realist evaluation within qualitative research was appropriately suited to achieve the main aims of this thesis. As the systematic review aided in identifying the interaction of personal and social factors that either facilitate or impede a sustainable RTW, the realist evaluation approach aided in explaining the context, mechanism and outcomes of the RTW process and the role gender plays. The refined and new theories developed in the realist evaluation uncovered greater depth in explanations around the main facilitating and impeding factors during the RTW process for people sick-listed with CMDs and MSDs. Additionally, it provided transferrable insights that will become useful for RTW coordinators and employers. Insights that would aid in implementing more holistic and effective RTW strategies for people with these conditions, and in turn, impact on the cost incurred due to days lost to work.

This thesis highlights the importance of educating workplace leaders on these health conditions, their symptoms, and how it impacts individuals. Having a good understanding of the complexities of these conditions increased line-managers capacity to be empathetic and strategic in developing the most appropriate RTW plan for sick-listed employees. Consequently, senior management's lack-lustre attitude to approving relevant resources and services to sick-listed individuals during the RTW process could only be explained by their lack of understanding regarding the severity of the condition and the benefit of requested amenities. This lack of understanding had negative implications on the ability of employees to effectively manage their on-going conditions, as well as sustain their return overall. Therefore, to ensure the full support of management and effective management of the RTW process for sick-listed individuals, educating leaders in the workplace is essential.

Finally, while employees' personal and social factors were shown to play a role in RTW outcomes, a significant finding of this thesis was the role organisational factors play in facilitating or impeding a sustainable RTW. All participants in this study returned to work

despite their condition, because in most cases like CMDs, full recovery may never be attained, therefore implying that where adequate measures by way of support and work modifications are not put in place by the employer, aggravating ill-health and eventual relapse is imminent. Additionally, where line-managers lack the competence to execute an effective RTW strategy, poor RTW outcomes are unavoidable. Hence training line-managers may be essential to ensure the implementation of a good quality RTW process.

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Appendices

Appendix 1: List of Electronic Databases Searched

Name of Database	No. of Relevant Ref. Found	No. of Ref. Exported	Date Accessed
Business Source Complete	1,188	11	05/01/2017
CINAHL	1,549	29	08/01/2017
Cochrane Library	352	2	01/11/2016
EBOSCO Host	1,138	8	08/01/2017
JSTOR	6,026	33	13/01/2017
Medline (OVID)	138	4	16/01/2017
PsychINFO	7,440	28	08/01/2017
PubMed	1,313	17	16/01/2017
Scopus	1,659	11	23/02/2017
ScienceDirect	12,025	42	10/03/2017
SPORTDiscus	6,999	12	10/03/2017
Web of Science	350	18	11/01/2017
Wiley Online Library	99	9	13/01/2017
Total	40,276	224	

Where NO represents number and REF. represents reference.

Appendix 2: Data Extraction Sheet

Paper	Authors, Date,
Study design	Briefly state the type of study.
Pre/Post Follow-ups (Months)	How long study took and the number of follow-up post intervention. If appropriate, how participants were assigned to intervention groups. How many observations are there?
Dependent Variables	This describes the nature of sustainable return to work. Any mediator variables that transmit the effects of the intervention.
Independent Variables	This describes the nature of interventions or, for observational studies, the variables investigated
Population	Where is the data sourced from (does it overlap with other studies), age/gender/ethnic/disability etc.?
Sample Size	This simply states the total number of participants. Providing the sample size per group in intervention studies.
Data Collection Tool	This simply states the data collection tools (e.g. questionnaire, interview, etc.).
Response Rate	Simply state the response rate of participants to the intervention/study. Country/region of study. Age/gender/ethnic/disability etc. composition if reported
Industrial Sector	State the industrial sector participating in the study.
Country	Country/region of study
Personal and Social factor included	This simply lists the personal and/or social factors evaluated in the studies.
Description of findings	What were the results with respect to sustainable return to work (including effect sizes, confidence intervals and their significance, for all relevant outcome) Were they positive or negative, or inconclusive, was causality established or demonstrated or just discussed/ suggested?

Appendix 3: Evidence Summary Table

Author/ Year	Study Design	Pre/Post Follow-Ups (Months)	Ill Health Condition	Dependent Variables	Independent Variables	Population	Sample Size	Data Collection Tool	Response Rate	Industrial Sector	Country	Personal/ Social Factor Involved	Description of Findings
Ahlstrom <i>et al.</i> 2013	Prospective	6 & 12 Months	MSDs, CMDs		workplace rehabilitatio n, supportive conditions at work and time	Women aged 35-65 years on long-term sick leave	N= 324	Questionn aire	72%, 60%	Human services organizati on	Sweden	Support from leaders	The results showed that individuals provided with workplace rehabilitation and supportive condition (e.g. influence at work, possibilities for development, degree of freedom at work, and meaning of work, quality of leadership, social support, and sense of community and work satisfaction) had significantly increased work ability and improved the RTW process for women on long-term sick leave.

Work
ability and
RTW

Andersen <i>et al.</i> 2014	Qualitative (Longitudinal)	3 Interviews within just after randomization, 3 months after and 6-7 months after.	CMDs	RTW	Workability assessments, RTW activities.	Persons on sick leave for approximately 8 weeks due to stress or depression, who spoke and understood Danish.	N= 18	Interview	94.4% at both 2 nd and 3 rd interview.	Various	Denmark	Support from leaders	At the last interview session, 11 participants had returned to work full time or part time or were no longer on sick leave. The workability assessment consultations and RTW activities could result in both motivation and frustration depending on the extent to which RTW professionals practiced an individual approach to sick listed persons. The individual approach seemed necessary for the realization of the positive potential in the RTW intervention.
Anema <i>et al.</i> 2003	Randomized controlled trial	Within 3 months and 3 months implementation.	MSDs	RTW	work design and organization, workplace and equipment design	Workers sick-listed between 2- 6 weeks due to LBP (male= 57.6%, mean age= 40.9)	N= 35	Questionnaire	78%	Health care & Social Security	Netherlands	Personal Characteristics (Attitude-Compliance), Support from leaders	Results suggests that participatory RTW programs was satisfactory and effective in stimulating a 66.7% RTW. It also suggests that compliance, satisfaction and acceptance of program

															by employees facilitates RTW.
Arends <i>et al.</i> 2014	Cluster randomized controlled trial	6 & 12 months	CMDs (stress, depression, anxiety, somatization)	Recurrent SA	Mental health complaints	Workers between 18-63 years with an episode of SA due to CMD of at least 2 weeks.	N= 158 (N=80 in intervention group and N=78 in control group)	Questionnaire	94.4% & 64% (at 3 months for both intervention and control group respectively)	Health care	Netherlands	Support from leaders	Results suggest that support from leaders in the return to work process are effective in reducing the incidence of recurrent sickness absence.		
Arnetz <i>et al.</i> 2003	Prospective controlled trial	0, 6 & 12 months	MSDs	RTW	Medical diagnose, rehab investigation, days to rehab plan, days to rehab cost, rehab cost, Number of sick days, age, gender and work hours	Employees of both genders diagnosed with a first or recurrent MSD. Mean age of 42.7 and 42.7 and Male/Female =31/41 and 26/39 in both intervention and reference group	N= 137 (N=65 in intervention group and N=72 in control group)	Standardized Nordic Questionnaire, Interview	84.6% & 27.8% (for both the intervention and reference group respectively)	National Insurance	Sweden	Support from leaders	The odds ratio for returning to work in the intervention group was 2.5% (95% confidence interval 1.2-5.1) compared to the reference group. It is suggested that management of MSDs should to a greater degree focus on early RTW and building on functional capacity and employee ability. Allowing the case managers, a more active role as well as involving ergonomist in workplace		

Baril <i>et al.</i> 2003	Qualitative	N/A	MSDs	RTW	Personal and socio-demographic factors, beliefs, attitude and motivation. (Injured worker, other actors in the workplace and those external to the workplace)	respectively . All actors involved in the RTW process for workers with MSDs. (Injured worker, other actors in the workplace and those external to the workplace)	N= 55 (Manitoba) N= 17 (Ontario) N= 36 (Quebec)	In-depth semi-structured interviews by focus groups and document review.	N/A	Various	Canada	Support from leaders and Co-workers	adaptation meetings might also be beneficial. Results from the study from injured workers suggests that characteristic influencing RTW success included personal and socio-demographic factors, beliefs and attitude and motivation. Human resources managers and health care professionals attributed worker's motivation to their individual characteristic, while injured workers, worker representatives and health and safety managers described workplace culture and the degree to which workers' well-being was considered as having a strong influence on workers' motivation. RTW success was therefore attributed to labour management relations and top
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Bernacki <i>et al.</i> 2000	Longitudina 1	10 years	MSDs, CMDs	Early RTW	The number of non-lost time and lost time cases, time lost from work, and the number of restricted workdays, job analyses.	Employees with work- related conditions.	1989 N= 16,212 1990 N= 16,851 1991 N= 17,022 1992 N= 17,136 1993 N= 17,771 1994 N= 18,282 1995 N= 19,565 1996 N= 20,921 1997 N= 21,016 1998 N= 22,156 1999 N= 28,518	OSHA 200 Log database, Occupatio nal injury clinic database, Health, safety and environme ntal departmen t's database.	-	Health Care	United States	Support from leaders	management commitment to Health and Safety. A significant decrease (55%) was observed in the rate of lost workday cases before versus after the return to work program. Furthermore, the number of lost workdays reduced from an average of 26.3 per 100 employees to 12.0 per 100 employees. The RTW initiative and the number of restricted duty days went from an average of 0.63 per 100 employees to 13.4 per 100 employees. The study suggests that a well-structured early RTW program is an integral part of a comprehensive effort to control the duration of disability associated with occupational injuries and illness. It also indicates that to be most effective, an early RTW program must include participation
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													by medical providers, safety professionals, injured employees, and supervisors. It also suggests the effectiveness of RTW programs if it includes an individual trained in ergonomics to facilitate job placement process.	
Besen <i>et al.</i> 2015	Longitudinal	1	3 time points (during initial visit to clinic, 7 days later and 3 months following initial visit).	MSDs (LBP)	RTW	Pain, catastrophizing, fear-avoidance beliefs, organizational support, RTW confidence, RTW expectations.	Participants with lumbar back pain with onset of less than 14 days. 18 - 63 years. Average age= 38, Male= 54%, white= 72%, non-Hispanic = 78%	N= 241	Questionnaire, Telephone interview, web-based survey, paper survey.	N/A	Health care	United States	Personal Characteristics (Attitude), Support from leaders and Coworkers.	Results suggest that successful return to work after an episode of LBP directly related to RTW confidence and RTW expectations, while; Pain, catastrophizing, fear-avoidance beliefs, organizational support, and RTW confidence were indirectly related to the RTW outcomes.
Bond and Bunce. 2001	Longitudinal Quasi-Experiment	2	1 observation times. 1-year follow up	CMDs	Stress and SA reduction	Mental ill-health, SA, job control and self-rated	Administrative employees in a UK central	N= 97	Questionnaire	56% in the PAR group and 53% in the	Public	United Kingdom	Job Crafting, Support from Leaders	Study found that work re-organization (PAR) interventions stirred by leaders, increased job control which mediated

pressure) maximum
and self- of 12 weeks.
efficacy Men= 466,
(willingness Women=
to expend 460. Aged
effort in 18-63 years.
completing Mean age=
a behaviour, 45.8 years.
persistence 33% of low
in the face level of
of adversity education,
and 30% of
willingness medium
to initiate level of
behaviour) education
and 30% of
high level of
education.
352 reported
MSDs, 235
reported
mental
symptoms
and 256
reported
other
physical
symptoms.

social support and the
three subscales of self-
efficacy. The final
multivariate model with
time to RTW as the
predicted outcome
included work attitude,
social support and
willingness to expend
effort in completing a
behaviour as significant
predictive factors.

Brouwer <i>et al.</i> 2010	Explorative (data from prospective 1-year cohort study)	6-12 weeks after onset of sick leave (baseline) and 10 months after listing sick.	MSDs, CMDs	Time to RTW across different health conditions	Perceived work attitude, self- efficacy and perceived social support	Workers on long-term sickness absence due to different types of symptoms. Absent for a maximum of 12 weeks. Workers with mental conditions such as Stress and depression or burnout, Workers with musculoskel etal conditions from back, upper and lower limb problems and workers with other physical	N= 862 (352= MSDs, 265= other physical conditio ns and 245= mental health conditio ns)	Questionn aire	86% at baseline.	Various	Netherla nds	Personal characteristics (Attitude, Self- Efficacy), Support from leaders and co-workers.	For workers out on musculoskeletal conditions, results showed that a good perceived work attitude, perceived support from supervisors, co-workers and other groups, and self-efficacy (willingness to expend effort in completing a behaviour) were significantly associated with time to RTW. While for workers out on mental health conditions, only self-efficacy (willingness to expend effort to complete a behaviour) was significantly associated with time to RTW.
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conditions such as diseases of the circulatory, digestive, neurological and respiratory systems. reported other physical symptoms.

Brouwer <i>et al.</i> 2011	Prospective Cohort	1,6,12 & 24 months post injury	MSDs (back or upper extremity)	RTW, RTW Self-efficacy.	RTW Self-efficacy, readiness for RTW, RTW status, SA duration and compensation characteristics, social support at work and health outcomes.	Workers who had filed a lost-time claim for back or upper extremity work-related MSDs. Only registered within 7 days post-	N= 632 at one month and N= 446 at 6 months.	Structured interviews, administrative database	61% at 1 month, 71% at 6 months	Various	Canada	Support from leaders and co-workers	The factor analyses supported three underlying factors; obtaining help from supervisors, coping with pain and obtaining help from co-workers. The total variance for the three scales were 68% at 1 month follow up and 76% at 6 months follow up. With regards to construct validity, relationships of RTW self-efficacy with depressive symptoms,
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injury was included

fear-avoidance, pain and general health were generally in the hypothesized direction. However the hypothesis that less advanced stages of change on the readiness for RTW scale could not be completely confirmed. Only pain RTW self-efficacy was significantly associated with RTW status and duration of work disability. The strength of association between RTW self-efficacy and other constructs was stronger at 6 months post injury compared to 1-month post injury.

Bültmann <i>et al.</i> 2009	Randomized Controlled Trial	12 months	MSDs	Cumulative SA hours	Work status, pain intensity, and functional disability	Participants absent from work for 4- 12 weeks, who have a reimbursement request indicating	N= 119 Intervention group= 68, Control group= 51	Questionnaire, Administrative data.	97% in the intervention group and 92% in the control group.	Public	Denmark	Support from leaders	For the time interval 0-6 months, 6-12 months and the entire follow-up period, the number of SA hours was significantly lower in the intervention group compared to the control group. In
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LBP or MSD as the main cause of sick leave and are 18 - 65 years of age.

conclusion, workers on sick leave for 4-12 weeks due to MSD who underwent the coordinated and tailored work rehabilitation intervention by an interdisciplinary team had fewer sickness absence hours than the controls.

Burtler <i>et al.</i> 2007	Prospective Cohort	1, 6 & 12 months	MSDs (LBP)	RTW	worker's satisfaction and health care	Workers aged 18 and older who filed worker's compensation claims for occupational back pain between January 1, 1999 and June 30, 2002.	N= 959 at one month follow up. N= 585 at six months follow up and N= 332 at 12 months follow up.	Survey, Interview	51% at baseline, 87% at 1 month, 62% at 6 months and 42% at 1 year.	Education	United States	Support from leaders	Results suggests that worker's satisfaction in the positive responses of their employers to their work-related injury claims is the most important influence on their stability in employment subsequent to onset of injury. Results show that although satisfaction with healthcare is influential, it is a much less important influence on patterns of employment than is a worker's perception of the actions of his employer.
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Crook and Moldofsky, 1994	Prospective longitudinal	3, 9, 15 & 21 months	MSDs	RTW or Remain on work at any point in time.	Gender, age, pattern of disability and RTW, LBP vs all other MSD pains	Workers who had sustained musculoskeletal injury at work and had not returned to work by 3 months post-injury. Male and female below age 60 (17-60). Mean age= 40.6, Males= 52.7%, females= 47.3%	N=148 at 3 months, N= 120 at 9 months, N= 115 at 15 months and N= 108 at 21 months	Interview	81% at 9 months, 95.8% at 15 months and 93.9% at 21 months.	Various	Canada	Personal characteristics	Results revealed that men are more likely to return to work earlier than women are. However, sustainability of RTW was more likely in women than in men. Workers aged 19-30 years had a higher probability of returning to work earlier, those aged 31-40 had a higher probability of remaining at work compared to workers aged 41-50 years. Results suggests that the probability of returning to work is dependent on the number of times work disability had recurred. Workers with shorter reoccurrence are more likely to remain at work. While workers with low back pain have a higher chance of reoccurrence compared to other musculoskeletal pains.
D'Amato and	Longitudinal	2-time waves (T1 & T2)	MSDs, CMDs	RTW	Psychological factors	Worker in full-time	N= 1460	Questionnaire	73% at T2	Various	Austria, Ireland,	Personal characteristics	Health improvement is necessary, but it alone is

Zijlstra, 2010		T2). Baseline and 6 months later.			(perceived health, well-being, self-efficacy, emotional exhaustion, depression, life events), Psychologic al aspects of the job (job stress, work ability, work centrality), organizatio nal policies for work resumption, experiences during the period of SA, RTW.					Finland, Netherlands and United Kingdom	, Support from leaders and co-workers	not enough as precondition for RTW. Psychological factors (self-efficacy, depression) and organizational factors had the highest impact on RTW. Results suggest that age and level of education play a marginal role in predicting return to work. People's beliefs and awareness were primary determinants of RTW. Arrangements made by the organization after a worker becomes absent to help RTW had a positive influence on RTW.	
De Rijk <i>et al.</i> 2008	Prospective Cohort	7-time frames (T1, T2, T3, T4, T5, T6, &	MSDs, CMDs	Initial and lasting RTW	Gender, RTW, lasting RTW, survival	Employees who reported sick for more than 1	N= 119	Questionnaire, structured face to face	56.6% at T1. 94.4% at the 1 st interview.	Various	Netherlands	Personal characteristics	Results suggest that men are more likely to have lasting RTW than women. Men with MSDs and no long-term disease were 3.5

T7) over 13 months.

time to month, who lasting had visited RTW, self-their OP rated health, between 1st reasons for May and reporting 11th sick, November presence of 2000. at least one Between 16- long-term 61 years, disease, worked 20h early per week or improveme more. nt and Male= 65, change in Women= 54 diagnosis.

interview, telephone interview

times more likely to have lasting return to work than men with mental illness and at least one long-term disease. While women with and early improvement in health and no changes in diagnosis were 5.5 times more likely to have lasting RTW than women who did not experience improvement and whose diagnosis had changed.

De Vries et al. 2014

Mixed 2 phases.

CMDs (depression)

RTW

Employees, supervisors and occupational physicians. Diagnosed with a major depressive disorder, have a paid job; have been on 100% sick leave for at least 1 year.

N= 60 (statement generation phase= 32, prioritization and categorization

Interview

94% in phase 1 and 72% in phase 2

Various

Netherlands

Personal characteristics (Attitude), Support from leaders and co-workers

Results suggest that **Person** (personality/coping problems, symptoms of depression and comorbid health problems, employees feeling misunderstood, and resuming work to soon), **Work** (troublesome work situation, too little support at work and too little guidance at work) **and**

phase=
38)

Healthcare (insufficient mental healthcare and insufficient care from occupational physician) were perceived as the main impeding factors for RTW after long-term absence related to major depressive disorder.

Dionne <i>et al.</i> 2013	Qualitative	-	MSDs (back pain)	RTW	Obstacles and facilitators to RTW.	Workers suffering from back pain severe enough to limit work activities. Aged 18 - 60 years. Men= 14, Women= 5	N= 19	Focus group discussion, written list	66.7% in Focus group 1 and 60% in Focus group 2	Various	Canada	Support from leaders, Personal Characteristics	Results suggest that personal factors (knowledge of one's limit and listening to one's body and physical training), Understanding from employers during the RTW process and the possibility of gradual return to work were the main facilitators to RTW.
Dunstan <i>et al.</i> 2013	Longitudinal	3 stages. Baseline, one week after & 3 months follow up.	MSDs	Factors influencing future work expectations.	Direct measure (Behavioural intervention, attitude, subjective norm,	Workers with compensable work injury. Mean age= 43.7 years (18- 66.1 years),	N= 158	Questionnaire, telephone interview	35%	Healthcare	Australia	Personal characteristics (attitude), Support from co-workers	Results show that attitude, subjective norm and perceived behavioural control explained 76% of the variance in behavioural intention. While the expectation to RTW (Behavioural intention) explained, 51%

perceived behavioural control) and Indirect measure scales (behavioural beliefs, normative beliefs and control beliefs)

Durand *et al.* 2000

Observational 2 years

MSDs (back pain)

Stable RTW

Quality of life, specific back disability, pain intensity, fear and avoidance beliefs, absenteeism and depression. Workers having thoracic or lumbar back pain arising from work causing an absence from work of more than 90 days, being 18 to 60 years old, having a claimed accepted for

N= 127
TRW= 28
FR= 49
CS= 29
DEN= 21

Questionnaire 93.3% in the TRW group, 76.6 in the FR group, 100% in the CS group and 87.5 % in the Den group

Various Canada

Support from leaders and co-worker support.

of the variance in work participation at follow up. The strength of key influences on RTW varied according to employment status, but strong influences included availability of modified duties, social aspects of work, the opinion of the treating doctor, co-worker support, pain and functional limitations.

At 2-year follow-up, 93% of participants in the therapeutic RTW (TRW) program were working. This rate was higher than in the comparison groups. Although limited by its norm-referenced evaluation design, the results of this study indicate the importance of placing the work site in the centre of the work rehabilitation process.

							compensation by the QWCB and having the legal right to return to their job.							
Ekberg <i>et al.</i> 2015	Prospective Cohort	3 months & 3-12 months.	CMDs (depression, anxiety, burnout and others)	Early and Later RTW	and Demographic data, health and work ability, personal resources, work conditions and employment situation.	Sick-listed individuals with CMDs for at least 2 weeks. Aged between 18-65 years.	N= 354	Questionnaire, Register data	66% at baseline.	Health Care	Sweden	Personal characteristics (education, self-efficacy) and Support from leaders	Lower educational level, better work ability at baseline, positive expectations of the RTW treatment and low perceived interactional justice in interaction with supervisors were associated with early return to work. While exit behaviour or turnover intentions and need for reduced demands at work were significantly associated with a later RTW.	
Ekbladh <i>et al.</i> 2010	Longitudinal	6, 12 & 24 months	MSDs, CMDs	RTW	WRI assessment items (assesses abilities and limitations,	Workers aged 20-60 years who at one specific day in 2004 were on sick	N= 53	Telephone interview	41%	Various	Sweden	Personal characteristics (attitude-belief in self), job crafting	At all three follow-ups, results suggest that expectations of job success, taking responsibility, adapting routine to minimize	

expectation leave
s of job between 60-
success, 89 days long
take on at least
responsibilit half time.
y, Women=
commitmen 34, Men=
t to work, 19, Mean
work- age= 43
related years.
goals,
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interest,
identifies
with being a
worker,
appraises
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expectation
s, influence
of other
roles, work
habits, daily
routines,
adapts
routine to
minimize

difficulties and perception
of family and peers are
significant predictors of
RTW. Overall, the WRI
assessment tool contains
items that could predict
RTW.

					difficulties, perception of work setting, perception of family and peers, perception of boss and perception of co- workers)								
Ekbladh <i>et al.</i> 2004	Retrospective (longitudinal)	2- years follow up	MSDs, CMDs	RTW	WRI assessment items (assesses abilities and limitations, expectation of job success, take responsibility, commitment to work, work-related goals,	Sick-listed workers. In the primary group, Mean age= 51 years (33-64 range), Women= 28, Men= 20. In the secondary group, Mean age= 51, Women= 6, Men= 68	N= 189	Interview	25% of the primary group and 58% of the secondary group	Various	Sweden	Personal Characteristics (Attitude, belief), Support from Leaders, co-workers	Results showed that assesses abilities and limitations, expectation of job success, taking responsibility, appraising work expectations and perception of work setting with regards to support all had predictive validity for RTW. The result emphasizes the importance of considering the unique individual's beliefs and expectations of his or her effectiveness at work when assessing clients work ability and

enjoys
work,
pursues
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identifies
with being a
worker,
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routines,
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routine to
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difficulties,
perception
of work
setting,
perception
of family
and peers,
perception
of boss and
perception

planning for further
rehabilitation.

Engstrom and Janson, 2007	Quantitative (longitudinal data)	1, 2 & 3 year follow up	CMDs (stress)	RTW	of co-workers) Time being sick and not sick registered, Gender, employer, occupation, age, previous SA, pain diagnosis	Workers with stress-related SA with a duration exceeding 28 days. Aged between 16-60 years. Women= 76.5%, Men= 23.5%	N= 893	SA data register	98%	Various	Sweden	Personal characteristics (Age, length of time out of work)	Results suggest that the employer and occupational categories had minor effects on RTW after long-term SA. Furthermore, age and health related factors together with time factors seemed to be more relevant in explaining RTW. The older workforce with much poorer health who have been absent on a long-term spell are more likely to have difficulties returning to work.
Franche <i>et al.</i> 2007	Prospective Cohorts	1 & 6 months	MSDs	Relationship between RTW & SA duration	Early contact, work accommodation (offer and acceptance), HCP contacted employer,	Lost-time claimants with work-related back or UE MSDs. Absent from work for a minimum of 5 days	N= 632	Interview, Administrative data.	61% at baseline and 71% at 6 months follow up.	Various	Canada	Support from leaders	Findings suggest that early receipt and acceptance of a work accommodation planned and supported by the supervisor and early HCP advice to the workplace on how to prevent re-entry is associated with a shorter work absence duration

					HCP advised employer on injury prevention, ergonomic assessment, RTW coordination and 20 other confounding factors	within the 14 calendar days after injury.								measured 6 months after injury in both self-reported and administrative data.
Friesen <i>et al.</i> 2001	Qualitative (Focused ethnography)	N/A	MSDs, CMDs	RTW	The worker attitudes and behaviours, worker participation), Workplace system (workplace organization, trust and credibility, communication and	Individuals able to answer the research question. Participants chosen based on knowledge, experience or importance in the work injury field and RTW	N= 55	Semi-structured interview	100%	Various	Canada	Support from leaders and co-workers	Study revealed that delays of all types in processing or delivery of information or treatment and ineffective communication among stakeholders was perceived as barriers to RTW. While establishment of RTW programs in the workplace, effective communication and teamwork as well as trust and credibility among stakeholders facilitated	

history, clinical rating. Age, length of time out of work. n based on LBP during the same period, currently out of work and having worked at least 3 months prior to their latest unemployment period. Clinic patients; age range of 22-57 years and the Social security patients; age range of 23-61 years.

RTW. Exclusive reliance on the physical examination and widespread use in the determination of disability for the purpose of compensation, without consideration of psychosocial characteristics, and without adjusting for the confounding effects of age and length of time out of work are not empirically justified by the results. Data set therefore suggest that age and length of time out of work interact with psychosocial risk factors such that the strength of associations between specific risk factors and outcome depend upon the age and period of unemployment of patients.

Hatchard
et al. 2012

Qualitative

2 Interview sessions.

CMDs

Return to mainstream work.

The worker (managing self, self-acceptance,

Individuals between ages 35 and 62 who had

N= 5

In-depth semi-structured interviews

100%

Various

Canada

Support from leaders and co-workers

Findings suggest that personal and workplace partnerships are integral to supporting workers as they

managing experienced
lifestyle and acute mental
health) The illness that
workers' had resulted
personal in time off
partnerships work and
(relationshi had
ps and attempted a
partnerships RTW in a
, mainstream
relationship workplace.
s form the Women= 4,
foundation, Men= 1.
realities (age range=
challenge 35-62years)
personal
partnerships
) and
Workplace
partnerships
(relationshi
ps and
demands,
workplace
leadership,
the power of
o-workers,
responding

take ownership of their
full potential and self-
direct RTW. Support from
both management and co-
workers were as important
to promoting self-
direction in the RTW
process

Haugli <i>et al.</i> 2011	Qualitative	N/A	MSDs, CMDs	RTW	to work demands) Positive encounters, increased self-understanding, support from the surrounding s. Patients on long-term sick leave due to MSDs and/or psychological health complaints. 10 individuals who has RTW (3 Men of 46-58 years and 7 Women of 41-56 years) and 10 individuals registered with a disability pension (3 Men of 41-53 years and 7 Women of	N= 20	Semi-structured telephone Interviews	100%	Various	Norway	Support from leaders and co-workers	The core categories describing RTW include; positive encounters, an opportunity for increased self-understanding and support from the surrounding.
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Haveraaen <i>et al.</i> 2016	Cohort	3 months	MSDs	RTW 3 months after RTW program.	Job demands, job control, social support, job characteristics. Other factors; age, gender, educational level, marital status, household income, diagnose, sick leave history, work status at the end of program, type of treatment, occupational sector, and physical job demands.	41-56 years). Workers finishing treatment at the RTW service before or during the study period, being on sick leave when they started at the RTW service and being in paid employment. Women= 76.1%, Participants with MSDs= 57.4%, multidisciplinary treatment=	N= 251	Questionnaire, National register data	71.1%	Health care	Norway	Support from leaders and co-workers	Results showed that having low psychological job demands, high co-worker and supervisor support and being in low strain job predicted RTW three months after end of RTW programme after adjusting for several prognostic factors.
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60.6%,
treatment
from one
profession=
4.3% and
medical or
surgical
treatment=
37.1%.

Heijbel <i>et al.</i> 2006	Prospective Cohort	18 months follow-up	MSDs, CMDs	Prediction of RTW & RTW	sex, age, own prediction of RTW, complaints from >1 group of symptoms, duration of complaints, duration of sick leave, pain, function, physically strenuous work, contact with the workplace/	Persons with an ongoing spell of full-time sickness absence for 90 days or longer. Women= 484, Men= 51	N= 535 at baseline. N= 508 after 18 months follow up.	Questionnaire	69% at baseline. 95% after 18 months follow up.	Various	Sweden	Personal characteristics (Attitude, age, duration of absence)	Results suggest that sick-listed person's own positive prediction of their RTW was highly significant. Other predictive factors to RTW included being on sick leave for a period of less than 1 year, having less pain perceiving that one was welcome back to work and being under 55 years.
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workmates,
 perception
 of being
 welcome
 back to
 work,
 contact with
 occupational
 health
 service,
 contact with
 the regional
 social
 insurance
 officer,
 contact with
 the trade
 union and
 rehabilitation
 programme.

Heijbel <i>et al.</i> 2013	Longitudinal	2 years follow up	MSDs, CMDs	RTW	age, type of work, problems or complaints, assessment at the OHS, rehabilitation	People who had reached a level of 28 days on sick leave. Women= 90% (704), Men= 10%	N= 779	Questionnaire	54%	Public	Sweden	Personal characteristics (age), Support from leaders.	The rehabilitation programme encountered challenges. However, counter measures were taken to facilitate coordination and communication. People with MSDs often received
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programme (75), ages, vocational rehabilitation, return to work or not after two years. 63 years (average age of 47 years). MSD patients= 53% (412) and Psychological/stress-related patients= 44% (340).

both multimodal and vocational rehabilitation. Vocational rehabilitation was advocated for people who were under 55 years of age, and for those with stress-related problems. The strongest predictive factors for RTW were; having received only vocational rehabilitation and being under 45 years of age. The study shows the need for coordination between multiple stakeholders. It suggests that supervisors should pay attention to people who have MSDs and are older as soon as the problem emerges.

Hoefsmit <i>et al.</i> 2014	Qualitative	N/A	MSDs, CMDs	RTW	Environmental factors (social support, belief that RTW supports health,	Employees who had been absent for more than 42 days and less than 2 years or had	N= 34	Open-ended Interviews	100%	Various	Netherlands	Support from leaders, Personal Characteristics (Attitude)	Results showed that both environmental (social support from relatives, belief that work stimulates health, adequate co-operation between stakeholders in RTW; E.G employees, employers and
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adequate cooperation between stakeholder s, supervisor's communication skills) and personal factors (employee's positive perception of the situation). experienced long-term sick leave and had resumed work less than one year before the interview, employers who represented the organisation 's RTW policy and supported absent employees to resume work and Ops who supported individual employees on sickness absence to RTW.

Ops, and the employer's communication skills) and personal factor (positive perception of working condition) stimulated RTW. Most factors stimulated RTW directly. In addition, adequate treatment and social support stimulated medical recovery.

Hu <i>et al.</i> 2014	Prospective Cohort	0.5 & 8 months follow up	MSDs	RTW & SA duration	Same company as before, same job title before, with signed job contracts, receiving work-related injury insurance, monthly salary of RTW versus pre-injury, work duration per week(hours), satisfaction with RTW, way of achieving RTW. Other potential	Men= 20, Women= 14 Workers with work-related hand injury. 55 years and younger for women, 60 and younger for men. Median age= 33.0 years, Median work experience= 1.4 years, Males= over 80% and from rural areas, married= 69.5%, middle school education= 54%	N= 246	Structured Questionnaire via telephone (interview)	96%	Various	China	Support from leaders	During the 8-month follow up, 78.1% (192 cases) returned to work successfully with a median absence duration of 44 days. Study indicated that multi-dimensional factors were significant in determining RTW. Factors from demographic, clinical, economic and psychological domains affected RTW in the univariate analyses. Receiving timely treatment, less serious injury, no tendon trauma and no skin loss were found to be significantly beneficial to RTW, while workers with decreased monthly salary during absence and lower pre-injury salary are likely to take longer sick leave. Most of the workers
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predictors;
demographic,
clinical
and socio-
economic.

successfully achieved
RTW after work-related
hand injury. Proper
clinical treatment and
post-injury rehabilitation
as well as economic and
social support seem to
have played a vital role in
prompting RTW that
should be prioritised for
intervention strategy.

Huijs <i>et al.</i> 2012	Prospective Cohort	2- year follow up	MSDs, CMDs	Duration until full RTW.	Gender, age, marital status, working hours, children living at home, education, ethnicity, contract type, working status, depression, anxiety, coping (active-	Employees sick-listed for 19 weeks. Mean age= 46.6 years, Women= 58.4%, 60% older than 45 years. Employment contact= 31.7h.	N= 682	Questionnaire	52%	Various	Netherlands	Personal Characteristics (age, educational level, self- efficacy, job contract)	Result showed that reporting both physical and mental problems as reason for sick leave was associated with a longer duration until full RTW. Non-parametric cox survival analysis showed that partial return to work at baseline and a lower age predicted full RTW. For employees with physical conditions, high level of education and RTW self- efficacy predicted RTW. For employees with mental complaints, those with permanent job
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					problem-solving), coping (avoidance), RTW self-efficacy, expectations work environment, physical exertion, level of RTW, days until full RTW.									contract returned fully while those with both physical and mental complaints were associated with longer duration until full RTW.
Janssen <i>et al.</i> 2003	Prospective Cohort	Every 4 months for a period of 3 years (For questionnaires), 2 months after ill-health, a follow up every 2 months and a final follow up 1 year after	MSDs, CMDs	Not working, RTW with adjustments & Full RTW.	Demographic covariates (gender, age), DCS variables (psychological job demands, supervisor support, co-worker support, decision latitude;	Employees sick-listed for 6-8 weeks.	N= 455	Questionnaire, Interviews	87.5% at T2	Various	Netherlands	Support from Leaders	Results indicated that high job demands were the least predictive of full RTW. However, the likelihood of employees with high job demands returning to work with adjustments was higher than the likelihood of them not working. Therefore, job demands might also work as a pressure to RTW. Furthermore, high skill discretion in combination	

reporting ill
(for
interviews)

skill
discretion &
decision
authority)

with high job demands
predicted working with
adjustments in comparison
with not working. High
supervisory support was
the most predictive of
RTW without adjustments
and the least predictive of
not working.

Jakobsen
and
Lillefejjell,
2014

Qualitative

N/A

MSDs

Successful
RTW

Employees' experiences of factors affecting the RTW process (mobilizing personal resources (job crafting practices), balanced daily life, needed dialogue and social support) and Factors in the employers' Long-term sick listed employees with chronic musculoskeletal pains who participated in the rehabilitation programme at the rehabilitation centre and had all returned to the same job, full or part time.

N=6

Interviews

100%

*****Vari
ous

Norway

Job Crafting,
Support from
leaders and
co-workers

Results suggest that successful RTW to work was dependent on employee's ability to identify and mobilize their personal resources, adapt a balanced daily life, require a positive dialogue with family, colleagues and their employer, while employers underlined the need for a helpful adjustment at work and how they wanted to become more involved in the rehabilitation process.

experiences as important for a successful RTW (adjustment at work, desired to be more actively involved in the RTW process and gap between employment and reality). Have national insurance benefit in the form of sickness benefit or rehabilitation benefit in 3 months or more. Men= 2, Women= 4. Aged 40-57 years.

Jensen <i>et al.</i> 2012	Randomized Clinical Trial	2 year follow up	MSDs (LBP)	Sustainable RTW	RTW and sick leave	Participants on sick leave for 3-16 weeks due to LBP, 16-60 years of age, and able to read and speak Danish.	N= 351 (Multidisciplinary intervention=17, Brief intervention=17, 5)	N= 344 after	Questionnaire	Multidisciplinary intervention group= 70.5%, Brief intervention group= 68.6%	Various	Denmark	Support from leaders	During the 2 year follow up, 80.0% and 77.3% had RTW for at least four weeks continuously, and the percentages with RTW at the 104 th week were 61.1% and 58.0% in the brief and multidisciplinary intervention groups respectively. At the 104 th week, 16.6% and 18.8% were on sick leave in the
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following
group
(Multidisciplinary
intervention=12
4, Brief
intervention=12
0)

two groups, respectively, and 12% were employed in modified jobs or participated in job training. The number of weeks on sick leave in the first year was significantly lower in the brief intervention group than in the multidisciplinary group, but during the second year, the number of sick leave were not significantly different between the intervention groups. Subgroups characterised by specific work-related factors modified the effect of the intervention groups on RTW rates. No difference in sick leave relapse was found between the intervention groups. The effects of the brief and multidisciplinary interventions at the two-year follow up were in

Johansson <i>et al.</i> 2006	Cross-Sectional	1 year	CMDs	RTW	Adjustment latitude, age, health, stimulating work, demanding household work.	Salaried employees who had been on sick leave for at least 90 days for one of 16 diagnoses in 2000. Age range= 21-66 years, Women= 1783, Men= 1273.	N= 3056	Questionnaire	54.7%	Private	Sweden	Job Crafting	general like the effects at the one-year follow up. Among women 32% were fully back to work, 34% were partly back and 34% were still on sick leave. Comparable figures for men were 33%, 32% AND 36%. For both men and women, the likelihood of RTW increased with increasing opportunity to adjust their work. Adjustment latitude thus increased returning to part-time as well as full-time work.
Karlson <i>et al.</i> 2010	Prospective controlled trial	1.5 years follow up	CMDs	Successful RTW	Patient-supervisor communication. Age and Gender.	Employment sick listing at least half time for 2-6 months from a previously healthy state and having an International	Intervention group; N= 74, Control group; N= 74	Questionnaire, Interviews	-	Various	Sweden	Support from leaders	There was a linear increase of RTW in the intervention group during the 1.5-year follow up, and 89% of subjects had returned to work to some extent at the end of the follow up period. The increase in RTW in the control group came to a halt after 6 months, and only 73% had returned to

Classification of Diseases (ICD-10) diagnosis within the F43 category (reaction to severe stress, and adjustment disorders, except post-traumatic stress disorder (F43.1), due to predominantly work-related stressors. Women= 59 (intervention group) and 56 (control group), Mean age=

work to some extent at the end of the 1.5-year follow up. Results suggest that workplace-oriented interventions involving dialogue with supervisors are effective in improving long-term RTW for patients on long-term sick leave due to burnout.

46.6 and 46.1 years in both intervention and control group respectively

Karlson <i>et al.</i> 2014	Prospective Controlled	1.5 years originally, and then after 1 years.	CMDs (Burnout)	Long-term stability of RTW	Patient-supervisor communication. Age and Gender.	Consecutive new sick-listed cases for the period 2003-2006. Those in employment, sick-listed for at-least half time for 2-6 months following a previously healthy state. Women= 81%, Mean age= 45.5 years of	N= 148 (Intervention group= 74, Control group= 74)	Questionnaire, Interview and Team supported dialogue.	86%	Various	Sweden	Support from leaders and Personal Characteristics (age)	Test over all 130 weeks showed a GROUP*WEEKS interaction effect, indicating differential group developments in RTW, though similarly high at week 130 in both groups with 82.4% of the intervention group and 77.9% of the control group having RTW. A significant interaction with age led to separate analyses of the younger and older subgroups, indicating a stable pattern of superior RTW only among younger participants in the intervention group.
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range 25-62 years.

Results indicated that workplace-oriented interventions involving both supervisors and employees showed long-term stability on RTW only among younger participants.

Krause <i>et al.</i> (2001)	Retrospective Cohort	1-4 years follow up	MSDs (LBP)	Time to RTW	Psychosocial job factors, duration of disability, injury history and severity, physical workload and demographic and employment factors.	A complete 3-year cohort of 850 compensated low back injury cases drawn from all workers administered at three district offices of a large worker's compensation insurance carrier. An ICD-9 code indicative of a definite	N= 721 at telephone follow up. N= 433 at interview.	Interview, survey	60% at point of interview	Various	United States	Personal characteristics (job control; control over work and rest periods) and Job Crafting	High physical and psychological job demands, and low supervisory support are each associated with about 20% lower RTW rates during all disability phases. High job control, especially control over work and rest periods were associated with over 30% higher RTW rates, but only during the sub-acute/chronic disability phase starting 30 days after injury. Job satisfaction and co-worker support were unrelated to time to RTW.
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LBP

diagnosis on
any medical
bill record
of the first
physician

visit or on
any bill
record of a
physician

visit within
14 days after
date of
injury,

within 14
days after
the first
physician

visit and
within 90
days after
the date of
injury.

Acute

phase=

Mean age=

37.3 years

old,

Female=

30%, Male=70%. Sub-acute/chronic phase= Mean age= 38.6 years old, Female= 32.2%, Male= 67.8%.

Labriola <i>et al.</i> (2006)	Cohort	1 year follow up	MSDs (wrist pain)	RTW	Psychosocial work environment risk factors (psychologic demands, decision authority, skill discretion, meaning of work and predictability of work, co-worker social support and supervisory	Employees who experienced SA periods exceeding 2 weeks during 2 years of follow up.	N= 428	Questionnaire and Register data.	75.6%	Various	Denmark	Personal characteristics (psychologic demands, decision authority, skill discretion, meaning of work and predictability of work), support from leaders and co-workers.	Of the 428 employees who were sick-listed for more than 2 weeks, 367 returned to work within 1 year after onset of SA, while 186 returned to work within 4 weeks. At the individual level, significant associations were found between one psychosocial (low meaning of work) and four physical factors (stooping or twisting the back, lifting more than 30kg, and reporting repetitive job tasks) and RTW within 4 weeks. The association was a
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social support), Physical work environment risk factors (stooping work position, twisting the back, lifting more than 30kg, pushing/pulling heavy burdens, full body vibration and repeating the same job task many times per hour). Health behaviour, body mass index and

decreased chance of RTW. While within 1 year, only 2 physical factors (being exposed to stooping work position and having repetitive job task) decreased the chance of RTW.

Lagerveld <i>et al.</i> 2010	Longitudina 1	3 waves. Baseline, 3 & 6 months	CMDs	RTW	general health Self- efficacy, depression, locus of control, coping and physical workload	Sample 1- Employees sick-listed for 13 weeks. Average age of 46 years, Females= 54% and worked for an average of 32 hours per week. Sample 2- Employees sick-listed due to CMDs and are going to receive psychothera py shortly after baseline measuremen t. Average age of 41	N= 2214 (Sample 1= 1934, Sample 2= 189 and Sample 3= 91)	Questionn aire, Files of the occupatio nal health organizati on.	36% in sample 2 and 21 % in sample 3	Various Netherla nds	Personal characteristics (self-efficacy)	The associations with general self-efficacy, locus of control, coping, physical workload and mental health problems support the construct validity of the scale. Most importantly, results indicated that RTW self- efficacy proved to be a robust predictor of actual RTW within three months.
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years,
 Female=
 57% and
 worked an
 average of
 33 hours per
 week.
 Sample 3-
 Employees
 on sick
 leave and
 have had
 contact with
 their
 occupationa
 l Physician
 during the
 inclusion
 period.
 Average age
 of 44 years,
 Women=
 47% and
 working an
 average of
 33 hours per
 week.

Laisne <i>et al.</i> 2013	Prospective Cohort	Baseline, after 2- & 8-	MSDs	RTW	Age, gender,	Working-age	N= 62	Questionnaires,	34.4%	Health and safety	Canada	Personal characteristics	Multivariate analysis indicated that at 2 months,
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months
follow-ups.

duration of individuals
symptoms, suffering
pain from
severity, musculoskel
disability, etal
work disorders
importance, and
work receiving
support, compensatio
work n benefits.
satisfaction, Those
recovery whose
expectation Musculoske
s, letal injuries
depression, resulted
anxiety, from a fall,
global an impact or
distress repetitive
severity strains, and
index, post comprised
traumatic or severed
symptoms relationship
and to employer.
readiness to Age
change. between 18-
55 years old.
Men= 47,
Mean age=
37.73 years,

administra
tive
database

(age, gender), gender, work recovery
Support from expectations and
co-workers importance of work were
predictive of work
outcomes. While at 8
months, age, medical
consolidation, trauma
symptoms, work support
and importance of work
were predictive of work
outcomes.

average of 11.01 years of education and \$27,431 of pre-injury income per year.

Lammerts <i>et al.</i> 2016	Cohort (Longitudinal data)	Baseline, 2 & 4 years follow up.	CMDs (depression & anxiety)	Sustainable RTW in 2 years	Demographic Characteristics (sex, age, partner status, education and net income), Personality Characteristics (neuroticism, extraversion, openness, agreeableness, conscientiousness and locus of control),	Participants with long-term depressive and anxiety disorders. Ages 18-65 years old. Female= 66.5%, Mean age= 42.32 years	N= 215 (T0= 176, T1= 39)	Data from the Netherlands study of depression and anxiety (NESDA)	81.8% at T0 and 22.3% at T1	Various	Netherlands	Personal characteristics (age,)	Results shows that in 2 years, 51.6% of participants returned to work sustainably and age, household, income, extraversion, employment status, skill discretion and job security were significantly associated with sustainable RTW in 2 years in the univariate analysis. While the multivariate analysis revealed significant associations between sustainable RTW and age, household and being on sickness benefit versus being employed.
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Disorder-
Related
Characterist
ics
(diagnosis
anxiety or
depression,
severity
depression,
severity
anxiety,
percentage
of time
depressive
symptoms,
percentage
of time
anxiety
symptoms,
use of anti-
depressants,
specialized
mental
health care)
and Work-
Related
Characterist
ics
(employe

						nt status, SA, job demands, decision authority, skill discretion, social support, job security and type of worker).							
Lederer <i>et al.</i> 2012	Cohort (longitudinal data)	5 years follow up	MSDs	Time to RTW following long-term disability	Age, number of dependents, gross annual income, perceived economic status, occupational category, perceived physical workload, hours of paid work per week, job	Adults on long-term disability due to work-related MSDs of the back, neck or upper limbs receiving compensation benefits for at-least 2 months at study entry. Age range= 18-55 years	N= 455	Structured interviews and administrative databases.	100%	Various	Canada	Personal characteristics (age, gender, economic status, annual income, job contract)	Time to RTW for both men and women on long-term disability were similar, but many personal and occupational factors influencing RTW differed by gender. Women's risk factor included older age, poor to very poor perceived economic status, working ≥ 40 h/week and having dependents and awareness of workplace-based occupational health and safety program. In men, being over 55 years old,

Loisel <i>et al.</i> 1997	Randomized Clinical Trial	1 year follow up	MSDs (back pain)	RTW	<p>satisfaction, work experience, job seniority, union membership, employment status, company size, score of job insecurity, awareness of OHS program in the workplace, injury site, nature of MSD, claim history</p> <p>old. Men= 286, Women= 169</p>	<p>Duration of absence from work, functional status, pain level, minor</p> <p>Workers with thoracic and lumbar back pain incurred at</p> <p>N= 104 (Usual care= 26, Clinical = 31,</p>	Questionnaire	-	Various	Canada	Support from leaders	<p>poor perceived economic status, working ≥ 40h/week and high-perceived physical workload and higher job insecurity negatively influenced time to RTW. In both men and women, probabilities of not returning to work varied widely according to worker's specific profile of personal and occupational factors.</p> <p>The full intervention group returned to regular work 2.41 times faster than the usual care intervention group. The specific effect of the</p>
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						comorbid diseases.	work that had caused an absence from work for more than 4 weeks and less than 3 months, age from 18-65 years, and back pain accepted for compensation by the Quebec WCB.	Occupational= 22, Full intervention= 25)					occupational intervention accounted for the most important part of this result, with a rate of return to regular work of 1.91. Pain and disability scales demonstrated either a statistically significant reduction or a trend toward reduction in the three intervention groups, compared with the trend in the usual care intervention group.
Lydell <i>et al.</i> 2009	Prospective and comparative Follow-up	1 year, 5 and 10 years follow up.	MSDs	Sustainable RTW	Gender, age, marital status, spouse disability pension, education, socio-economic division, diagnosis	Working-age people aged 18-65 years, who were sick-listed due to MSDs.	N= 385 at baseline and 1 year follow up. N= 243 at 5 and 10 years follow up. N=	Questionnaire and 10 years follow up.	69% at 5 years follow up.	Various	Sweden	Personal characteristics (period of absence, age, gender, educational level)	Results indicated that the number of sick-listed days before rehabilitation, age, self-rated pain, life events, gender, physical capacity, self-rated functional capacity, educational and light physical labour were predictors of long-term RTW.

					and working situation.	183 (working full-time group= 110 and sick-listed group= 73) final inclusion.							
Lysaght and Larmour-Trode, 2008	Qualitative	-	MSDs, CMDs	RTW	Support in the workplace; emotional, information, instrumental and appraisal support	Workers and supervisors who had experienced or supervised work re-entry event within the previous 12 months. Those who had experienced workplace injury or	N= 26 (Supervisors= 8, Previously Injured workers = 18)	Interviews	100%	Various	Canada	Support from leaders and co-workers	A full range of social dimensions were reported to be relevant and were arising from a variety of sources (e.g. supervisors, co-workers, disability manager, work unit and outside of work). Respondents identified trust, communication and knowledge of disability as key precursors to a successful RTW process.

disability
within the
previous 12
months and
returned to
work on
modified
duties or
with
modified
equipment
or other
supports.

Workers;

Females=

14, Males=

4. Average

age= 47.7

years

(range= 24-

61 years).

Supervisors:

Females= 2,

Males= 6.

Average

age= 44.6

years

(range= 37-

53 years).

Marhold <i>et al.</i> 2001	Randomized controlled	Pre- treatment, post treatment, 4 & 6 months follow up.	MSDs	RTW. Reduction in SA.	Number of days of sick leave. Well- established self- reported inventories like; Multi- dimensional pain inventory (MPI), Coping strategies questionnaire (CSQ), Beck depression inventory (BDI), Pain and impairment rating scale (PAIRS) and Disability rating index (DRI).	Women between 25- 60 years old, a diagnosis of MSDs, no psychotic illness, no planned operations and being gainfully employed. Mean age= 46 years.	N= 72 (long- term sick leave of >12 months= 36, Short- term sick leave of 2-6 months= 36)	Questionn aires, beck depression inventory, disability rating index, pain & impairme nt rating scale	91.7%	Various	Sweden	Job crafting	Results showed that cognitive-behavioural RTW program was more effective than treatment as usual in reducing the number of days on sick leave for patients on short- term sick leave. The treatment program also helped the patients on short-term sick leave to increase their ability to control and decrease pain and to increase general activity level compared to the control condition.
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Martin <i>et al.</i> 2015	Mixed study	2 years after first interview for individual interviews. 2 years 2 months after first interview for group interviews. Multidisciplinary team observed on 4 occasions.	CMDs	Early RTW and reduced SA.	Recruitment and reach, multidisciplinary rehabilitation activities, coordination of stakeholder s, cooperation with SIOs, participant satisfaction and context.	Employees aged between 20 and 60 years, on SA of 4-12 weeks duration because of CMDs such as depression, anxiety or stress-related conditions. Women= 142, Men= 71	N= 213	Individual and group interviews, observations, national registers and documents from the intervention.	83.5%	Various	Denmark	Personal characteristics (Positive expectations), Support from leaders.	The quality of the implementation varied greatly across the three settings. Barriers included lack of skills to assess MHPs according to the inclusion criteria, different interpretations of SA legislation among stakeholders, competing rehabilitation alternatives, and lack of managerial support for the intervention. An important facilitator was the motivation and availability of resources to solve disagreements through extensive communication.
Muijzer <i>et al.</i> 2011	Case Report	-	MSDs, CMDs	RTW & Effort sufficiency .	Personal (age, gender, education, reason of absence, tenure, periods of complete	Sick-listed Employees who have not returned to work fully and are not receiving the original	N= 415	Close-ended Questionnaire	-	Unknown	Netherlands	Support from leaders, Personal characteristics (Educational level)	Using the multiple logistic regression analysis, the only factor related to RTW effort sufficiency was good employer-employee relationship. Factors related to RTW were high education, no previous periods of complete

							disability, level of periods of income and work are not fully resumption) disabled. and external Average factors (SA age= 47 work years. related, Male= 180 relationship (43%), employer/e Female= 235, low and education conflict). level= 20%, medium educational level= 60% and high educational level= 20%								disability and a good employer-employee relationship.
Nielsen <i>et al.</i> 2010	Prospective follow up (Longitudinal)	52 weeks follow up	CMDs (stress, burnout, depression, anxiety)	Time to RTW	Gender, age, RTW expectancy, prior absence with MHP, occupation, self-reported	Employee absent due to MHP, employees who reported somatic complaints. Sickness absence not	N= 644	National register for social transfer payments, Questionnaire	100%	Various	Denmark	Personal characteristics (Positive attitude)	Employees sick-listed with self-reported stress/burnout returned to work faster than those with self-reported depression and other MHPs do. A positive RTW expectancy of the sick-listed person and no prior absence with HPs		

				reason for absence.	more than 12 weeks.								were associated with a shorter time to RTW.
					Male= 190, Female= 454, Age range of 19-≥50 years, Mean age= 40 years								
Nielsen <i>et al.</i> 2013	Mixed	Baseline and 6 months follow up.	CMDs (depression, anxiety, stress)	RTW	Age, educational level, workplace, size of workplace, RTW status, employment status, major depressive inventory symptom score	Employees sick-listed due to CMD and had applied for sickness benefit compensation. Male= 44, Female= 182. Age range of 19-50 years and older.	N= 226	Questionnaires register and interviews	41% at baseline. 76% at 6 months follow up.	Various	Denmark	Support from leaders and co-workers	High support was most often reported from the personal and health system, while encounters with social insurance officers were least often reported to be highly supportive. Colleagues were more often reported to be highly supportive (49%) than supervisors (30%). Gender differences remained statistically significant in both contact and encounter assessments. Women considered their supervisors as less supportive, while their

Nieuwenh uijsen <i>et</i> <i>al.</i> 2004	Longitudina l Cohort	Baseline, 3month, 6 months and after 1 year.	CMDs	Time to RTW	to Communica tion with employees, promoting gradual RTW and consulting other professional s.	Employees on sick leave due to MHPs for less than 6 weeks. Mean age= 44.2%, Male= 42%	Supervis or: N= 85. Employ ees; N=198	Questionn aire, Telephone Interview	94% at baseline	Health care	Netherla nds	Support from leaders	friends were highly supportive. Better communication between supervisor and employee was associated with time to full RTW in non-depressed employees. For employees with a high level of depressive symptoms, this association could not be established. Consulting other professionals was more often associated with a longer duration of sickness absence for both full and partial RTW. If sickness absence had financial consequences for the department, the supervisor was more likely to communicate frequently with the employee. In conclusion, supervisors should communicate more frequently with employees during SA as well as hold follow up meetings more
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													often as this is associated with a faster RTW in those employees.
Opsahl <i>et al.</i> 2016	Randomized controlled trial	12 months follow up	MSDs (LBP)	Actual RTW	Age, gender, education, covariates, co-worker social support, job satisfaction, and return to work expectancies.	Employees on sick leave due to LBP for 2-10 months. At least 50% sick-listed, at least 50% employed, age range= 20-60 years, Men= 49.7%, Mean age= 44.3 years old.	N= 574 (Intervention group= 414 and Control group= 160)	Questionnaire	98.8%	Various	Norway	Personal characteristics (high RTW expectancies, gender)	Regardless of gender, high expectancies of returning to work were a strong and significant predictor of RTW at 12 months. While high job satisfaction was not a significant predictor. There were no differences in the levels of expectancies or overall job satisfaction between men and women. However, men had in general higher odds of returning to work compared to women.
Post <i>et al.</i> 2005	Longitudinal	10 months follow up	MSDs, CMDs (stress)	RTW	Duration of employment in present job, total duration of employment, extent of employment, status of employment	Employees on sick leave for a maximum of 12 weeks. Men= 466, Women= 460, age range= 18-63 years	N=926	Questionnaires	86%	Various	Netherlands	Support from leaders and co-workers	The multivariate model showed that working in one of the vocational sectors public administration, construction, financial and commercial services, transport or education and having a low co-worker support was related to

					t, type of working hours, management position, vocational sector, and industry.	(Mean age= 46 years), very low education= 8%, low education= 33%, medium education= 30%, high education= 30%							longer duration of RTW. While having a low supervisory support was associated with a higher rate of RTW.
Poulsen <i>et al.</i> 2014	Randomized controlled trial	52 weeks follow-up	CMDs	Recovery from SA	Age, gender, education, employment status, purchase of prescribed medicine, contact with own general practitioner, and history of hospital admission.	3 Municipalities that had separated sub-units of their sickness benefit management offices serving the same population allowing for randomization at the individual	N= 3105 (Intervention group= 1948 and Control group= 1157)	Questionnaire, interviews	-	Various	Denmark	Support from leaders	The intervention effect differed significantly between the municipalities. In one municipality, the intervention resulted in a statistically significant increased rate of recovery from long-term SA. In the other two municipalities, the intervention did not show a statistically significant effect. Adjustments for a series of possible confounders only marginally altered the estimated hazard ratio.

level of sick-listed beneficiariss to an intervention or control office; The sickness benefit office sub-units were geographically separated, thereby reducing the risk of intervention spill-over between CTM intervention and ordinary sickness benefit management; and the number of sick-listed

The effect of the intervention differed substantially between the three municipalities, indicating that the contextual factors are of major importance for success or failure of this complex intervention.

beneficiaries eligible for the study was sufficiently high to generate a large intervention and comparable control group.

Participants sick-listed for 8 weeks.

Reiso <i>et al.</i> 2003	Follow-up	2-year follow-up	MSDs (Back)	Time until RTW	Age, gender, diagnoses, pain intensity, work ability, self-predicted absence status, RTW.	Patients certified as sick who attended a back-disorder outpatient clinic from September 1997 to December 1998. Age range= 20-	N= 190	Questionnaire	-	Various	Norway	Personal characteristics (age, diagnosis, self-assessed work ability, self-prediction)	According to the multiple cox regression analysis, age of 40 to 49 years, high pain intensity, low self-assessed work ability and a self-predicted absence status of not returning to work predicted longer time until RTW. Back disorders with radiation predicted shorter time until return to work. The CCP/WONCA chart's
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63 years,
Men= 65%

physical fitness, daily activities, overall health and change in health were associated with time until return to work in the univariate analyses only, as was the duration of sickness certification episodes from start to inclusion and the degree of sickness certification at inclusion. In conclusion, information about the age of patients, diagnoses, pain intensity, self-assessed work ability and self-predicted absence status may be used as predictors of time until RTW in patients with back disorders.

Roelen <i>et al.</i> 2012	Mixed	1.5, 3, 6, 12 & 12 months	CMDs (emotional, neurotic, somatoform, stress, mood disorder)	RTW	Age, gender and socioeconomic position.	Employees on SA due to mental disorder. Men= 21,146, Women= 30,608,	N= 51,754	- SA Register	-	Various	Netherlands	Personal characteristics (age, gender, socioeconomic position)	Employees with emotional disturbances had the highest RTW rates; 95% and 98% after 1 and 2 years, compared to 89% and 96% of employees with neurotic, somatoform and stress-related
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(depression))

<35years-
≥55 years

disorders and 70% and 86% of employees with mood disorders respectively. Women resumed their work later than men. While younger employees with emotional disturbances, neurotic, somatoform and stress-related disorders had earlier RTW than older employees and employees with low socioeconomic position had earlier RTW than those with high socioeconomic positions. RTW rates and probabilities differed across categories of mental disorders. Age and socioeconomic position were associated with RTW of employees with emotional, neurotic, somatoform and stress-related disorders but not among those experiencing mood disorders.

Selander <i>et al.</i> 2015	Mixed (Explorative method/desc riptive design)	April 2012, 2 nd Reminder and June 2012.	MSDs, CMDs	RTW	Employee's contact with workplace actors.	Sick-listed individuals on full sickness absence of between 60- 90 days and permanently employed. Age range 16-65 years old. Men= 215, Women= 316, Mean age= 51.7% and 50.3% for men and women respectively	N= 1112 initial selectio n. N= 390 in April 2012. N= 502 on second reminde r and N= 534 in June 2012. Total respond ent= 531	Questionn aire	35% at first dispatch. 45% at 2 nd reminder. 48% at final reminder.	Various	Sweden	Support from leaders and co-workers, Personal characteristics (positive attitude)	Results showed that employees had frequent and, in most cases, appreciated contact with their supervisors and co- workers. Contact with other workplace actors; that is, the occupational health unit, the union representative and the human resources department, were less frequent. Employees who experienced the contact as supportive and constructive were far more positive and optimistic than others regarding RTW.
Shaw <i>et al.</i> 2008	Case Study	-	MSDs (shoulder)	Number of days to RTW	Workplace- based RTW program. Examinatio n of the managemen t of shoulder	Workers who were diagnosed with rotator cuff injuries from January 1999 to	N= 184	Telephone and in person in- depth Interview, Onsite visits,	100%	Manufact uring	Canada	Support from leaders	Findings revealed that workplace-based RTW programs were consistent with and shaped by the organizational culture of problem solving, knowledge exchange and equitable participation of

injuries at work. December 2003. Age range= 18-45 years old

Document review

workers, supervisors and health professionals. These components contributed to the problem achieving the following outcomes; one-third of workers were placed on modified duties within 3days, 56% of workers who engaged in an early RTW program returned to work within one month. Overall, 87.8% of workers with rotator cuff injuries successfully returned to pre-injury work.

Shiri <i>et al.</i> 2011	Randomized Controlled Trial	2, 8, 12 and 52 weeks follow up.	MSDs	Reduction of SA	Pain intensity, pain interference with work, leisure time and sleep. Age, physical activity, lifting, elevators, forceful or	Subjects seeking medical advice to upper extremity symptoms whose symptoms or the exacerbation of symptoms	N= 177 (Intervention= 91, Control = 86)	Interview, internet and mailed questionnaire and administrative data.	At baseline, 98% in both intervention and control groups. At 52 weeks follow up, 71% in the intervention group	Health care	Finland	Support from leaders	During the first three months of follow up, the percentage of employees with SA due to UE or other MSDs did not differ between the intervention and control group, but the total number of SA days in the intervention group was about half of that in the control group. During 4-12 months of follow up, the percentage of
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pinch grip, had started job strain, less than 30 fear days prior to avoidance. the medical consultation and immediate sick leave was not required. Age range= 18-60 years.

and 75% in the control group.

employees with sickness absence due to upper extremity disorder or upper extremity and other MSDs combined was lower in the intervention group than the control group. (Where intervention involved participation of supervisors.) Results suggest that early ergonomic intervention reduces SA due to UE or other MSDs.

Stahl and Stiwne, 2014	Qualitative	2 Occasions (interviewed between 2005 and 2006 and between 2008 and 2009) and a follow up after 4 years.	CMDs	RTW	Restitutive and Contingent Narrative (Possibility of accommodation and support from employers, colleagues, healthcare professional	Persons and sick-listed with CMDs and on sick leave. Women= 7, Men= 1, Age ranged= 30 and 57	N= 8	Interview	100%	Various	Sweden	Support from leaders and co-workers	In the restitutive narratives, RTW was considered as essential for returning to life as it was, and support from managers and colleagues facilitated a successful return.
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					s and insurance officials and quality of interactions)									
Steenstra et al. 2006	Randomized controlled trial	12, 26- & 52-weeks follow-up.	MSDs (LBP)	Lasting RTW	Pain intensity, functional status, quality of life and general health.	Workers sick-listed for a period of 6 weeks due to LBP. Age range= 18-65 years.	N= 196 (Workpl ace interven tion= 96 and Usual care= 100)	Questionn aire	100%	Health care	Netherla nds	Support from leaders	The workplace intervention group returned to work 30.0days earlier on average than the Usual care group at slightly higher direct costs. Workers in the clinical intervention group that had received usual care in the first 8 weeks returned to work 21.3 days later average. The group that had received the workplace intervention in the first 8 weeks and the clinical intervention after 8 weeks returned to work 50.9 days later average. A workplace intervention was more effective than the usual care in RTW at slightly higher costs and was equally effective as	

Stoltenberg <i>et al.</i> 2010	Longitudinal	2-3 years follow-up	MSDs, CMDs	RTW	Gender, age, primary diagnosis, municipality, ethnicity and income	Social workers in six municipalities in East Denmark sick-listed on a long-term basis from 1 October 2002 to 31 December 2005. Age range= 18-58, Mean age= 42.5 years. Men= 3139, Women= 4641.	N= 7780 at baseline. N= 5562 at 3 years.	Dream Register, Denmark	71.5% at 3 years	Health care	Denmark	Personal characteristics (age)	intervention was not found. After 1.5 years, 55.2% of the population had returned to work and this level was maintained through the remaining follow-up period. All the included potential determinants were found to be significantly related to RTW at 1 and 3 years. The effects of sex, ethnicity, and income were found to be nearly constant over time. The effects of municipality, diagnosis and age changed markedly over time and mostly during the first year.
Tenhiala <i>et al.</i> 2013	Prospective study	Initial survey in 2004. SA records tracked between	CMDs	SA	Perceptions of organizational justice, SA, age, job demands,	Employees on SA. Women= 81%, Served in non-communal	N= 37,324	Questionnaire, SA records	66% in 2004.	Health care	Finland	Support from Leaders	Results suggest that age moderates the association between perceptions of procedural justice and long SAs after controlling for gender, tenure,

2005 and
2006.

gender, occupations
tenure in = 83%,
current Mean age=
work 46.2%, Age
position, range= <35
occupational - >55 years
group, old.
work unit,
job
demands,
health
behaviours

occupational group, work
unit, job demands and
health behaviours. When
older employees
experienced a high level of
procedural justice, they
were less likely to take
short, non-certified SAs
from work. Finally, results
suggest that high quality
relationships with
supervisors can prevent
both short and long spells
of sickness absence at all
ages.

Tjulin *et al.* 2011

-

MSDs, RTW
CMDs

Policies and Workers,
organizational structure co-workers,
for RTW, human
Social manager
demands & and
expectations and supervisors
supervisory units in 3
management municipaliti
es. Work
units that
had
experienced

N= 33

Interview

100%

Public

Sweden

Support from
Leaders and
Co-workers.

Key findings that emerged
during analysis showed
that some co-workers have
a more work-task oriented
approach towards return to
work process, whilst
others had a more social
relational approach. In
both situations, the social
relations worked hand in
hand with job tasks (how
task were allocated and
how returning workers
were supported by others)

a recent RTW of a sick-listed worker who had been on sick leave for at-least 1 month and when the re-entry of the sick-listed worker did not occur more than 3 months before the interview date.

and could make or break the RTW process. The constant communication amongst the co-workers and between the co-workers and supervisors and the re-entry workers and updates on the return to work process facilitated an understanding among co-workers about the situation of returning worker appeared to facilitate RTW.

Van Beurden <i>et al.</i> 2015	Cluster randomized controlled trial	Baseline & 3 months follow up.	CMDs	RTW	RTW self-efficacy, RTW, personal, health-related and work-related variables.	Occupational physicians. Workers on sick leave due to a MHP. Age range= 18-64 years. Women= 60%, highly educated=	N= 66 (occupational health physicians; 32 in the intervention group and 34	Structured telephone questionnaire, questionnaire.	For workers; 93% at baseline and 95% at 3 months follow up.	Health care	Netherlands	Support from leaders, Personal characteristics (self-efficacy)	28.9% of workers fully returned to their work and 22.3% of workers returned partially 3 months after consultation with the OP. Results indicated that workers whose occupational physicians had received the training, RTW self-efficacy increased significantly
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2/3, mean in the number of control contracted group) hours= 32h N= 128 a week (sick-listed workers)

compared to those whose occupational physicians had participated in the control group. Higher RTW self-efficacy scores were significantly more often associated with full RTW than with no RTW three months later, but the intervention did not affect this association. This study showed that training to enhance guideline adherence of occupational physicians leads to increased RTW self-efficacy in workers short-listed with CMDs during the first months of SA in a real-life occupational health care setting.

Van Oostrom <i>et al.</i> 2009	Feasibility Evaluation within a Randomized controlled trial	Baseline and 3 months follow up.	CMDs (stress)	RTW	Workplace intervention (scheduling, job design, communication, training, use of support)	Both employees and supervisors. Employees who had been on sick leave from	N= 112 (Intervention group= 56, CAU= 56)	Questionnaires	71.4% in the intervention group. 100% in the Usual care group.	Various	Netherlands	Support from leaders	Participants identified 151 obstacles to RTW relating to job design, communication, mental workload and person-related stress factors. The 281 consensus-based solutions identified were
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regular work for 2-8 weeks with distress.

mostly related to job design, communication and training. 725 of these solutions were realized at the evaluation with employee and supervisor. Overall, employees, supervisors and Ops were satisfied with the workplace intervention. Time-investment was the only barrier at implementation reported.

Van Oostrom <i>et al.</i> 2010	Randomized controlled trial	3, 6 & 12 months follow up	CMDs (stress)	Lasting RTW	Stress-related symptoms.	Employees with distress and sick-listed for 2-8 weeks. Mean age= 48.6 years in intervention group and 49.2 in CAU. Male= 76.7% in intervention group and	N= 145 (Intervention group= 73, CAU= 72)	Questionnaires, administrative data	100% in the intervention group, 97.2% in CAU.	Various	Netherlands	Support from leaders, Personal characteristics (Positive attitude-intention to return)	Overall, the participatory workplace intervention where contacts between employee and supervisors were more intensive and structured, indicated no effects on lasting RTW. However, it significantly reduced time until lasting RTW for employees who at baseline declared intentions to RTW despite symptoms. For employees who showed no baseline intentions to return,
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Verbeek <i>et al.</i> 2002	Randomized controlled trial	3 & 12 months follow up	MSDs (back)	Time until RTW	Time until recurrence, number of days lost, rates of RTW at 3 and 12 months, pain intensity, functional disability and six general health perception scales at 3 and 12 months follow up assessments	Workers with back pain and on sick leave for less than 1 month. Mean age= 39 years, Male= 33%	80.6% in CAU.	N= 120 (interve	Questionnaires	98% at baseline, 92% after 3 months and 90% after 12 months.	Health care, Education	Netherlands	Support from leaders	There were no significant differences found after 3 and 12 months follow up evaluation in terms of time until return to work or other health outcomes. However, recurrences occurred more frequently in the intervention group compared to the reference group (supervisory support).
Vermeulen <i>et al.</i> 2011	Randomized controlled trial	3, 6, 9 & 12 months	MSDs	Sustainable first RTW	Duration of sickness benefit, pain intensity and	Unemployed and temporary agency workers	N= 163 (Interve	Questionnaires	71.2% at follow up.	Various	Netherlands	Support from leaders	The median duration until sustainable RTW was 161 days in the intervention group compared to 299 days in the usual care	

functional sick-listed CAU=
status. for 2-8 84)
weeks due
to MSDs as
main health
complaints.
Mean age=
44.0 years in
the
intervention
group and
45.6 years in
the control
group,
Male=
57.0% in the
intervention
group and
63.1% in the
control
group, Level
of
education=
57.0% in the
intervention
group and
60.7% in the
control
group.

group. The new
participatory RTW
program resulted in a non-
significant delay in RTW
during the first 90 days,
followed by a significant
advantage in the RTW rate
after 90 days.

Volker <i>et al.</i> 2015	Prospective Longitudinal	2 years follow up	CMDs (anxiety, depression, somatization)	Duration until full RTW.	RTW Self-efficacy.	Sick-listed employees who were currently on sick leave between 4 weeks and 1 years and having access to the internet. Age range= 18-44 years and ages ≥45 years. Female= 51.9%	N= 493	Questionnaire	55.6%	Various	Netherlands	Personal characteristics (Self-efficacy, age, gender), Support from leaders and co-workers	RTW self-efficacy was a significant predictor of RTW. In the multivariate model, low RTW self-efficacy, the thought of not being able to work while having symptoms and chronic medical conditions were predictors of a longer duration until RTW.
Wahlin <i>et al.</i> 2012	Prospective cohort	3 months follow up	MSDs, CMDs (stress, depression & adjustment disorder, anxiety, burn-out)	RTW within 3 months	Expectation s and self-efficacy, social support, health, functioning and work ability and work conditions.	Being on sick leave for MSDs or mental disorders, age range= 18-65 years, have a good knowledge of Swedish.	N= 699 (MSD group; Clinical group= 314; combine group= 118. Mental disorder	Questionnaire	84.1% after 3 months (response to questionnaire)	Various	Sweden	Support from leaders, Personal characteristics (attitude, age, educational level)	Results showed that patients with mental disorders who received the combined intervention (clinical and work-related) returned to work to a higher degree than those who only received clinical intervention. However combined intervention did not affect RTW for patients with MSDs, rather

group;
 Clinical
 group=
 146;
 Combin
 ed
 group=
 121)

a better work ability and positive expectations of RTW were associated with RTW. The prevalence of work-related interventions was higher for those who were younger and more highly educated. Receiving combined interventions increased the probability of RTW for patients with mental disorders, but not for patients with MSDs.

Wainwright *et al.* 2013

Qualitative -

MSDs

RTW

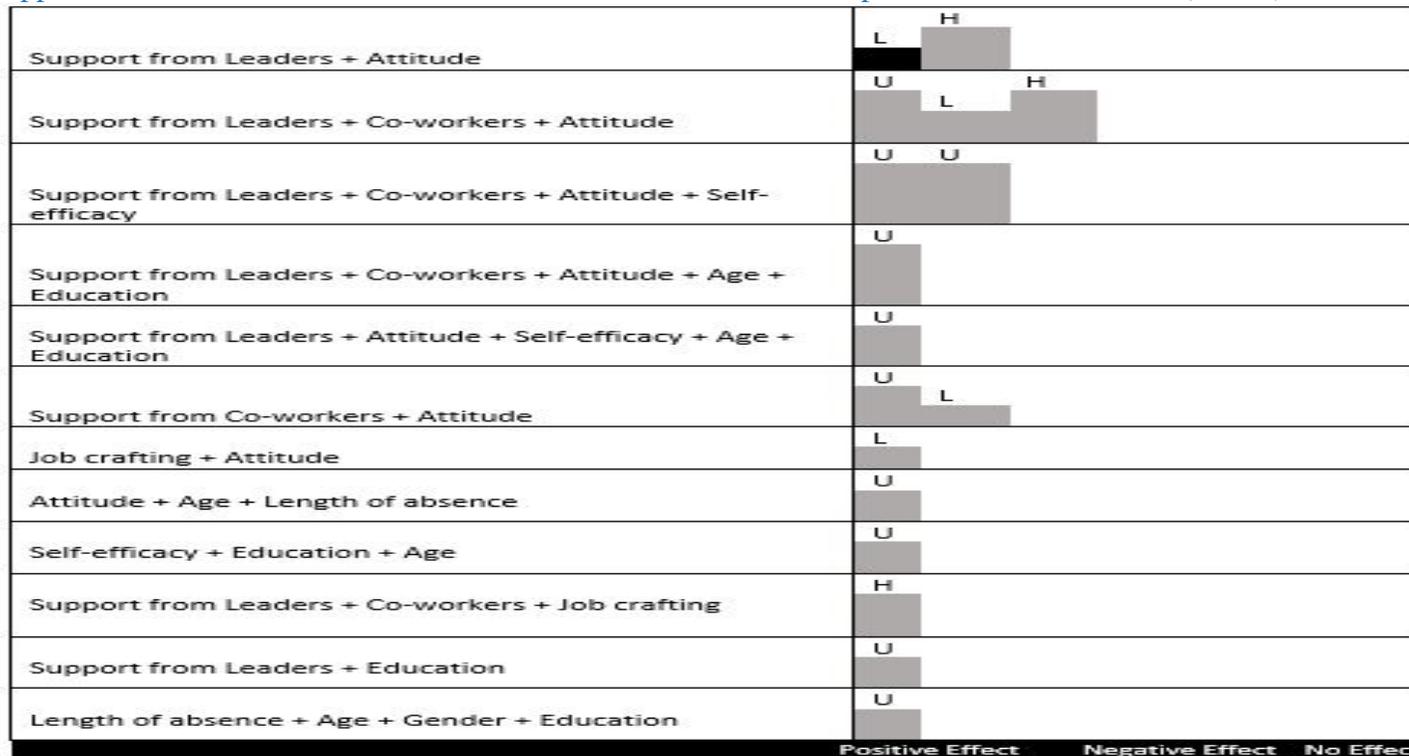
Frequent enquiry after health status, being able to trust employer, feeling valued, Guidelines about maintaining contact with absent employees
 Employers who had managed sick leave cases and employees who had experienced sick leave for chronic pain. Be at least 18 years old and able to give
 N= 26 (13 employees and 13 employees)
 Semi-structured interviews
 84.6% for employers and 100% for employees
 Charity, Commerce
 United Kingdom
 Support from leaders

Five themes were elicited. 1. Frequent enquiry after health status was intrusive by some employees but part of good practice by employers and acknowledging this difference was useful. 2. Being able to trust employees due to their performance track record was helpful for employers when dealing with complex chronic pain conditions. 3. Feeling

and value of informed
the fit note. consent. Be
in
employment
and have
needed a
sick or fit
note within
the last year
or be on
current sick
leave; to
have
consulted
their GP in
the last year;
to have
experience
pain lasting
over 3
months
within the
last year.

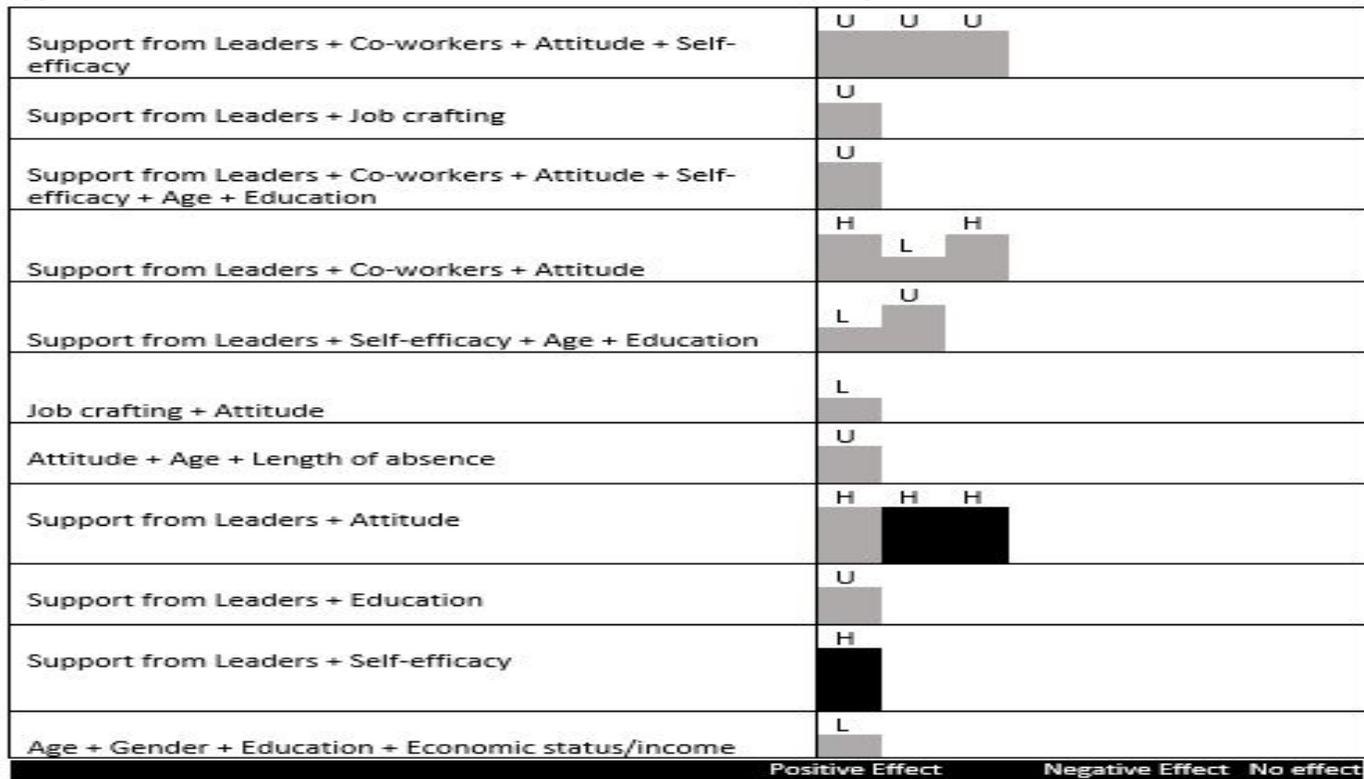
valued increased
employee's motivation to
RTW. 4. Guidelines about
maintaining contact with
absent employees were
useful if used flexibly. 5.
Both parties valued the fit
note for its positive
language, interrogative
format and biomedical
authority.

Appendix 6: Evidence of Sustainable RTW after Ill health for multiple interaction of factors (MSDs)



Key: The quality of study is indicated by the height of the bar with a specific designation on it in each row (H to represent very high quality studies, U to represent low quality studies upgraded to high quality based on the GRADE criteria and L to represent low quality studies). Studies with relatively stronger designs (RCT) are indicated with full-tone (black) bars, and weaker study designs (observational and qualitative studies) are indicated with half tone (grey) bars. The harvest plots were combined with a narrative synthesis. (Included studies: Support from leaders + attitude=3, 34; support from leaders + co-workers + attitude= 8, 24; support from leaders + co-workers + attitude + self-efficacy= 10, 11; support from leaders + co-workers+ attitude + age + education= 16; support from leaders + attitude + self-efficacy + age + education= 78; support from co-workers + attitude= 20, 46; job crafting + attitude= 23; attitude + age + length of absence= 32; self-efficacy + education + age= 36; support from leaders, co-workers + job crafting= 38; support from leaders + education= 54; length of absence + age + gender + education= 50)

Appendix 7: Evidence of Sustainable RTW after Ill health for multiple interaction of factors (CMDs)



Key: The quality of study is indicated by the height of the bar with a specific designation on it in each row (H to represent very high quality studies, U to represent low quality studies upgraded to high quality based on the GRADE criteria and L to represent low quality studies). Studies with relatively stronger designs (RCT) are indicated with full-tone (black) bars, and weaker study designs (observational and qualitative studies) are indicated with half tone (grey) bars. The harvest plots were combined with a narrative synthesis. (Included studies: Support from leaders + co-workers + attitude+ self-efficacy=10, 11, 77; support from leaders + job crafting= 9; support from leaders + co-workers + attitude + self-efficacy + age + education= 16; support from leaders + co-workers+ attitude= 18, 24, 63; support from leaders + self-efficacy + age + education= 22, 78; job crafting + attitude= 23; attitude + age + length of absence= 32; support from leaders + attitude= 34, 53, 74; support from leaders + education= 54; support from leaders + self-efficacy= 72; age + gender + economic status/income= 62).

Risks for contamination of the comparison group and other confounding factors have been taken into account and controlled for in the analysis (see below) if possible.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Participants were blind to their assignment to the treatment and comparison group.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
There was consistent and equivalent measurement of the treatment and control groups at all points when measurement took place.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
The study had clear processes for determining and reporting drop-out and dose. Differences between study drop-outs and completers were reported if attrition was greater than 10%. The study assessed and reported on overall and differential attrition.	Y	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
The measures were appropriate for the intervention's anticipated outcomes and population.	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
The measures used were valid and reliable. This means that the measure was standardised and validated independently of the study and the methods for standardization were published. Administrative data and observational measures may also have been used to measure programme impact, but sufficient information was given to determine their validity for doing this.	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Measurement was independent of any measures used as part of the treatment.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Measurement was blind to group assignment.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
In addition to any self-reported data (collected through the use of validated instruments), the study also included assessment information independent of the study participants (e.g., an independent observer, administrative data, etc.).	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	N	Y
The methods used to analyse results are appropriate given the data being analysed (categorical, ordinal, ratio/ parametric or non- parametric, etc.) and the purpose of the analysis.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y
Appropriate methods have been used and reported for the treatment of missing data.	C	Y	Y	Y	Y	Y	Y	Y	C	C	Y	Y	Y	Y	Y	N

The study had clear processes for determining and reporting drop-out and dose. Differences between study drop-outs and completers were reported if attrition was greater than 10%. The study assessed and reported on overall and differential attrition.	Y	Y	Y	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
The measures were appropriate for the intervention's anticipated outcomes and population.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
The measures used were valid and reliable. This means that the measure was standardised and validated independently of the study and the methods for standardization were published. Administrative data and observational measures may also have been used to measure programme impact, but sufficient information was given to determine their validity for doing this.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Measurement was independent of any measures used as part of the treatment.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Measurement was blind to group assignment.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
In addition to any self-reported data (collected through the use of validated instruments), the study also included assessment information independent of the study participants (e.g., an independent observer, administrative data, etc.).	Y	Y	Y	N	Y	Y	Y	Y	Y	N	Y	Y	Y	Y
The methods used to analyse results are appropriate given the data being analysed (categorical, ordinal, ratio/ parametric or non- parametric, etc.) and the purpose of the analysis.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	C	Y	Y
Appropriate methods have been used and reported for the treatment of missing data.	Y	Y	Y	C	Y	Y	Y	Y	Y	N	Y	Y	Y	Y

56. Was the recruitment strategy appropriate to the aims of the research?

Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y

Consider:

Has the researcher explained how the participants were selected?

Have they explained why the participants they selected were the most appropriate to provide access to the type of knowledge sought by the study?

Is there any discussion around recruitment and potential bias (e.g. why some people chose not to take part)? Is the selection of cases/ sampling strategy theoretically justified?

6. Was the data analysis sufficiently rigorous?

Y Y Y C Y Y Y Y Y Y Y Y N Y Y

Consider:

If there is an in-depth description of the analysis process?

If thematic analysis is used, is it clear how the categories/themes were derived from the data?

Does the researcher explain how the data presented were selected from the original sample to demonstrate the analysis process?

Are sufficient data presented to support the findings?

Were the findings grounded in/ supported by the data?

Was there good breadth and/or depth achieved in the findings?

To what extent are contradictory data taken into account?

Are the data appropriately referenced (i.e. attributions to (anonymised) respondents)?

7. Has the relationship between researcher and participants been adequately considered?

Y Y Y Y Y Y Y Y Y Y Y Y N Y Y

Consider:

Has the researcher critically examined their own role, potential bias and influence during (a) formulation of the research questions (b) data collection, including sample recruitment and choice of location?

How has the researcher responded to events during the study and have they considered the implications of any changes in the research design?

8. Have ethical issues been taken into consideration?

Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y

Consider:

Are there sufficient details of how the research was explained to participants for the reader to assess whether ethical standards were maintained?

Has the researcher discussed issues raised by the study (e.g. issues around informed consent or confidentiality or how they have handled the effects of the study on the participants during and after the study)?

Have they adequately discussed issues like informed consent and procedures in place to protect anonymity? Have the consequences of the research been considered i.e. raising expectations, changing behaviour?

Has approval been sought from an ethics committee?

9. Contribution of the research to wellbeing impact questions?

Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y

Consider:

Does the study make a contribution to existing knowledge or understanding of what works for wellbeing? E.g. are the findings considered in relation to current practice or policy?

Appendix 11: Common personal and social factors

Author	Condition	Sustainable RTW outcome
Positive Outcomes		
<i>Personal Factors</i>		
Positive Attitude		
Anema 2003	MSDs	+
Bensen 2015	MSDs	+
Brouwer 2009	MSDs + CMDs	+
Brouwer 2010	MSDs	+
D'Amato 2010	MSDs + CMDs	+
Dionne 2013	MSDs	+
Dunstan 2013	MSDs	+
Ekbladh 2010	MSDs + CMDs	+
Ekbladh 2004	MSDs + CMDs	+
Heijbel 2006	MSDs + CMDs	+
Hoefsmit 2014	MSDs + CMDs	+
Labriola 2006	MSDs	+
Laisne 2013	MSDs	+
Opsahl 2016	MSDs	+
Reiso 2003	MSDs	+
Wahlin 2012	MSDs + CMDs	+
Ekberg 2015	CMDs	+
Martin 2015	CMDs	+
Nielsen 2013	CMDs	+
Van Oostrom 2009	CMDs	+
Volker 2015	CMDs	+
Self-Efficacy		
Brouwer 2009	MSDs + CMDs	+
Brouwer 2010	MSDs + CMDs	+
D'Amato 2010	MSDs + CMDs	+
Huijs 2012	MSDs	+
Lagerveld 2010	CMDs	+
Van Beurden 2015	CMDs	+
Volker 2015	CMDs	+
Younger Age		
Crook 1994	MSDs	+
D'Amato 2010	MSDs + CMDs	+
Gallagher 1989	MSDs	+
Heijbel 2006	MSDs + CMDs	+
Heijbel 2013	MSDs + CMDs	+
Huijs 2012	MSDs + CMDs	+
Laisne 2013	MSDs	+
Lederer 2012	MSDs	+

Lydell 2009	MSDs	+
Reiso 2003	MSDs	+
Steenstra 2009	MSDs	+
Stoltenberg 2010	MSDs + CMDs	+
Wahlin 2012	MSDs + CMDs	+
Engstrom 2007	MSDs	+
Lammerts 2016	CMDs	+
Roelen 2012	CMDs	+
Volker 2015	CMDs	+

Higher Education

D'Amato 2010	MSDs + CMDs	+
Huijs 2012	MSDs	+
Lydell 2009	MSDs	+
Muijzer 2011	MSDs + CMDs	+
Wahlin 2012	MSDs + CMDs	+
Ekberg 2015	CMDs	+

Inconsistent Outcomes

Gender

De Rijk 2008	MSDs + CMDs	+/-
Lederer 2012	MSDs	+/-
Lydell 2009	MSDs	+/-
Opsahl 2016	MSDs	+/-
Crook 1994	MSDs	+/-
Johansson 2006	CMDs	+/-
Roelen 2012	CMDs	+/-
Volker 2015	CMDS	+/-
Laisne 2013	MSDs	+/-

No Effects

Positive Attitude

Brouwer 2010	CMDs	none
De Vries 2014	CMDs	none

Self-Efficacy

Huijs 2012	CMDs	none
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Inconclusive Outcomes

Low Economic Status/Income

Lammerts 2016	CMDs	+/?
Roelen 2012	CMDs	+/?

Short-term Length of absence

Gallagher 1989	MSDs	+/?
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Heijbel 2006	MSDs + CMDs	+/?
Lydell 2009	MSDs	+/?
Steenstra 2009	MSDs	+/?
Engstrom 2007	CMDs	+/?

Temporary and Insecure Job contract

Huijs 2012	MSDs + CMDs	+/?
Lederer 2012	MSDs	+/?
Lammerts 2016	CMDs	+/?

Where sustainable RTW outcomes is represented as positive (+), negative (-), no effect (none), inconsistent (+/-) and inconclusive (+/?).

Appendix 11: Common personal and social factors continued.

Author	Condition	Sustainable RTW outcome
Positive Outcomes		
Environmental Factors: Social Factors		
Support from leaders		
Ahlstrom 2013	MSDs + CMDs	+
Anema 2003	MSDs	+
Baril 2003	MSDs	+
Bernacki 2000	MSDs + CMDs	+
Brouwer 2009	MSDs + CMDs	+
Brouwer 2010	MSDs	+
Brouwer 2011	MSDs	+
Bultmann 2009	MSDs	+
Burtler 2007	MSDs	+
D'Amato 2010	MSDs + CMDs	+
Dionne 2013	MSDs	+
Durand 2000	MSDs	+
Ekbladh 2004	MSDs + CMDs	+
Franche 2007	MSDs	+
Friesen 2001	MSDs + CMDs	+
Haugli 2011	MSDs + CMDs	+
Haveraaen 2016	MSDs	+
Heijbel 2013	MSDs + CMDs	+
Hoefsmit 2014	MSDs + CMDs	+
Hu 2014	MSDs	+
Janssen 2003	MSDs + CMDs	+
Jakobsen 2014	MSDs	+
Jensen 2012	MSDs	+
Labriola 2006	MSDs	+
Laisne 2013	MSDs	+
Loisel 1997	MSDs	+

Lysaght 2008	MSDs + CMDs	+
Muijzer 2011	MSDs + CMDs	+
Selander 2015	MSDs + CMDs	+
Shaw 2008	MSDs	+
Shiri 2011	MSDs	+
Steenstra 2006	MSDs	+
Tjulin 2011	MSDs + CMDs	+
Vermeulen 2011	MSDs	+
Wainwright 2013	MSDs	+
Andersen 2014	CMDs	+
Arends 2013	CMDs	+
Bond 2001	CMDs	+
De Vries 2014	CMDs	+
Hatchard 2012	CMDs	+
Karlson 2010	CMDs	+
Karlson 2014	CMDs	+
Martin 2015	CMDs	+
Nieuwenhuijsen 2004	CMDs	+
Post 2005	CMDs	+
Poulsen 2014	CMDs	+
Stahl 2014	CMDs	+
Tehiala 2013	CMDs	+
Van Beurden 2015	CMDs	+

Support from Co-workers

Brouwer 2009	MSDs + CMDs	+
Brouwer 2010	MSDs	+
Brouwer 2011	MSDs	+
D'Amato 2010	MSDs + CMDs	+
Dunstan 2013	MSDs	+
Ekbladh 2004	MSDs + CMDs	+
Friesen 2001	MSDs + CMDs	+
Haugli 2011	MSDs + CMDs	+
Haveraaen 2016	MSDs	+
Jakobsen 2014	MSDs	+
Labriola 2006	MSDs	+
Laisne 2013	MSDs	+
Lysaght 2008	MSDs + CMDs	+
Selander 2015	MSDs + CMDs	+
Tjulin 2011	MSDs + CMDs	+
De Vries 2014	CMDs	+
Hatchard 2012	CMDs	+
Nielsen 2013	CMDs	+
Stahl 2014	CMDs	+

Negative Outcomes

Support from leaders

Post 2005	MSDs	-
Ekberg 2015	CMDs	-

No Effects

Support from leaders

Arnetz 2003	MSDs	none
Besen 2015	MSDs	none
Verbeek 2002	MSDs	none
Wahlin 2012	MSDs	none
Nielsen 2013	CMDs	none
Brouwer 2010	CMDs	none
Van Oostrom 2009	CMDs	none
Van Oostrom 2010	CMDs	none
Volker 2015	CMDs	none

Support from co-workers

Besen 2015	MSDs	none
Post 2005	MSDs + CMDs	none
Brouwer 2010	CMDs	none
Volker 2015	CMDs	none

Inconclusive Outcomes

Job crafting

Bond 2001	CMDs	+/?
Johansson 2006	CMDs	+/?
Jakobsen 2014	MSDs	+/?
Krause 2001	MSDs	+/?
Marhold 2001	MSDs	+/?

Where sustainable RTW outcomes is represented as positive (+), negative (-), no effect (none), inconsistent (+/-) and inconclusive (+/?).

Appendix 12: List of included studies

Author	Year	Title
Ahlstrom <i>et al.</i>	2013	Workplace rehabilitation and supportive conditions at work; a prospective study
Andersen <i>et al.</i>	2014	How do workers with common mental disorders experience a multidisciplinary return to work intervention? A qualitative study.
Anema <i>et al.</i>	2003	Participatory ergonomics as a return to work intervention: a future challenge
Arends <i>et al.</i>	2013	Prevention of recurrent sickness absence in workers with common mental disorders: results of a cluster-randomised controlled trial.
Arnetz <i>et al.</i>	2003	Early workplace intervention for employees with musculoskeletal related absenteeism; a prospective controlled intervention study
Baril <i>et al.</i>	2003	Management of return to work programs for workers with musculoskeletal disorders; a qualitative study in three Canadian provinces.
Bernacki <i>et al.</i>	2000	A facilitated early return to work program at a large urban medical centre.
Besen <i>et al.</i>	2015	Returning to work following low back pain; towards a model of individual psychosocial factors.
Bond and Bunce.	2001	Job control mediates change in a work re-organization intervention for stress reduction.
Brouwer <i>et al.</i>	2009	Behavioural determinants as predictors of return to work after long-term sickness absence; an application of the theory of planned behaviour
Brouwer <i>et al.</i>	2010	A prospective study of return to work across health conditions; perceived work attitude, self-efficacy and perceived social support.
Brouwer <i>et al.</i>	2011	Return to work self-efficacy; development and validation of a scale in claimants with musculoskeletal disorders
Bültmann <i>et al.</i>	2009	Coordinated and tailored work rehabilitation (CTWR): A randomized controlled trial with economic evaluation undertaken with workers on sick leave due to musculoskeletal disorders.
Burtler <i>et al.</i>	2007	It pays to be nice; employer-worker relationships and the management of back pain claims
Crook and Moldofsky	1994	The probability of recovery and return to work from work disability as a function of time.
D'Amato and Zijlstra	2010	Toward a climate for work resumption; the nonmedical determinants of return to work.

De Rijk <i>et al.</i>	2008	Gender differences in return to work patterns among sickness absentees and their associations with health; a prospective cohort study in the Netherlands.
De Vries <i>et al.</i>	2014	Perceived impeding factors for return to work after long-term sickness absence due to major depressive disorder: A concept mapping approach
Dionne <i>et al.</i>	2013	Obstacles to and facilitators of return to work after work-disabling back pain; The worker's perspective
Dunstan <i>et al.</i>	2013	What leads to the expectation to return to work? Insights from a theory of planned behaviour (TPB) model of future work outcomes
Durand <i>et al.</i>	2000	Therapeutic return to work: Rehabilitation in the workplace.
Ekberg <i>et al.</i>	2015	Early and late return to work after sick leave; predictors in a cohort of sick-listed individuals with common mental disorders
Ekbladh	2010	Return to work; The predictive value of the worker role interview (WRI) over two years
Ekbladh <i>et al.</i>	2004	The worker role interview- preliminary data on the predictive validity of return to work of clients after an insurance medicine investigation
Engstrom and Janson	2007	Stress-related absence and return to labour market in Sweden
Franche <i>et al.</i>	2007	The impact of early workplace-based return to work strategies on work absence duration; a 6-month longitudinal study following an occupational musculoskeletal injury
Friesen <i>et al.</i>	2001	Return to work; the importance of human interactions and organizational structures.
Gallagher <i>et al.</i>	1989	Determinants of return-to-work among low back pain patients
Hatchard <i>et al.</i>	2012	Workers' perspective on self-directing mainstream return to work following acute mental illness: Reflections on partnerships
Haugli <i>et al.</i>	2011	What facilitates return to work? Patients experiences 3 years after occupational rehabilitation
Haveraaen <i>et al.</i> (2016)	2016	Do psychological job demand, decision control and social support predict return to work three months after return to work (RTW) programme? The rapid-RTW cohort study
Heijbel <i>et al.</i>	2006	Return to work expectation predicts work in chronic musculoskeletal and behavioural health disorders; Prospective study with clinical implications
Heijbel <i>et al.</i>	2013	Implementation of a rehabilitation model for employees on long-term sick leave in the public sector; Difficulties, counter-measures and outcomes

Hoefsmit <i>et al.</i>	2014	Environmental and personal factors that support early return to work; A qualitative study using the ICF as a framework
Hu <i>et al.</i>	2014	Predictors of return to work and duration of absence following work-related hand injury
Huijs <i>et al.</i>	2012	Differences in predictors of return to work among long term sick listed employees
Janssen <i>et al.</i>	2003	The demand-control-support model as a predictor of return to work
Jakobsen and Lillefejjell	2014	Factors promoting a successful return to work; from an employer and employee perspective
Jensen <i>et al.</i>	2012	Sustainability of return to work in sick-listed employees with low-back pain. Two-year follow-up in a randomized clinical trial comparing multidisciplinary and brief intervention.
Johansson <i>et al.</i>	2006	Return to work and adjustment latitude among employees on long-term sickness absence
Karlson <i>et al.</i>	2010	Return to work after a workplace-oriented intervention for patients on sick leave for burnout; A prospective study
Karlson <i>et al.</i>	2014	Long-term stability of return to work after a workplace-oriented intervention for patients on sick leave for burnout
Krause <i>et al.</i>	2001	Psychosocial job factors and return-to-work after compensated low back injury: A disability phase-specific analysis
Labriola <i>et al.</i>	2006	Multilevel analysis of individual and contextual factors as predictors of return to work
Lagerveld <i>et al.</i>	2010	Return to work among employees with mental health problems; development and validation of a self-efficacy questionnaire
Laisne <i>et al.</i>	2013	Biopsychosocial determinants of work outcomes of workers with occupational injuries receiving compensation; A prospective study
Lammerts <i>et al.</i>	2016	Longitudinal associations between biopsychosocial factors and sustainable return to work of sick-listed workers with a depressive or anxiety disorder
Lederer <i>et al.</i>	2012	Gender differences in personal and work-related determinants of return to work following long-term disability: A 5year cohort study.
Loisel <i>et al.</i>	1997	A population-based, randomized clinical trial on back pain management.
Lydell <i>et al.</i>	2009	Predictive factors of sustained return to work for persons with musculoskeletal disorders who participated in rehabilitation
Lysaght and Larmour-Trode	2008	An exploration of social support as a factor in the return to work process

Marhold <i>et al.</i>	2001	A cognitive behavioural return to work program: effects on pain patients with a history of long-term versus short-term sick leave.
Martin <i>et al.</i>	2015	Barriers and facilitators for implementation of a return-to-work intervention for sickness absence beneficiaries with mental health problems: results from three Danish municipalities.
Muijzer <i>et al.</i>	2011	Influence of efforts of employer and employee on return to work process and outcomes
Nielsen <i>et al.</i>	2010	Predictors of return to work in employees sick-listed with mental problems: findings from a longitudinal study
Nielsen <i>et al.</i>	2013	Encounters between workers sick-listed with common mental disorders and return to work stakeholders. Does workers' gender matter?
Nieuwenhuijsen <i>et al.</i>	2004	Supervisory behaviour as a predictor of return to work in employees absent from work due to mental health problems.
Opsahl <i>et al.</i>	2016	Do expectancies of return to work and job satisfaction predict actual return to work in workers with long lasting LBP?
Post <i>et al.</i>	2005	Work-related determinants of return to work off employees on long-term sickness absence
Poulsen <i>et al.</i>	2014	Effect of the Danish return-to-work program on long-term sickness absence: results from a randomized controlled trial in three municipalities.
Reiso <i>et al.</i>	2003	Back to work: Predictors of Return to Work among patients with Back disorders certified as sick.
Roelen <i>et al.</i>	2012	Employees sick-listed with mental disorders; Who returns to work and when?
Selander <i>et al.</i>	2015	Contact with the workplace during long-term sickness absence and worker expectations of return to work
Shaw <i>et al.</i>	2008	An investigation of a workplace-based return to work program for shoulder injuries
Shiri <i>et al.</i>	2011	The effect of workplace intervention on pain and sickness absence caused by upper-extremity musculoskeletal disorders
Stahl and Stiwne	2014	Narratives of sick leave, return to work and job mobility for people with common mental disorders in Sweden
Steenstra <i>et al.</i>	2006	Economic evaluation of multi-stage returns to work program for workers on sick leave due to low back pain.
Steenstra <i>et al.</i>	2009	What works best for whom? An exploratory, subgroup analysis in a randomized, controlled trial on the effectiveness of a workplace intervention in low back pain patients on return to work.

Stoltenberg & Skov	2010	Determinants of return to work after long-term sickness absence in six Danish Municipalities.
Tenhiala <i>et al.</i>	2013	Organizational justice, sickness absence and employee age.
Tjulin <i>et al.</i>	2011	The social interaction of return to work explored from co-workers' experiences.
Van Beurden <i>et al.</i>	2015	Effect of an intervention to enhance guideline adherence of occupational physicians on return to work self-efficacy in workers sick-listed with common mental disorders
Van Oostrom <i>et al.</i>	2009	A participatory workplace intervention for employees with distress and lost time; A feasibility evaluation within a randomized controlled trial
Van Oostrom <i>et al.</i>	2010	A workplace intervention for sick-listed employees with distress; results of a randomized controlled trial
Verbeek <i>et al.</i>	2002	Early occupational health management of patients with back pain.
Vermeulen <i>et al.</i>	2011	A participatory return to work intervention for temporary agency workers and unemployed workers sick-listed due to musculoskeletal disorders; Results of a randomized controlled trial
Volker <i>et al.</i>	2015	Return to work self-efficacy and actual return to work among long-term sick-listed employees
Wahlin <i>et al.</i>	2012	Association between clinical and work-related interventions and return to work for patients with musculoskeletal or mental disorders
Wainwright <i>et al.</i>	2013	Return to work with chronic pain: employer's and employee's views

Appendix 13: Summary of Scoping Review

Author/Year	Title	Aim	Outcome Measure	Intervention	Personal and Social Factor	Findings	Comments
Arends <i>et al.</i> (2012)	Interventions to facilitate return to work in adults with adjustment disorders (Review)	To assess the effects of interventions facilitating RTW for workers with acute or chronic adjustment disorders.	RTW	Pharmacological interventions, Psychological interventions (such as cognitive behavioural therapy (CBT) and problem solving therapy), Relaxation techniques, Exercise programmes, Employee assistance programmes or Combinations of these interventions.	Nil	We found moderate quality evidence that CBT did not significantly reduce time until partial RTW and low quality evidence that it did not significantly reduce time to full RTW compared with no treatment. Moderate quality evidence showed that PST significantly enhanced partial RTW at one-year follow-up compared to non-guideline based care but did not significantly enhance time to full RTW at one-year follow-up.	This study was intervention focused, as such specific effects of personal and social factors on RTW outcomes were not taken into account.
Carrol <i>et al.</i> (2010)	Workplace involvement improves return to work rates among employees with back pain on long-term sick leave: a systematic review of the effectiveness and cost-effectiveness of interventions.	To determine whether interventions involving the workplace are more effective and cost effective at helping employees on sick leave return to work than those that do not	RTW	Workplace intervention	Nil	Stakeholder participation and work modification are more effective and cost effective at returning to work adults with musculoskeletal conditions than other workplace-linked interventions, including exercise	This study's focus was on the cost-effectiveness of the intervention, as such conclusions on how they translate to the sustainability of RTW is still unclear. Hence the need for further research.

Cancelliere et al. (2016)	Factors affecting return to work after injury or illness: best evidence synthesis of systematic reviews	involve the workplace at all. To identify common prognostic factors for return-to-work across different health and injury conditions and to describe their association with return-to-work outcomes.	RTW	Return-to-work, lower severity of the injury/illness, return-to-work coordination, and multidisciplinary interventions	Higher education and socioeconomic status, higher self-efficacy and optimistic expectations for recovery	Expectations of recovery and return-to-work, pain and disability levels, depression, workplace factors, and access to multidisciplinary resources are important modifiable factors in progressing return-to-work across health and injury conditions.	Their study provided strong evidence suggesting that return to work is facilitated by an interplay of factors. However, these factors were not restricted to personal and social factors as is the case in this current review, but it also evaluated the effectiveness of several interventions as a factor. This study did not also focus specifically on MSDs and CMDs, but it evaluated return to work outcomes across different health and injury conditions. Hence the need for reviews specifically addressing outcomes for MSDs and CMDs.
Dewa et al. (2015)	The effectiveness of return to work interventions that incorporated work-focused problem-solving skills for workers with sickness absences related to	The purpose of this study is to review the current state of the published peer-reviewed literature related to return-to-work (RTW) interventions that	RTW	Work focused problem-solving skills	Nil	There was variability among the studies with regard to RTW findings. Two of three studies reported significant differences in RTW rates between the intervention and control groups. One of six studies observed a significant difference in sickness	This study included only workers with mental health disorders, findings cannot be generalised for workers with MSDs which is also a target ill-health in this review.

mental disorders: a systematic literature review. incorporate work focused problem-solving skills for workers.

absence duration between intervention and control groups. In conclusion, there is limited evidence that combinations of interventions that include work-related problem-solving skills are effective in RTW outcomes.

Franché et al. (2005)

Workplace-based Return-to-Work Interventions: A Systematic Review of the Quantitative Literature.

. To synthesize evidence on effectiveness of workplace-based RTW interventions and strategies that assist workers with musculoskeletal and other pain related conditions to return to work after a period of work absence.
 . To provide an assessment of methodological strengths and limitations of studies in this field and will be addressed in a later paper.

RTW

Workplace intervention

Nil

The systematic review provides the evidence base supporting that workplace-based RTW interventions can reduce work disability duration and associated costs, however the evidence regarding their impact on quality-of-life outcomes was much weaker.

Regardless of the fact that this study took account of the impact of leaders on RTW, included studies only recruited participants with MSDs. Hence effects on participants with CMDs cannot be generalised.

Krause et al. (1998)	Modified work and return to work: A review of the literature.	To synthesize and critically appraise the scientific evidence in this field.	RTW	Modified work	Nil	<i>The main finding of this review is that modified work programs facilitate return to work for temporarily and permanently disabled workers. Injured workers who are offered modified work return to work about twice as often as those who are not. Similarly, modified work programs cut the number of lost work days in half</i>	Even though results attained the target outcome; RTW as a result of modified work provided by leaders, the study did not evaluate the impact of the interphase between workers and leaders. It is this interphase between employees and leaders during the RTW process that this study is interested in and how that impacts on sustainable RTW.
Mikkelsen & Rosholm (2018)	Systematic review and meta-analysis of interventions aimed at enhancing return to work for sick-listed workers with common mental disorders, stress-related disorders, somatoform disorders and personality disorders	The aim of the present review and meta-analysis was to collate and update the existing evidence for interventions aimed at facilitating RTW in sick-listed workers with mental disorders.	RTW	Organisational Change, Graded RTW, Therapeutic Elements and Workplace contact before RTW	Nil	The results reveal strong evidence for interventions including contact to the work place and multicomponent interventions and moderate evidence for interventions including graded RTW. In addition, the results provide strong evidence for interventions targeting stress compared with interventions targeting other mental disorders.	This study's focus was on RTW outcomes for workers sick-listed for mental disorders. Even though findings echo's the effectiveness of workplace-based interventions, however, effects of personal and social factor which are the focus of this review were not evaluated.
Nigatu et al. (2016)	Intervention for enhancing return to work in individuals with a common mental illness: Systematic	To assess the effectiveness of existing workplace and clinical interventions that	RTW	Workplace intervention, Clinical intervention	Nil	In conclusion, this review found no evidence supporting the effectiveness of RTW interventions in employees with a CMD.	These findings are inconsistent with suggestions from previous literature; this review found no evidence supporting the effectiveness of RTW

review and meta-analysis of randomized controlled trials were aimed at enhancing RTW.

interventions in employees with a CMDs. Therefore, a need for further research to understand this disparity is imperative.

Van Vilsteren *et al.* (2015)

Workplace intervention to prevent work disability in workers on sick leave (Review).

To determine the effectiveness of workplace interventions in preventing work disability among sick-listed workers, when compared to usual care or clinical interventions.

RTW

Workplace intervention.

Nil

Results showed moderate-quality evidence that workplace interventions reduce time to first RTW, high-quality evidence that workplace interventions reduce cumulative duration of sickness absence, very low-quality evidence that workplace interventions reduce time to lasting RTW, and moderate-quality evidence that workplace interventions increase recurrences of sick leave.

Even though the study suggested the effectiveness of workplace intervention on RTW, personal and social factors were not individually measured for as is the case in the current review.

Appendix 14: Topic guide for Managers

1. Do you manage the return to work process for sick-listed employees?
 1. Explain how the return to work process works, and the role of managers.
 2. What factors do you suppose are likely to facilitate a successful RTW or impact decisions to RTW for sick-listed employees?
 3. What factors are likely to impede a successful RTW for sick-listed employees?
 4. Do you think these factors are gender-related?
 5. Is there anything else you think is important in aiding sustainable RTW for you that we have not talked about?

Appendix 15: Topic guide for Employees

Participant IDNO |_|_|_|_| Gender Male / Female Researcher Initials |_|_|_|_|

Date |_|_|/|_|_|/|_|_|

Introduction

I am _____ from _____

- ✓ General purpose of the study
- ✓ Aims of the interview and expected duration
- ✓ Who is involved in the process (other participants)
- ✓ Why the participant's cooperation is important
- ✓ What will happen with the collected information and how the participant/target group will benefit
- ✓ Any questions?
- ✓ Consent

Warm up [demographic & work history]

Can I ask some details about you and your job?

Job Title _____ Job level _____

Years worked at this facility |_|_|years|_|_|months

Educational Background: High School College University

What department do work in? _____

How many hours/weeks? _____

How old are you? Under 30yrs 30-40yrs Over 40yrs

Are you married/ Single or cohabiting? Yes No
 Do you have any children? Yes No
 Health condition and duration of absence? _____
 Is it a recurrent condition? _____
 Did you return to full time or part time work? _____

Now I am going to ask you some questions about your perception about work, the return to work process and certain factors, circumstances or situations that you feel could facilitate a sustainable RTW.

Interview 1

Domain	Topic and Probes
<p>Context</p> <p>+</p> <p>Mechanism</p> <p>+</p> <p>Outcome</p>	<p style="text-align: center;">RTW Process</p> <p>1. Could you tell me about your views on the return to work process?</p> <p>Probes;</p> <ul style="list-style-type: none"> •Do you consider the process helpful/ or not? Why? •What challenges were concerned about you would encounter on returned to work? •How straightforward did you think it was to return to work? What made it easy or difficult? •Is there anything about the RTW process that is most likely to discourage you from returning to work? •How satisfied are you in general with the RTW process? <p>Work adjustment</p> <p>2. Could you tell me about how the nature of your job and the work environment affected return to work?</p> <p>Probes;</p> <ul style="list-style-type: none"> •Was your job different from before absence? How? Did you need any work adjustments? Tell me about that. •How did you perceive your employers/supervisor’s willingness to adjust your work? Was the adjustment beneficial? <p>Workplace encounter/ support</p> <p>3. Could describe your relationship with your 1st manager and 2nd colleagues at work, how would you qualify their role in your return to work? Supportive or not?</p> <p>Probes;</p>

•What were the specific expectations you had with regards to the level of support you expected from them on your RTW? By that I mean, what did you expect them to do to show support? And do you think they met it?

•Do you think knowing that you have a supportive team or line manager could motivate you to return to work?

Domestic Pressures

4. Could you tell me about how your life outside of work affected return to work?

Probes;

•Can you say apart from work, you have an active/busy domestic and home life? (Married, kids, house chores, etc.) Tell me about that.

•Do you suppose still being domestically active when you should be taking a break and recuperating plays a part in delaying your recovery and eventual RTW? Why?

•Do you feel you have more help at home than at when you return to work?

Health services awareness/engagement

5. Could you tell me about how your employers' occupational health services affected return to work?

Probes;

•Are you aware of all healthcare services available to you at the workplace in the event that you are ill?

•Has engaging with information about health-care services available to you been helpful and beneficial in your ability to get the right help for your recovery and RTW?

How?

Adequate rehabilitation/ treatment

6. How did the treatment you received affect return to work?

Probes;

•How confident were you in the care/rehabilitation provided to you?

•Do you suppose it was adequate and beneficial? In what way?

Health characteristics

7. Could you tell me about any other health related factors that may have affected your recovery?

Probes;

•How do you feel about the speed of your improvement? Early or taking too long?

•Apart from CMDs/MSDs, were you experiencing any other health issues? And were your healthcare providers aware of these?

	<ul style="list-style-type: none"> •Where you fully recovered on RTW? How do you think that impacted on your RTW process? Do you suppose it was helpful to RTW whilst not fully recovered? If not fully recovered; why did you feel the need to RTW? •Are you more likely to RTW on full recovery or when you feel well enough to manage just fine? <p>Work importance</p> <p>8. In general terms, could you explain how important is work in your overall life and why this is the case?</p> <p>Probes;</p> <ul style="list-style-type: none"> •How did you feel about being on sick leave? What did being absent mean to you? •Do you think the way you feel about your work affects your motivation to return to work? (i.e. regardless of whether you're fully recovered or not) Why? <p>9. What other factors do you suppose are likely to facilitate/motivate or hinder your decisions to return to work? Explain.</p> <p>10. Is there anything else you would like to add or ask me?</p>
<p>Closing</p> <p>Is there anything else you think is important in aiding sustainable RTW for you that we have not talked about?</p> <ul style="list-style-type: none"> ✓ Summarise ✓ Thank participant ✓ Provide extra information and contacts to participants 	

Appendix 16: Participant Information Sheet

INFORMATION SHEET

Introduction

I am a researcher at the University of East Anglia conducting a study on sustainable return to work (RTW) after ill-health such as; musculoskeletal disorders (MSDs) or common mental health disorders

(CMDs). I am interested in learning about how gender interacts with various personal and social factors to facilitate sustainable return to work for workers returning to work after sick leave.

Why is this study being done?

Over the years, MSDs and CMDs have contributed to the high levels of sickness absence in Great Britain, which puts workers at the risk of loss of job or long-term disability especially if conditions extend over a period and are poorly managed. Across the country, the rate of sickness absence has shown little or no reductions, which may suggest the ineffectiveness of return to work measures or interventions at facilitating sustainable return to work after ill-health for workers. This information will help us understand the different interplay of factors which facilitate RTW differently for men and women to create more effective and tailor-made RTW programs (taking into account risk factors for both genders) to meet men and women's specific needs which would instigate sustainability of RTW.

What will happen during the interview?

We would like to ask you some questions about your perspective on the implementation, effects of return to work process and factors that either facilitate or hinder sustainable RTW. We will take notes of the discussion and a recording will also be made using a digital voice recorder. After we ask these questions in the first interview, one more interview will be conducted between 2-3 months from the first one to follow up on issues raised in the previous interviews. All information gathered will be treated as confidential by the study personnel, and records of the interviews will be kept securely in locked filing cabinets and offices. No personal identification information such as names will be used in any reports arising out of this research.

How long will the study last?

Each interview will last about 60-90 minutes; however, the total duration of the study will be about 12 months.

Where will interviews take place?

Interviews will be conducted either via the phone or face to face at participant's or researchers' professional site.

What risks can I expect from being in the study?

Information you provide about your experiences and opinions will be recorded, but your name will not be used in any reports of the information provided. Quotes or other results arising from your participation in this study if included in any reports, will be presented anonymously. The information obtained from these interviews will only be used by the project researcher and will be locked at our project office. The personal information gathered for this study will be kept private and only accessed by me. Obtained data will be stored for a period of 12 months – 2 years to allow for transcription and final analysis. Data will be deleted on completion of the doctoral study.

Are there benefits to taking part in the study?

There will be no direct benefit to you from participating in this study. However, the information that you provide will help researchers, health professionals, decision and policy-makers understand how best to improve return to work programs/interventions at the workplace to sustain recovery and improve health and well-being.

What other choices do I have if I do not take part in this study?

You are free to choose not to participate in the study. If you decide not to take part in this study, there will be no penalty to you.

What are the costs of taking part in this study? Will I be paid for taking part in this study?

There are no costs to you for taking part in this study. You will not be paid for taking part in this study.

What are my rights if I take part in this study?

Taking part in this study is your choice. You may choose either to take part or not to take part in the study. If you decide to take part in this study, you may change your mind at any time. No matter what decision you take, there will be no penalty to you in any way.

Who can answer my questions about the study?

You can talk to the researcher about any questions or concerns you have about this study. Contact me on email a.etuknwa@uea.ac.uk. If you have any questions, comments or concerns about taking part in this study, first talk to the researcher.

Giving consent to participate in the study

You may keep this information sheet if you wish. Participation in this study is voluntary. You have the right to decline to participate in the study, or to withdraw from it at any point without penalty. If you do not wish to participate in the study, you should inform the researcher now. If you do wish to participate in this study, you should tell the researcher now, or at the time of the interview if this is to take place in the future. If you do not agree to quotes or other results arising from your participation in the study being included, even anonymously, in any reports about the study, please tell the researcher.

Dissemination of Findings

A brief report summarising the findings from this research will be forwarded to participants via email at the end of the study.

Appendix 17: Consent Form

CONSENT FORM

Study Title: Sustainable return to work after ill-health; Personal and social factors

Chief Investigator: Etuknwa, Abasiama (Sema)

•The study has been explained to me in a language that I comprehend. All the questions I had about the study have been answered. I understand what will happen during the interview and what is expected of me. *Initial:*

•I have been informed that it is my se to take part in the interview today and that if I choose to refuse, I do not have to give a reason, and that it will not be at any cost to me. *Initial*

•I have been informed that anything I say during the interview will remain completely confidential: my name will not be used nor any other information that could be used to identify me.

Initial:

•It has been explained that sometimes the researchers find it helpful to use my own words when writing up the findings of this research. I understand that any use of my words would be completely anonymous (without my name). I have been told that the interview may be used in this way.

Initial:

Circle response:

I agree to take part in the study:	Yes	No
I agree that my own words may be used anonymously in the report	Yes	No

Signature of participant:

NAME (in capital letters)	SIGNATURE	DATE OF SIGNATURE (in DD/MM/YYYY)

Tick box if participant refuses to have witness present

Signature of Researcher taking consent:

I have discussed the study with the respondent named above, in a language he/she can comprehend. I believe he/she has understood my explanation and agrees to take part in the interview.

NAME (in capital letters)	SIGNATURE	DATE OF SIGNATURE (in DD/MM/YYYY)

Appendix 18: Consolidated CMO configured RTW theories

S/N	CMO configured RTW theories
1	Sick-listed employees who are a single, divorced or separated parent to very young children and have no help with domestic chores during sick leave (context) are less likely to engage with the RTW process early (mechanism), which impacts negatively on recovery, leading to a delay in return to work (outcome).
2	Women aware of the workplace health and safety programs (context), are more likely to engage with the RTW process (Mechanism), which in turn facilitates lasting return to work (outcome).
3	Employees are motivated to engage the RTW process even when they are not fully recovered (mechanism), as a result of the level of importance they place on their job and the personal factors surrounding them (mechanism) (context), thus facilitating an RTW (outcome).
4	Depending on the severity of the nature of illness, people with MSDs and CMDs (context) are likely to report co-morbidity or changing health complaints during absence (mechanism), which contributes to a delay in recovery and eventual RTW” (outcome).
5	When people sick-listed with CMDs are acknowledging of their condition and open with their health providers (context), it impacts the quality of care provided (mechanism), which plays a role on recovery and RTW (outcomes).
6	When employees sick-listed with MSDs & CMDs (context) can access and/or afford adequate and suitable treatment and rehabilitation early on in their absence period (mechanism), it increases their chances of recovery and their likelihood of returning to work early (outcome).
7	Finance (context) influences motivations to participate in the RTW process (mechanism) even when not fully recovered for employees who are the primary financial providers at home (context) which impacts on sustainable RTW (outcome).
8	Employees are more likely to engage the RTW process (mechanism) when they feel supported, valued and cared for at the workplace (context), which results in their ability to settle in comfortably, thus significantly easing their transition back to work and impacting on sustainable RTW (outcome).
9	Female line-managers are considered more likely to be supportive and suited to handle the RTW process (context) compared to male line-managers, as they hold a more positive attitude, are more caring and willing to help employees during the RTW process

	(mechanism), which boosts employees' self-efficacy, thus leading to their ability to RTW sustainably (outcome).
10	Line-managers who have a good relationship with sick-listed employees (context) are likely to be more supportive of employees during the RTW process (mechanism), which impacts on sustainable RTW (outcome).
11	A competent and supportive manager, working in collaboration with other health services within the organisation (context) is likely to increase their level of understanding about employee's condition and best RTW approach to adopt, as well as be more empathic towards employees (mechanism). As a result, they can successfully implement an effective RTW strategy (mechanism) which boosts employee's self-efficacy, thus impacting on sustainable RTW (outcome).
12	Reassuring female employees of their workload during the RTW process (context) is effective in assuaging fear (mechanism) and assisting in easy transition back to work (outcome), which in turn impacts on successful RTW (outcome).
13	Employees' sick-listed with CMD (context) are less likely to engage with the RTW process early, as a result of persisting personal or external issues (mechanism) which delays recovery and eventual return to work (outcome).
14	People sick-listed with MSD, who have an active personality (context) are more likely to engage the RTW process even when they are not fully recovered (mechanism), thus facilitating an early RTW.
15	Women who are of a higher educational level and holding a leadership position are more likely to engage in the RTW process whilst not fully recovered out of a need to prove oneself and to prove that they are deserving of their attained position, thus facilitating early RTW.
16	More women than men are likely to form strong social networks within the workplace which in most cases forms the basis for engaging the RTW process early thus facilitating RTW.
17	When absent employees are contacted during absence by a trusted and supportive nominee (context), it instigates in employee's feelings of being cared for and valued (mechanism), which in turn motivates their decision to RTW (outcome).
18	Sick-listed female employees (context) are more likely to be overwhelmed by guilt of letting the team down, which instigates decisions to engage the RTW process early (mechanism), thus facilitating an RTW (outcome).

19	Employees who hold leadership positions with no replacements during absence (context) are more likely to be pressured by their employers to engage the RTW process early as no other person can do their job (mechanism), thus facilitating RTW (outcome).
20	Employees sick-listed with CMD who have been absent for an extended period (context), are more likely to be either pressured to RTW by organisations who lack proper understanding about mental health issues or RTW out of a fear of job loss-progression (mechanism), thus facilitating a RTW after sick leave (outcome).
21	Sick-listed male employees who have no replacements during absence (context) are likely to return to work early in spite of not being fully recovered (outcome) from the fear of an increasing workload (mechanism).
22	Sick-listed employees benefit from support external to the workplace (e.g., spouse, family and general practitioner), which plays a role on adequate care received and recovery, thus facilitating RTW.
23	Employees sick-listed with MSDs and CMDs who have a good understanding of the nature of their condition (context), and its risk factors are likely to engage in self-management practices (mechanism) which impacts on recovery and a sustainable RTW (outcome).
24	When employees with MSDs requiring physiotherapy (context) return to work, rehabilitation time is likely to be impacted (mechanism), which hinders full recovery, thus contributing to poor RTW outcomes (outcome).
25	When RTW strategies are exclusive of adequate work accommodations and a sufficient rehabilitation time (mechanism), being absent for an extended period (context) is more likely to impede sustainable RTW (outcome) for men, compared to women.
26	Compared to men, sick-listed female employees who RTW during periods of organisational/departmental changes (context) are more likely to experience challenges during the RTW process as a result of poorly implemented RTW strategies (mechanism), thus impacting on poor RTW outcomes (outcome).
27	When employees sick-listed with CMD return to toxic working environments (context) during the RTW process (mechanism), it is likely to aggravate their condition, leading to a failed RTW (outcome).
28	During the implementation of the RTW plan for sick-listed employees, when certain factors such as the nature of employee's job is not properly taken into account (context), RTW strategies are bound to be poorly effected (mechanism), and a result, poses challenges for employees which impedes sustainable RTW (outcome).

29	Employees sick-listed with CMDs are likely to benefit from physically-engaging task on initially return, as this facilitates smooth transition back to work, recovery, and eventual sustainable RTW.
30	When there is a general lack of understanding on ill-health and the RTW process is not fully supported by higher management within the organisation (context), it impedes effective implementation of appropriate measures for returning workers (mechanism), which reduces the likelihood of employees attaining a sustainable RTW (outcome).