

Engaging in sickness presenteeism: How do people decide? The decision-making process behind sickness presenteeism, and implications for its management

Huijun Chen

A thesis submitted in partial fulfilment of the requirements of Nottingham Trent University for the degree of Doctor of Philosophy

Aug 2024

## Copyright Statement

The copyright in this work is held by the author. You may copy up to 5% of this work for private study, or personal, non-commercial research. Any re-use of the information contained within this document should be fully referenced, quoting the author, title, university, degree level and pagination. Queries or requests for any other use, or if a more substantial copy is required, should be directed to the author.

## Acknowledgement

I would like to express my sincere gratitude to my supervisors, Dr Zara Whysall, Prof Maria Karanika-Murray and Dr Michael Hewitt for their invaluable guidance and support throughout my PhD journey. Their expertise and mentorship were instrumental in shaping my research and academic growth. I am also profoundly thankful to my family for their understanding and belief in my abilities. Their unwavering support sustained me during the inevitable ups and downs of this demanding undertaking.

I extend my heartfelt appreciation to the participants in my study, whose cooperation and contributions were indispensable to the success of my research. Their willingness to engage in this study enriched my work and made it possible. Finally, I want to acknowledge the countless friends and colleagues who have offered encouragement, motivation, and companionship throughout this journey. This work would not have been possible without the collaborative effort and encouragement of all these individuals and groups. I am deeply grateful for their roles in my academic and personal growth.

## Table of Contents

LIST OF OUTPUTS FROM THIS THESIS: .....	7
LIST OF FIGURES .....	8
LIST OF TABLES .....	8
<b>ABSTRACT .....</b>	<b>9</b>
<b>CHAPTER 1 - INTRODUCTION.....</b>	<b>10</b>
1.1 THE CHALLENGES OF PRESENTEEISM .....	10
1.2 UNDERSTANDING PRESENTEEISM: POTENTIAL BENEFITS AND MANAGERIAL CHALLENGES .....	12
1.3 METHODOLOGICAL APPROACHES AND CHALLENGES DURING THE PANDEMIC .....	13
1.4 STRUCTURE OF THIS THESIS.....	15
<b>CHAPTER 2 - LITERATURE REVIEW.....</b>	<b>18</b>
2.1 INTRODUCTION.....	18
2.2 DEFINITION OF SICKNESS PRESENTEEISM .....	19
2.3 UNDERSTANDING DECISION-MAKING THEORIES AND PRESENTEEISM.....	20
2.3.1 <i>General Decision-Making Theories</i> .....	20
2.3.2 <i>Existing Presenteeism Decision-Making Studies</i> .....	25
2.4 THE PRESENTEEISM DECISION-MAKING (PDM) MODEL .....	28
2.5 FACTORS THAT INFLUENCE THE DECISION OF PRESENTEEISM .....	33
2.5.1 <i>Work-related factors</i> .....	37
2.5.2 <i>Person-related factors</i> .....	42
2.5.3 <i>Organisational and Environmental Factors</i> .....	45
2.5.4 <i>Other Demographic Factors</i> .....	48
2.6 THE CONSEQUENCES REGARDING PRESENTEEISM BEHAVIOUR.....	52
2.7 COMMON RESEARCH METHODS IN DECISION-MAKING STUDIES.....	54
2.8 CONCLUSION .....	57
<b>CHAPTER 3 - RESEARCH EPISTEMOLOGY AND METHODOLOGY.....</b>	<b>58</b>
3.1 RESEARCH PHILOSOPHY .....	58
3.2 COMMON RESEARCH METHODS.....	59
3.3 THE ADOPTED RESEARCH METHOD.....	61

3.3.1 <i>Study 1: Initial General Questionnaire</i> .....	63
3.3.2 <i>Study 2: The Diary Study</i> .....	65
3.3.3 <i>Study 3: Semi-Structured Interviews</i> .....	67
3.4 PARTICIPANT RECRUITMENT AND SAMPLING .....	68
<b>CHAPTER 4 - STUDY 1 – INITIAL CROSS-SECTIONAL QUESTIONNAIRE .....</b>	<b>71</b>
4.1 INTRODUCTION.....	71
4.2 METHODOLOGY.....	72
4.2.1 <i>Approach</i> .....	72
4.2.2 <i>Measures</i> .....	74
4.2.3 <i>Demographic characteristics</i> .....	78
4.2.4 <i>Analytic Approach</i> .....	81
4.3 RESULTS.....	87
4.4 DISCUSSION.....	94
4.5 CONCLUSION .....	97
<b>CHAPTER 5. STUDY 2 – DIARY STUDY .....</b>	<b>98</b>
5.1 INTRODUCTION.....	98
5.2 METHODOLOGY.....	99
5.2.1 <i>Approach</i> .....	99
5.2.2 <i>Measures</i> .....	102
5.2.3 <i>Demographic characteristics</i> .....	103
5.2.4 <i>Analytic Approach</i> .....	106
5.3 RESULTS.....	107
5.3.1 <i>Overview of reported health issues and decision outcomes</i> .....	107
5.3.2 <i>Thematic analysis regarding each stage</i> .....	114
5.4 DISCUSSION.....	126
5.5 CONCLUSION .....	132
<b>CHAPTER 6. STUDY 3 – SEMI-STRUCTURED INTERVIEWS .....</b>	<b>133</b>
6.1 INTRODUCTION.....	133
6.2 METHODOLOGY.....	135

6.2.1 Approach.....	136
6.2.2 Interview Questions .....	136
6.2.3 Demographic characteristics.....	138
6.2.4 Analytic Approach .....	143
6.3 RESULTS.....	146
6.3.1 Common Practice of Attendance management norms, policies and procedures.....	146
6.3.2 Feelings and perceptions towards presenteeism and sickness absenteeism.....	152
6.3.3 The Impact of COVID-19 and the Shift to Working From Home .....	156
6.3.4 The perception of current support and desired future resources .....	158
6.4 DISCUSSION.....	162
6.5 CONCLUSION .....	165
<b>CHAPTER 7 - GENERAL DISCUSSION.....</b>	<b>167</b>
7.1 INTRODUCTION.....	167
7.2 THE PRESENTEEISM DECISION-MAKING PROCESS IS NON-LINEAR.....	170
7.3 STRONG BIAS TOWARDS WORK-RELATED CONSIDERATIONS .....	171
7.4 COGNITIVE BIASES PLAY A VITAL ROLE IN THE PRESENTEEISM DECISION-MAKING PROCESS .....	173
7.5 THE PREFERENCE FOR DIRECT SUPPORT FROM LINE MANAGERS AND INDIVIDUALISED ADJUSTMENT .....	174
7.6 CONCLUSION .....	176
<b>CHAPTER 8 - IMPLICATIONS, LIMITATIONS, AND DIRECTIONS FOR FUTURE RESEARCH.178</b>	
8.1 THEORETICAL IMPLICATIONS.....	178
8.2 PRACTICAL IMPLICATIONS .....	182
8.3 LIMITATIONS AND FUTURE RESEARCH.....	185
<b>CHAPTER 9 – CONCLUSION .....</b>	<b>189</b>
<b>REFERENCES.....</b>	<b>192</b>
<b>APPENDIX 1. THE INITIAL CROSS-SECTIONAL QUESTIONNAIRE.....</b>	<b>221</b>
<b>APPENDIX 2. THE DAILY DIARY SURVEY .....</b>	<b>254</b>
<b>APPENDIX 3. SEMI-STRUCTURED INTERVIEW QUESTIONS.....</b>	<b>266</b>

List of outputs from this thesis:

1. Breitsohl, H., Patel, C., Restubog, S., Ruhle, S. A., Schilpzand, P., Rosen, C., Chen, H., Whysall, Z. and Zöhrer, L., 2022. Theoretical and Empirical Advancements in Presenteeism Research. In *Academy of Management Proceedings* (Vol. 2022, No. 1, p. 11663). Briarcliff Manor, NY 10510: Academy of Management.
2. Chen, H., Whysall, Z. and Karanika-Murray, M., 2021. Why presenteeism isn't necessarily a bad thing. *HR Magazine*.
3. Chen, H., Whysall, Z. and Karanika-Murray, M., 2022. How do people decide? The decision-making process behind sickness presenteeism. In: 82nd Annual Meeting of the Academy of Management (AOM 2022), Seattle, Washington, United States, 5-9 August 2022.
4. Chen, H., Whysall, Z., Karanika-Murray, M. and Hewitt, M. 2024. Discovering decision-making patterns of presenteeism behaviour through a qualitative diary study. In: 16th European Academy of Occupational Health Psychology (EAOHP), Granada, Spain, 5-7 June, 2024.
5. Chen, H., Whysall, Z., Karanika-Murray, M. and Hewitt, M. 2024. An experience sampling study of presenteeism decision-making. In: 84th Annual Meeting of Academy of Management (AOM 2024), Chicago, United States, 9-13th August 2024.
6. Karanika-Murray, M., Biron, C., Hervieux, V., Whysall, Z. and Chen, H., 2021. Managing Presenteeism to Optimise Health and Performance. In: T. Wall, C. L. Cooper and P. Brough (Eds). *The SAGE Handbook of Organizational Wellbeing*, London: SAGE Publications Ltd.
7. Whysall, Z., Karanika-Murray, M. and Chen, H., 2023. Understanding the decision-making process for presenteeism behavior: An integration and conceptual model. In: C. L. Cooper and L. M. Lapierre (Eds). *Cambridge Companion To Organisational Stress and Well-being*, Cambridge: Cambridge University Press.
8. Whysall, Z., Chen, H., Karanika-Murray, M. and Hewitt, M., 2023. Effectively managing sickness presenteeism - understanding the decision-making process. In: 21st European Association of Work and Organizational Psychology Congress, Katowice, Poland, 24-27 May 2023.

## List of Figures

Figure 1. Health-performance framework (Karanika-Murray and Biron, 2020) .....	27
Figure 2. The Presenteeism Decision-making model (Whysall et al., 2023) .....	30
Figure 3. Types of factors influencing presenteeism decisions.....	34
Figure 4. An overview of the research methods adopted in this thesis .....	69
Figure 5. The flow of the daily diary survey .....	101
Figure 6. The revised PDM model .....	181

## List of Tables

Table 1. Demographic information of the initial cross-sectional questionnaire.....	78
Table 2. An overview of the data generated by the initial cross-sectional questionnaire .....	85
Table 3. Negative binomial regression between variables measured in the cross-sectional questionnaire.....	91
Table 4. Bivariate Pearson of variables measured in the cross-sectional questionnaire .....	92
Table 5. Demographic information of the diary study participants.....	104
Table 6. Frequencies of attendance outcomes selected by participants .....	109
Table 7. Frequencies of reported health issues, mean severity for each health issue, and the attendance outcome .....	110
Table 8. Information related to the interview participants .....	140
Table 9. A summary of research questions, research methods, and findings.....	169



## Abstract

Presenteeism, the phenomenon of working while unwell, is highly prevalent and costly. Although many studies consider presenteeism as an attendance behaviour with negative consequences to the workplace, some highlight that with appropriate management and adjustments, presenteeism can positively impact organisations and individuals. Research has identified several factors that impact individuals' decisions regarding presenteeism. However, little is known about how individuals decide to enact presenteeism, instead of taking sick leave, specifically in how they evaluate and prioritise different factors within the decision-making process.

Using an experience sampling approach, supplemented by an initial cross-sectional questionnaire and subsequent semi-structured interviews, this thesis examines the decision-making process of presenteeism based on the conceptual model developed by Whysall et al. (2023), which comprises four linear stages: (1) Trigger, (2) Options, (3) Evaluation, and (4) Feedback. Through a combination of qualitative (i.e., thematic analysis and narrative analysis) and quantitative analyses (i.e., logistic regression, multiple linear regression and bivariate correlation), the results substantiated the characteristics of the four stages and disclosed a cyclical association among them, implying that the process may not strictly adhere to the linear progression outlined in the conceptual model. Individuals may bypass certain stages or swing between stages 2 and 3, depending on the severity of their symptoms and work-related factors. Moreover, the significance of work-related factors throughout the decision-making process has been highlighted. Nevertheless, individuals do not tend to reflect on their attendance decisions unless their symptoms persist or worsen, which increases the possibility of long-term sickness absence in the future. These findings underscore the critical necessity for effective managerial interventions targeting presenteeism behaviour, which can be informed by a more comprehensive understanding of the decision-making process. Creating a positive and supportive work environment with enhanced support from line managers is crucial for mitigating the adverse effects of presenteeism.

## Chapter 1 - Introduction

Presenteeism, defined as working while experiencing ill-health symptoms (Ruhle et al., 2020), poses a significant challenge for detection and management. Unlike sickness absenteeism, where an individual's absence is evident, presenteeism is often less tangible and frequently goes unreported, making it hard to detect (Hemp, 2004). The subtle nature of this behaviour, coupled with the complexity of measuring the associated productivity losses, has led to growing concern among both researchers and practitioners, particularly given its high prevalence and the substantial economic costs involved.

### 1.1 The Challenges of Presenteeism

One of the most striking aspects of presenteeism is its high prevalence across different countries and occupational groups. For example, within the European Union (EU), a large-scale study involving 43,816 interviews found that 41% of male and 45% of female respondents had attended work while unwell at least once in the past 12 months (Eurofound, 2012). Similar findings emerged from a survey of 2,533 Norwegian and Swedish employees, where 56% reported experiencing presenteeism in the previous year (Johansen et al., 2014). In Portugal, a study of 332 non-academic staff members at a public university revealed that 30.1% had engaged in presenteeism (Magalhães et al., 2022), while in Belgium, 62% of 3,274 full-time workers reported working despite being sick in the last year (Caers et al., 2019).

The prevalence of presenteeism is not limited to Europe. In the UK, a report from the Chartered Institute of Personnel and Development (CIPD) indicated that 65% of respondents had observed presenteeism in the office, while 81% noticed it among those working from home (CIPD, 2022). Pre-pandemic data from the CIPD, based on over 1,000 organisations representing 3.2 million employees, found that more than 80% of respondents reported presenteeism at their workplaces in the last 12 months, with 25% noting an increase compared to the previous year (CIPD, 2019). Similarly, a study by Kinman and Clements (2022) revealed that over 90% of 1,956 UK prison officers worked while feeling unwell, with 43% always working despite ill health. The NHS staff survey of 2023 further confirms the issue, with 54.83% of employees reporting presenteeism, only a slight decrease from the

previous year. These examples illustrate that presenteeism is a pervasive issue, not confined to any single region or sector, and highlight the necessity for further research and targeted interventions.

The economic implications of presenteeism further underscore its significance as a workplace issue. In Australia, the annual cost of presenteeism is estimated at approximately \$34.1 billion (KPMG, 2011), while in the United States, presenteeism among nurses alone incurs an annual cost of USD 12 billion (Letvak et al., 2012). In the UK, the combined annual cost of absenteeism, presenteeism, and labour turnover between 2020 and 2021 was estimated at £53-56 billion, with presenteeism accounting for the largest proportion of this cost (Deloitte, 2022). The financial burden of presenteeism often surpasses that of sickness absenteeism, as it is harder to measure the exact financial losses when employees continue to work, albeit at reduced productivity (Hemp, 2004; Kinman, 2019). These figures highlight the urgent need to address presenteeism not just as a health issue but as a critical factor in economic productivity.

Moreover, presenteeism poses severe risks to employee health and well-being. Engaging in work while unwell can exacerbate existing health issues, leading to long-term sickness absence. Research indicates that presenteeism can contribute to deteriorating physical and mental health without proper management, increasing the likelihood of prolonged absenteeism (Bergström et al., 2009). For instance, Conway et al. (2014) found that presenteeism can exacerbate mental health issues, a finding echoed by Kinman and Clements (2022). Demerouti et al. (2009) also noted that prolonged presenteeism can lead to burnout, particularly depersonalisation. Furthermore, specific health conditions such as allergies, hypertension, musculoskeletal pain, and mental health issues like anxiety and depression are strongly associated with higher rates of presenteeism and significant productivity losses (Allen, D., et al., 2018).

The COVID-19 pandemic has further complicated the landscape of presenteeism. Remote working, while reducing some physical and psychological stressors (Shimura et al., 2021), has made it more challenging for managers to detect when employees are working while unwell (Ferreira et al., 2022; Borsi and Gerpott, 2022; Steidelmüller et al., 2020). The pandemic also heightened job insecurity among academic staff in the UK (Kınikoğlu and Can, 2021), increasing the pressure to work despite illness (Kniffin et al., 2021; Van Der Feltz-Cornelis et al., 2020). Without appropriate interventions, the

trend of presenteeism, particularly in the context of remote work, could lead to more severe health outcomes and further economic costs.

In summary, presenteeism is a complex and multifaceted issue that is difficult to detect and measure but carries significant implications for employee health and organisational productivity. Its high prevalence and substantial economic costs underscore the need for continued research and more effective management strategies in workplaces worldwide.

## 1.2 Understanding Presenteeism: Potential Benefits and Managerial Challenges

While presenteeism is commonly viewed as a negative workplace phenomenon, due to its high prevalence and associated costs, several studies suggest that, when managed appropriately, it can be beneficial and even therapeutic (e.g., Karanika-Murray and Biron, 2020; Miraglia and Johns, 2016; Ruhle et al., 2020; Whysall et al., 2023). In fact, the adverse effects of presenteeism do not arise automatically; rather, they emerge when there is insufficient management or inadequate adjustments to work tasks, environment, or equipment (Ruhle et al., 2020). In some cases, work can positively impact an individual's health and well-being by providing structure, boosting self-esteem, and enhancing social support (Waddell and Burton, 2006; Kinman and Grant, 2021). A supportive work environment resembling a familial atmosphere can help employees with health challenges overcome isolation and refocus away from their symptoms (Knani et al., 2018). Additionally, Wang et al. (2023) found that employees' affective commitment might enhance the positive impact of presenteeism on performance evaluations, particularly in high-demand work settings.

Despite these potential benefits, there is a notable absence of managerial interventions specifically aimed at addressing presenteeism. According to CIPD (2022), among the 804 UK organisations surveyed, almost half (47%) had not implemented any measures to manage presenteeism. The widespread shift to remote work following the COVID-19 pandemic has further complicated this issue, as the prevalence of presenteeism has increased (Ruhle et al., 2020). Remote work environments make it more challenging for managers to detect signs of ill-health among their staff and to intervene appropriately. Given these challenges, there is an urgent need for effective managerial interventions to

mitigate the negative impacts of presenteeism on both organisations and individuals. Central to this effort is gaining a deeper understanding of how individuals make the decisions to work while unwell.

Currently, most existing research on presenteeism has concentrated on answering the “what” - identifying the factors that influence individuals' decisions to work while unwell. This includes examining variables such as work-related factors (e.g., job demands, job security, adjustment latitude) and person-related factors (e.g., self-efficacy and health locus of control). However, there has been relatively little focus on the underlying psychological mechanisms that explain “how” individuals make these decisions (Ruhle et al., 2020; Whysall et al., 2023). Understanding the cognitive and emotional processes that drive presenteeism is essential for developing targeted interventions and leveraging its potential to balance health and work demands effectively.

In light of this, the current thesis aims to fill this knowledge gap by exploring the decision-making process underlying presenteeism using an experience sampling diary method. By gaining deeper insights into how individuals make decisions about working while unwell, this research seeks to inform the development of effective managerial interventions to address and mitigate presenteeism.

### 1.3 Methodological Approaches and Challenges During the Pandemic

Grounded in the presenteeism decision-making model (PDM model, Whysall et al., 2023), the present research adopts a three-stage mixed-method approach (i.e., the initial cross-sectional survey, the diary study, and the semi-structured interviews) to examine how individuals decide to engage in presenteeism behaviour. The experience sampling diary method aims to capture real-time insights into the nuanced decision-making process related to presenteeism. To the best of my knowledge, the presenteeism decision-making process model introduced by Whysall et al. (2023) is the first and only theoretical model that delineates the steps individuals take when deciding to engage in presenteeism. Such a theoretical framework not only provides a concrete foundation for the research but also offers solid guidance for participants to systematically dissect their thought processes.

In the first stage, 399 participants completed an initial cross-sectional survey, providing contextual information about their work environment, person-related factors, and demographics. These participants from diverse countries, industries and backgrounds were recruited through convenience

sampling from various platforms, including LinkedIn, Prolific, Lindus Health, and MQ Mental Health. The survey collected data on participants' work environments, person-related variables (such as levels of emotional distress, self-efficacy, over-commitment, and health locus of control), and demographic information. This survey provides supplemental information for the subsequent diary study, measuring variables that have a lower tendency to change during the data collection period. In the initial survey, participants were asked to recall the number of presenteeism and sickness absenteeism days for the last 12 months, which is considered the dependent variable for the negative binomial regression test. This test is chosen due to the over-dispersion of the count data.

Following this, the diary study aimed to capture participants' decision-making process of presenteeism through the PDM model (Whysall et al., 2023). Out of 399 initial survey respondents, 155 of them participated in the diary study and completed at least one daily diary survey. In total, there were 1402 diary entries and 476 health incidences. A thematic template analysis was conducted to investigate how participants decided to engage in presenteeism behaviour. Additionally, several statistical tests (i.e., Bivariate Correlations and Logistic Regression) were used to examine the association between participants' rated symptom severity and their decision outcomes, as well as the frequency of illness types concerning these decision outcomes. Focusing on the first and most important research question of "How do people make their decisions to work when they are physically or mentally unwell? And under what circumstances?", the template analysis identified patterns and characteristics of the presenteeism decision-making process. For example, the data revealed that participants did not follow a linear decision-making process as outlined by the PDM model (Whysall et al., 2023), particularly between stage 2 (identification of options) and stage 3 (evaluation of perceived options). Additionally, stage 3 is likely to be simplified if participants' options are limited by other work-related variables or if their symptoms are considered less legitimate or not as severe. Moreover, the participants in this study rarely reflect on their decisions unless their ill-health symptoms persist or worsen. These findings have contributed to current presenteeism research by providing deeper insights into how individuals decide to engage in this attendance behaviour.

Moving on to the final phase of the study, semi-structured interviews were conducted with 21 of the 155 participants from the diary study. These interviews focused on getting a deeper and more

comprehensive understanding of how participants perceive their presenteeism/sickness absenteeism behaviour, their support mechanism and attendance management procedures at work, as well as their desired support that could enable them to prioritise their health demands when necessary. These interviews aimed to provide insights into effective strategies for managing presenteeism and identifying the types of support that should be offered. The goal was to promote functional presenteeism while preventing it from transitioning into dysfunctional presenteeism (Karanika-Murray and Biron, 2020).

It is important to note that data collection for this project occurred during the COVID-19 pandemic, which presented exceptional challenges. Initially, I intended to recruit participants from two large organisations in the UK to control the organisational context. However, despite promoting the study through social media platforms and various online presses, very few individuals expressed interest. Consequently, the sampling strategy had to shift from purposive sampling to convenience sampling to secure a sufficient number of participants for the study.

Apart from the change in sampling strategy, other challenges also emerged. During the COVID-19 pandemic, restrictions on in-person meetings necessitated a shift to virtual data collection methods. This included distributing surveys online and conducting interviews via video conferencing tools. However, not all participants had equal access to technology or stable internet connections, which affected their ability to participate fully in the data collection process. Additionally, many potential participants faced increased personal and professional demands during the pandemic, potentially leading to lower response rates, high dropout rates, and reduced interview availability.

Despite these obstacles, the research, which includes a cross-sectional survey, a diary study and semi-structured interviews, successfully adapted to the circumstances. This adaptation ensured that valuable data was collected and analysed, thereby contributing meaningful insights into the decision-making processes of presenteeism and strategies for managing this workplace phenomenon.

#### 1.4 Structure of this thesis

To investigate the underlying cognitive processes guiding individuals' decisions to engage in presenteeism, this thesis employs a mixed-method approach anchored in an experience sampling diary study. The subsequent chapters are structured to provide a thorough exploration of this research.

Chapter 2 will provide a comprehensive literature review on presenteeism and decision-making. This chapter will discuss the definition of presenteeism, factors that have been identified as influential to presenteeism decisions, the consequences associated with presenteeism, the role of decision-making theories in this thesis, and the adopted conceptual model.

Chapter 3 focuses on a discussion of the research methodology, explaining the philosophy guiding this thesis. By embracing the pragmatic viewpoint, this study employed a mixed-method approach to rigorously and comprehensively investigate the underlying psychological mechanisms involved in presenteeism decision-making. Pragmatism, as the chosen philosophical stance, allows for the integration of qualitative and quantitative methods (Denzin, 2012), thereby enhancing the depth and breadth of understanding of the complex phenomenon of presenteeism decision-making.

Subsequently, Chapter 4 discusses the initial cross-sectional questionnaire, which offers a foundation to dive into how individuals' surroundings and person-related factors affect their decision-making process. The cross-sectional questionnaire provides a structured approach to gathering quantitative data that illuminates the multifaceted factors influencing presenteeism decisions. By surveying a diverse sample of participants across various organisational contexts and examining key variables identified as influential to presenteeism behaviour, such as work demands, social support at work, work insecurity, personal health status, and psychological factors, this questionnaire aims to provide a comprehensive snapshot of the factors influencing presenteeism decisions. The quantitative insights gained from the questionnaire will lay a solid groundwork for subsequent phases of the study, facilitating deeper explorations in later chapters.

Grounded in the presenteeism decision-making (PDM) model (Whysall et al., 2023), chapter 5 will present the second and core phase of this thesis—a diary study employing an experience sampling approach. This methodological approach is designed to capture real-time insights into the complex and nuanced decision-making process concerning presenteeism. By documenting participants' experiences and reflections when they experience ill-health symptoms on a working day, the diary study aims to provide a deeper understanding of the underlying factors, motivations, and considerations that influence their choices. This qualitative approach enables a rich exploration of individual perspectives and



experiences, offering valuable insights that can complement the quantitative data gathered in earlier stages of the research.

Following this, Chapter 6 concentrates on the final data collection phase of the current thesis, which is the semi-structured interviews. By exploring individuals' perspectives on their decisions regarding presenteeism and sickness absence, as well as their perceptions of attendance management procedures in the workplace, these interviews provide a platform for participants to express their thoughts and experiences in a detailed and personal manner. Moreover, the interviews aim to understand what factors would encourage individuals to incorporate a more balanced consideration between work demands and health concerns when deciding to engage in presenteeism behaviour.

Finally, Chapter 7 discusses the overall findings generated by this thesis comprehensively, while Chapter 8 deliberates the implications of this thesis, acknowledges its limitations, and outlines potential directions for future research in the field. Chapter 9 serves as the conclusion of the current thesis.

## Chapter 2 - Literature Review

### 2.1 Introduction

This literature review will delve into several critical aspects surrounding the phenomenon of presenteeism in the workplace, including decision-making. To begin with, it is essential to establish a clear understanding of the definition of presenteeism as adopted in the current thesis. Presenteeism is the practice of individuals working when they are unwell, even though they may not be in the best physical or mental condition (Ruhle et al., 2020). This definition provides the foundation for exploring the multifaceted aspects of this phenomenon. Moving forward, it is crucial to delve into the factors that influence individuals' decisions to work while unwell. Taking a philosophical standpoint rooted in social constructionism, it is arguable that presenteeism is not solely a personal decision. Instead, it is a socially constructed phenomenon shaped by various contextual factors. These factors encompass personal, work-related, and environmental factors (Johns, 2010; Lohaus and Habermann, 2019), including but not limited to, one's financial concerns, job security, workplace policies and norms, peer pressure, and job demands.

Furthermore, as an important part of any decision-making process, understanding the possible consequences of enacting presenteeism is vital since it will influence how individuals behave (March, 1994). This includes examining how presenteeism can lead to decreased productivity (Kigozi et al., 2017; Strömberg et al., 2017; Zhang, W., et al., 2015), and potential long-term health issues and sickness absence for employees (Bergström et al., 2009; Sanderson and Cocker, 2013). It is essential to consider the broader implications of presenteeism beyond the immediate decision to work while unwell. Finally, to comprehend how the decision to engage in presenteeism is made, it is essential to draw upon existing decision-making research, the latest research that attempts to unwrap the presenteeism decision-making process, and the common research methods employed in decision-making studies.

It is worth noting that both presenteeism and sickness absenteeism will be seen as the probable outcomes of the same decision in this thesis (Hansen and Andersen, 2008; Halbesleben et al., 2014; Patton and Johns, 2012). These attendance behaviours are rooted in situations where individuals experience ill-health symptoms on a working day, serving as the underlying connection between them.

However, the present thesis will focus on presenteeism behaviour and its research mainly, while sickness absence will be treated as one of the attendance outcomes when individuals decide to engage in presenteeism.

## 2.2 Definition of sickness presenteeism

At this moment, the presenteeism definition has been unified by Ruhle et al. (2020), as the phenomenon of individuals working when they experience ill-health symptoms. Historically, there have been debates regarding how to define presenteeism (Lohaus and Habermann, 2019; Karanika-Murray and Cooper, 2018). For example, on one hand, an emphasis has been placed on the consequences of presenteeism by defining presenteeism as productivity loss due to a health problem of an employee (e.g., Schultz and Edington, 2007; Burton et al., 2004; Hemp, 2004; also see Lohaus and Habermann, 2019; Zhou et al., 2016). On the other hand, presenteeism has been described simply as going to work while ill (e.g., Aronsson and Gustafsson, 2005; Bergström et al., 2009; Hansen and Andersen, 2009; Cooper and Lu, 2016; Dew et al., 2005; also see Lohaus and Habermann, 2019). The former definition focuses on the productivity loss resulting from the health condition(s) experienced and overlooks the potential beneficial consequences of presenteeism, whilst the latter definition does not conflate cause and effect (Ruhle et al., 2020; Karanika-Murray and Cooper, 2018; Johns, 2010), focusing more on the act itself, and potential reasons behind it. In addition, the difference in the definition of presenteeism might be caused by societal and economic differences between these two areas, particularly the healthcare system difference (Karanika-Murray and Cooper, 2018). As an illustration, while the healthcare system in the United States gives greater importance to private health insurance, in Europe, there has traditionally been an emphasis on social care, where the government provides health insurance, prioritising employees' health and well-being and the transition back into the workforce after sick leave (Ridic et al., 2012).

The COVID-19 pandemic necessitated the need to review how presenteeism should be defined as many employees do not need to be present at the workplace to enact presenteeism (Kinman and Grant, 2021). Working from home has become common practice and employees can hide their ill-health symptoms behind their monitors. The boundary between work and home has been blurred by remote

working, which has increased the likelihood of them enacting presenteeism (Brosi and Gerpott, 2023). As a result, the current thesis has adopted the definition of presenteeism as a “behaviour of working in the state of ill health” (Ruhle et al., 2020, p. 346), which is neutral and does not hint at any potential motives or consequences, the location of work, or exclude any kinds of health issues.

### 2.3 Understanding decision-making theories and presenteeism

Understanding the intricate dynamics of decision-making processes in the context of presenteeism is paramount for organisations aiming to foster a healthy and productive work environment. In this regard, various theories of decision-making provide valuable insights into the process of individuals choosing between attending work while unwell (presenteeism) or taking sick leave (absenteeism). This section delves into the applicability of general decision-making theories to presenteeism behaviour and critically evaluates the existing studies that aim to examine presenteeism decision-making. By examining these theories and studies, my objective is to uncover the complexities inherent in presenteeism decision-making and shed light on effective research practices for investigating the underlying psychological mechanisms of presenteeism decision-making. This exploration contributes to the development of sound methodologies and theoretical frameworks that can enhance the understanding of how individuals decide to work when unwell.

#### 2.3.1 General Decision-Making Theories

Given that the present thesis aims to investigate individuals' decision-making processes regarding their presenteeism behaviour, it is essential to critically incorporate decision-making theories to elucidate this process. For a long time, decision-making has been referred to as a choice individuals make between desirable alternatives, centring “on the notion of the subjective value, or utility, of the alternatives among which the decider must choose” (Edwards, 1954, p 410). Expected Utility Theory, one of the traditional decision-making theories, describes decision-making as a rational, analytic process (Von Neumann and Morgenstern, 1947). According to the Expected Utility Theory, individuals assess all possible options against their perceived value or benefit, choosing the one with the highest expected utility, calculated by weighing the perceived value by the probability of its occurrence (Mongin, 1997). However, the Expected Utility Theory assumption of rationality has been extensively

critiqued. Researchers have realised that not all decisions made by individuals are rational, especially when uncertainties are involved in the decision-making process (Kahneman and Tversky, 1979). A decision or a choice of action is seen as risky when individuals are aware of the possibilities of various outcomes but not sure which one of them would be the result of their action (Kacelnik and Bateson, 1997). This complexity undermines the applicability of rational models like Expected Utility Theory in real-world scenarios where uncertainty is pervasive. Connecting this to presenteeism behaviour, the Expected Utility Theory also proves inadequate. In cases where individuals experience symptoms of ill health, the rational choice would be to rest rather than to continue working. However, within contemporary work environments, the decision to take sick leave is often fraught with uncertainties regarding one's reputation at work, the impact on others and how others perceive one's behaviour. Therefore, rational decision-making theories, such as the Expected Utility Theory, are more appropriate for contexts where all associated risks are known, like lotteries and roulette (Gigerenzer and Gaissmaier, 2015). In contrast, decision-making theories that acknowledge that individuals' decision-making processes are not always rational, such as Decision Field Theory (Busemeyer and Townsend, 1993), are more suitable for understanding presenteeism behaviour.

One of the most known decision-making theories under uncertainty is Kahneman and Tversky's Prospect Theory (1979). This theory highlights several characteristics of individuals' decision-making when facing uncertainties. For instance, the phenomenon of loss aversion reveals that decision-makers prefer certain gains over probable losses if the difference between gains and losses is not substantial. Conversely, when faced with certain losses, they tend to choose probable losses over certain ones, exhibiting risk-seeking behaviour. This suggests that individuals are generally loss-averse but become risk-seeking when all options entail adverse outcomes (Kahneman, 2012). Furthermore, the certainty effect, highlighted in Prospect Theory, demonstrates a tendency among decision-makers to undervalue potential outcomes compared to certain ones. This effect makes people more risk-averse when gains are guaranteed and more risk-seeking when losses are certain (Kahneman and Tversky, 1979). In the context of presenteeism decision-making, individuals appear to be more risk-seeking from the perspective of health. They tend to underestimate the potential long-term detrimental effects on their health in comparison to the relatively more immediate and certain negative impacts on their work,

making them more susceptible to engaging in presenteeism behaviour. Additionally, the framing effect, also discussed by Kahneman and Tversky (1979), which refers to the influence of how options are presented, significantly impacts decision-making. For example, if taking sick leave is framed negatively in the workplace, it discourages individuals from doing so, thereby increasing presenteeism. Similarly, if working while sick is highly praised, it adopts a culture of presenteeism as well. In other words, the organisation's culture influences how individuals decide to engage in presenteeism behaviour.

In examining presenteeism decision-making, it is crucial to explore various theoretical frameworks that shed light on different facets of decision-making. Thus far, the discussion has established that traditional rational decision-making theories may be inadequate in explaining how individuals decide to enact presenteeism. It becomes evident that theories addressing uncertainty are more appropriate for understanding presenteeism decision-making. Alternatively, another prominent approach to consider is viewing presenteeism as a result-oriented behaviour. For example, built upon the Theory of Reasoned Action, the Theory of Planned Behaviour (Ajzen, 1985, 1991) posits that individuals' behaviour is driven by behavioural intention, which is influenced by their motivation, and that could be explained by their attitude towards certain behaviour, subjective norms, and perceived control of the behaviour. However, while the Theory of Planned Behaviour offers insights into how intentions influence actions, it has been criticised for oversimplifying the complexity of human behaviour and neglecting the emotional and irrational factors that can drive decision-making. Complementing this, Vroom's Expectancy theory of motivation (1964) provides a more comprehensive explanation of how individuals are motivated to act based on the anticipated outcomes of their actions. It indicates that individuals' actions are determined by how much they value an expected outcome, and they believe that through this action, they could get the result they want. Expectancy theory highlights how individuals perceive their environment and subsequent, and three key elements in Expectancy theory have been indicated, which are Valence, Instrumentality, and Expectancy. To explain these key elements by using working hard and recognition as an example, Valence reflects how much employees want the recognition, and Instrumentality refers to the perceived possibility of having a good performance through working harder, whilst Expectancy is the perceived probability of a good performance will be resulted in the desired recognitions (Issac et al., 2001). While this framework offers

a structured way to understand motivation, it assumes a level of rational calculation that is often absent in real-world decision-making.

Apart from viewing an individual's decision-making as result-oriented, several theories have also attempted to categorise individuals' decision-making processes based on their complexity and thoroughness. For example, Kahneman (2012) attempted to explain how people make decisions through two approaches, that are intuitive, and analytical thinking, and he labelled them as system 1 (intuitive) and system 2 (analytical). System 1 mainly relies on people's impressions and feelings, whereas System 2 refers to a more systematic process that involves evaluation and consideration. Through a cross-sectional survey, a study on selected life decision-making processes (Savioni et al., 2022) revealed that people tend to listen to their feelings more when they make decisions regarding love and relationships (system 1 thinking), and system 2 becomes involved to a stronger degree when they make work-related decisions. The results of the current research also suggested that individuals use both system 1 and system 2 thinking when making presenteeism decisions, employing each system in varying proportions. This highlights the possibility that the dichotomy of System 1 and System 2 overlooks the complexity and context-specific nature of decision-making.

After examining various decision-making theories, it is noteworthy that people do not make decisions in a consistent manner (Slovic and Monahan, 1995), particularly presenteeism decision-making process, which is very situation-specific (Baker-McCleary et al., 2010). Individuals' decision-making processes are sensitive to different contexts, frames, and elicitation procedures (Shafir et al., 1993). They react differently to various situations, which influences their decision-making process. The Transactional Theory of Stress (Lazarus and Folkman, 1984) argues that people may have different reactions to a stressful situation, and some of them choose to face the problem and try to control the situation (Fight responses), but some prefer to avoid the difficult situation to alleviate its negative consequences (Flight responses). Cooper and Lu's (2016) research shows this theory's relevance to presenteeism. The fight and flight responses, as outlined in Cooper and Lu's study on presenteeism behaviour, reflect approach and avoidance motives. Their research highlights that antecedents could either positively or negatively influence the decision between presenteeism and absenteeism, depending on the circumstances.

It is important to acknowledge that individual decision-making processes are idiosyncratic and depend on the different situations and times, particularly for presenteeism decisions, since individuals might experience different health issues in different periods, and how they perceive their work environment may also fluctuate. In addition, cognitive biases are closely connected with human decision-making because people learn and develop thinking patterns individually (Dvorsky, 2013; Tversky and Kahneman, 1974). For example, the illusion of control refers to a common bias which occurs when people are making decisions and perceive that they have more control than they do, whilst the status quo bias is about individuals preferring to maintain their current or previous decision (Samuelson and Zeckhauser, 1988). To elaborate, when individuals experience ill-health symptoms on a working day, they may choose to enact presenteeism because they feel a greater sense of control over their health, compared to how their manager and colleagues perceive them being sick. Additionally, the act of presenteeism can be viewed as a preference for the status quo or a rejection of altering the default action and the associated risks. **These two cognitive biases can significantly influence how individuals decide to work when they are unwell, however, they can fluctuate considerably and are easily influenced by various factors.**

**To summarise, the examination of decision-making theories reveals valuable insights into the complexities of presenteeism decision-making. While theories like the Theory of Planned Behaviour and Expectancy Theory provide structured frameworks, they often assume a level of rationality that does not align with real-world decision-making. Kahneman's dual-system theory offers a more realistic view but can still be overly rigid. Context-specific theories and cognitive biases provide deeper insights but require careful consideration of individual and situational variability when applied to presenteeism decision-making. Moreover, how individuals decide their behaviour is situation-specific and depends on several contextual factors. Understanding these nuances is essential for developing effective interventions to optimise decision-making in the context of presenteeism, balancing health and work performance demands. The next section will discuss what is currently known about presenteeism decision-making.**



### 2.3.2 Existing Presenteeism Decision-Making Studies

As discussed previously, most current presenteeism studies focus on answering the question of “what factors are contributing to the behaviour of presenteeism” but neglect the underlying cognitive decision-making process. To address the call for answers to “how people make their decisions to work while unwell”, several academics have endeavoured to unravel the decision-making process of presenteeism by integrating concepts and conducting empirical studies.

For example, Halbesleben et al. (2014) applied a dialectical approach to understand how different types of supervisory-subordinate relationships impact the attendance decision triggered by a health event. Specifically, they examined this within the framework of three relational dialectics, which represent common tensions in supervisory-subordinate relationships: autonomy-connection, openness-closedness, and predictability-novelty (Baxter, 1990). Halbesleben et al. (2014) hypothesised that employees would employ different strategies in their presenteeism decision-making process based on the subordinate's and supervisor's respective locations on a particular dialectical continuum. For instance, in the openness-closedness dialectic, employees may choose sickness presenteeism because they are unwilling to disclose their health issues to their supervisor. Yet, they desire to maintain a close relationship with them. In comparison, employees who feel they can be open with their supervisors tend to lean towards sickness absenteeism. However, as highlighted by Lohaus and Haberman (2021), the relationship between employees and their supervisors is just one of many factors influencing presenteeism decision-making. While social dynamics undoubtedly play a significant role, it remains unclear how these dynamics impact an individual's cognitive processes when deciding between presenteeism and sickness absence.

More recently, Lohaus and Haberman (2021) designed an experimental vignette study to test the applicability of Vroom's Expectancy Theory (1964) in explaining how presenteeism decisions are made. Their findings reveal that the alignment between the participants' deliberate choices and the decisions computed based on the formulas derived from Vroom's expectancy theory exceeded random chance. This lends credence to the proposition that Expectancy Theory can elucidate presenteeism decision-making, further reinforcing the concept that presenteeism is a goal-oriented behaviour (Karanika-Murray and Biron, 2020). **However, insights into how individuals decide between working**

when unwell or taking sick leave remain limited. The reliance on artificial vignettes and hypothetical decisions diminishes the validity of the findings, as the experimenters artificially constrain the number of factors in the decision-making process, and participants do not face genuine work attendance decisions. Hence, it is imperative to ascertain the extent to which these principles are observable in real-life scenarios. The exploration of genuine presenteeism decisions could determine, for instance, whether individuals prioritise different things at different times or make decisions based on different sets of values and variables (Galotti, 2005).

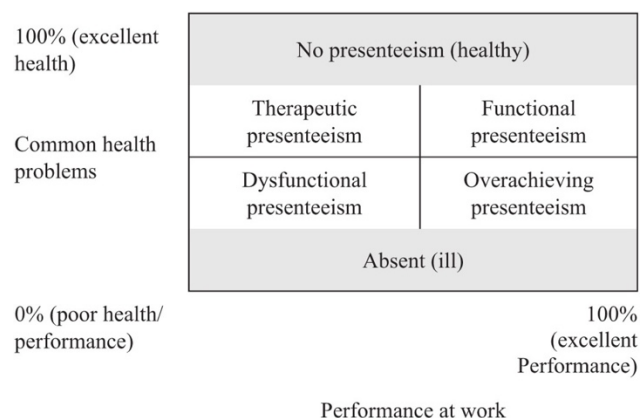
Moreover, considering the notion of two conceptual models of presenteeism, which are the health-performance framework of presenteeism developed by Karanika-Murray and Biron (2020) and the presenteeism decision-making (PDM) process model developed by Whysall et al. (2023), Rivkin et al. (2022) employed a within-person daily approach to investigate how work-goal progress affects individuals' decision-making process of working when experiencing ill-health symptoms. The study results demonstrated that individuals are more likely to work when they are unwell if they have more incomplete work tasks (referred to as low work-goal progress), and this would occur when the ill-health symptoms are severe (referred to as high somatic complaints). Conversely, when work-goal progress is good and ill-health symptoms are more serious, individuals would be more likely to opt for sickness absenteeism since they feel content with their work performance. The study of Rivkin et al. (2022) also suggested that individuals engage in self-regulation when working under somatic complaints, as they need to suppress behavioural responses to ill-health symptoms, as well as their cognitions and emotions. While this study provides significant insights into the presenteeism decision-making process by focusing on how work progress influences daily decisions, it overlooks the possibility that decision-makers may consider more than just work progress when opting for presenteeism. Factors related to the work environment and individual characteristics are likely to also play a role in their decision-making process.

Studies have attempted to unravel the complex underlying mechanisms of how individuals decide to engage in presenteeism. However, current research has not yet thoroughly explored broader aspects, such as the evolution of the decision-making process, the various considerations individuals take into account, the relative weight of these factors, and the influence of individual psychological

factors (such as health locus of control, self-efficacy, and mental health) on decision making. The decision-making process remains a significant gap in our comprehension of presenteeism behaviour. This understanding is pivotal for guiding practical solutions and interventions aimed at better supporting individuals experiencing ill-health symptoms in making more informed decisions that balance both health and work performance demands.

It is worth noting that the conceptual models mentioned in the study by Rivkin et al. (2022) provide important theoretical insights regarding presenteeism behaviour. Firstly, Karanika-Murray and Biron (2020) see presenteeism as an adaptive behaviour which individuals adopt to meet their health and work performance demands. They have categorised this behaviour into four types, that are functional, dysfunctional, overachieving, and therapeutic presenteeism (See Figure 1). Functional presenteeism is the ideal balance between health and work performance demands, in which individuals can complete their daily work tasks without taxing their health, whilst dysfunctional presenteeism is the opposite, in which individuals are not productive at work and their ill-health symptoms worsen. Moreover, overachieving presenteeism describes presentees who can maintain their usual productivity level but at the expense of their recovery, while therapeutic presenteeism indicates a situation in which individuals focus more on their health and less focus on their work performance (Karanika-Murray and Biron, 2020). Importantly, these types of presenteeism do not stand alone, and without appropriate management, functional presenteeism may deteriorate into dysfunctionality or transition into overachievement. Therefore, promoting functional presenteeism in the workplace necessitates effective managerial interventions to manage presenteeism, underscoring the imperative to gain a deeper understanding of the decision-making process surrounding presenteeism.

Figure 1. Health-performance framework (Karanika-Murray and Biron, 2020)



Secondly, the PDM model introduced by Whysall et al. (2023) represents a synthesis of diverse decision-making theories and insights from presenteeism research. This model comprehensively accounts for both absenteeism and presenteeism decisions as potential attendance outcomes, recognising their shared origins from a common trigger (Halbesleben et al., 2014; Patton and Johns, 2012). It delineates four sequential stages in the decision-making process that exert influence on individuals' behaviour. Commencing with Stage 1 (Trigger) and progressing through Stage 2 (Options), followed by Stage 3 (Evaluation) and culminating in Stage 4 (Feedback, Whysall et al., 2023), the model offers a structured framework to understand the complexities of presenteeism decision-making.

Subsequent to a thorough evaluation of various decision-making theories and existing studies on presenteeism, the PDM model developed by Whysall et al. (2023) emerges as a particularly suitable theoretical framework for the current thesis. This framework integrates multiple decision-making theories and, to the best of our knowledge, represents the first theoretical model specifically targeted at understanding the decision-making process of presenteeism. It offers significant flexibility, as it does not confine itself to a specific type of contextual factor or element when examining the presenteeism decision-making process. The following chapter will present more details regarding the PDM model (Whysall et al., 2023).

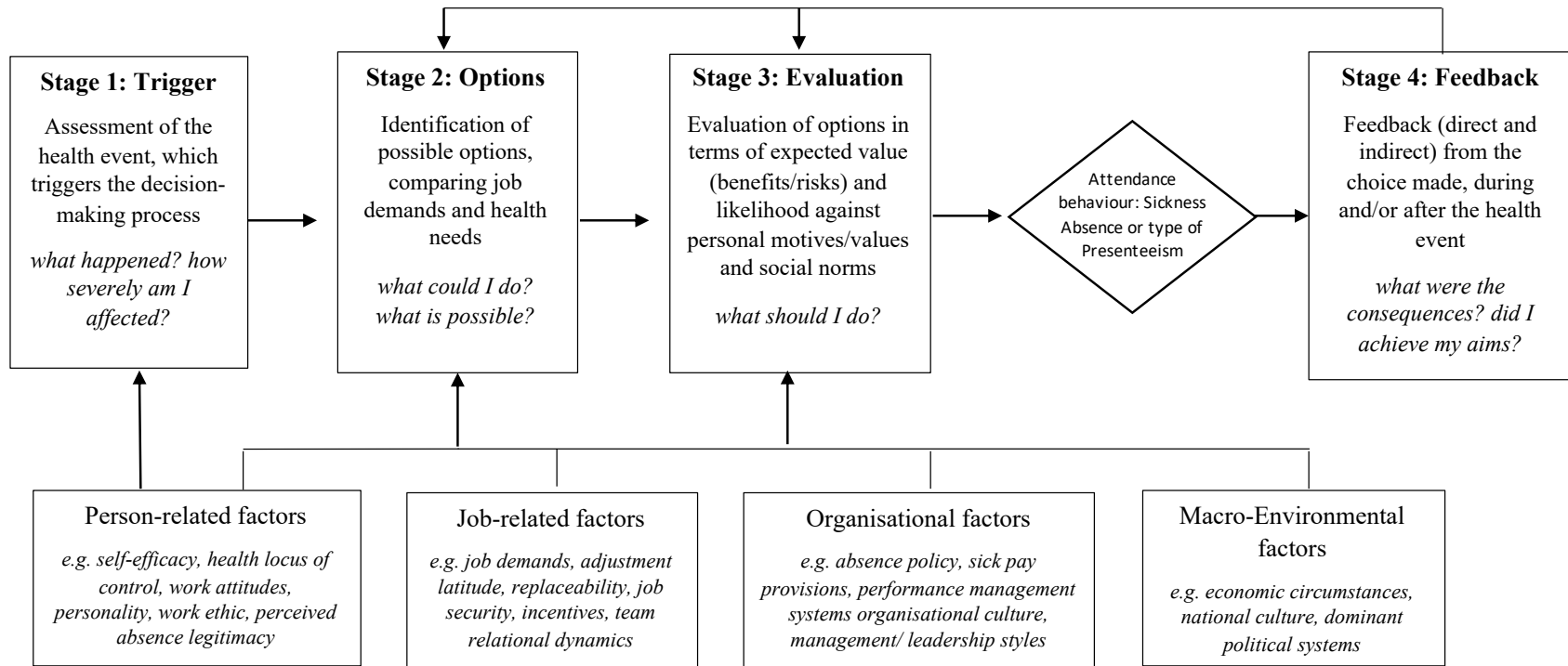
#### 2.4 The Presenteeism Decision-Making (PDM) Model

Through integrating decision-making theories and research on presenteeism, Whysall et al. (2023) developed a conceptual model to explain how individuals decide to engage in presenteeism or sickness absenteeism. The model outlines four stages in the decision-making process, which are (1) trigger, (2) options, (3) evaluation, and (4) feedback. Several characteristics of this conceptual model are worth mentioning. For example, it captures both sickness absenteeism and presenteeism as the decision outcomes since they could be the results of the same decision (Halbesleben et al., 2014; Patton and Johns, 2012). Furthermore, as shown in Figure 2, the model highlights a loop between Stage 2 (options) and 3 (evaluation), and Stage 4 (feedback) influencing both Stage 2 and 3. In addition, this model recognises the impact of individuals' psychological, job-related, organisational, and macro-environmental factors on the decision-making process of their work attendance behaviour when they

experience ill-health symptoms on a working day. Moreover, as highlighted by Whysall et al. (2023), the options in individuals' presenteeism decision-making are not binary, and there is some middle ground between presenteeism and sickness absenteeism. For instance, individuals may choose to focus solely on prioritised tasks or take extended breaks throughout the working day, and they may also declare sick leave but continue to complete work-related tasks, which should be classified as presenteeism but has often been categorised or calculated as sickness absenteeism in previous presenteeism studies. The following sections will provide a detailed discussion of each stage of the PDM model.

Stage 1 (Trigger) describes the phase during which individuals experience ill-health symptoms on a typical workday, initiating the decision-making process of either working through their discomfort or taking a day off to rest. As John (2010) suggested, this stage may include a quick assessment of how severe the ill-health symptoms are and how much the symptoms are affecting the decision-makers' work capability. Specific health issues significantly and directly impact individuals' ability to work, depending on their occupation. For instance, Johns (2010) noted that a sore throat would have a pronounced negative effect on a singer but not a pianist, and sickness absence would be highly likely the decision outcome for the singer. This echoes Busemeyer and Johnson's (2004) concept of decision thresholds, which indicates that for some individuals, the threshold of taking sick leave may be very high due to various reasons and different health issues and how individuals perceive their health issues would have an impact on their threshold of sickness absence too. Moreover, it is proposed that when individuals assess their health issues, psychological factors, such as health locus of control, emotional distress, and the level of over-commitment to work and self-efficacy, will come into play.

Figure 2. The Presenteeism Decision-making model (Whysall et al., 2023)



Subsequently, Stage 2 (options) refers to the cognitive process of individuals identifying what alternatives they have under their circumstances. Job-related and organisational factors would be most likely involved in this process, such as job demands, social support at work, absence policy, and organisation culture. Due to the diverse working environment, individuals may have various options apart from conducting normal work through discomfort and taking a sick day to rest. For example, the outbreak of the COVID-19 pandemic made a lot of organisations shift from physical offices to home offices, and studies found that working from home increases the likelihood of presenteeism (Kinman and Grant, 2021). It is essential to acknowledge that there are different types of presenteeism between full and partial productivity, and individuals would adjust their attendance behaviour to meet their health and work demands (Whysall et al., 2023; Karainika-Murray and Biron, 2020).

Stage 3 (evaluation) indicates an evaluative process of the options individuals feel that they have, with a core focus on individuals' values and motivation. Vroom's Expectancy Theory (1964) can help to explain this process, and it illustrates that individuals would choose one option based on the expected value and how likely their expected outcome would occur due to their action. For instance, individuals who would want to get a promotion at work, enact presenteeism as a way to maintain a good attendance record and they believe that a good attendance record would help them achieve their goal. This is just a simple example and in reality, when individuals decide to work when unwell involves many other factors. In addition, the push-and-pull (Miraglia and Johns, 2016) or approach and avoidance motives (Cooper and Lu, 2016; Lu et al., 2013; Lu et al., 2014;) of presenteeism would also affect individuals' evaluation. For example, individuals with low job satisfaction may pay more attention to the benefits of taking sick leave since they would have time to recover from their health event, and they might care less about their work demands. This is echoing to the JD-R model, which suggests that individuals who have inadequate resources at work, but high job demands are very likely to work when they are unwell (McGregor et al., 2016).

Finally, Stage 4 (feedback) indicates an evaluation of the decision made by an individual. At this stage, individuals would focus on assessing the efficiency of their decisions against their health and performance demands, and the timings of this stage vary. Some might start second thinking about their decisions to work while ill during an episode of a health event or after the health event has eased, relying on any negative or positive consequences after individuals enacted presenteeism (Whysall et al., 2023). This reflects that experiences in previous similar events influence people's decision-making and reinforced behaviours are most likely to be repeated but punished behaviours would be ceased (Verharen et al., 2020). When studying human decision-making it is essential to include post-decision as a phase, in addition to the information gathering before the decision and patterns of processing the gathered information (Svenson, 1996). This echoes Stage 4 in the PDM model (Whysall et al., 2023), which suggests that post-decision feedback would influence how individuals decide in a similar situation in the future. Furthermore, as suggested by Lohaus and Habermann (2019), the act of presenteeism has both intended and unintended consequences on multiple levels, which will flow into individuals' decision-making process in various ways, consciously and prospectively or subconsciously and retrospectively (Whysall et al., 2023).

The PDM model developed by Whysall et al. (2023) offers a solid foundation for understanding how individuals decide to engage in presenteeism behaviour. To the best of my knowledge, this is the first model specifically designed to dissect the decision-making process of presenteeism, outlining four key stages: trigger, options, evaluation, and feedback. Moreover, the PDM model highlights a dynamic loop between the stages of identifying and evaluating options, as well as the influence of feedback on future decisions. It also acknowledges the role of various work-related, person-related, organisational, and macro-environmental factors in shaping these decisions. Importantly, the model emphasises that options in presenteeism decision-making are not merely binary but exist on a spectrum, with intermediate behaviours such as partial productivity or working while on sick leave also considered. Grounded in the PDM model, this research aims to gain a deeper understanding of presenteeism decision-making through a mixed-method design centred on an experience sampling method, providing valuable insights into developing effective managerial interventions for presenteeism. Subsequently, a discussion of the factors influencing individuals' presenteeism behaviour will be presented.



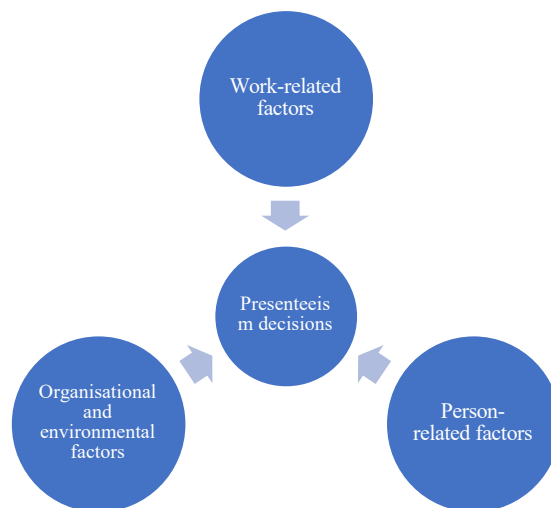
## 2.5 Factors that influence the decision of Presenteeism

How individuals make decisions varies (Slovic and Monahan, 1995), and how they decide to engage in presenteeism behaviour is situation-specific and influenced by multiple factors (Baker-McCleary et al., 2010). In the realm of presenteeism research, two known models have attempted to summarise what factors influence individuals' presenteeism behaviour, how they interact with individuals' decisions to work when they are unwell, and what the potential consequences are. The first one is the dynamic model of presenteeism developed by Johns (2010) which has concluded a range of work-context factors (e.g., job demands, job security, absence policy) and personal factors (e.g., health locus of control, personality, stress) that can influence individuals' decision between sickness absenteeism and presenteeism when they experience health issues on a working day. In addition to identifying the factors, Johns' (2010) model also includes the cumulative consequences on individuals. Moreover, based on Johns' model (2010), Lohaus and Habermann (2019) developed a more comprehensive model that includes work-related (e.g., role demands, time demands, supervisor support), person-related (e.g., emotional exhaustion, depression, self-efficacy), organisational (e.g., understaffing, organisational downsizing, paid sick leave policy, reward system) and environmental variables (e.g., culture and society, economy). Furthermore, in Lohaus and Habermann's model, the consequences of enacting presenteeism have been divided into 2 categories. For example, individual consequences of choosing presenteeism include productivity loss, potential future health problems, higher rates of depression, and reduced job satisfaction, while the organisational consequences include productivity loss, lower engagement and negative feelings with co-workers (Lohaus and Habermann, 2019). Compared to Lohaus and Habermann's (2019) model, the consequences highlighted in Johns' (2010) model are more individual-focused and more associated with chronic and recurring health issues, since he claims the negative impact of presenteeism, such as productivity loss, is not as immediate as sickness absence.

These two models provide a comprehensive overview of the factors influencing individuals' attendance behaviour when they are unwell and outline the potential consequences on individuals and organisations. However, neither of them has delved into the underlying mechanisms of how individuals make this decision. The decision of presenteeism is dynamic, and influenced by a complex interplay of

work-related, personal, and organisational and environmental factors (Baker-McClearn et al., 2010). Understanding the nuanced array of influences driving the decision to engage in presenteeism constitutes a crucial prelude to unravelling its complexities. As illustrated in Figure 3, an array of factors spanning the realms of work, personal attributes, and organisational and environmental dynamics intricately shape individuals' choices regarding attendance behaviour when they experience ill-health symptoms on a working day (see Lohaus and Habermann, 2019, for a comprehensive review). Presenteeism, far from being a binary phenomenon, emerges as a multifaceted construct perpetually moulded by a myriad of variables (Baker-McClearn et al., 2010).

Figure 3. Types of factors influencing presenteeism decisions



Within the sphere of work-related factors, the impact of job demands on presenteeism prevalence has garnered substantial scholarly attention (Aronsson et al., 2021; Demerouti et al., 2009; Deery et al., 2014; Kinman and Wray, 2018). Similarly, the spectre of job insecurity looms large, compelling individuals towards presenteeism (Heponiemi et al., 2010; Kim et al., 2020; Schmidt and Pfortner, 2020; Zhang, J., et al., 2020). Yet, nestled within the organisational fabric, the level of support from peers and supervisors emerges as a significant mitigating force. Yang et al. (2019) reveal a negative correlation between co-worker support and presenteeism prevalence, while Shimabuku and Mendonça (2018) underscore the salience of supervisor support in fostering a sense of control over one's workload, thereby mitigating tendencies towards presenteeism. Moreover, different kinds of supervisory-subordinator relations have various levels of impact on how individuals decide to engage

in presenteeism behaviour. Through exploring Baxter's (1990) three different relational dialectics (i.e., autonomy-connection, openness-closedness, and predictability-novelty) representing common tensions in supervisor-subordinate relationships, Halbesleben et al. (2014) proposed that individuals may employ presenteeism or absenteeism behaviour as a strategy to manage tensions in their relationship with their supervisors. For example, in the openness-closedness dialectic, individuals may choose presenteeism because they are not willing to disclose personal health information to their supervisor. These studies and findings have not only delved into the intricate ways in which work-related factors influence individuals' presenteeism behaviour but also highlighted the pivotal role of work-related factors in shaping individuals' presenteeism behaviour.

Transitioning to the individual sphere, person-related factors wield considerable influence. In the study of Yang et al. (2016), it was found that personality traits, such as extroversion, agreeableness, conscientiousness, openness and neuroticism, are significantly associated with stress-related factors at work and presenteeism prevalence. They also discovered a significantly negative relationship between stress-related factors and individuals' health. Furthermore, Lu et al. (2013) discussed that individuals' motives underlying presenteeism behaviours can be divided into two groups: approach and avoidance. The former refers to individuals choosing to work when unwell because they believe they can overcome the discomfort, while the latter motive refers to individuals working when unwell due to fear of negative consequences (e.g., loss of income, negative impression from managers). The study by Lu et al. (2013) revealed that an individual's level of neuroticism is positively associated with the likelihood of an individual enacting presenteeism with avoidance motives. It means that if an individual is more sensitive to negative emotions or has a higher tendency to experience anxiety, he or she may be more inclined to choose presenteeism because of their fear of negative outcomes that can be triggered by taking sick leave. In contrast, individuals with a high level of self-efficacy will commit to presenteeism with approach motives, which means that they choose to work when unwell because they believe they can effectively manage their discomfort and maintain their productivity.

Following this, in different studies, self-efficacy was found to be a potential moderator, shaping the nexus between presenteeism behaviour and health outcomes (Lu et al., 2014), and reducing negative impacts on productivity and individuals' health associated with presenteeism behaviour (Li et al., 2019).

Moreover, Li et al.'s study (2019) also revealed that individuals' health is negatively associated with presenteeism prevalence. This finding is echoed by the study of Coledam et al., (2021) and Goto et al. (2020). Additionally, within the realm of personal-related factors, individuals who strongly believe they have control over their health, in other words, those with a strong level of internal health locus of control, have lower tendencies towards presenteeism (Johns, 2011; Lohaus and Röser, 2019). However, only a few factors, such as locus of control, self-efficacy, and individuals' health, have been investigated empirically in relation to presenteeism. Many studies have neglected to explore the potential connections between presenteeism and other person-related factors, such as emotional exhaustion, depression, and lifestyle choices. These unexplored dimensions may hold valuable insights into the complex interplay between personal attributes and presenteeism behaviour.

The third group of factors that can influence presenteeism behaviour pertains to organisational and environmental factors. Yet, they have received limited attention in research, especially when compared to the other two groups. The environment individuals live in and the cultures they have been exposed to or adapted to could have an impact on their presenteeism behaviour. For example, heightened levels of presenteeism were often witnessed in societies where strict rules about being at work, highly valued strong attendance records and coping with economic changes are common (Galon et al., 2014; Lu et al., 2013). On the other hand, the support provided by organisations, as perceived by employees, plays a crucial role in shaping the norms surrounding presenteeism (Thun et al., 2013). For example, in educational settings, the support—or lack thereof—from school administrations can unintentionally promote a culture of presenteeism among staff. This phenomenon has been observed in studies examining the behaviour of school nurses (Rebmann et al., 2016). Furthermore, how individuals perceive presenteeism could have an impact on their decision to enact it, and social media can easily influence this perception. However, to the best of my knowledge, no study has investigated how social media influences individuals' perception of presenteeism and the behaviour itself. In the study by Pattern and Johns (2012), which explored the differing understandings of absence between popular press and research, the researchers did not delve into how these differences influence individuals' viewpoints toward absence and their decision of absenteeism.

In essence, presenteeism is a multifaceted phenomenon influenced by a variety of factors spanning work-related attributes, personal factors, organisational culture, and societal norms. Understanding the factors driving presenteeism behaviour is crucial for unravelling the underlying psychological mechanisms of presenteeism decisions, ultimately promoting employee well-being and organizational success. The following sections will delve into each group of these factors individually, starting with work-related factors, followed by person-related factors, and then organisational and environmental factors.

### 2.5.1 Work-related factors

The importance of work-related factors regarding presenteeism (e.g., job demands and workload, leadership style, job control) has been highlighted in many presenteeism studies, as they play a more decisive role compared to the other factors (Hansen and Andersen, 2008).

#### *Job demands*

Job demands are one of the most researched and common work-related factors when discussing presenteeism behaviour. According to Bakker et al. (2014), job demands are referred to as the physical, social, and organisational aspects of work, which require physical or mental effort and can lead to physiological or psychological costs. Heightened job demands increase the likelihood of individuals engaging in presenteeism behaviour (Aronsson et al., 2021; Miraglia and Johns, 2016; Patel et al., 2023), which is seconded by the result of Study 1 – General Questionnaire in the current thesis. When viewing presenteeism behaviour through the lens of the Conservation of Resources theory (Hobfoll, 2001), individuals may use other available resources, such as presenteeism, to avoid potential losses caused by job demands (Demerouti et al., 2009). In addition, grounded in the Demand-Control-Social Support (DCSS) model (Karasek and Theorell, 1990), Shimabuku and Mendonça (2018) examine the impact of work-related psychological demands on presenteeism and disclose that when individuals experience a higher level of psychological demands at work, the tendency of them working when unwell rises. Furthermore, through the job demands-resources (JD-R) model (Bakker and Demerouti, 2007), McGregor et al. (2016) demonstrate that with an increased risk of burnout, individuals will work when they are unwell because they feel stressed and exhausted from having too much work to do, and this

can also happen when they do not have adequate support and resources at work. **These theoretical frameworks underscore the complex relationship between job demands and presenteeism. They suggest that not only do job demands directly contribute to presenteeism, but the absence of necessary resources and support systems exacerbates the issue.**

### *Social Support at Work*

Social support from both supervisors and colleagues plays a significant role in mitigating presenteeism prevalence, as highlighted by research findings. The study of Knani (2022) in the tourism and hospitality sector underscores this point, revealing that as job demands increase, the incidence of presenteeism tends to rise. However, this trend can be counteracted by a high level of social support in the workplace. Individuals experiencing greater support from their work environment are more likely to feel comfortable taking time off when needed, thus reducing the likelihood of presenteeism.

Moreover, cultural differences can also influence the effectiveness of social support in addressing presenteeism. Research conducted in China by Yang et al. (2019) suggests that while both colleague and supervisor support is beneficial, support from colleagues may have a more pronounced effect in reducing presenteeism rates compared to support from supervisors. This finding highlights the importance of considering cultural nuances and workplace dynamics when implementing strategies to combat presenteeism. Furthermore, Shimabuku and Mendonça (2018) echo these findings, emphasising the positive impact of social support at work on reducing presenteeism. Their study reinforces the notion that fostering a supportive work environment, characterised by strong relationships among colleagues and supportive leadership, can significantly contribute to reducing presenteeism prevalence.

### *Adjustment Latitude/Job Control*

In addition, in the same study by Shimabuku and Mendonça (2018), they also revealed that the more work control employees have, the less likelihood of them choosing presenteeism. This aligns with the findings of Aronsson et al. (2021), who have discovered that job control is the most health-promoting factor in their study, reducing both presenteeism and sickness absence. Job control, can also be referred to as adjustment latitude, which is defined as the extent to which individuals can adjust their work demands to their needs (Johansson, G. and Lundberg, 2004). Regarding the relationship between

presenteeism prevalence and adjustment latitude, mixed findings have emerged. For instance, similar to Johansson, G. and Lundberg's study (2004), Gerich (2016) indicates a negative association between presenteeism and adjustment latitude; however, Knani (2022) found that individuals with a higher level of adjustment latitude are more likely to engage in presenteeism. When individuals experience low adjustment latitude, they usually find themselves with limited options other than continuing to work, which typically results in an increase in the prevalence of presenteeism. In contrast, when they have a high level of adjustment latitude, it means they can adapt their work demands to better suit their health needs, potentially leading to a higher likelihood of presenteeism as well. A similar u-shaped curvilinear pattern is found between job control and individuals' likelihood of engaging in presenteeism (Gerich, 2019). When individuals experience a low or moderate level of job control, an increase in job control will lead to a decrease in presenteeism prevalence. In contrast, if individuals have a very high level of job control, the likelihood of them choosing to work when they are unwell increases.

### *Leadership*

Moreover, **leadership styles have an impact on individual and how they perceive their work environment.** Therefore, the role of leadership has also been identified as an antecedent that can influence individuals' presenteeism behaviour. A study conducted by Dietz et al. (2020) showed the correlation between leaders' health-related behaviour and their subordinates' health-related behaviour, which indicated that if the supervisors worked when unwell, the tendency of their subordinates to choose presenteeism over sickness absenteeism would increase. In addition, Hinse and Mathieu (2022) examined how leadership styles (transformational, transactional, and laissez-faire, Antonakis et al., 2003) interact with the likelihood of public sector employees working when they are unwell. The study results showed that the transformational leadership style did not have a significant relationship with stress-related presenteeism prevalence, whereas the laissez-faire leadership style (also known as "the absence of leadership") had a significant positive association with the rate of presenteeism. This study has highlighted the importance of how an appropriate leadership style could have a positive impact on the work environment and the potential to modify individuals' attendance behaviour. Furthermore, supportive leadership behaviour could also reduce the prevalence of presenteeism, and sickness absenteeism and the cost associated with these attendance behaviours (Schmid et al., 2017). **However,**

in the current study, the Pearson Correlation of the General Questionnaire only found a statistically significantly negative association between absenteeism days and supportive leadership. To connect this factor to individuals' presenteeism decision-making, supportive leadership can encourage employees to prioritise their health needs when deciding whether to work while unwell or take sick leave. By not feeling pressured to work despite their illness, individuals may experience better health, which can consequently lead to decreased absenteeism.

### *Job Insecurity*

Another factor that stands out as one of the crucial factors in the decision of presenteeism is job insecurity. The higher the level of job insecurity individuals experience, the more likely they are to engage in presenteeism behaviour (Kim et al., 2020; Schmidt and Pförtner, 2020) and the less likely they are to choose sickness absenteeism (Miraglia and Johns, 2016). Additionally, individuals with different types of contracts perceive varying levels of job insecurity, which influences their decision to engage in presenteeism behaviour (Johns, 2010). For instance, those with temporary, fixed-term or part-time contracts may feel a heightened sense of uncertainty about their job, leading them to be more inclined to engage in presenteeism to demonstrate their commitment and value to the organisation. Conversely, individuals with more secure employment contracts may feel more confident in taking sick leave when necessary, knowing that their job is less at risk. However, the study by Heponiemi et al. (2010) found that in the public sector of Finland, individuals with fixed-term contracts reported fewer presenteeism days compared to those with full-time contracts, despite job insecurity being positively associated with presenteeism prevalence. This unexpected finding suggests that there may be additional factors at play influencing presenteeism behaviour in different employment contexts. It is possible that individuals with fixed-term contracts may feel less pressure to demonstrate their commitment to their jobs due to the temporary nature of their employment. Alternatively, they may have greater flexibility in managing their workload or taking time off when needed. Further research is needed to fully understand the complexities of presenteeism in various employment settings and to develop targeted interventions to address it effectively.



### *Norms at the workplace*

Apart from all the work-related factors mentioned above, Thun et al. (2013) suggested adding workplace norms to the list, specifically organisational adjustment norms and attendance pressure norms. Their study proposed that supervisors' attitudes significantly impact how individuals perceive these norms at their workplace, which eventually influences their presenteeism behaviour. This aligns with Steers and Rhodes' (1978) model, which summarises the variables related to employees' attendance behaviour, and Johns' (2010) dynamic model of presenteeism and sickness absenteeism. The study by Thun et al. (2013) revealed that if supervisors strongly prefer high attendance and minimal absenteeism, the attendance pressure norms in the workplace will be elevated, whilst the organisation adjustment norms will be restricted. As a result, employees will feel pressured to attend work even when unwell, increasing presenteeism. This finding underscores the importance of supervisory attitudes in shaping workplace culture and norms, which can have significant implications for employee attendance behaviour. In this study, according to the results of the negative binomial regression of the General Questionnaire, organisational adjustment norms were one of the statistically significant factors associated with absenteeism days. However, there was no statistically significant association between presenteeism/absenteeism days and participants' attendance pressure norms.

To summarise, presenteeism is significantly associated with various work-related factors, including job demands, job insecurity, support from supervisors and co-workers, leadership style, and job control/adjustment latitude. In addition to these factors, norms at the workplace (i.e., attendance pressure norms, organisation adjustment norms) have been included in the Study 1 – General questionnaire. While extensive research has established the correlation between presenteeism prevalence and these work-related factors, there is a notable gap in understanding how individuals assess these factors and make trade-offs based on their evaluations in the decision-making process of presenteeism. This critical knowledge gap remains unresolved. As organisations strive to promote employee well-being and productivity, a holistic understanding of the decision-making process of presenteeism is essential for the development of targeted interventions and policies aimed at fostering healthier workplace cultures.

### 2.5.2 Person-related factors

Person-related factors, including personality traits, self-efficacy, commitment to work, health locus of control, attitudes towards sickness absenteeism, and physical and mental health, influence how individuals perceive their surroundings and decide to engage in presenteeism behaviour.

#### *Physical health and mental distress*

Johns (2010) proposed that certain ill-health symptoms can unilaterally impact the decision-making process irrespective of an individual's capacity to work (Johns, 2010). If ill-health symptoms severely compromise a person's ability to work, taking sick leave becomes the automatic choice (Johns, 2010). The study of Martinez and Ferreira (2012) found that nurses with a better health state are associated with a reduced rate of presenteeism, mirroring other presenteeism studies (e.g., Biron et al., 2006; Gosselin et al., 2013; Miraglia and Johns, 2016). Moreover, illnesses that require extensive recovery may exhaust an individual's physical and cognitive resources, rendering them incapable of fulfilling work-related duties.

In addition, mental distress is included in the list of psychological factors crucial for shaping perceptions of symptom severity. Through a systematic review, García-Iglesias et al. (2023) found that stress is one of the main contributing factors to working despite being ill, especially during COVID-19. Due to heavy workloads and long work hours, medical staff usually experience a high stress level, adversely affecting both their physical and mental well-being, leading to an increasing probability of working when unwell (Jia et al., 2022).

Moreover, individuals' mental well-being contributes to resilience (Hu et al., 2015), enabling them to effectively cope with life stressors and challenges (Gloria and Steinhardt, 2016). Conversely, according to the biopsychosocial model of health, mental health significantly intersects with various pain disorders (e.g., Gatchel, 2004), indicating a bidirectional relationship between symptoms and perceptions of mental ill-health (see Self-Regulation Model, Leventhal et al., 1984). These findings highlight that individuals' health and well-being play a pivotal role in shaping their decisions regarding presenteeism by influencing their perception of symptom severity. It significantly impacts their initial assessment of symptoms at the onset of the decision-making process.

### *Health locus of control and self-efficacy*

Furthermore, an individual's assessment of their health is also influenced by their internal capacities and resources. The Health Belief Model (Rosenstock, 1974) elucidates that various psychological traits affect the perceived severity of symptoms. Among these traits, self-efficacy, internal health locus of control, and mental health hold particular significance. Self-efficacy is defined as the belief in one's capability to achieve goals through specific actions (Bandura, 1997), and internal health locus of control, which pertains to the belief that one's health is governed by internal factors (Norman et al., 1998). Notably, these two factors impact the severity of health symptoms individuals perceive (e.g., Roddenberry and Renk, 2010; Johns, 2010), thus affecting their evaluation of their ability to work. Research has directly associated self-efficacy with reduced pain severity among chronic pain sufferers (Jackson et al., 2014). In decisions regarding presenteeism, where symptom severity threatens individuals' health, a stronger internal locus of control can mitigate this threat by diminishing the perceived severity (Goldzweig et al., 2016). Moreover, in Johns' (2011) study, participants who perceive stronger control of their health (also known as health internals) tend to engage in sickness absence more when they feel unwell on a working day, and their perceived overall health is better compared to health externals. Supplementing this finding, Lohaus and Röser (2019) found a higher rate of presenteeism is associated with individuals with an external locus of control. However, not many studies have empirically investigated how the locus of control and other personality traits influence individuals' decisions between working when unwell and taking sick leave, and further research is needed.

Self-efficacy can also influence individuals' motive to engage in presenteeism behaviour. For instance, individuals with high self-efficacy are more likely to participate in presenteeism because they believe they can overcome discomfort and sustain productivity (Lu et al., 2013). However, for people who suffer from long-term musculoskeletal pain, the level of self-efficacy was found to be negatively associated with presenteeism (Martinez-Calderon et al., 2018). Despite having high self-efficacy in general, the experience of chronic pain can significantly impair individuals' ability to function optimally in the workplace. In such cases, they may find it difficult to sustain productivity even though they believe in their capabilities. Thus, while high self-efficacy is often associated with more presenteeism

days, the presence of chronic pain can mitigate this effect, leading to a negative correlation between self-efficacy and presenteeism in certain populations, as observed by Martinez-Calderon et al. (2018). Alternatively, self-efficacy can also serve as a buffer that helps to reduce the productivity loss associated with presenteeism through decreased job stressors (Brunner et al., 2019; Li et al., 2019). It can also be a mediator between presenteeism and the risk of burnout (Yu et al., 2015). As a result, it is important to maintain a good level of self-efficacy among employees to promote better health and well-being at work. When individuals feel confident in their abilities to handle challenges and tasks effectively, they are more likely to experience lower levels of stress and burnout. Moreover, fostering self-efficacy can contribute to a positive work environment, where employees feel empowered to take on responsibilities and contribute to the organisation's success.

#### *Work commitment*

Furthermore, how much an individual is committed to his/her job also influences the decision of presenteeism. While Hansen and Andersen (2008) found that excessive commitment to work can lead to higher rates of presenteeism, Yang et al. (2017) discovered that affective commitment can reduce presenteeism. This discrepancy can be attributed to the different perspectives on individuals' commitment to work in the studies. Hansen and Andersen (2008) adopted Siegrist's (1996) view, which characterises over-commitment as a high tendency to accept all demands. In contrast, Yang et al. (2017) view work commitment as affective, akin to a sense of loyalty and belonging that fosters engagement, organisational dedication, and the pursuit of organisational goals (Meyer and Allen, 1991; Mowday et al., 1982). Presenteeism could be considered a type of organisational citizenship behaviour (Demerouti et al., 2009; Johns, 2010; Ruhle et al., 2020), as individuals may use the action of working while ill to show their loyalty and commitment to their organisations, and to enable effective managerial intervention for presenteeism, organisations need to perceive it as a neutral behaviour (Karanika-Murray and Biron, 2020), instead of a negative one.

#### *Attitudes towards absence*

In addition to examining individuals' self-efficacy, health locus of control, over-commitment, and physical and mental health, the current study also seeks to understand the correlation between

individuals' attitudes towards sickness absence and presenteeism. An individual's attitude towards sickness absence is a product of their values and perceptions of their environment. For instance, individuals may perceive sickness absence as a sign of weakness or may fear negative consequences such as falling behind on work tasks or being perceived unfavourably by colleagues or supervisors (Lu et al., 2013). Conversely, some individuals may view sickness absence as a necessary step to prioritise their health and prevent the spread of illness to others in the workplace. In the study of Hansen and Andersen (2008), they found out that individuals with a conservative attitude towards sickness absence will be more likely to work when feeling unwell. Understanding these attitudes is crucial as they can significantly impact individuals' decisions regarding presenteeism.

In contrast to work-related factors, limited studies have focused on exploring the impact of person-related factors on individuals' decisions to work while unwell (Lohaus and Habermann, 2019). These person-related factors are crucial in shaping individuals' perceptions of their work environment and can mitigate the negative effects of presenteeism. Therefore, understanding how these factors interact with work-related elements is vital for comprehending the decision-making process behind presenteeism and devising effective managerial interventions to address this behaviour. Consequently, the present thesis posits that individuals' assessments of their health and work capabilities are influenced by personal factors such as internal locus of control, self-efficacy, over-commitment, attitude towards sickness absence and both physical and mental health. These factors will be measured by the Study 1 – General Questionnaire.

### 2.5.3 Organisational and Environmental Factors

The impact of organisational and environmental factors on presenteeism and sickness absenteeism has been recognised by the model developed by Lohaus and Habermann (2019). Their model includes factors such as paid sick leave policy, economic climate, organisational downsizing, and cultural norms, such as gender roles and work ethics within a specific country, under the domain of environmental influences. Compared to the work-related factors discussed in the previous session, these organisational and environmental factors might not have a direct and apparent impact on presenteeism behaviour and prevalence. However, they certainly influence how individuals perceive their surroundings and subsequently affect their work attendance behaviour.

### *Macro Environmental factors*

Between 2019 and 2022, the emergence of a global pandemic presented significant challenges to many organisations worldwide. The economy, which had not yet fully recovered from the 2008 global recession, faced further setbacks due to COVID-19-related lockdowns and isolation measures. This poor economic climate led to increased employee redundancy and layoffs, exacerbating the fear of losing employment and resulting in high job insecurity (Galon et al., 2014; Wood et al., 2020). Research indicated that during financially difficult times, the rate of sickness absence significantly dropped (Leigh, 1985; Markham, 1985; Pichler, 2015; Taylor et al., 2010), suggesting a higher rate of presenteeism (Aronsson et al., 2000; Caverley et al., 2007). A similar pattern was identified in a study conducted by Van Gyes and Szekér (2013), which investigated changes in working conditions at a national level across European Union Member States and Norway since the onset of the financial crisis in late 2008. Employees, fearing job loss, were more likely to attend work despite being unwell, prioritising job security over health concerns when deciding their attendance behaviour.

Moreover, the COVID-19 outbreak has added extra pressure on individuals to persist in working even when they are not feeling well. Staff and students at the University of York reported high psychological stress and high levels of presenteeism and absenteeism in the middle of the COVID-19 pandemic (Van Der Feltz-Cornelis et al., 2020), while a survey in the UK disclosed that more than one-third (35%) of the respondents engaged in presenteeism during lockdown, and nearly a quarter of them (24%) perceive a need to demonstrate their daily presence as proof of their work commitment (Canada Life, 2020). Additionally, during the COVID-19 pandemic, individuals and organisations have adopted remote working practices to mitigate the spread of the virus, and ensure business continuity. For some, this shift to working from home was positive, offering greater flexibility and reducing commute times (Allen, T.D., et al, 2015). However, others found managing the boundaries between work and personal life challenging, leading to difficulties in maintaining a healthy work-life balance (Waizenegger et al., 2021). Furthermore, if an individual is working from home full-time, his/her tendency to work when unwell is heightened, whilst short-term remote working can reduce psychological and physical stress responses (Shimura et al., 2021). These divergent experiences highlight the complex interplay between

organisational policies, individual circumstances, and broader economic conditions in shaping work attendance behaviours.

Furthermore, in a broader context, national culture and work ethics also impact presenteeism behaviour. For example, a lower level of presenteeism has been found in Latin countries since they attach little importance to competition between colleagues and the value of working extra hours (Ferreira et al., 2019). In contrast, in countries that have adopted the Confucian culture of valuing a strong work ethic, such as Japan and China, a higher prevalence of presenteeism was found compared to the UK (Lu et al., 2013). Moreover, Lu et al. (2013) also indicated that individuals in these countries strongly prefer to engage in presenteeism even if their job security and job satisfaction are high, as their cultural norms encourage working through illness.

#### *Organisational factors*

Alternatively, organisational factors such as sick pay policies, attendance management policies, and organisational culture also have an impact on how individuals decide to work when they feel unwell. For example, Irvine (2011) has pointed out that compared to individuals who are in less secure employment, or who work in smaller companies, individuals who are in stable employment, particularly in large-sized organisations, feel more confident about taking sick leave and remaining absent when they are feeling unwell. This confidence stems from their employers' comprehensive sick pay benefits and their employer's capacity to manage their absence effectively. Likewise, when organisations implement cost-effective strategies or changes related to cutbacks, the likelihood of individuals working when they are unwell increases (Wynen et al., 2021). Through analysing interviews collected in nine organisations in the UK, Baker-McClearn et al. (2010) reveal that a significant number of interviewees believe that their company's policies and procedures regarding sick leave exerted pressure on them to attend work, particularly in cases where sick pay was withheld or when there was a looming possibility of facing disciplinary actions or contract termination. In their study, the system of "trigger points" and return-to-work interviews are found to be a very common practice at the workplace, but interviewees perceived these protocols as stress-inducing and pulling them away from choosing sickness absence.

In summary, organisational and environmental factors play a crucial role in shaping presenteeism and absenteeism behaviours. The economic conditions, cultural norms, and organisational

policies collectively influence how employees respond to their work environment, particularly during periods of economic instability and health crises. Understanding these influences can help organisations develop better strategies to manage employee attendance and overall well-being. While the impact of work-related and personal factors on individual attendance behaviours may be more immediate and pronounced, the significance of organisational and environmental factors should not be overlooked in presenteeism research. Organisational factors, such as sick pay policies, attendance management practices, and workplace culture, serve as the foundation of how individuals perceive and respond to attendance expectations posed by their employer, and shape the work environment in ways that either encourage or discourage presenteeism. On the other hand, environmental factors, including the broader economic, job market stability, and societal norms, can influence individuals' decisions regarding whether to prioritise their health or fulfil workplace obligations when they experience ill-health symptoms on a working day. These factors provide the context in which work-related and personal factors function.

#### 2.5.4 Other Demographic Factors

Apart from the work-related, person-related, organisational and environmental factors, research also found that certain groups of individuals are more prone to presenteeism behaviour. For example, there are gender-related differences in presenteeism behaviour (Aronsson and Gustafsson, 2005). In Sweden, a study conducted within a healthcare institute found that female physicians exhibited more days of presenteeism compared to their male counterparts (Gustafsson Sendén et al., 2016). The authors suggested that this discrepancy might be attributed to gender stereotyping and additional responsibilities at home. Additionally, in the United States, females were also found to be more prone to presenteeism behaviour (Susser and Ziebarth, 2016). However, this pattern might change after women give birth. In the study by Azmat et al. (2022), it was found that when women had their first child, they took more sickness absence compared to their male partners.

In addition, certain occupational groups exhibit a higher prevalence of presenteeism than others. Healthcare workers, such as doctors and nurses, are particularly prone to presenteeism (Andres et al., 2021; Dew et al., 2005; Rainbow, 2019; Rebmann et al., 2016). They often engage in presenteeism out of consideration for others, with primary reasons including a strong commitment to their patients and a



desire not to add extra workload to their colleagues. Specifically, nurses have the highest rate of working when unwell among all occupations due to internal guilt about increasing their co-workers' workload and the potential negative consequences for their patients (Rainbow, 2019). Another occupational group that is particularly vulnerable to presenteeism is academic staff. In a survey of 6,874 academic staff across UK colleges and universities, the majority (88%) reported frequently working while feeling sick (Kinman and Wray, 2018). It has been observed that employees who possess specialised skills and are not easily replaced at work have a higher rate of working while feeling unwell, and when they decide whether to work when feeling unwell, this could be presented as a critical factor.

Moreover, the type of employment contract individuals have also impacts their presenteeism behaviour, through job insecurity. Compared to those with permanent full-time contracts, individuals with part-time or fixed-term contracts are less likely to take sick leave and more likely to work when unwell (Johns, 2010; Kim et al., 2016; Reuter et al., 2019). This may be due to heightened job insecurity and the lack of paid sick leave. Missing work results in lost income. For individuals who are experiencing financial difficulties in general, this will be a significant driver of presenteeism. Similar to the finding of Merrill et al. (2012), Callen et al. (2013) revealed that stress from work and one's home, as well as finance, are significantly associated with presenteeism prevalence in the workplace. The combination of job insecurity and financial stress creates a compounding effect, further intensifying the tendency of individuals to work when unwell.

When individuals face uncertain job prospects, they may feel compelled to demonstrate their dedication and indispensability by showing up to work, even when unwell. Additionally, the fear of losing income due to missed work reinforces the pressure to prioritise attendance over health. According to the Attitudes Towards Health Management report of Mintel (2024), financial stability has a significant influence on adults' physical health and mental well-being. Individuals who are struggling with their finances report poorer health, higher incidences of mental health issues, increased stress, and greater fatigue. Financial concerns are a primary source of stress, particularly for young and middle-aged adults. In contrast, financially secure individuals are more likely to prioritise health in their spending and lifestyle choices.

Moreover, stress significantly impacts both physical and mental health. The same report by Mintel (2024) showed that 80% of participants reported experiencing some form of stress in the year leading up to August 2023, with 34% considering the stress they experienced to be a health issue over the past year. Mental health conditions and fatigue/exhaustion are more prevalent among those experiencing stress. For instance, survey respondents reported various negative side effects: 50% of adults who experienced stress in the last 12 months reported difficulty sleeping, 46% reported low energy, and 37% mentioned that stress led to emotional outbursts. Additionally, 43% of adults who experienced stress in the last year also faced a mental health condition.

Importantly, people in the UK often experience a combination of mental and physical health problems simultaneously, with 27% of adults having experienced three or more health issues in the last 12 months (Mintel, 2024). The leading causes of work-related stress, as identified by CIPD (2023), are heavy workloads and the volume of work, followed by management style. High levels of stress contribute to a great sense of strain, making it more difficult for individuals to prioritise self-care and take time off when needed. Financial stress adds another layer to this strain, as individuals may feel trapped between the need to earn income and the necessity of attending to their health.

When examining the correlations between presenteeism/sickness absenteeism prevalence and participants' demographics using the Pearson correlations, similar patterns were found in Study 1. For presenteeism days, one's financial situation showed a positive correlation. In other words, combined with the gender differences which was discussed above, female participants and those experiencing higher financial stress tended to report more days of presenteeism. Conversely, both gender and financial situation exhibited a similar pattern concerning absenteeism days. Additionally, organisation size and contract type were significantly negatively correlated with absenteeism. This indicates that participants who were male, did not have a permanent full-time contract, but experienced high level of financial stress, and those working in medium or small-sized organisations reported fewer absenteeism days.

These findings align with those of Böckerman and Laukkanen (2009), who found that women with permanent full-time contracts tend to work while unwell more often compared to men. This could be influenced by various factors, including job security concerns, workplace culture, and personal

commitments, highlighting the complex interplay between demographic factors and work behaviour. Understanding these patterns is crucial for developing targeted interventions to manage presenteeism and absenteeism, particularly among vulnerable group. The next section will discuss the consequences of presenteeism. It is important to understand these consequences as they influence individuals' decision-making and behaviour, particularly regarding the trade-offs involved.

## 2.6 The consequences regarding presenteeism behaviour

Presenteeism, characterised by its high prevalence and significant costs (Hemp, 2004), is widely regarded as a negative phenomenon for both employees and organisations. However, recent studies have shown that with suitable adjustments and a supportive work environment, presenteeism can have therapeutic and adaptive effects, which can be beneficial for both individuals and their employers (Karanika-Murray et al., 2015; Karanika-Murray and Biron, 2020; Whysall et al., 2018). In decision-making theories, understanding the possible consequences associated with one's action is an important facet since it provides an important source of feedback in the decision-making process. This feedback plays a crucial role in effective decision-making, as it helps evaluate the appropriateness of the selected option for the situation, assess the degree to which expected outcomes are achieved, and identify connections between actions and outcomes (Hardman, 2009). What individuals expect to achieve through presenteeism behaviour and what potential losses they perceive if they choose to take sick leave, influence how they decide their attendance behaviour when feeling unwell on a workday. Even though some productivity may be maintained through presenteeism, whilst sickness absenteeism indicates no productivity (Johns, 2010), individuals should understand the impact of presenteeism on their health and job performance when deciding to work when unwell or rest and take sick leave.

From the perspective of its impact on individuals' health, presenteeism can deteriorate their both physical and mental health state and increase the risk of long-term sickness absence (Bergström et al., 2009; Taloyan et al., 2012). Through a systematic review, Skagen and Collins (2016) found that most presenteeism studies indicated it as a risk factor for decreased self-rated health state and a predictor of sickness absenteeism in the future. When considering the Recovery Theory (Meijman and Mulder, 1998) in the context of presenteeism behaviour, it becomes evident that individuals' health can deteriorate due to inadequate time for rest and recovery. Working when unwell necessitates additional effort and time to meet work performance demands, which, in turn, reduces the time available for recuperation. Moreover, the more severe the health symptoms, the greater the effort and time required (Lu et al., 2013). In the same study by Lu et al. (2013), via a 2-wave panel study with 245 full-time employees in Taiwan, they also disclosed that presenteeism has a negative impact on their participants'

mental and physical health and job satisfaction, and it increases the risk of exhaustion. Moreover, through a survey of 1,956 prison officers in the UK, Kinman and Clement (2022) found that a higher rate of presenteeism was significantly linked to more pronounced mental health symptoms, reduced job performance, and a less favourable safety climate in the workplace. In addition to productivity loss, presenteeism can lead to more errors at work. For instance, in a study conducted by Johansson, F. and Melin (2019) involving Swedish commercial airline pilots, it was observed that pilots who had engaged in presenteeism within the previous 12 months were more prone to reporting five or more errors during their flight duties.

Appropriate adjustments and a supportive work environment are crucial for presenteeism to become rehabilitative and restorative to individuals (Karanika-Murray and Biron, 2020; Whysall et al., 2018). Supervisory support can reduce the negative impact in relation to presenteeism and lead to a lower risk of exhaustion (Lu et al., 2013). A study conducted by Chen et al. (2020) found a three-way interaction between presenteeism, support from both peers and supervisors and individuals' innovative performance. To clarify, when employees engage in presenteeism, their innovative performance reaches its peak when they receive substantial support from both supervisors and colleagues. In contrast, when the support is minimal, the innovative performance drops to the lowest level. Furthermore, based on the Job Demand and Resource model, McGregor et al. (2016) posit that an increase in job resources, such as leadership and social support at work, can enhance individuals' work engagement and decrease the prevalence of presenteeism. Additionally, to explore the potential positive outcomes associated with presenteeism, Röser and Lohaus (2021) conducted a study involving part-time working students building upon the content model established by Lohaus and Habermann (2019). The results showed that students were able to list work-related, individual-related, and organisation-related positive effects of presenteeism (e.g., avoiding extra work for teammates, gaining or maintaining income, and expecting a good performance review). Subsequently, Lohaus et al. (2021) adopted an online quantitative survey to examine the derived presenteeism positive effects of Röser and Lohaus' study (2021), and the results showed that all the positive effects listed in the previous study remained relevant. These studies have offered insights into the positive effects associated with presenteeism and underscored the significance of a supportive environment in mitigating the negative consequences associated with presenteeism.

Through critically evaluating the existing literature on presenteeism, it has become evident that there is a lack of comprehensive understanding regarding how individuals decide to engage in this attendance behaviour, even when at risk of worsening health and well-being. Current research has laid the foundation by identifying factors associated with this behaviour but has not delved into the underlying psychological mechanisms through which individuals leverage these factors in their decision-making processes. A few studies have attempted to examine this intricate and dynamic decision-making process, such as Lohaus and Haberman (2021) and Rivkin et al. (2022), but they have only provided limited insights. As a result, this thesis aims to investigate the presenteeism decision-making process through the PDM model (Whysall et al., 2023). A mixed-method approach has been employed to address the following research questions:

RQ1. How do people make their decisions to work when they are physically or mentally unwell?

And under what circumstances?

RQ 2. How do individuals assess contextual factors in their decision-making and the influences of person-related factors on this consideration?

RQ3. How can presenteeism be effectively managed, and how can we promote informed decision-making to balance health and work performance demands?

The goal of the current thesis is to enhance our understanding of how individuals decide to work when unwell. By gaining deeper insights into this behaviour, effective managerial interventions are aimed at addressing presenteeism, creating a more supportive work environment, and enhancing the work experience for individuals. **More discussion regarding the research instruments and methodology adopted by the current thesis can be found in Chapter 3**, and the following session presents a summary of general research methods in decision-making studies.

## 2.7 Common Research Methods in Decision-Making Studies

Before determining the most suitable research approach for examining the presenteeism decision-making process, it is essential to explore common methods of data collection in general decision-making studies. Typically, research methods align with theoretical stances such as qualitative (e.g., case studies, interviews, and focus groups), quantitative methods (e.g., surveys and experiments),

and mixed methods, combining qualitative and quantitative approaches (Leedy and Ormrod, 2001; Williams, 2007). For example, in quantitative decision-making studies, questionnaires are one of the popular methods serving the purpose of examining individuals' decision-making processes (Connors et al., 2016). Through a structured questionnaire, Holmes et al. (2014) discovered that when shopping online, shoppers feel more positively towards using their computers to make an order, and they intend to use their mobiles to search for information during the phase of considering alternatives, which indicated shoppers' mobile phones involve more in their decision-making process of online shopping. Similarly, Zhang, K. Z. et al. (2014) found that online product reviews significantly influence purchase decisions, emphasising the impact of perceived product quality and review credibility. In addition, Donaldson and McNicholas (2004) investigated how postgraduate students decide to pursue a master's degree through a quantitative mixed-method approach combined with interviews and a survey. Their research showed that students were mainly motivated to study a postgraduate degree by the improvement of career prospects and higher employability due to enhanced skills. Moreover, the reputation, the university's location, and the programme's accreditation are the deciding factors influencing their choice of institution.

However, the limitation of using a questionnaire to investigate how individuals make decisions should be addressed. Individuals' decision-making process is specific to situations, and the results generated from questionnaires may not be able to reflect their actual behaviour. For example, Galotti et al. (2014) found discrepancies between students' questionnaire responses and their actual course selection behaviours, underscoring the need for alternative methods. To address this, Connors et al. (2016) advocate for experimental approaches with hypothetical scenarios, enabling researchers to probe participants' decision-making processes more deeply. Additionally, innovative research instruments like laboratory protocols and observation methods, as discussed by Connors et al. (2016), offer promising avenues for elucidating individual differences in decision-making.

Moreover, in researching individuals' decision-making, two distinct approaches emerge: the structural approach and the process approach (Maule and Svenson, 1993). The former approach mainly focuses on how inputs and decision outcomes are interconnected, demonstrating how individuals' decisions and preferences can be clarified based on the information given by each alternative, whereas

the latter approach concentrates more on how decisions are made and the underlying psychological and cognitive processes of individuals. For instance, the study of Galotti et al. (2014) mentioned above adopted a structural approach to examine if the variables measured by the questionnaire predict students' choice of courses. In contrast, Schildmann et al. (2013) conducted interviews with pancreatic cancer patients, to explore how their perceptions and views on information influence their decision-making about treatment. They have identified two stages regarding the process of information gathering and treatment decision-making. In the initial stage, patients prioritised the advice from their physician and limited interest was shown when surgical and medical treatments were presented to them. As the disease progresses, they become more proactive in searching for information and making their own decisions about their treatment. Unlike Galotti et al. (2014), who aimed to establish associations between factors and decision outcomes, Schildmann et al. (2013) delved into the unfolding decision-making process.

In the current thesis, a process approach is embraced to examine individuals' decisions to work while unwell. Under the process approach, “the researcher follows and draws upon conclusions about the psychological process from problem presentation to decision through collecting process tracing measures, such as information search and think aloud protocol” (Svenson, 1996, p. 252). Moreover, echoing the study of Rivkin et al. (2022), one of the existing research in relation to presenteeism decision-making, the experience sampling diary method emerges as a highly effective approach for examining the presenteeism decision-making process. Its ability to capture real-time insights, provide a contextual understanding, offer a longitudinal perspective, ensure ecological validity, and accommodate individual differences makes it a valuable tool for researchers in this field (Csikszentmihalyi and Larson, 1987; Hektner et al., 2007; Scollon et al., 2003). By employing this method, researchers can gain a comprehensive understanding of how individuals navigate the complex interplay of factors influencing their decisions to engage in presenteeism. Moreover, the method's flexibility allows for the exploration of dynamic decision-making processes in individuals' natural environments, offering rich and nuanced insights that may not be achievable through traditional research methods. Additionally, this method aligns with the pragmatism paradigm, as it facilitates the recording of participants' thoughts, feelings, and actions when they experience ill-health symptoms on a working day, enhancing reliability and validity of the research findings (Denzin, 2012, 2017).



## 2.8 Conclusion

This chapter has explored several aspects of presenteeism, including discussions on its definition, relevant decision-making theories, the latest research regarding presenteeism decision-making, the factors shaping the decision to engage in presenteeism, the consequences related to presenteeism behaviour, the PDM model (Whysall et al., 2023) that is embedded in the current thesis, and the common research methods in decision-making studies. Given the complexity of the topic and the importance of understanding how individuals choose to work when unwell and under what circumstances, a qualitative mixed-method approach centered on an experience sampling diary method has been adopted, which will allow us to delve deep into the process of presenteeism decision-making, providing valuable insights into the underlying motivations, contextual factors, and individual experiences that contribute to this phenomenon. In the forthcoming chapter, the philosophical position adopted in the current thesis and how this inform the research methods adopted in this thesis will be discussed.

## Chapter 3 - Research epistemology and methodology

A research philosophy represents what a researcher knows about the world and how they gain knowledge, and it includes ontological and epistemological components (Baldwin et al., 2014). Ontology is referred to as the way individuals perceive reality and their recognition of the world, epistemology is about the individuals' approach to knowledge (Denzin and Lincoln, 2008; Howell, 2012).

### 3.1 Research Philosophy

The research paradigm of pragmatism is suitable for comprehensively unwrapping the complex psychological mechanisms of individuals who decide to work when unwell. Pragmatism, which is usually connected with mixed methods or multiple methods (Creswell and Clark 2011; Teddlie and Tashakkori, 2009), suggests that researchers should adopt the philosophical or methodological approach that is most effective for the specific research problem under investigation (Tashakkori and Teddlie, 1998). It also highlights the practical application of research findings and values methods that can be transformed into actions (Riga, 2020). Unlike strict realism and extreme relativism, pragmatism allows more flexibility in terms of the truth of knowledge (Shook, 2023). Pragmatists hold various perspectives on the concept of "truth" (Shook, 2023). For some, truth applies solely to knowledge that has undergone rigorous validation in the past. Others perceive truth as evolving during ongoing investigations as methods are justified. Alternatively, some reserve truth for the enhancement of knowledge through future inquiries. This diversity in understanding truth is a characteristic of pragmatism, and pragmatists appreciate the merits of each viewpoint.

From a pragmatist perspective, knowledge is not a passive reflection of reality but is actively constructed through our interactions with the world (Dewey, 1925). This research identifies that how individuals decide to engage in presenteeism behaviour is situation-specific and time-sensitive. This perspective is crucial for understanding the multifaceted nature of presenteeism, as it considers how personal beliefs, workplace culture, societal expectations, and interpersonal relationships all contribute to the decision to attend work despite being unwell.

Pragmatism also underpins the mixed-methods approach used in this research (Denzin, 2012). The initial cross-sectional survey collected data on participants' work environment, person-related variables, and demographics, while the diary study captured their decision-making process regarding presenteeism in situ (targeting at RQ1 and RQ2). The final semi-structured interviews offered deeper insights into participants' perceptions of their decisions regarding presenteeism and sickness absenteeism, workplace attendance management practices, the support provided by their employer, and the additional support they desired to prioritise their health needs when necessary (targeting at RQ3). This mixed-method design is beneficial for examining the presenteeism decision-making process because it combines quantitative data and qualitative insights, allowing for a more comprehensive investigation. Furthermore, employing a mixed-methods approach enables a comprehensive grasp of the presenteeism decision-making process. Quantitative data provides a structured analysis of participants' work environments and personal variables, offering statistical insights. Meanwhile, qualitative data delves deeper into understanding the intricate dynamics and contextual nuances influencing presenteeism. Subjective experiences, motivations, and decision-making rationales of participants when they decided to work while unwell were uncovered by the qualitative data. By integrating both approaches, the research aims to attain a nuanced understanding that can guide the development of targeted interventions to support productive presenteeism while mitigating its potential adverse effects.

### 3.2 Common Research Methods

Traditionally, research methods are categorised into three categories: quantitative, qualitative, and a mix of both. Qualitative research highlights the relationship between social conditioning and the reasoning process and how we understand a phenomenon (Blake, 2007; Saunders et al., 2018). Characteristically, interpretivism (Altheide and Johnson, 1994) and constructivism (Guba and Lincoln, 1994) form the foundation of the qualitative paradigm, which claims that there are multiple realities based on how an individual constructs reality (Sale et al., 2002). On the other hand, in the quantitative paradigm, researchers adopt positivism, and they believe that there is one truth only, and it is completely objective and independent from human perception (Sale et al., 2002). These two **distinct** philosophical

viewpoints result in **different** epistemological approaches. For instance, when researchers employ quantitative methods to collect data, they can examine a phenomenon without **directly** influencing or being influenced by it directly, as the investigator and the study participants are **considered** independent entities. Conversely, when using qualitative methods, researchers and study participants collaboratively create findings through interactions (Guba and Lincoln, 1994). A qualitative approach is indispensable for uncovering the underlying aspects of a phenomenon (O’Gorman and MacIntosh, 2015), while a quantitative approach may be employed to dissect the contextual environment surrounding individuals. **There may be a natural alignment between research paradigms and methods, but there is no deterministic relationship that mandates the use of a specific paradigm with a particular set of methods (Morgan, 2013).**

**As mentioned previously, this thesis has adopted a mixed-method experience sampling approach informed by pragmatism.** Mixed method research, also referred to as integrative research, is a type of research that combines qualitative and quantitative research elements in one study, and it can occur during the stage of data collection or data analysis (Johnson, R.B., et al., 2007). Mixed method research could be either quantitative dominant or qualitative dominant, depending on the researchers’ philosophical standing and the phenomenon they are researching. Qualitative dominant mixed methods research focuses on “a qualitative, constructivist-poststructuralist-critical view of the research process” and recognises the benefits of quantitative data and approaches that could be added to research projects (Johnson, R.B., et al., 2007). However, there is an ongoing debate about whether qualitative and quantitative methods could be mixed in a single study.

**Mixing qualitative and quantitative methods in a study has several practical advantages (Tebes, 2012). For instance, when neither approach is adequate to address a research question, a mixed method design can draw on each approach and deal with both exploratory and confirmatory questions in one study (Clark et al., 2008; Teddlie and Tashakkori, 2009). In addition, Haase and Myers (1998) advocate the combination of these two research approaches since they both have the same goal of understanding the world. Moreover, Reichardt and Rallis (1994) described that these two approaches also share a common aim of developing knowledge-informed practice to enhance the human condition, through a rigorous and conscientious research process. Although qualitative and quantitative approaches are not**

commensurate, these two methods can be combined in one study if it is for complementary purposes (Sale et al., 2002),

In conclusion, this research has highlighted the significance of adopting a pragmatic approach when investigating complex phenomena such as presenteeism. By embracing pragmatism, researchers can effectively navigate the intricate interplay of factors influencing presenteeism decision-making processes. Furthermore, the integration of qualitative and quantitative methods has emerged as a powerful strategy to enhance the depth and breadth of understanding in research inquiries. Moving forward, the insights gained from this study can inform the development of targeted interventions aimed at promoting functional presenteeism while mitigating its adverse consequences, thereby contributing to the advancement of knowledge and the improvement of organisational well-being.

### 3.3 The Adopted Research Method

From a pragmatic point of view, selecting methods that best address the research questions and produce actionable results is the key (Morgan, 2014). Pragmatism prioritises the selection of research instruments that are both practical and effective in capturing insights applicable to real-world settings. Therefore, research instruments that can provide valuable insights at the moment when individuals are making a decision to engage in presenteeism are preferable. The experience sampling method is particularly suitable in this regard because it provides real-time data on participants' thoughts and behaviours in their natural environments (Delanoeije et al., 2019). By minimising recall bias (Conway and Briner, 2012; Myin-Germeys et al., 2018) and post hoc rationalisations (Nisbett and Wilson, 1977), the experience sampling method ensures that the data collected is both accurate and immediately relevant. It leads to insights that can be directly applied to developing interventions and solutions for managing presenteeism. Within the experience sampling method domain, a diary study has been employed in this research to capture the research participants' decision-making processes regarding presenteeism.

Moreover, it is notable that the open-ended questions in the daily diary survey are derived from the PDM model, enabling the research participants to provide answers corresponding to each stage outlined in the model, thereby elaborating on their decision-making process. This approach primarily

reflects a deductive research design, where the study begins with a theoretical framework, such as the PDM model, and uses it to guide the data collection and analysis. This method is useful for testing existing theories and models, as it allows for a structured and focused investigation (Azungah, 2018). Consequently, this approach enables a systematic exploration of how well the PDM model explains the presenteeism decision-making process. In addition, a template analysis, also known as a deductive thematic analysis (King, 2012), is employed to analyse the data generated from the diary study. While the primary approach to data analysis is deductive, guided by the stages outlined in the PDM model, the analysis also allows for themes to emerge organically from the data. This combination ensures a thorough examination of the data, balancing the application of established theoretical frameworks with the flexibility to identify new insights that arise naturally (Azungah, 2018).

Complementing the diary study, an initial cross-sectional survey was administered to gather essential information regarding individuals' work environments and person-related factors that can influence how they decide to enact presenteeism. This survey provided critical contextual data, including details about participants' work settings and demographics, which is foundational for understanding the broader context of their presenteeism decisions. By gathering this preliminary data, the survey laid the groundwork for the diary study, enabling a more comprehensive exploration of the decision-making process of presenteeism. Together, these two stages were designed to address RQ1 and 2. Furthermore, to investigate RQ3 on managing presenteeism effectively, the final stage of semi-structured interviews provides in-depth insights into individuals' perceptions of their decisions regarding presenteeism and sickness absenteeism, their expectations regarding workplace support, and the attendance management protocols at their workplace. Such nuanced information is beyond the scope of a questionnaire, making semi-structured interviews the most suitable method for capturing these detailed perspectives

This research aims to gain a comprehensive understanding of presenteeism decision-making, which is critical for developing targeted managerial interventions that address this multifaceted workplace phenomenon. Due to the complex interplay of contextual factors influencing presenteeism, generic strategies are unlikely to be effective. Insights into current attendance management strategies, resources, and support provided by employers, as well as individuals' perceptions of these elements, are

needed. Therefore, employing research instruments that offer in-depth understanding is essential. In this context, semi-structured interviews are particularly valuable for gaining comprehensive insights into these aspects. The following section provides more details of each stage of the research, including survey design, variables measured, core categories of interview questions, and analytic approach.

### 3.3.1 Study 1: Initial General Questionnaire

In the initial stage, participants complete a general questionnaire designed to gather demographic data and measure relatively stable variables such as job demands and social support at work. These variables provide a baseline understanding of the participants' work environment and personal characteristics, which are critical for interpreting the data collected in subsequent stages.

Based on the existing literature on presenteeism, the chosen variables for the general questionnaire encompass both work-related and person-related factors. In the domain of work-related factors, the questionnaire will assess:

1. **Job Demands:** Job demands have a direct positive relationship with presenteeism prevalence (Johns, 2010). It includes aspects such as workload, time pressure, and cognitive demands that may contribute to presenteeism. Several theoretical models, such as the DCSS model (Karasek and Theorell, 1990) and the JD-R model (Bakker and Demerouti, 2007), can be applied to explain the association between job demands and presenteeism.
2. **Social Support:** This measures the perceived support from coworkers and supervisors, which can influence employees' decision to work when ill. It can be considered as a resource at all. Therefore, the level of presenteeism rises, when individuals' job demands increase, but drops when they receive a high level of social support at work (Knani, 2022; Shimabuku and Mendonça, 2018).
3. **Leadership:** Leadership styles influence how individuals perceive their work environment, and different styles have varying degrees of impact on presenteeism behaviour. For example, the transformational leadership style did not show a significant relationship with stress-related presenteeism prevalence, whereas the laissez-faire leadership style exhibited a significant positive association with the rate of presenteeism (Antonakis et al., 2003).

4. **Adjustment Latitude:** This assesses the degree of flexibility and autonomy employees have in managing their work tasks and schedules, which can impact their ability to cope with health challenges. Different from job demands, which have a linear association with presenteeism prevalence, a u-shaped curvilinear pattern was found between adjustment latitude and presenteeism (Gerich, 2019).
5. **Job Insecurity:** This measures employees' concerns about the stability of their job and its potential impact on their health and well-being. Increased levels of job insecurity correlate with a greater prevalence for presenteeism, as evidenced by studies conducted by Kim et al. (2020) and Schmidt and Pfortner (2020). Conversely, individuals experiencing heightened job insecurity are less inclined to opt for sickness absenteeism (Miraglia and Johns, 2016)
6. **Norms at the workplace:** This includes two variables, which are attendance pressure norms and organisation adjustment norms (Thun et al., 2013). The former evaluates the prevailing norms or expectations within the organisation regarding attendance and the pressure to come to work even when unwell. The latter assesses the organisation's policies and practices related to accommodating employees' health needs and promoting a healthy work-life balance. Norms play a pivotal role in understanding attendance behaviour within an organisation. Norms regarding attendance can vary significantly across different organisations and even within different departments or teams within the same organisation.

In terms of person-related factors, the questionnaire will measure:

1. **Mental Distress:** This evaluates the level of psychological distress experienced by the study participants, which can influence how they evaluate their ill-health symptoms. The assessment of symptom severity notably influences the decision-making process of presenteeism. Furthermore, individuals' mental health plays a role in fostering resilience (Hu et al., 2015), enabling them to adeptly manage life's stressors and difficulties (Gloria and Steinhardt, 2016).
2. **Health Locus of Control:** This assesses individuals' beliefs about the extent to which they can control their health outcomes (Norman et al., 1998), which may affect their decision-



making regarding working when unwell. When it comes to deciding whether to work when unwell, having a strong internal locus of control can help reduce the perceived severity of the symptoms (Goldzweig et al., 2016). Additionally, in Johns' (2011) study, participants with a strong sense of control over their health (referred to as health internals) tended to take sick leave more often when feeling unwell on a workday.

3. **Self-Efficacy:** This measures individuals' confidence in their ability to manage their health and work responsibilities effectively, despite facing challenges (Bandura, 1997). Self-efficacy can impact individuals' tendency to engage in presenteeism. For example, those with high self-efficacy are more inclined to participate in presenteeism because they believe they can manage discomfort and maintain productivity (Lu et al., 2013)
4. **Attitude Towards Absence:** This evaluates employees' perceptions and attitudes regarding absenteeism at their workplace. If individuals have a more conservative attitude towards absence, their likelihood of engaging in presenteeism is high (Hansen and Andersen, 2008).
5. **Over-commitment:** This assesses individuals' level of investing themselves in work-related tasks and responsibilities, leading to presenteeism behaviour. Hansen and Andersen (2008) identified that excessive dedication to work can result in increased rates of presenteeism.

Moreover, a number of demographic variables will also be measured, such as age, gender, tenure, one's financial situation and overall health. By measuring these variables, the general questionnaire aims to comprehensively assess the multifaceted factors contributing to presenteeism in the workplace, providing valuable insights for organizations to address and mitigate its impact on employees' health and productivity.

### 3.3.2 Study 2: The Diary Study

Grounded in the PDM model (Whysall et al., 2023), the second stage employs the experience sampling method to collect real-time data on participants' daily experiences. Participants were able to report on their daily thoughts, feelings, and behaviours. This method allows for the capture of in-the-moment experiences and fluctuations, offering a dynamic view of participants' day-to-day activities and

psychological states. This method ensures high ecological validity and reduces biases associated with retrospective self-reports, aligning with the pragmatic goal of obtaining actionable and accurate data.

Moreover, the four stages outlined in the PDM model (Whysall et al., 2023) have been incorporated into a series of open-ended questions within the daily diary survey. Complementing this, close-ended questions were utilised to gauge the types of health issues, overall symptom severity, attendance outcomes for the day, and perceived productivity. Unlike the variables assessed by the general questionnaire, the daily diary survey captures variables that exhibit greater fluctuation. This mixed-method approach integrates both qualitative and quantitative data, essential for understanding the complex and idiosyncratic nature of presenteeism decision-making. The open-ended questions provide rich insights into decision-making, whereas the closed-ended questions measure key variables, offering a comprehensive view of participants' health and presenteeism decision-making process. Additionally, the online structured self-report diary method employed in this study is especially effective in the context of the COVID-19 pandemic, where restrictions on face-to-face interaction made remote data collection essential. Moreover, its efficacy also lies in its capacity to capture the relatively irregular occurrence of ill health on a working day, necessitating decision-making regarding attendance behaviour. A pilot study was conducted before the main research, which aimed to help find any problems with the research plan and fix them early on (Van Teijlingen and Hundley, 2001). The results of the pilot study showed that people needed more help answering open-ended questions, so prompts were added before each one. In addition, some participants forgot to fill out the daily survey, so a daily reminder was scheduled for them.

In terms of data analysis, a deductive template analysis, a form of thematic analysis (King, 2012), and inductive sub-themes were adopted to analyse the data generated from the diary study. The data analysis was primarily guided by the PDM model (Whysall et al., 2023) and its stages, serving as a starting point to cluster the data. Additional sub-themes were allowed to emerge during the analysis (inductive), further enriching the understanding of presenteeism decision-making. This combined deductive and inductive approach enables a systematic yet flexible examination of how participants decide to engage in presenteeism behaviour, allowing for a more comprehensive understanding of the factors influencing their decisions, the context in which these decisions were made, and the various

decision-making patterns employed by individuals (Azungah, 2018). Moreover, this approach also reflects a pragmatic perspective. The deductive approach is used to test and refine the PDM model (Whysall et al., 2023), while the inductive approach allows for capturing the nuanced decision-making provided by the participants. Furthermore, the quantitative data collected from the diary study were analysed using several statistical tests. Multiple linear regression was employed to investigate the associations between participants' person-related factors (i.e., self-efficacy and emotional distress) and their ratings of symptom severity. Additionally, logistic regression was used to examine the relationship between attendance outcomes and symptom severity. These analyses are crucial as they reveal how symptom severity directly influences the decision to engage in presenteeism and how person-related factors impact this decision-making process. By understanding these relationships, we can better comprehend the dynamics of the presenteeism decision-making process.

### 3.3.3 Study 3: Semi-Structured Interviews

The final stage consists of semi-structured interviews aimed at gaining an in-depth understanding of the participants' perspectives. These interviews are designed to explore the nuances of participants' experiences and provide qualitative insights that the other two stages might not reveal. Through these conversations, researchers can identify more effective interventions and approaches to manage presenteeism, as well as the impact on the individuals. The qualitative data from the interviews complement the findings from the experience sampling method, offering a comprehensive and multi-faceted understanding of the research phenomenon.

The interview questions focused on four key aspects: (1) attendance management policies and procedures; (2) feelings and perceptions of their work attendance decisions; (3) the impact of COVID-19 and change of work mode to their presenteeism/sickness absenteeism decisions; (4) support and resources that can encourage them to prioritise their health when deciding whether to engage in presenteeism. All these insights were not able to be captured in a survey, thus, semi-structured interviews were adopted. This approach allowed for a comprehensive exploration of the participants' experiences and perspectives regarding presenteeism, as well as their desired support from their employers. Currently, most businesses in the UK do not have interventions targeted at presenteeism

behaviour, whilst being sent home by one's line manager was the most common intervention when dysfunctional presenteeism is spotted (CIPD, 2019). By probing into these dimensions, these interviews sought to uncover barriers and potential avenues for intervention to address presenteeism effectively. By delving into the subjective experiences and perceptions of participants through narrative analysis, the interviews serve as a vital tool for enriching the understanding of the presenteeism decision-making process and informing evidence-based interventions aimed at promoting functional presenteeism and organisational wellbeing.

By integrating these three stages, the research methodology leverages the strengths of both quantitative and qualitative approaches. The combination of baseline measures, real-time data collection, and in-depth qualitative insights ensures a robust and comprehensive exploration of the research questions, ultimately leading to more reliable and actionable findings.

#### 3.4 Participant Recruitment and Sampling

Initially, the author planned to recruit one or two large-sized organisations in the UK through social media platforms and professional networks, and the management of each organisation can then encourage their employees to join the current research. The author first shared her research on LinkedIn and requested her university to promote the study within its network. However, after several weeks, she did not receive any response. This occurred in early 2021, amidst the ongoing challenges posed by the COVID-19 pandemic. Following this, to enhance the appeal of the study, she provided a tailored report along with valuable recommendations on managing employees' attendance behaviour to the organizations that agreed to participate. Additionally, she graciously reached out to her LinkedIn network, requesting them to share her study.

Regrettably, despite several months of dedicated effort, only one large international organisation (comprising over 250 employees) and one medium-sized company (with a staff count ranging between 50 and 250 employees, as per the Department for Business, Energy and Industrial Strategy, 2021) in the UK expressed interest. The larger organisation operates as a global facility management service provider with a substantial workforce, while the medium-sized company specialises in traffic and highway management services, boasting approximately 50 employees based

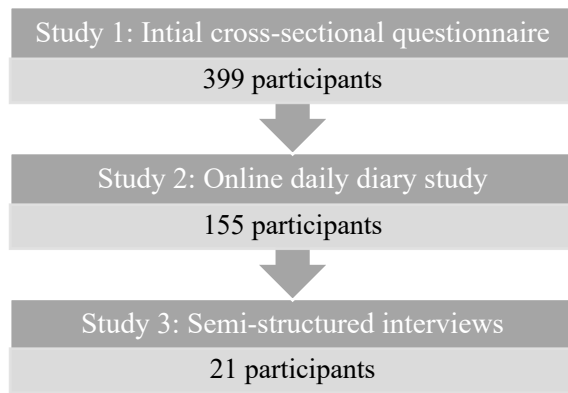
in the UK. Management representatives from both organisations made contact and were furnished with comprehensive details regarding the study. The author of this thesis created promotional materials, which were disseminated within these two firms to encourage employee participation. The promotional materials explicitly stated that participation was entirely voluntary and anonymous. Nonetheless, the initial survey garnered responses from a mere 105 employees across both organisations, with only 22 consenting to partake in the subsequent diary study.

Furthermore, all primary data for the current thesis was collected in the year 2021, amid the backdrop of the COVID-19 pandemic and associated lockdown measures, which posed significant challenges to data collection efforts. For instance, England entered its third national lockdown on 6th January 2021, with restrictions gradually easing following the publication of the "Roadmap Out of Lockdown" on 22nd February 2021. Ultimately, on 19th July 2021, the majority of legal restrictions on social contact were lifted (Institute for Government, 2022).

As a result, the author opted to broaden the study's scope to the public domain to augment participant numbers, transitioning to a convenience sampling method. Additionally, she reached out to various research platforms, such as MQ Mental Health (<https://www.mqmentalhealth.org/home/>) and a company named Lindus Health (<https://www.lindushealth.com>), in order to tap into their professional networks for participant recruitment. Furthermore, efforts were made to enhance study visibility by publishing articles on the university website and HR Magazine. Moreover, the university provided a modest research grant, enabling the author to enlist 100 participants for both the initial questionnaire and subsequent diary study via Prolific, a survey administration service provider. Participants recruited from Prolific were given a small reward. More details regarding the reward can be found in Chapter 4 – Initial General Questionnaire.

In the end, 399 participants (including 100 respondents from Prolific) completed the initial questionnaire. Out of this total, 205 individuals (51.4%) from the same pool agreed to participate in the subsequent diary study, with 21 participants (5.3%) eventually taking part in the semi-structured interviews (see Figure 4).

Figure 4. An overview of the research methods adopted in this thesis



Convenience sampling is frequently utilised in clinical research, particularly when recruiting patients who meet the predetermined inclusion criteria for a study (Acharya et al., 2013). This approach offers several advantages, including its widespread usage and cost-effectiveness. However, it also has its limitations, foremost among which is the inability to measure or control variability and bias. Additionally, the findings derived from convenience sampling cannot be generalisable beyond the sampled population (Andrade, 2021), thus constraining the broader applicability of the research outcomes. Despite its limitations, convenience sampling remains a prevalent choice in research, particularly in the context of constraints imposed by factors such as the COVID-19 pandemic and the associated sensitivities. Given these challenges, convenience sampling emerged as the most practical and feasible option for the author to pursue to advance the objectives of the study. The ease of access and cost-effectiveness inherent in convenience sampling proved indispensable, allowing the author to swiftly gather data amidst the prevailing circumstances. While acknowledging the inherent limitations of convenience sampling, the author deemed it necessary to make pragmatic decisions in navigating the complexities posed by the pandemic, ensuring the continuity and progress of the study. In the next chapter, extensive details of the initial cross-sectional questionnaire will be presented.

## Chapter 4 - Study 1 – Initial Cross-sectional Questionnaire

### 4.1 Introduction

To address the research question of “How do people make their decision to work when they are physically or mentally unwell, and under what circumstances”, it is important to understand individuals’ psychosocial environment and connect it to how they decide to enact presenteeism. A list of factors has been identified that would influence the decision of presenteeism, and they could be divided into three main groups: work-related, person-related, and environmental-related (see Johns, 2010; Lohaus and Habermann, 2019 for a review). To collect data in terms of individuals’ psychosocial environment, a cross-sectional survey was adopted at the initial phase of the thesis.

Cross-sectional surveys are often used to find out the relationships between a series of factors and an outcome for the population at a specific time point (Levin, 2006). Using cross-sectional surveys is good for collecting a large sample of data which is useful for estimating the prevalence of an outcome. Multiple presenteeism studies have used this method to investigate how the level of presenteeism within certain groups of employees is associated with a number of work-related and psychological factors. For example, Johansen et al. (2014) conducted a study to investigate why Norwegian and Swedish employees between the ages of 20 and 60 chose to work when they were unwell. They used a cross-sectional survey in 2011, and a total of 2,853 individuals completed the postal questionnaire. Among the respondents, 56% (n=1,408) reported experiencing presenteeism in the last 12 months. In this study, not wanting to put extra work into their colleagues (43%), enjoying work (37%), and feeling indispensable (35%) were the most common reasons for presenteeism. Another example was a study conducted by Chambers et al. (2017) in New Zealand, which investigated the reasons senior medical staff would feel pressure to work when they feel unwell. There were 1,806 senior doctors and dentists who completed the survey, and 88% of the respondents reported that they had experienced presenteeism. These respondents found it difficult to find short-term cover for work, and they worried about the impacts on their patients if they were to take sick leave. In addition, the sociocultural norms also influenced their decision to enact presenteeism. More recently, Tang et al. (2019) adopted a similar method to examine the relationship between the prevalence of presenteeism in medical staff in China

and their mindfulness and self-efficacy and 580 medical staff were recruited. The study results indicated negative associations between presenteeism and staff's mindfulness and self-efficacy, whilst a positive relationship was found between mindfulness and self-efficacy. **Cross-sectional surveys are commonly used in presenteeism research to explore the associations between different factors and the prevalence of presenteeism. They are effective for gathering large amounts of data (Wang and Cheng, 2020), which helps estimate how common presenteeism is and understand its connections with work-related and psychological factors.**

Although cross-sectional surveys are good for examining the relationship between factors and an outcome, when being the core research tool, cross-sectional surveys are not helpful if the research aims to seek the causal relationships between the factors and the outcome (Levin, 2006). **Additionally, this method is also inadequate in capturing the complex and dynamic processes involved in decision-making, such as the underlying cognitive mechanisms of presenteeism. Therefore, the first stage of this thesis focuses on understanding participants' work conditions and psychological environments, which provides a foundation for the subsequent diary study. It is notable that these factors do not fluctuate daily; thus, they do not require daily collection.** The next section will detail the participant recruitment process, the factors measured, and the methods used.

## 4.2 Methodology

### 4.2.1 Approach

The targeted participants of the cross-sectional survey were individuals who were employed during the research period. At first, it was intended to recruit one or two large-sized organisations through social media platforms and professional networks and then encourage their employees to participate in the study. Unfortunately, even though I offered to provide a tailored report and valuable advice on managing employees' attendance behaviour to the organisations which agree to take part, only one international large-sized organisation (more than 250 employees) and one medium-sized company (between 50 and 250 employees, Department for Business, Energy and Industrial Strategy, 2021) in the UK showed interest. The large-sized organisation is a facility management service provider to businesses across the globe and it has thousands of employees, whilst the medium-sized company



provides traffic and highway management services, and reports to have around 50 employees based in the UK. The management from both companies contacted me and received details regarding the study. Promotional materials were created by the thesis author and were used to circulate within these two firms to encourage employees to participate. The promotional materials noted that all participation was voluntary and anonymous. However, only 105 employees in total from both organisations answered the initial survey and only 22 of them gave consent for the subsequent diary study. Moreover, all the primary data of the current thesis was collected in the year 2021, and the COVID-19 pandemic and lockdowns made data collection more difficult. For example, on 6<sup>th</sup> January 2021, England entered the third national lockdown and restrictions were lifted gradually after the “Roadmap Out of Lockdown” was published on 22<sup>nd</sup> February 2021, then eventually on 19<sup>th</sup> July 2021, most legal limits on social contact were removed (Institute for Government, 2022). Due to the impact caused by the pandemic and the limited involvement from the two organisations that agreed to participate, I decided to open the study to the public to boost the number of participants. The sampling method for the initial questionnaire shifted to convenience sampling. After promoting the study using professional networks, for example, an article published on the university website and another one on HR Magazine, and social media platforms (i.e., LinkedIn and MQ Mental Health (<https://www.mqmentalhealth.org/home/>)). Following this, a company named Lindus Health (<https://www.lindushealth.com>) contacted the author and offered free assistance to promote the study in their network and eventually more individuals joined the first stage of the thesis. In addition, a small research fund was granted by the university which allowed me to recruit 100 participants for the initial questionnaire and the subsequent diary study using Prolific, a survey administration service provider. A small reward would be given to the participants recruited from Prolific for their time and effort contributed to the study (based on an hourly rate of £6). If they spent 20 minutes completing the initial survey, they would receive £2 in return, and the maximum reward per person for both the initial survey and the diary study was £6. In the end, 399 participants (including 100 respondents from Prolific) responded to the initial questionnaire and 205 of them (51.4%) agreed to participate in the subsequent diary study.

#### 4.2.2 Measures

The survey began with information about the project and several questions regarding participants' consent. Participants could choose to take part in the second and/or the third phase of the thesis, or only the initial survey, and if participants agreed to join the other stages, they would be asked to provide their email addresses for communication. Prior to commencing data collection, this thesis obtained ethical approval from the NTU Research Ethics Committee. The full copy of the questionnaire can be found in Appendix 1. Additionally, all participants were asked to create a unique identification code, so that I would be able to link the data of three different stages under one profile or find their data if they want to withdraw from the study. Instructions on how to create a unique identification code and how the data would be used had been included before the participants started filling out the survey.

Following participants' consent, presenteeism and absenteeism prevalence in the last 12 months was measured by two separate open-ended questions, which asked how many days and separate times (regardless of duration) of presenteeism/absenteeism they experienced in the last 12 months. Moreover, variables that do not change frequently have been measured by this initial cross-sectional survey, such as work-context factors (i.e., attendance pressure norms, organisational adjustment norms, job demands, leadership, job insecurity, adjustment latitude, social support), psychological factors (i.e., mental health status, health locus of control, attitudes towards absence, self-efficacy, over-commitment) and other demographics including experienced health conditions in the last 12 months, self-evaluate general health, supervisory duties, past unpleasant experience of taking sick leave, financial difficulties, gender, tenure, age, ethnic group, contract type, general working hours per week, caring duties.

*Attendance pressure norms* were measured by 3 items developed by Thun et al. (2013), which are "It is expected here that you attend work irrespective of how you feel", "Employees who are absent are seen as disloyal", and "Employees who come to work late and leave early are frowned upon". Participants were asked to rate these items on a 7-point Likert scale (1 = Strongly Disagree to 7 = Strongly Agree), and their responses created a potential range of 7 to 21, with a higher score suggesting a more restricted norm regarding attendance in the workplace. The Cronbach's Alpha (1951) for this scale is  $\alpha=.589$  and all the scales that were included in the initial cross-sectional questionnaire have been published and chosen to fit the current study.

*Organisational adjustment norms* were measured by 4 items developed by Thun et al. (2013), and the items were “It is easy to find alternative work for those who need less strain”, “Around here people with health problems get help and support to manage their job”, “At this workplace work is looked upon as health-promoting and positive, also for those with health problems”, and “At this workplace it is taken into consideration that different health problems may demand different arrangements”. The Cronbach’s Alpha for this scale is  $\alpha=.800$  and participants were asked to rate these items on a 7-point Likert scale (1 = Strongly Disagree to 7 = Strongly Agree), and their responses create a potential range of 7 to 28, which a higher score suggesting more support from the organisation level.

Additionally, individuals’ job demands, job insecurity and social support have been examined by items extracted from the Copenhagen Psychosocial Questionnaire, and some of the items adopted were adjusted for better understanding. For instance, *job-related demands* were measured by 14 items and divided into quantity demands, work pace, emotional demands, and cognitive demands. Examples of items include “How often do you not have time to complete all your work tasks?”, “Is your work emotionally demanding?”, and “Do you have to keep your eyes on lots of things while you work?”, and the Cronbach’s Alpha for this scale is  $\alpha=.813$ . Participants would rate the items on a 7-point Likert scale (1 = Never to 7 = Always). The 14-item devised scale has a potential range of 14 to 98, and higher scores mean higher job demands. *Job insecurity* was measured by 3 items, which were “Are you worried about becoming unemployed?”, “Are you worried about new technology making you redundant?”, and “Are you worried about it being difficult for you to find another job if you became unemployed?”, and participants were asked to rate them on a 7-point Likert scale (1 = To an extremely small extent to 7 = To an extremely large extent). The Cronbach’s Alpha for this scale is  $\alpha=.534$ . The responses could be summed up between 7 and 21, with a higher score indicating a high level of job insecurity. Furthermore, 6 items were used to measure *individuals’ social support at work*, and an example item would be “How often is your line manager willing to listen to your problems at work, if needed?”. The Cronbach’s Alpha for this scale is  $\alpha=.807$  and participants were asked to rate these items on a 7-point Likert scale (1 = Never/hardly ever to 7 = Always), which potentially creates a range from 7 to 21, and a higher level of social support at work was suggested by a higher score. *Leadership* was measured by 8 adjusted items from the QPS Nordic, and an example item would be “Does your line manager encourage you to

participate in important decisions?”. Participants would rate the items based on a 7-point Likert scale (1 = Never/hardly ever to 7 = Always), and an index between 7 and 56 would be created in which a higher score indicates a more supportive leadership style. The Cronbach’s Alpha for this scale is  $\alpha=.796$ .

Adjustment latitude was examined by using the scale developed by Johansson, G., et al. (2015). There were 7 items followed by a question that asked, “What opportunities do you have for adjusting your work if you do not feel well?” and the items included “Doing only the necessary work and postponing the rest”, “Choosing among work tasks”, “Getting help from one’s colleagues”, “Working at a slower pace than usual”, “Taking longer breaks”, “Shortening the working day”, and “Postponing the work and going home”. A 7-point Likert scale (1 = Never to 7 = Always) was adopted for the participants to rate these items. The responses could be summed to create an index ranging from 7 – 49, and a score between 28 and 49 indicates a high level of adjustment latitude at work, whereas an index range from 7-27 means a low level of adjustment latitude. The Cronbach’s Alpha for this scale is  $\alpha=.883$ .

Individuals’ psychological factors include their emotional distress, health locus of control, attitudes toward absence, self-efficacy, and the level of over-commitment to work. Participants’ *emotional distress* was measured by 12 items from the General Health Questionnaire from Goldberg and Williams (1998), and participants needed to rate these items on a 4-point Likert scale. Examples of items were “Have you recently lost much sleep over worry?” (1 = Better than usual to 4 = Much less than usual); “Have you recently felt capable of making decisions about things?” (1 = More so than usual to 4 = Much less capable), and “Have you recently been able to face up to problems?” (1 = More so than usual to 4 = Much less able). By subtracting 1 from each numerical response on the 1-4 scale, the continuous GHQ score is calculated on a 0-3 scale. This involves adding up the scores from all 12 questions to arrive at a composite score ranging from 0 to 36. A score of 0 signifies excellent mental health, while a score of 36 indicates extremely poor mental health. Therefore, a higher score corresponds to worse mental health. The Cronbach’s Alpha for this scale is  $\alpha=.865$ .

The *health locus of control* was examined by 11 items developed by Wallston et al. (1976), and an example item would be “Good health is largely a matter of good fortune”. Participants were asked to rate on a 6-point Likert scale (1 = Strongly disagree to 6 = Strongly agree). The scale comprises 11 items and can yield scores ranging from 11 to 66. Participants with scores higher than the median score

of 38.5 were classified as "health externals", suggesting that they hold generalised beliefs that their health is influenced by factors outside their control, such as luck or fate. On the other hand, individuals with scores below the median were categorised as "health internals" and are likely to believe that they have control over their health through their own actions and behaviours. The Cronbach's Alpha for this scale is  $\alpha=.509$ .

To measure individuals' *attitudes toward absence*, this study adopted and adjusted 7 items from Hansen and Andersen (2008). An example of these items would be "A's 7-year-old child has a high temperature for the second day running. The child could also be looked after by friends" and participants needed to rate these items on a 7-point Likert scale (1 = completely unreasonable to take sick leave to 7 = completely reasonable to take sick leave). The seven-item scale has a range of 7 to 49, and it has been categorised into three groups based on the scores obtained: conservative absence attitudes (scores 7-21), balanced absence attitudes (scores 22-28), and liberal absence attitudes (scores 29-49). The Cronbach's Alpha for this scale is  $\alpha=.587$  and it is important to note that a higher score indicates a more liberal attitude towards absence.

In addition, the level of *self-efficacy* was measured by 10 items from Schwarzer and Jerusalem (1995) and two example items would be "I can always manage to solve difficult problems if I try hard enough", and "It is easy for me to stick to my aims and accomplish my goals. Survey respondents would rate these items on a 7-point Likert scale (1 = Not at all true to take sick leave to 7 = Exactly true). This scale's total score ranges from 10 to 70, and a higher score indicates that an individual has more self-efficacy. The Cronbach's Alpha for this scale is  $\alpha=.887$ .

Furthermore, 6 items from Siegrist et al. (2004) were used to measure individuals' level of *over-commitment to their work*, and the items were "I get easily overwhelmed by time pressure at work", "As soon as I get up in the morning, I start thinking about work problems", "When I get home, I can easily relax and switch off work", "People close to me say I sacrifice too much for my job", "Work rarely lets me go, it is still on my mind when I go to bed", and "If I postpone something that I was supposed to do today, I'll have trouble sleeping at night". Participants would rate these items based on a 6-point Likert scale (1 = Strongly Disagree to 6 = Strongly Agree). A total score that ranges from 6

to 36 was yielded by this scale and a higher score indicates a greater likelihood of experiencing overcommitment at work. The Cronbach’s Alpha for this scale is  $\alpha=.514$ .

#### 4.2.3 Demographic characteristics

In total, there were 399 individuals who had either partially or fully completed the initial cross-sectional questionnaire. Out of 399 survey respondents, 379 of them (95.0%) have completed most of the survey and provided their demographic information, thus, these 379 individuals were included in the analysis. Among 379 initial questionnaire participants, 242 were female (63.9%), 129 were male (34.0%), 1 participant described himself/herself as transgender, and 4 participants chose “prefer not to tell”, along with 3 respondents who did not answer this question. The mean age was 40 years (SD=12.5, range 17-72 years), the mean job tenure was 6.2 years (SD=6.8, range 0.08-38.2 years), and the mean hours of work were 37.0 hours/week (SD=11.8, range 3-84 hours). In terms of organisational size, 64.4% of participants worked in a large, 17.7% in a medium, 15.3% in a small-sized organisation (less than 50 employees, Department for Business, Energy and Industrial Strategy, 2021), and 1.6% of participants were not sure about the size of their employers. Nearly three-quarters of the participants (71.2%) had a full-time permanent contract, 16.4% were permanent part-time employees, 8.5% were on a fixed-term full-time/part-time or flexi-time contract, and 0.8% had a 0-hour contract. Regarding participants’ ethnicity, over half of the participants (59.6%) described themselves as English/Welsh/Scottish/Northern Irish/ British, the rest of the participants were from various backgrounds, for example, 10.6% were from any other white background, 8.4% were African, 3.7% were Chinese, 2.1% were India, 1.6% were white and black African, and 2.9% were from any other Asian background (see Table 1).

Table 1. Demographic information of the initial cross-sectional questionnaire

Characteristics	Description	N case (SD) or (%)	If applicable	
			Min	Max
Age	Mean age (SD)	40 (12.5)	17	72
Gender*	Female	242 (64)		
	Male	129 (34)		
	Transgender	1 (0.3)		
	Prefer not to tell	4 (1.1)		
Tenure	Mean tenure with current employer (SD)	6.2 (6.8)	0.08	38.2
Contract type*	Permanent full-time	270 (71.2)		

	Permanent part-time	62 (16.4)		
	Fixed term, full-time	23 (6.1)		
	Fixed-term, part-time	5 (1.3)		
	0 hour contract	3 (0.8)		
	Flexi hours	4 (1.1)		
	Others	11 (3.0)		
Organisation size*	Large (more than 150 employees)	244 (64.4)		
	Medium (between 50 and 150 employees)	67 (17.7)		
	Small (less than 50 employees)	58 (15.3)		
	Not sure	6 (1.6)		
Country of working*	United Kingdom	278 (73.4)		
	South Africa	37 (9.8)		
	European Union	30 (30.1)		
	Australia	1 (0.3)		
	Canada	1 (0.3)		
	United States	6 (1.6)		
	India	1 (0.3)		
	Indonesia	4 (1.1)		
	Mexico	3 (0.8)		
	Vietnam	1 (0.3)		
	Jordan	1 (0.3)		
	United Arab Emirates	1 (0.3)		
	China	10 (2.6)		
Weekly working hours	Mean working hours per week (SD)	37.2 (11.6)	3	84
Management responsibility*	Yes	139 (36.7%)		
	No	228 (60.2%)		
Caring responsibilities at home*	Yes	153 (40.4)		
	No	218 (57.5)		
Having an unpleasant experience of requiring sick leave*	Yes	82 (21.6)		
	No	293 (77.3)		
Working on-site during Covid*	Yes	198 (52.2)		
	Sometimes	67 (17.7)		
	No	111 (29.3)		
Self-rated health	Extremely good	43 (11.3)		
	Moderately good	135 (35.6)		
	Slightly good	53 (14.0)		
	Neither good nor bad	55 (14.5)		
	Slight bad	67 (17.7)		
	Moderately bad	23 (6.1)		
	Extremely bad	3 (0.8)		
Self-rated financial situation	Keeping up with all bills - without any difficulties	201 (53.0)		
	Keeping up with all bills - but it is struggle from time to time	119 (31.4)		
	Keeping up with all bills - but it is a constant struggle	42 (11.1)		
	Not keeping up with all bills - have fallen behind with some of them	9 (2.4)		
	Not keeping up with all bills - have fallen behind with many of them	8 (2.1)		
Sector*	Facility management	92 (24.3)		

	Accountancy, banking or finance	23 (6.1)		
	Business, consultancy or management	28 (7.4)		
	Charity and voluntary work	5 (1.3)		
	Computing or IT	21 (5.5)		
	Creative arts or design	5 (1.3)		
	Energy and utilities	3 (0.8)		
	Engineering or manufacturing	19 (5.0)		
	Healthcare	30 (7.9)		
	Public services or administration	19 (5.0)		
	Retail	14 (3.7)		
	Science or pharmaceuticals	9 (2.4)		
	Teacher training or education	24 (6.3)		
	Transport or logistics	14 (3.7)		
	Sales	9 (2.4)		
	Science or pharmaceuticals	9 (2.4)		
	Property or construction	5 (1.3)		
	Marketing, advertising or PR	3 (0.8)		
	Leisure, sport or tourism	3 (0.8)		
	Marketing, advertising or PR	3 (0.8)		
	Social care	4 (1.1)		
	Recruitment or HR	2 (0.5)		
	Law	5 (1.3)		
	Law enforcement and security	4 (1.1)		
	Hospitality or events	3 (0.8)		
	Environment or agriculture	2 (0.5)		
	Others	24 (6.4)		
Ethnicity*	African	32 (8.40)		
	Any other Asian background	11 (2.9)		
	Any other Black / African/ Caribbean background	1 (0.3)		
	Any other ethnic group	5 (1.3)		
	Any other Mixed / Multiple ethnic background	5 (1.3)		
	Any other White background	40 (10.6)		
	Arab	1 (0.3)		
	Bangladeshi	1 (0.3)		
	Caribbean	1 (0.3)		
	Chinese	14 (3.7)		
	English / Welsh / Scottish / Northern Irish / British	226 (59.6)		
	Gypsy or Irish Traveller	1 (0.3)		
	Indian	8 (2.1)		
	Irish	7 (1.8)		
	Pakistani	1 (0.3)		
	White and Asian	1 (0.3)		
	White and Black African	6 (1.6)		
	White and Black Caribbean	2 (0.5)		
	Prefer not to say	12 (3.2)		

\*The percentages do not add up to 100% due to missing data, total n = 379



Moreover, over one-third of the respondents (36.7%) had managerial responsibility for at least one employee, 40.4% had caring responsibilities at home, and only 21.6% of participants had unpleasant experiences of requiring sick leave. Additionally, when asked whether they needed to work on-site during the COVID-19 pandemic, over half of the respondents (52.2%) gave a positive answer, while 29.3% reported that they did not need to work on-site and 17.7% indicated they needed to work on-site sometimes. In terms of self-rated overall health, 11.3% rated themselves as 'extremely good', 35.6% as 'moderately good', 14.0% as 'slightly good', 14.5% as 'neither good nor bad', 17.7% as 'slightly bad', 6.1% as 'moderately bad', and only 08% as 'extremely bad'. In terms of financial status, just over half (53.0%) indicated that they can cover their bills without difficulties, whereas 31.4% found keeping up with their bills to be a struggle occasionally, 11.1% described keeping up with their bills as a constant struggle, and 4.5% were not able to keep up with their bills. It is worth noting that 24.3% of the initial questionnaire respondents were from a large-sized facilities management organisation in the UK since the management agreed to work with me and encouraged their employees to join the study. Other respondents were employed in a range of sectors including accountancy, banking, or finance (6.1%); computing or IT (5.5%); teacher training or education (6.3%); business, consultancy, or management (7.4%); and healthcare (7.9%).

#### 4.2.4 Analytic Approach

As discussed in Chapter 3.3.1, to provide a concrete understanding of study participants' work and social environments for the subsequent diary study, the initial general questionnaire measured a series of work-related factors (e.g., job demands, social support) and person-related factors (e.g., locus of control, self-efficacy). By collecting data on these variables, the study aims to create a holistic picture of the participants' environments and personal characteristics, which can significantly impact their decision-making processes related to presenteeism and overall well-being. This approach ensures that the diary study is grounded in a thorough understanding of the various factors that influence participants' work and personal lives.

In addition, participants were asked to recall and report the number of days and separate instances they worked while feeling unwell, either mentally or physically, in the past 12 months. They

were also asked to report the number of sick leave days and instances of absence due to feeling unwell in the same period. This is critical for understanding the prevalence and patterns of health-related work behaviours among participants. The format of these questions was adapted from the most commonly used single-item measure for presenteeism prevalence. An open-ended response format was employed to avoid restricting information and to enable more comprehensive statistical analysis (Ruhle et al., 2020). Responses to these questions regarding presenteeism and sickness absenteeism prevalence were given over a number of days and at separate times, which could be referred to as count data. According to Coxe et al. (2009), count data reflects how many times a behaviour occurred in a period, which is commonly used in psychology and behavioural science studies. Count data are generally not normally distributed, as there are a lot of low-count observations and no observations below 0, thus the results of statistical significance tests would be biased and inefficient (Gardner et al., 1995). While regression models are often used to measure the relationship between a dependent variable and a set of predictors (Sellers and Shmueli, 2010), to analyse count data, it is recommended to use Poisson regression or negative binominal regression, which belongs to the family of general linear regression (Coxe et al., 2009; Nelder and Wedderburn, 1972).

While both Poisson regression and negative binominal regression are commonly used to manage data that is not normally distributed, negative binominal is particularly for over-dispersed count data (Schober and Vetter, 2021; Ver Hoef and Boveng, 2007). After comparing the average number of reported presenteeism ( $M=13$ ,  $SD=26.2$ ) and absenteeism days ( $M=6.0$ ;  $SD=19.3$ ) over the last 12 months to their standard deviation, respectively, it was observed that the standard deviation was significantly larger than the mean, indicating that the data was over-dispersed. Similar patterns were found in the episodes of presenteeism and absenteeism reported by the participants. To address this over-dispersion, it is essential to consider alternative statistical models that can appropriately handle the variability in the data. Standard Poisson regression models assume that the mean and variance of the count data are equal (Coxe et al., 2009). However, the presence of over-dispersion, where the variance exceeds the mean, violates this assumption and can lead to inefficient, inconsistent, and biased parameter estimates.

One approach to handle over-dispersion is to use a Negative Binomial regression model. This model includes an additional parameter to account for the extra variability, providing more accurate and reliable results in the presence of over-dispersed data. By adjusting for over-dispersion, the Negative Binomial model ensures that the standard errors of the estimates are correctly specified, leading to more valid inferences about the relationship between the predictors and the response variable (Ver Hoef and Boveng, 2007). A study by Johns (2011) also utilised negative binomial modelling to analyse his data, and the appropriateness of using this modelling method has been examined by Bacharach et al. (2010). As a result, data generated from the initial cross-sectional questionnaire were analysed using a Negative Binomial regression in SPSS version 28 to test the association between presenteeism/absenteeism prevalence and the contextual factors measured by the questionnaire. Since presenteeism and absenteeism are often considered potential outcomes of the same decision-making process (Halbesleben et al., 2014), the Negative Binomial regression analysis was conducted for both, allowing for a more comprehensive understanding of how various factors influence these related behaviours.

Using an initial survey to supplement an experience-sampling diary study is a common research practice (Bolger and Laurenceau, 2013; Hyers, 2018). The initial survey can measure variables that do not change daily, such as participants' work environment, demographics, and contact details throughout the study. This approach saves participants the effort of inputting their details every day, thereby reducing participant burden and increasing the efficiency of data collection (Bolger et al., 2003).

Negative binomial regressions have limitations, such as the need to transform coefficients for better interpretability and the risk of overfitting (Green, 2021). However, when the main objective of the cross-sectional survey is to supplement the subsequent diary study and the negative binomial test aims to evaluate associations between variables, the need for interpretability through coefficient transformation may be less significant (Musunuru et al., 2020). Moreover, unlike a Poisson model, a negative binomial model offers more flexibility and a better fit for data by allowing the variance to exceed the mean, which makes it particularly suitable for count data with varying levels of dispersion (Ver Hoef and Boveng, 2007; Yirga et al., 2020).

Furthermore, it is important to highlight that Cronbach's Alpha of some variables measured by the initial questionnaire have relatively low values (see Table 2). This could be attributed to the possibility that the items measuring those variables were limited or that the internal consistency of those items was not sufficiently high (Tavakol and Dennick, 2011). As a result, to ensure the reliability and consistency of the negative binomial model, the variables with satisfactory Alpha ( $\alpha$  ranging between 0.70 and 0.95 according to Bland and Altman, 1997; Tavakol and Dennick, 2011) are selected. These include participants' emotional distress, adjustment latitude, organisational adjustment norms, leadership, social support, job demands, and self-efficacy. This step ensures that the analysis is based on reliable measurements, enhancing the validity of the study's conclusions.

Removing variables with low Cronbach's alpha values (i.e., over-commitment, job insecurity, attendance pressure norms, attitudes towards absence, and health locus of control) has several implications for the study and its validity. For instance, it narrows the range of contextual factors contributing to the binomial regression model, while improving overall reliability. Additionally, it may potentially reduce statistical power due to the decreased number of variables. However, this simplification results in a model that is less prone to overfitting. Given that the cross-sectional survey was intended to provide contextual information about the participants, and the primary aim of this thesis is to investigate how individuals decide to engage in presenteeism behaviour, removing these variables is justifiable. Moreover, having a low Cronbach's alpha value does not indicate that the scales adopted in the cross-sectional survey for measuring those variables were not reliable. Several factors could contribute to a lower alpha, such as the size of the sample and the diversity of the sample (Bujang et al., 2018). The scales may be reliable in other contexts or populations, but the circumstances of this study may have influenced their performance. In the future, conducting a pilot study would be valuable for testing Cronbach's alpha values and adjusting the survey accordingly before the data collection.

Table 2. An overview of the data generated by the initial cross-sectional questionnaire

Variables	Description	N case (SD) or (%)	If applicable		
			Min	Max	Cronbach's alpha
Sickness presenteeism days	Mean presenteeism days in 12 months (SD)	13.3 (26.2)	0	365	
Sickness presenteeism episodes	Mean presenteeism episodes in 12 months (SD)	7.6 (23.6)	0	360	
Sickness absenteeism days	Mean absenteeism days in 12 months (SD)	6.0 (19.3)	0	252	
Sickness absenteeism episodes	Mean absenteeism episodes in 12 months (SD)	1.7 (3.6)	0	40	
Emotional distress	Mental health status index (SD)	15.3 (6.8)			0.865
Health locus of control	Number of participants who are health internals	189 (49.9)			0.509
	Number participants who are health externals	190 (50.1)			
Attitude towards absence	Number of participants who have conservative absence attitudes	127 (33.5)			0.587
	Number of participants who have balanced absence attitudes	135 (35.6)			
	Number of participants who have liberal absence attitudes	117 (30.9)			
Attendance pressure norms	Attendance pressure norms index (SD)	12.2 (4.5)			0.589
Organisation adjustment norms	Organisation adjustment norms index (SD)	16.7 (5.2)			0.800
Adjustment latitude*	Number of participants who have high adjustment latitude at work	218 (57.5)			0.883
	Number of participants who have low adjustment latitude at work	160 (42.2)			
Leadership	Leadership index (SD)	34.5 (10.6)			0.796

Social support	Social support index (SD)	27 (8.8)			0.807
Job demands	Job demands index (SD)	59.5 (15.8)			0.813
Job insecurity	Job insecurity index (SD)	10.12 (4.8)			0.534
Over-commitment	Over-commitment index (SD)	20.7 (5.4)			0.514
Self-efficacy	Self-efficacy index (SD)	50.5 (11.0)			0.887

\*The percentages do not add up to 100% due to missing data, total n = 379

### 4.3 Results

Regarding how many days and episodes the participants worked when they were unwell in the last 12 months, the average number was 13 days (SD = 26.2, range 0-365, see Table 2), and the average number of episodes was 7.6 (SD = 23.6, range 0-360). This indicates that participants experienced approximately 13 days and 7.6 episodes of presenteeism, with significant variability among individuals. The high standard deviation and wide range suggest that some participants rarely worked while unwell, while others did so quite frequently.

On the other hand, the average absenteeism days were 6.0 (SD=19.3, range 0-252), and the mean number for absenteeism episodes was 1.7 (SD=3.6, range 0-40). This shows that participants took about 6 days off on average and had around 1.7 episodes of absenteeism in the past year. Like presenteeism, the high standard deviation and range indicate substantial differences in participant absenteeism behaviour. In addition, the data also indicated that 127 survey respondents (33.5%) are conservative towards sickness absence, meaning they are less likely to take days off when unwell. Meanwhile, 135 of them have a balanced absence attitude (35.6%), and 117 of them (30.9%) are liberal, indicating a greater tendency to take time off when needed.

Regarding health locus of control, almost half of the respondents (49.9%) were health internals, which means that they believe they have control over their health. This could imply a proactive approach to managing their health and possibly a greater tendency towards self-care and prevention strategies. Moreover, health internals were found to be more prevalent in presenteeism in the study by Johns (2011), which can potentially explain why some participants in this study reported a high number of presenteeism days and episodes.

When it comes to adjustment latitude at work, over half of the survey respondents (57.5%) have a high level of adjustment latitude, suggesting that they have considerable flexibility in how they can adjust their work conditions to accommodate their health needs. According to Gerich (2019), high adjustment latitude also suggests a high level of presenteeism. This trend is also reflected in the current study.

Moreover, the mean job insecurity was 10.12 (SD = 4.8), indicating moderate levels of job insecurity among participants. The average over-commitment was 20.7 (SD =5.4), which reflects a

tendency towards high personal investment in work. The mean job demands were 59.5 (SD=15.8), indicating that participants generally experience high work demands. Additionally, the average attendance pressure norms were 12.2 (SD = 4.5), and the organisation adjustment norms were 16.7 (SD = 5.7), suggesting moderate levels of pressure to attend work and moderate flexibility in organisational support for adjustments.

The findings above have provided valuable insights into the study participants, offering a solid and comprehensive understanding of their overall work environment and personal values. These insights serve as a foundation for the subsequent diary study, providing contextual factors necessary to answer the first research question: "How do people make their decisions to work when they are physically or mentally unwell? And under what circumstances?". These factors are crucial for understanding the complex interplay between individual health beliefs, organisational dynamics, and personal circumstances that influence work attendance decisions when experiencing ill health.

Moving to the negative binomial regression, as discussed in the previous section, this regression test aims to examine the relationship between presenteeism/absenteeism prevalence and the other measured variables. Given that the data on the number of presenteeism/absenteeism days exhibited over-dispersion, the negative binomial regression emerged as a suitable statistical test for this analysis.

With the number of presenteeism days as the dependent variable, a number of factors (i.e., participants' emotional distress, organisation adjustment norms, leadership, adjustment latitude, job demands, social support, self-efficacy, age, tenure, weekly working hours, number of people managing at work and under care), and demographic information (i.e., gender, organisation size, contract type, finance situation, and self-rated overall health) as the covariates, a negative binomial regression was run and the omnibus test showed a statistically significant association ( $p < 0.01$ ). This indicates that the combined effect of the covariates significantly predicts the number of presenteeism days. Regarding the Goodness of Fit, the Pearson Chi-square was equal to 1.668, which means that the model fits the data well, suggesting that the variability in the number of presenteeism days is well-explained by the model without overdispersion. This finding again underscores that presenteeism decision-making is complex and influenced by a combination of work-related and person-related factors.



However, when changing the dependent variable to the number of absenteeism days, the omnibus test showed a statistically significant association ( $p = .000$ ), indicating a significant relationship between the covariates and absenteeism days as well. However, the Pearson Chi-square was equal to 2.875, indicating that the model was slightly over-dispersed. This suggests that the variability in absenteeism days is not as well-captured by the model, hinting at the presence of additional factors or more complexity in absenteeism behaviour.

In addition, as shown in Table 3, the negative binominal regression indicated that the number of self-reported presenteeism days in the last 12 months has a positive association with individuals' emotional distress ( $\beta = .032$ ,  $p < .05$ ), job demands ( $\beta = .015$ ,  $p < .01$ ), and overall health ( $\beta = .293$ ,  $p < .01$ ), and a negative association with participants' self-efficacy ( $\beta = -.017$ ,  $p < .05$ ). This means that as emotional distress and job demands increase, so do the days of presenteeism. Additionally, those who rate their health better also tend to have more presenteeism days, second to the findings of McGregor et al. (2016), Demerouti et al. (2009), and Deery et al. (2014). Conversely, higher self-efficacy is associated with fewer presenteeism days, echoing the study of Tang et al. (2019). Individuals with high self-efficacy manage their workloads more effectively and are better at mitigating negative influences, such as health issues or emotional stress, resulting in a lower level of presenteeism (Tang et al., 2019).

In contrast, the number of absenteeism days in the last 12 months was positively associated with participants' emotional distress ( $\beta = .061$ ,  $p < .01$ ), self-rated overall health ( $\beta = .127$ ,  $p < .05$ ), and the organisation adjustment norms ( $\beta = .082$ ,  $p < .01$ ), and negatively associated with leadership ( $\beta = -.047$ ,  $p < .01$ ), weekly working hours ( $\beta = -.026$ ,  $p < .01$ ), and tenure ( $\beta = -.030$ ,  $p < .01$ ). This indicates that individuals experiencing higher levels of emotional distress are more likely to take sick leave, consistent with the findings of Hilton et al. (2009). Similar to the current research, the study of Hilton et al. (2009) also finds a positive association between emotional distress and presenteeism. This could be due to emotional distress potentially leading to depression (Schinckus et al., 2018), making individuals more prone to presenteeism. Additionally, this study found that individuals who rated their health as better also tended to take more days off, showing a similar pattern to presenteeism. This may

suggest that those who generally feel healthy might recognise and act upon the need for rest and recovery when they do feel unwell.

Further analysis of the correlations between variables (see Table 4) revealed a positive association between the number of presenteeism days and the number of absenteeism days over the past 12 months ( $r = .11, p < .005$ ). This finding aligns with previous research by Gosselin et al. (2013), Johns (2011), Hansen and Andersen (2008), and MacGregor et al. (2008), suggesting that individuals are not simply replacing sick leave with presenteeism. Instead, the decision to enact presenteeism likely involves complex considerations such as the nature of the illness, perceived job demands, organisational culture regarding sickness absence, and personal financial circumstances. These factors collectively influence whether an individual chooses to work despite being unwell or opts to take time off. Understanding these complexities is crucial for answering the research question of “How can presenteeism be effectively managed, and how can we promote informed decision-making to balance health and work performance demands?”. It emphasises that a high presenteeism rate does not necessarily equate to a low level of sickness absenteeism; these are distinct behaviours with different underlying motivations and contextual influences. By acknowledging these nuances, researchers can better understand how and why individuals make decisions about their work attendance when experiencing health issues. This understanding is crucial for developing effective workplace health policies and interventions that promote both employee well-being and organisational productivity

Table 3. Negative binomial regression between variables measured in the cross-sectional questionnaire

Variable	Presenteeism days in the last 12 months	Absenteeism days in the last 12 months
	$\beta$	$\beta$
Emotional distress	.032*	.061**
Organisation adjustment norms	.010	.082**
Leadership	.001	-.047**
Adjustment latitude	.008	-.005
Job demands	.015**	.006
Social support	.015	.001
Self-efficacy	-.017*	.009
Age	.008	-.004
Gender <sup>a</sup>	-.280*	-.034
Tenure	-.013	-.030**
Weekly working hours	-.004	-.026**
Number of people managing at work	.002	-.007**
Number of people under care at home	.007	.004
Organisation size <sup>b</sup>	-.064	-.210*
Contract type <sup>c</sup>	-.079	-.414**
Finance situation <sup>d</sup>	-.093	-.064
Self-rated overall health <sup>e</sup>	.293**	.127*

\*  $p \leq .05$ . \*\*  $p \leq .01$   
<sup>a</sup>Female = 1, Male = 2. <sup>b</sup> Large-sized organization = 1, medium-sized organization = 2, Small-sized organization = 3.  
<sup>c</sup> Permanent, full-time = 1, Permanent, part-time = 2, Fixed-term, full-time = 3, Fixed-term, part-time = 4, others = 5.  
<sup>d</sup> Keeping up with all bills - without any difficulties = 1, Not keeping up with all bills - have fallen behind with many of them = 5.  
<sup>e</sup> Extremely bad = 1, Extremely good = 7.

Table 4. Bivariate Pearson of variables measured in the cross-sectional questionnaire

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. Presenteeism days	—																		
2. Absenteeism days	.11*	—																	
3. Emotional distress	.23**	.18**	—																
4. Organisation adjustment norms	-.10	.02	-.32**	—															
5. Leadership	-.04	-.13**	-.27**	.45**	—														
6. Adjustment latitude	-.06	-.06	-.18**	.31**	.42**	—													
7. Job demands	.17**	.07	.40**	-.19**	.01	.00	—												
8. Social support	-.04	-.10	-.28**	.40**	.62**	.39**	-.06	—											
9. Self-efficacy	-.13*	-.03	-.35**	.17**	.31**	.16**	.02	.34**	—										
10. Age	.08	.03	-.02	-.10	-.17**	-.18**	-.02	-.11*	-.04	—									
11. Gender <sup>a</sup>	-.11*	-.08	-.06	.01	.10*	.04	-.03	.10*	0.04	-.07	—								
12. Tenure	-.01	-.03	.01	-.05	-.05	-.06	.11*	-.08	-.01	.39**	-.04	—							

13. Weekly working hours	.05	-.06	.15**	-.13*	.04	0	.33**	.04	.06	-.07	.30**	-0.01	—						
14. Number of people managing at work	.02	-.05	-.10	.06	.12*	.02	.08	.11*	.09	.04	-.03	.15**	.02	—					
15. Number of people under care at home	.01	-.01	.03	-.05	.01	.00	.06	.12*	.13*	.01	-.01	.01	-.02	.07	—				
16. Organisation size <sup>b</sup>	-.06	-.08	.02	-.05	.10*	.10	.13*	-.07	.08	-.13*	.13*	-.09	.14**	-.10	-.02	—			
17. Contract type <sup>c</sup>	-.07	-.07	-.05	.00	.01	.03	-.11*	-.07	.02	.00	-.08	-.13*	-.29**	0.03	-.02	.12*	—		
18. Finance situation <sup>d</sup>	.11*	.07	.38**	-.15**	-.12*	-.13*	.12*	-.11*	-.06	-.00	.03	-.03	.06	-.08	.09	-.02	-.05	—	
19. Self-rated overall health <sup>e</sup>	.27**	.14**	.43**	-.19**	-.21**	-.16**	.16**	-.36**	-.25**	.12*	-.06	.04	.08	-.06	.03	.03	-.07	.26**	—
N	373	376	378	379	379	378	379	379	379	370	376	370	375	357	368	369	378	379	379
Mean	13.3	6.0	15.3	16.7	34.5	25.3	59.5	27	50.5	39.8	1.4	6.2	37.3	10.2	1.0	1.5	1.6	1.7	3.1
SD	26.2	19.3	6.8	5.2	10.6	11.4	15.8	8.8	11.0	12.5	0.6	6.8	11.6	44.4	2.3	0.8	1.3	0.9	1.5

\*. Correlation is significant at the 0.05 level (2-tailed). \*\*. Correlation is significant at the 0.01 level (2-tailed).

<sup>a</sup> Female = 1, Male = 2. <sup>b</sup> Large-sized organization = 1, medium-sized organization = 2, Small-sized organization = 3.

<sup>c</sup> Permanent, full-time = 1, Permanent, part-time = 2, Fixed-term, full-time = 3, Fixed-term, part-time = 4, others = 5.

<sup>d</sup> Keeping up with all bills - without any difficulties = 1, Not keeping up with all bills - have fallen behind with many of them = 5.

<sup>e</sup> Extremely bad = 1, Extremely good = 7.

#### 4.4 Discussion

To understand how individuals make their decisions to enact presenteeism, it is imperative to comprehensively grasp the psychosocial environment of individuals and establish the link to their choice of presenteeism. A combination of factors has been identified as exerting an impact on the inclination toward presenteeism, and these factors can be categorised into three primary domains: work-related, individual-related, and environment-related factors (for an overview, refer to Johns, 2010; Lohaus and Habermann, 2019). To acquire data pertaining to individuals' psychosocial milieu, a cross-sectional questionnaire was adopted in the initial phase of this thesis, **supplementing the subsequent diary study.**

Using a negative binomial regression test, the data generated by the initial questionnaire revealed that the reported number of presenteeism days in the last 12 months has a statistically significant association with multiple factors, including person-related (i.e., participants' emotional distress and self-efficacy) and work-related factors (i.e., organisation adjustment norms, leadership, adjustment latitude, job demands, social support), as well as demographic variables (i.e., age, gender, tenure, organisation size, contract type, weekly working hours, the number of people managing at work and under care, finance situation, and self-rated overall health). In addition, the number of self-reported absenteeism days in the last 12 months was also statistically associated with all the factors outlined above. **This finding further supports the notion that presenteeism and sickness absenteeism and potential outcomes of the same decision-making process,** highlighting that the decision to engage in presenteeism is not solely a matter of individual preference. Instead, it is dynamic and influenced by various factors (Baker-McClearn et al., 2010). In addition, according to Karanika-Murray and Biron (2020), presenteeism is an adaptive behaviour that individuals adopt to balance their health and work performance demands.

In addition, job-related factors, such as leadership, organisation adjustment norms, adjustment latitude, and social support, showed adverse correlations with presenteeism prevalence in the current study, which are consistent with previous presenteeism research (e.g., Miraglia and Johns, 2016; Lu et al., 2013; Thun et al., 2013). To clarify, when individuals have a higher level of job demands with a

lower level of self-efficacy and higher emotional distress, they are more likely to enact presenteeism. Moreover, the data also reflected those individuals with a more challenging financial situation and a lower level of self-efficacy, leadership and social support, adjustment latitude and organisation adjustment norms tend to have a lower overall health, which was associated with a higher prevalence of presenteeism and sickness absence. Furthermore, echoing previous studies (e.g., Skagen and Collins, 2016; Suzuki et al., 2015), the data also displayed a positive association between the number of presenteeism days and absenteeism days in the last 12 months. **This suggests that the prevalence of sickness absenteeism increases when individuals engage in more presenteeism, indicating that individuals do not substitute absenteeism with presenteeism.**

Moreover, the positive association between job demands and presenteeism prevalence was in line with the study of McGregor et al (2016). They utilised the Job Demand-Resource (JD-R) model (Bakker and Demerouti, 2007) to investigate the relationship between job demands and resources and the prevalence of presenteeism. This study disclosed that an increase in job demands, along with a drop in resources (i.e., leadership and social support), would increase the level of burnout and then lead to a higher likelihood of individuals working when they are unwell. In contrast, when the resources at work improve, the prevalence of presenteeism would decrease through higher work engagement. A psychologically resourceful work environment can help mitigate the negative impact of presenteeism on both individuals and organisations (Bergström et al., 2020). Furthermore, Brunner et al. (2019) revealed that an increase in job demands affects individuals differently, depending on their roles and the resources available to them. They suggested that organisations should adopt a more personalised approach to adjusting job demands for their employees, **a recommendation that has been underscored by the final semi-structured interviews conducted in this thesis.** Moreover, the results indicated that the organisation adjustment norms are positively associated with absenteeism days, which is partially aligned with the findings of the study conducted by Thun et al. (2013). They disclosed that supervisors' attitude influences the organisation adjustment and attendance pressure norms individuals perceive at their workplace, and the more supportive their supervisor is, the more positive individuals will feel when they work while unwell, which would potentially yield favourable impacts in relation to presenteeism.

When it comes to individual-related factors, such as emotional distress and level of self-efficacy, the former showed positive associations with both presenteeism and absenteeism days. This suggested that individuals with poorer mental health tend to accumulate more instances of working when unwell and taking more sickness absences. Stress plays a decisive role in individuals' emotional distress, and it can affect how they make decisions (Starcke and Brands, 2012). In the study of Morris (2005), stress was highlighted as a motivational factor that could promote presenteeism behaviour, but when it crosses the threshold of being perceived as overwhelming and detrimental, individuals are more likely to shift their focus towards survival. This shift in perspective might result in a preference for riskier decisions, switching from continuing to work while unwell to taking sick leave. Individuals consider taking sick leave as a riskier decision, compared to presenteeism, because the uncertainty and potential negative consequences underlie the action of taking sick leave, such as leaving extra work to colleagues and damaging the relationship with one's supervisor. According to the Prospect Theory (Kahneman and Tversky, 1979), when individuals are faced with two options, both involving losses, they tend to choose the one with a potential loss rather than a certain loss. When stress surpasses a certain threshold, it can harm individuals' mental health (Morris, 2005). Continuing to work when unwell may not guarantee meeting performance needs but can further deteriorate their mental health, representing a certain loss in their overall well-being, thereby switching to sickness absence. Furthermore, when individuals feel more positive about their work environment, their level of self-efficacy rises, alleviating the adverse consequences often linked with presenteeism (Lu et al, 2014). In addition, a higher level of self-efficacy has been portrayed to correspond with a better mental health state and a more positive coping strategy (Bandura, 1997). This is seconded by the results of the current study, where higher self-efficacy is related to a high level of perceived organisation adjustment norms, social support, leadership, and adjustment latitude at the workplace, resulting in better mental health. Self-efficacy plays a vital role in stressful situations since it moderates the perceived level of stress generated by these challenging situations, then subsequently influences the emotions individuals experience, the coping strategy they employ, as well as their overall psychological well-being (Karademas and Kalantzi-Azizi, 2004). **In the context of presenteeism decision-making, individuals with elevated self-efficacy are likely to perceive their symptom severity more positively, leading them to feel more confident in their ability to manage**



their health issues while remaining at work, thereby decreasing their likelihood to take sick leave and increasing the rate of presenteeism.

#### 4.5 Conclusion

To provide a comprehensive overview, the initial cross-sectional questionnaire laid the groundwork for an in-depth exploration of the presenteeism decision-making process. Negative Binomial regression analysis revealed that the associations between the prevalence of presenteeism and sickness absenteeism with contextual factors exhibit notable similarities. For example, the level of emotional distress is positively associated with both presenteeism and sickness absenteeism. This finding further reinforces the proposition that presenteeism and absenteeism are potential outcomes of the same decision-making process (Halbesleben et al., 2014). The results highlight the significance of work-related and person-related factors in shaping presenteeism decisions and prevalence, validating the profound influence of these variables. This study also reveals a positive association between presenteeism and sickness absenteeism, indicating that individuals are not simply substituting absenteeism with presenteeism. This suggests that the presenteeism decision-making process is dynamic and complex (Baker-McClearn et al., 2010), providing deeper insights into understanding presenteeism decision-making. In the subsequent chapter, grounded in the PDM model (Whysall et al., 2023), a detailed exposition and analysis of the pivotal diary study is provided, offering a deeper understanding of the decision-making process of presenteeism.

## Chapter 5. Study 2 – Diary study

### 5.1 Introduction

The second stage of the research, which is the core phase, adopted an experience sampling method intending to investigate individuals' decision-making process of presenteeism in a natural setting. As outlined by Hektner et al. (2007), the experience sampling method is a way to collect information about the daily life of individuals, in terms of context and content. This method is used to study the experience of individuals, which consists of the contents of consciousness including thoughts, feelings, and sensations. One of the main advantages of adopting experience sampling methods in research is that it provides an opportunity for researchers to examine the daily fluctuations between individuals' consciousness and the external context and the contents in their minds, by asking individuals to complete a survey consisting of both open- and closed-ended questions every day at a specific time point or when they are signalled to respond by a pager or an email (Hektner et al., 2007).

In addition, experience sampling methods are also referred to as a way to provide an instrument to research participants to describe the variation of their mental processes and can be used to collect data regarding the frequency and patterning of individuals' daily activities, social interactions, psychological states, and thoughts (Csikszentmihalyi and Larson, 2014), which is difficult to achieve if using cross-sectional surveys (Verhagen et al., 2016). Recently, using experience sampling methods and the daily diary approach has become popular in organisational behaviour studies (Fisher and To, 2012), and another important benefit of applying this research instrument is to minimise the bias and error which are correlated to common retrospective methods (Beal and Weiss, 2003). Research has found that how people feel about certain events at the moment is different from their reflection on those events, and many factors could lead to this emotional change, such as memory error, salience, and recency (Schwarz et al., 2009).

Furthermore, studies in the field of decision-making have used a similar approach. For instance, a study conducted by (Radcliffe, 2013, p166) aimed to “gain a detailed understanding of mechanisms and processes of decision-making in incidents of work-family conflict” through a qualitative diary method combined with semi-structured interviews, and 24 working couples participated in the study

over one month. The author highlighted the strength of using the qualitative diary methods, that is to reveal new insights into the decision-making process of work-family in the context of daily life, which cannot be done by a more traditional research approach. Additionally, the experience sampling method is considered an effective way to capture the decision-making process of presenteeism with a low possibility of memory bias (Ruhle et al., 2020). Therefore, it is arguable that the experience sampling method with a daily diary is a suitable method to examine how individuals decide to enact presenteeism when they experience ill-health symptoms.

To allow the participants to outline their thought process when they face the decision of working or resting, a series of open-ended questions based on the presenteeism decision-making process model developed by Whysall et al. (2023) was included in this study. Moreover, several close-ended questions, such as multiple choice and ranking questions, were included in the daily survey to capture individuals' attendance decisions, the ill-health symptoms they experienced how severe the symptoms were, and the productivity of the day. With the ability to avoid the bias caused by suggesting answers to individuals (Reja et al., 2003), open-ended questions are good for collecting more comprehensive and spontaneous responses from participants (Wilson, 2003), and the answers to open-ended questions are much richer when using online surveys (Schaeffer and Dillman, 1998). Moreover, as Johns (2010) stated, the variation of ill-health symptoms also has an impact on how individuals decide to enact presenteeism. Thus, it is essential to capture what kind of somatic complaints individuals experience and how severe they think their symptoms are. The following section describes the participant recruitment approach, and the measurements adopted in the diary study.

## 5.2 Methodology

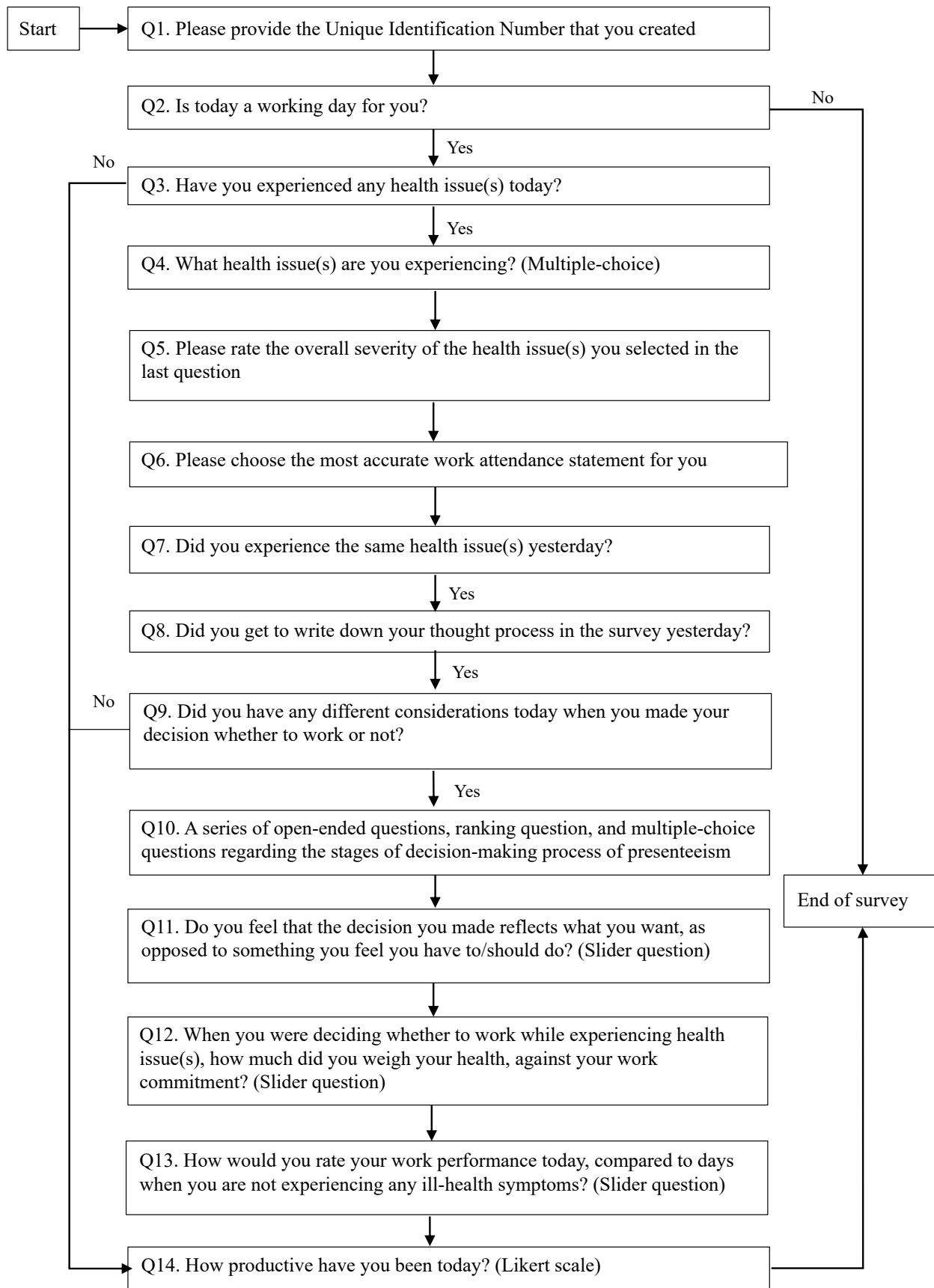
### 5.2.1 Approach

Diary study participants were recruited through the initial cross-sectional survey. As stated previously, of 399 initial questionnaire respondents, 205 of them agreed to join the diary study, and in the end, 158 individuals (77.1%) had completed at least one diary survey. In addition, before the diary study began, participant information including a brief of the study, and information about what the study aim was, what unique identification code they created at the first stage and their right to withdraw

from the study was sent to the participants who have given consent to take part in the diary study by email. A copy of the participant information sheet and the diary questionnaire can be found in the appendix. The diary study was conducted between June and August 2021. An email reminder with the link to complete the daily survey was sent to the participants every weekday at 4 p.m. British summertime. Some participants contacted me and asked for the reminder to be sent during weekends since they also worked during weekends. Moreover, covid restrictions existed in many countries during the data collection period, thus, the definition of presenteeism as ‘working while feeling unwell’ (Ruhle et al., 2020) was used in the instructions to participants, avoiding reference to ‘going to’ work to avoid restrictions in terms of work location.

Furthermore, it is noticeable that the daily survey had a short and extended version, depending on whether the participants reported that they were experiencing ill-health symptoms when they answered the survey (see Figure 5 below). Items for measuring participants’ daily productivity were included in both short and extended versions, but the open-ended questions developed based on the four stages of the presenteeism decision-making process model developed by Whysall et al. (2023) will be skipped automatically if the participants claimed that they did not feel unwell on that day. Two screening questions of whether the participant was experiencing any ill-health symptoms on a working day were presented at the beginning of the diary survey. If the participant answered “yes” to both questions, other questions in relation to their health status, work status for the day, and questions of how they made their decision would be presented. Questions on daily productivity were asked if participants answered “yes” to the question asking whether today a working day for them is but “no” to the other question asking if they experienced any ill-health symptoms. The survey ended for that day if participants indicated that that specific day was not a working day. In addition, the daily survey also gave an option to the participants to skip the open-ended questions if they were experiencing the same symptoms the day before and there was nothing new in their consideration.

Figure 5. The flow of the daily diary survey



### 5.2.2 Measures

*Individuals' health status* was assessed by asking participants to indicate what health issue(s) they were experiencing, from a list of common health issues compiled from the literature (e.g., Office for National Statistics, 2020; the Council for Work and Health, 2018; Whysall et al., 2018). The list included options such as “Infectious illnesses (e.g., the flu, gastrointestinal problems, Covid-19)”, “Digestive issues”, “Anxiety, depression, stress”, and “Musculoskeletal problems/pain (e.g., neck and shoulder pain)” (the “other” option was also included, where they were asked to specify their health symptoms and the data was manually categorised). The overall *severity of their health issues* was assessed with one item on a 7-point scale (1 = *Not severe* to 7 = *Extremely severe*).

The *work status of the day* was measured by assessing work attendance (presenteeism and absenteeism) as a multiple-choice question. Since the choice between presenteeism and absenteeism should not be binary (Whysall et al., 2023), the response options included: (1) “I did not take sick leave and I worked (from home, my workplace or elsewhere) even though I am/was feeling unwell”, (2) “I did not take sick leave and I had the flexibility to work part of my day or complete part of my tasks only”, (3) “I took sick leave after I worked for part of my day”, (4) “I took sick leave but still did some work-related tasks (e.g. replying to work emails) after I have officially declared myself as on sick leave”, and (5) “I took sick leave and I did not do any work-related tasks (e.g. replying work emails) all day”, reflected a range of combinations of presenteeism and absenteeism. Options 1 and 5 represent presenteeism and absenteeism respectively, whereas options 2, 3, and 4 indicate partial presenteeism. Participants could type in an answer if none of these statements was appropriate for them.

*The decision-making process for presenteeism.* Participants were asked to articulate their thought processes in four open-ended questions, based on the four stages in the presenteeism decision-making process model (Whysall et al., 2023), and probing questions were included to extract key information from participants regarding each stage. For instance, *Stage 1* (Trigger) was assessed by asking participants to reflect on what triggered them to start considering whether to work. Probes were included: “What made you start thinking about working or not?” and “In what ways did your health issue(s) affect you or your workability?”. *Stage 2* (Options) was assessed by asking participants to identify the available options they had when they were deciding, and three probes were included: “What

were the available options you had? (e.g., taking sick leave; working on urgent tasks only and postpone the rest for later when I feel better; working as usual, etc.)”, “What made you feel that you have those options?”, and “What tasks were you able to carry out with your health issue(s)?”. Stage 3 (Evaluation) was assessed by requiring the survey respondents to write down how they evaluated their options and determined the action, and the probing questions were “How did you evaluate the available options?”, “What did you consider when making the decision?”, and “At which point did you feel like you had reached the preferred option?”. Moreover, Stage 4 (Feedback) was assessed with three “Yes/No” questions, which were “Did you think about the possible outcomes for your options?”, “Did you consider whether you made the right decision?”, and “Did you reconsider your decision?”, then participants needed to write down why they answered positively or negatively for every question. Probes were included: “What were the possible outcomes you estimated?”, “Why did you feel that you made the right decision?”, and “How many times did you change your mind and why?”. Participants were reminded that the probing questions were only for assistance.

*Daily Work Performance* has been measured by 3 items from the individual task proficiency scale developed by Griffin et al. (2007). Participants were asked to rate their performance on a 5-point Likert scale (1 = *Very little* to 5 = *A great deal*), for example: “carried out the core parts of your job well”, and “completed your core tasks well using the standard procedures”. Cronbach’s alpha for this scale was  $\alpha = .955$ .

### 5.2.3 Demographic characteristics

Regarding the diary study, around 51.3% of participants (205 out of 399 initial survey respondents) agreed to take part in the diary study and eventually 158 individuals (41.7% of the cross-sectional survey respondents) joined the diary study, and 155 participants’ demographic information could be connected to the cross-sectional survey using the unique identification codes. Moreover, among these 155 individuals, 26 of them (18.7%) did not experience any ill-health symptoms when they were answering the survey daily, and another 8 of them (5.2%) did not answer the open-ended questions even though they claimed to have experienced ill-health symptoms on a working day. As a result, the sample size of the thematic analysis for the diary study was 121 individuals.

Out of 121 diary study participants, 78 of them were female (64.5%) while 40 of them (33.1%) were male (see Table 5). The average age was 38 years old (SD=11.7, range 21-71 years), and the mean tenure with the current employer was 6.24 years (SD=6.30, range 0.08-33.5 years), whilst the average weekly working hour was 38.3 (SD=11.12). Over half of the participants (57.0%) described themselves as English/Welsh/Scottish/Northern Irish/ British, and 16.5% of them were African. Regarding contract types, most participants (77.7%) had a permanent full-time contract during the diary study, while 11.6% had a permanent part-time contract, and 9.1% were on a fixed-term full-time/part-time or flexi-time contract.

Additionally, 76 out of 121 diary study participants (62.8%) worked in a large-sized organisation, 23 of them (19.0%) worked in a medium-sized firm, and 19 of them (15.7%) worked in a small-sized company. In terms of overall health, 28.1% rated that as ‘moderately good’, 19.0% as ‘neither good nor bad’, and 20.7% as ‘slightly bad’. In terms of financial status, nearly half (46.3%) indicated that they can cover their bills without difficulties, whereas 34.7% found keeping up with their bills to be a struggle occasionally. Moreover, over half of the participants (59.5%) were working in the UK and 18.2% were working in South Africa. The range of sectors the participants worked at was diverse, for example, 9.9% worked in teacher training or education, 9.1% worked in computing or IT, 11.6% worked in accountancy, banking, or finance, and 9.1% worked in engineering or manufacturing. Moreover, over half of the participants (59.5%) had caring duties at home, while 44.6% were managing at least 1 person at work.

Table 5. Demographic information of the diary study participants

Characteristics	Description	N case (SD) or (%)
Age	Mean age (SD)	37.5 (12.2)
Gender*	Female	78 (64.5)
	Male	40 (33.1)
	Prefer not to tell	1 (0.8)
Tenure	Mean tenure with current employer (SD)	6.24 (6.30)
Weekly working hours	Mean weekly working hours (SD)	38.3 (11.1)
Working on-site during Covid-19 pandemic	Yes	42 (34.7)
	Sometimes	25 (20.7)
	No	54 (44.6)
	Yes	35 (28.9)



Had unpleasant experiences of requiring sick leave*	No	85 (70.2)
Managerial responsibilities at workplace	Yes	54 (44.6)
	No	67 (55.4)
Caring responsibilities at home*	Yes	48 (39.7)
	No	72 (59.5)
Contract type	Permanent full-time	94 (77.7)
	Permanent part-time	14 (11.6)
	Fixed term, full-time	7 (5.8)
	Fixed-term, part-time	3 (2.5)
	Flexi hours	1 (0.8)
	Others	2 (1.7)
Organisation size*	Large (more than 150 employees)	76 (62.8)
	Medium (between 50 and 150 employees)	23 (19.0)
	Small (less than 50 employees)	19 (15.7)
	Not sure	1 (0.8)
Country of working*	United Kingdom	72 (59.5)
	South Africa	22 (18.2)
	European Union	17 (14.0)
	United States of America	3 (2.5)
	Canada	1 (0.8)
	Indonesia	1 (0.8)
	Mexico	1 (0.8)
	Jordan	1 (0.8)
Ethnic group*	English/Welsh/Scottish/Northern Irish/ British	69 (57.0)
	African	20 (16.5)
	Any other white background	14 (11.6)
	Irish	4 (3.3)
	Indian	3 (2.5)
	Caribbean	1 (0.8)
	Arab	1 (0.8)
	Any other Mixed / Multiple ethnic background	3 (2.5)
	White and Black African	2 (1.7)
	Any other ethnic group	1 (0.8)
	Any other Asian background	1 (0.8)
	Prefer not to say	1 (0.8)
Sector*	Accountancy, banking or finance	14 (11.6)
	Business, consultancy or management	5 (4.1)
	Computing or IT	11 (9.1)
	Creative arts or design	2 (1.7)
	Energy and utilities	2 (1.7)
	Engineering or manufacturing	11 (9.1)
	Healthcare	8 (6.6)
	Hospitality or events	1 (0.8)
	Law	1 (0.8)
	Law enforcement and security	2 (1.7)
	Leisure, sport or tourism	1 (0.8)
	Marketing, advertising or PR	1 (0.8)
	Facility management	5 (4.1)
Others	15 (12.4)	

	Property or construction	1 (0.8)
	Public services or administration	10 (8.3)
	Retail	5 (4.1)
	Sales	4 (3.3)
	Science or pharmaceuticals	3 (2.5)
	Teacher training or education	12 (9.9)
	Transport or logistics	5 (4.1)
Self-rated overall health	Extremely good	10 (8.3)
	Moderately good	34 (28.1)
	Slightly good	17 (14.0)
	Neither good nor bad	23 (19.0)
	Slight bad	25 (20.7)
	Moderately bad	12 (9.9)
Self-rated financial situation	Keeping up with all bills – without any difficulties	56 (46.3)
	Keeping up with all bills – but it is struggle from time to time	42 (34.7)
	Keeping up with all bills – but it is a constant struggle	15 (12.4)
	Not keeping up with all bills – have fallen behind with some of them	6 (5.0)
	Not keeping up with all bills – have fallen behind with many of them	2 (1.7)

\* The percentages do not add up to 100% due to missing data, total n = 121

Furthermore, there were a total of 1591 diary entries between late June and the first week of August 2021, and 1402 of them (88.1%) were indicated as working days by the participants. The average number of diary entries per person was 9 (SD = 4.5, range 1-22), then there were 476 health incidences (34.0%) nested in 121 participants who reported themselves experiencing ill-health symptoms on a working day. Moreover, the daily survey enabled the participants to skip the open-ended questions if they were experiencing the same symptoms the day before and there was nothing new in their consideration, therefore, among 476 health incidences, 350 of them (73.4%) will be included in the thematic analysis.

#### 5.2.4 Analytic Approach

When it comes to analysing qualitative data, thematic analysis is one of the well-known methods. Thematic analysis is comprehensive, and it allows researchers to identify themes cross-referenced to the data and use either deductive or inductive approaches (Hayes, B.K., 1997). In addition, thematic analysis is beneficial for investigating the diversity of perspectives from research participants by highlighting the similarities and contrasts, and then generating unanticipated findings (Braun and Clarke, 2006; King, 2004). Brooks et al. (2015) stated that within the domain of thematic analysis, there

are different types of methods, including template analysis (King, 2012), matrix analysis (Miles and Huberman 1994) and framework analysis (Ritchie and Spencer, 2002). They offer different ways to organise and interpret qualitative data.

In the context of the diary study, the author found that template analysis is well-suited for analysing its intricate data. The study is designed to unravel participants' thought processes using the four process steps outlined in the PDM model, where participants respond to open-ended questions related to each step. This model serves as the initial framework for the analysis. Furthermore, during the phase of familiarising with the data, it became evident that participants did not strictly adhere to the steps when responding to the open-ended questions. Therefore, a flexible approach is required. As a type of thematic analysis, template analysis maintains a structured approach to analysing textual data while offering flexibility to tailor it to the specific requirements of a study (Brooks et al., 2015).

Therefore, in this diary study, the analysis of open-ended questions was conducted using template analysis with Nvivo (Version 12, 2018), while the multiple-choice questions were analysed using percentages, frequencies, and linear regression with SPSS (version 28).

Similar to traditional thematic analysis, the first step of template analysis begins with becoming familiar with the data and conducting initial coding (Braun and Clarke, 2006; King, 2012). During this stage, the author identifies elements in the data that could contribute to addressing the research questions. Given that the initial analytic framework was provided by the PDM model (Whysall et al., 2023), the author subsequently categorised the data according to each step outlined in the model. Following this, the author organised the themes that emerged within each step and structured them into coherent clusters. These themes will undergo refinement throughout the template analysis process.

## 5.3 Results

### 5.3.1 Overview of reported health issues and decision outcomes

Out of a total of 476 health incidences, most decision outcomes (88.5%) were classified as presenteeism, while only 7.4% were categorised as sickness absenteeism, and 4.2% involved a combination of working while sick for part of the day and taking sick leave for the remainder (see Table

6). It's important to note that participants were allowed to report multiple health issues within a single entry.

To summarise, among 121 participants, the most reported health issue was Headache/Migraine, with 63 participants (52.0%) mentioning it. This was followed by Anxiety, depression, stress, reported by 57 participants (47.1%), Sleep problems by 53 participants (43.8%), and Musculoskeletal problems/pain by 42 participants (34.7%) (refer to Table 7 for details).

Moreover, presenteeism predominated over absenteeism across all health issues when considering decision outcomes. For instance, out of the 476 health incidents reported, 30% were related to Headache/Migraine (142 incidents), 35% to Anxiety, depression, and stress (166 incidents), 23.2% to Sleep problems (110 incidents), and 21.0% to Musculoskeletal problems/pain (100 incidents). Specifically, of the 142 incidents involving Headache/Migraine, 130 resulted in presenteeism (91.5%). Similarly, for Anxiety, depression, and stress, 136 out of 166 incidents (82.0%) led to presenteeism. Regarding Sleep problems and Musculoskeletal problems/pain, 100 out of 110 incidents (91.0%) and 91 out of 100 incidents (91.0%) resulted in presenteeism. Connecting this finding to RQ1, which aims to examine the presenteeism decision-making process, it is evident that individuals experiencing health issues such as Headache/Migraine, Sleep Problems, Musculoskeletal problems/pain, and Anxiety, depression, and stress are highly inclined towards engaging in presenteeism. This finding echoes the study conducted by Whysall et al. (2018), which similarly observed that individuals experiencing Musculoskeletal problems/pain, as well as Anxiety, depression, and stress, exhibit a high prevalence of presenteeism. It suggests that the decision-making process of presenteeism does not focus solely on health needs. Instead, it involves a complex interplay of various work-related and personal factors.

Table 6. Frequencies of attendance outcomes selected by participants

Variables	Descriptions	N cases (SD) or (%)
Sickness presenteeism (SP)	Number of incidences in which participants chose “I did not take sick leave and I worked (from home, my work place or elsewhere) even though I am / was feeling unwell”	362 (76.1)
	Number of incidences in which participants chose “I did not take sick leave and I had the flexibility to work part of my day or complete part of my tasks only”	45 (9.5)
	Number of incidences in which participants chose “I took sick leave but still did some work-related tasks (e.g. replying to work emails) after I have officially declared myself as on sick leave”	14 (2.9)
Sickness absenteeism (SA)	Number of incidences in which participants chose “I took sick leave and I did not do any work-related tasks (e.g. replying work emails) all day”	35 (7.4)
Mixture of sickness presenteeism and sickness absenteeism (SP/SA)	Number of incidences in which participants chose “I took sick leave after I worked for part of my day”	20 (4.2)

Table 7. Frequencies of reported health issues, mean severity for each health issue, and the attendance outcome

Health issue	Average severity reported by participants	Total number of participants experienced health issue	Total number of episodes reported	Episodes of SP	Episodes of SA	Episodes of SP/SA
	<i>n</i>	<i>n</i>	<i>n</i>	<i>n</i>	<i>n</i>	<i>n</i>
Headache/ Migraine	3.65	63	142	130	10	2
Anxiety, depression, stress	4.41	57	166	136	23	7
Sleep problems	4.25	53	110	100	6	4
Musculoskeletal problems/pain (e.g. neck and shoulder pain)	4.40	42	100	91	2	7
Digestive issues	4.02	22	45	35	10	2
Allergies	3.50	16	39	36	2	1
Infectious illnesses (e.g. flu, gastro, Covid-19)	3.33	14	33	25	4	4
Respiratory problems (e.g. asthma)	3.90	13	39	38	0	1
Diabetes	4.80	7	20	20	0	0
Menstrual Symptoms	3.86	7	7	6	0	1

Vaccine side effects	2.83	5	6	5	1	0
Fatigue	3.00	3	3	3	0	0
Heatwave	4.00	3	3	3	0	0
Autoimmune disease symptoms	5.21	2	14	12	0	2
Kidney diseases	2.75	2	4	4	0	0
Nausea	3.50	2	2	2	0	0
Pain in foot	2.50	2	2	2	0	0
Eye problem	2.50	2	2	2	0	0
Ulcerative Colitis	5.00	2	11	10	0	1
Broken ankle	3.00	1	7	7	0	0
Cardiovascular disease / Hypotension	4.00	1	1	1	0	0
Clogged ear	3.33	1	3	3	0	0
Concussion	5.33	1	3	1	1	1
Crps pain	4.86	1	14	13	0	1
Long Covid symptoms	6.20	1	5	5	0	0

Sinuous infection	3.00	1	4	3	0	1
Sore throat	2.00	1	1	1	0	0
Hangover	3.00	1	1	1	0	0
Toothache	6.00	1	1	1	0	0
Alcohol or other drug-related problems	4.00	1	1	1	0	0

---



Moreover, how individuals evaluate their ill-health symptoms is subjective, and psychological factors such as self-efficacy, over-commitment to work and health locus of control are likely to influence this appraisal of symptom severity (e.g., Diatchenko et al., 2005; Johns, 2010) and their emotional distress. Therefore, it is proposed that individuals' psychological factors (i.e., emotional distress, self-efficacy, over-commitment, and health locus of control) are likely to influence how individuals evaluate the severity of their health condition(s), including their mental health. Due to the low value of Cronbach's Alpha for the scales of over-commitment and health locus of control, only individuals' emotional distress and self-efficacy will be included in the following analyses (see Table 2). The potential impact of removing variables with low Cronbach's alpha value has been discussed in Chapter 4.2.4.

**Nonetheless, the relationship between person-related factors and participants' ratings of their symptom severity is not established in this study.** When using individuals' self-efficacy and emotional distress as independent variables and their average symptom severity as the dependent variable, a multiple linear regression found an approaching but not reaching statistically significant association ( $F(2, 118) = 2.927, p = .057$ ) with self-efficacy ( $\beta = -.006$ ), or emotion distress ( $\beta = .214$ ). When the dependent variable changed from average symptom severity to the first-day severity, there was no statistically significant association with individuals' self-efficacy or emotional distress ( $F(2, 118) = 1.966, p = .145$ ).

Furthermore, when participants were asked to describe the options they perceived they had, they mentioned various possibilities, such as continuing to work as usual, working from home, taking sick leave (either unpaid, paid, or limited), focusing on urgent tasks only, taking more breaks during work, having a shorter working day, and having flexible working hours. It was found that in more than half of the cases (182, 53.0%), the options perceived as genuinely feasible were limited to those related to presenteeism. In 151 instances (44.0%), participants considered both presenteeism and sickness absenteeism options, while only in 10 incidents (2.9%), participants considered sickness absenteeism options exclusively. The total number of responses here was 343, which was fewer than the 477 total incidents because the daily survey gave an option to the participants to skip the series of questions

regarding how they decided to enact presenteeism if they were experiencing the same symptoms the day before and there was nothing new in their consideration.

Moreover, when analysing attendance outcomes by assigning a value of 1 for presenteeism and 0 for sickness absenteeism, a logistic regression was conducted. The test result revealed a statistically significant relationship between the mean symptom severity (treated as the independent variable,  $\beta = -.38$ ) and the attendance outcome (considered as the dependent variable,  $\chi^2(1) = 9.75$ ,  $p = .002$ ). The odds ratio, at 0.688 (95% CI: 0.540, 0.877), indicated that for each unit increase in symptom severity, the likelihood of individuals opting for presenteeism decreased by 68.8%. These findings indicated that presenteeism played a prominent role in the decision-making process of attendance behaviour among the diary study participants. To connect this finding to RQ1 and RQ2, it is revealed that when faced with health issues, participants often perceived their feasible options as limited to those that involved presenteeism. It suggests that workplace culture and policies might encourage or necessitate working while unwell, possibly due to a lack of viable alternatives or support for taking sick leave.

### 5.3.2 Thematic analysis regarding each stage

Grounded in the PDM model (Whysall et al., 2023), the qualitative data from the diary study were analysed using the PDM model as the theoretical framework. Several themes emerged under each step outlined in the model—trigger, options, evaluation, and feedback (refer to Table X for an overview). Following this, a discussion of each primary and sub-theme will be provided, along with supporting quotes extracted from the diary study data. Each sub-theme is a part of the decision-making process of presenteeism, addressing RQ1 and R2.

#### *Stage 1 Trigger*

It is proposed that the decision-making process will be triggered by a health event and individuals would consider the severity of the ill-health symptom(s) they were experiencing and how much the symptoms affect their work capability. The data has shown positive evidence for this stage, for example, when asked the participants to describe what triggered them to consider whether to work or not, they wrote:

“My eyelids are physically twitching (you can see them moving in the mirror) [...] I feel I am perfectly capable of completing my work tasks, I'm just a little uncomfortable.” (Participant 024)

“I woke up with a strong headache and my asthma flaring up. It didn't really [affect] my work ability though” (Participant 031)

“Heatwave over [the] weekend made my [hay fever] worse, gave me [a] headache, stuffy head, difficult to concentrate in such hot weather” (Participant 004)

“I have a deadline that I must meet before the end of the week. I have pain in my shoulder, which makes it difficult to complete some tasks at work.” (Participant 039)

In addition, as discussed in Chapter Two, there is a decision threshold that would lead to a change of decision from presenteeism to sickness absence. For individuals experiencing mild symptoms, their threshold of taking sick leave is high. For instance, a participant who had symptoms of asthma with a severity rating of 2 described:

“I thought about the options for a while and it was pretty tempting to stay at home, but it's not something I do if I'm not really sick.” (Participant 033)

Additionally, the participant below who was experiencing Headache / Migraine with a severity rating of 1 wrote:

“If needed, I would have taken sick leave, but I only had a headache.” (Participant 099)

Furthermore, it is argued that the threshold of changing from “soldiering on” to taking sick leave has a negative association with the severity of individuals' symptoms. When the ill-health symptoms are severe to a degree that individuals can no longer bear with them, sickness absence was deemed to be the automatic decision, which suggests that the threshold would be at the lowest. For example:

“I had a very severe anxiety reaction with strong physical symptoms which made it impossible to get out the flat door” (Participant 086, Anxiety, depression, stress with a symptom rating of 6)

“It is because my pain was severe and it affected my ability to work” (Participant 075, Musculoskeletal problems/pain with a symptom rating of 6)

Moreover, the data also revealed that this threshold will be lowered if the ill-health symptoms persist. For example, the experience of Participant 030 illustrates this complexity. Initially, despite symptoms of sleep problems, anxiety, depression, stress, and digestive issues, they attempted to work from home but soon found themselves unable to concentrate. They subsequently opted to take half a sick day, followed by a full day off after consulting their GP and adjusting their medication due to side effects. In one of the diary entries, they wrote:

“[...] When I took a half day yesterday I mentioned my stomach issues, but did not feel comfortable mentioning my mental health issues. I did not want to start work and have to take another half day [of] sick leave as I feel this would be frowned upon and raise more questions than not coming in at all, but I know I really need to get back by tomorrow” (Participant 030)

Similarly, Participant 008, who deals with autoimmune disease and chronic pain, faced the challenge of deciding whether to work or take sick leave. Despite feeling dreadful due to pain and lack of sleep, Participant 008 chose to work, acknowledging the implications of frequent absences on their work reputation and company perception. However, upon realising the severity of their symptoms and the inability to focus on demanding tasks, they eventually opted for a sick day to avoid further exacerbation of their condition.

“My symptoms as reported yesterday had not improved. I realised that there was no way I would feel fit to work continuously throughout the day with focussed tasks including research, fact-checking, statistical analysis and report-writing.” (Participant 008)

“I strongly felt that if I were to try to start my working day again, this would result in the same outcome as yesterday (i.e. having to call in sick after working for a couple of hours), [...] I also felt that if I did not rest today and tried to 'power through' this would only result in a relapse or worsening of symptoms later in the week.” (Participant 008)

These examples underscore the variability in presenteeism decision-making processes, particularly for individuals experiencing chronic health issues. Factors such as perceived control over symptoms, management strategies, workplace norms, and personal thresholds for absenteeism play pivotal roles. This variability and situational nature of decision-making are essential to understanding

how individuals navigate the complexities of presenteeism, shedding light on the diverse considerations that influence their choices in the workplace.

However, evaluating health issues and symptom severity was just the beginning of the decision-making process. Beyond assessing their health status, individuals also navigate a complex interplay of work-related and person-related factors that influence their attendance decisions while feeling unwell. These factors include organisational culture, job demands, personal financial circumstances, social support networks, and the availability of flexible work arrangements. Understanding how these diverse elements interact is crucial for comprehensively analysing the decision-making dynamics behind presenteeism in the workplace.

### *Stage 2 Options*

Although the qualitative data analysis of the diary study is primarily guided by the PDM model (Whysall et al., 2023) using a deductive approach, several inductive sub-themes have emerged. The PDM model suggests that after Stage 1, individuals identify available options based on their work environment (i.e., Stage 2) and then evaluate these options against personal values, work-related factors, and health demands (i.e., Stage 3). However, our data reveals deviations from this model in the decision-making process between working while unwell and taking sick leave, providing deeper insights for RQ1 and RQ2. Specifically, the data indicates that participants do not strictly follow the stages outlined in the PDM model. Instead, they often skip or simplify Stages 2 and 3, or there may be a feedback loop between these two stages. This largely depends on how they perceive the options available to them, which was found to be heavily biased by work-related factors, such as workload, adjustment latitude, and personal circumstances, including financial considerations. For example,

“Sick leave was not an option as covering for another colleague” (Participant 005)

“I had certain tasks that had to be completed today & taking sick leave wouldn’t have been an option.” (Participant 004)

“I couldn’t take sick leave as the policy requires [*a sick note*] for individuals to take another sick leave after a certain period” (Participant 074)

“Didn’t have any options [other than working as usual] as cannot afford not to work [financially]” (Participant 013)

“I could have taken sick leave but I did not see the point. I knew today would be a relatively easy day so decided to work.” (Participant 009)

Additionally, mild ill-health symptoms were found to push individuals towards presenteeism by making the option of taking sick leave seem less legitimate or less desirable. For instance, Participant 073 mentioned experiencing a mild headache in one of their diary entries. When asked to describe their available options, they wrote:

“Working as usual. I couldn't justify for leave” (participant 073)

Moreover, Participant 056 was experiencing Headache / Migraine, Anxiety, depression, stress one day with a symptom severity rating of 3, and he/she answered the following in the Stage 2:

“I had many options but I would prefer to take sick leave for more serious symptoms.” (Participant 056)

On the other hand, the data revealed that when individuals have more options than working when unwell and taking sick leave, the likelihood of them getting into the decision loop between the Stage 2 and 3 is higher. For instance, Participant 036 combined Stage 2 and Stage 3 in one of their diary entries while experiencing digestive issues. They wrote the following when describing their options:

“I could have done some work from home, however today was going to be fairly quiet in terms of workload. My boss would not mind if I took the day off.” (Participant 036, Stage 2)

Participant 036 then wrote in the evaluation:

“I decided the best way to recover quickly was to take a sick day and try to stay in bed to recover. I felt that doing so would have little impact on my work, and would also help me recover more quickly.” (Participant 036, Stage 3)

Another example would be Participant 066. He/she had options of working on tasks with high priority, remote working, taking sick leave, and in one of the diary entries, they wrote:

“I have some options to work only on high priority tasks, as well as some documentation tasks, however I felt lazy and half-done the high-prio tasks, [...] I feel that the options I have are more

into the direction of just delivering needed parts of the work but not really contributing to the overall success of the team.” (Participant 066, Stage 2)

In his/her evaluation for that specific diary entry, he/she wrote:

“I still have to start my day early, so even with the lack of sleep I felt that I needed to go to work (doing home office). And since I already have a list of tasks ahead of me, I wanted to finish at least some of them today. I did consider not going to work before I started and sleep more, however I think I would lead to just feeding into my depression and also adding more stress once I go back to work with piled-up tasks.” (Participant 066, Stage 3)

Another situation that can lead to a loop between Stage 2 and Stage 3 occurs when individuals experience severe ill-health symptoms but hesitate to take sick leave. In this case, absenteeism was considered alongside presenteeism, but the decision-making process became more complex. For instance, in one of the diary entries, Participant 008 wrote the following in Stage 1, when he/she described the evaluation of their ill-health symptoms:

“I woke up feeling dreadful. I didn't sleep until really late because of the heat, also because I was in so much pain [...] Being tired and in pain meant that I knew I would find it difficult to focus and concentrate, as well as being in a great deal of physical discomfort.” (Participant 008, Stage 1)

When asked Participant 008 to describe their option in Stage 2, they wrote:

“My options were to call in sick or work as usual. All of my tasks are 'urgent' so I can't postpone certain tasks for later, in addition, by the very nature of [my illness] I cannot predict if I will feel better 'later' - or when 'later' will be.” (Participant 008, Stage 2)

They then wrote the following in Stage 3 on the same day:

“I can't call in sick because if I did that every time I felt ill I would be off sick for the majority of the year. I already know that my sickness absence record is seen unfavourably by the company despite minimising time taken off. I decided pretty quickly on this basis.” (Participant 008, Stage 3)

Participant 030 will be another example. He/she was experiencing severe symptoms of Anxiety, depression, stress (severity rating of 6), and when he/she described their available options, they wrote:

“My options were to try to carry on as normal, or take sick leave. I did not feel like prioritizing urgent tasks would help as there is some much work piling up now. I am barely functioning at all at the moment so carrying on as normal seemed counterproductive.” (Participant 030, Stage 2)

In the evaluation for the same day, they wrote:

“I [...] tried to weigh up the negative impact on my health by carrying on [versus] the implantation for my other team members if I took leave and my work remained undone [...] at this stage I think they think I am just creating problems by not being able to complete my work and it would be best to let others do it. At that point my decision was made but part of me felt like they were making it for me. I am scared that they see me as useless and incompetent.” (Participant 030, Stage 3)

To conclude, the stage of identifying available options is heavily influenced by individuals' work-related factors, personal circumstances, and the severity of their health issues. When individuals experience mild ill-health symptoms and perceive that their only option is to continue working, they often skip or simplify the subsequent evaluation stage. Conversely, when more options are available, such as in cases of very severe health issues where taking sick leave appears to be a legitimate choice, individuals are more likely to loop between Stage 2 and Stage 3 or combine these stages in their decision-making process.

### *Stage 3 Evaluation*

Based on the findings in relation to Stages 1 and 2, it is evident that the complexity of Stage 3 evaluation is closely connected to the previous two stages. In other words, whether individuals would adopt system 1 or system 2 thinking at this stage depends on their evaluation of Stages 1 and 2. As described previously, when individuals experience mild ill-health symptoms, the likelihood of them engaging in presenteeism behaviour is higher because taking sick leave is not perceived as a legitimate or desirable option. In such cases, individuals are likely to rely on System 1 thinking during Stage 3, the evaluation of perceived options. System 1 thinking is characterised by a quick, automatic decision-making process that favours the default action (Kahneman, 2012), which in this context means



continuing to work while feeling unwell. For example, Participant 076 wrote the following for Stages 1, 2 and 3 respectively in one of the daily surveys he/she completed:

“I did not think about staying away from work because I had deadlines to meet.” (Participant 076, Stage 1)

“I did not have options.” (Participant 076, Stage 2)

“I did not do any evaluations as I felt that the only option I had was to work.” (Participant 076, Stage 3)

In addition, Participant 102 who struggled significantly with their finances, wrote in one of their diary entries:

“I have no choice I have to work my home comes with the job” (Participant 102, Stage 1)

“I carried out my normal day” (Participant 102, Stage 2)

“There was no choice” (Participant 102, Stage 3)

Moreover, when Participant 015 suffered from Headache / Migraine with a severity rating of 1, they wrote the following in that diary entry:

“Nothing, I am still working” (Participant 015, Stage 1)

“I took paracetamol” (Participant 015, Stage 2)

“I made sure I had plenty of fluids so I didn’t have to go home” (Participant 015, Stage 3)

This type of evaluation, referred to as reflexive evaluation in this thesis, relies heavily on individuals' instincts and quick responses to the situation, reflecting system 1 thinking in Kahneman (2012). This has emerged as a sub-theme under the domain of Stage 3 evaluation. Decisions which were made through reflexive evaluation are usually swift and concentrate on one specific factor that plays a decisive role in the decision-making process. For instance, according to the example provided above Participant 076 concentrated solely on their work deadlines in their decision-making process, Participant 102 focused on their financial situation mainly, and Participant 015 based their presenteeism decision on their mild ill-health symptoms. In each case, the reflexive evaluation led individuals to make rapid decisions driven by the most pressing factor at the moment, rather than a balanced assessment of all available options.

Moreover, another core theme that emerged from the data is nuanced evaluation, which is similar to system 2 thinking (Kahneman, 2012). Unlike reflexive evaluation, which is quick and instinctive, nuanced evaluation involves a more complex and thorough decision-making process. In the current thesis, it is revealed that individuals who suffer from chronic or persistent health issues tend to make presenteeism decisions through nuanced evaluation more, compared to acute and short-term health issues.

When individuals engage in nuanced evaluation, they consider a broader range of factors and weigh multiple aspects of the situation. This type of evaluation could be an indicator of the decision loop between Stages 2 and 3, which was discussed in the previous section. It is worth noting that When nuanced evaluation happens, not only the evaluation process (Stage 3) tends to be more analytic and thorough, but also the other stages, such as Stage 1 and 2. For instance, Participant 116 suffered from an autoimmune disease. In one of their diary entries, they wrote the following:

“[My work] requires weekend work and preparation. I have been flaring with my underlying disease since Wednesday last week. I feel exhausted and in pain, but it is just as much hard work to [find my cover] and reply to emails as it is to go in.” (Participant 116, Stage 1)

In the same diary entry, they described:

“I could have taken a sick day, but we are still expected to answer emails and prepare work [...] I am also waiting on hearing whether I have an interview for [a] promotion, and I do not want to jeopardise that - leaving me feeling like if I am not going to get any rest anyway by staying home, I might as well be there.” (Participant 116, Stage 2)

Participant 116 only wrote one line for Stage 3 in this diary entry. However, their response to Stage 4 overlapped with Stage 3, which is shown below.

“If I miss work it creates more work for me and [my] colleagues - and I feel like I cannot afford to use too much ‘goodwill’, as I have a chronic condition so [I] am sick 3 or 4 times per year. I did consider that I would feel better quicker if I rested, but there is [no] guarantee of that, especially as I can't get a doctor's appointment until 5th July to discuss additional medications, so pushing through seemed more reasonable.” (Participant 116, Stage 4)

Another example of nuanced evaluation, which is more common among participants with chronic health issues, is Participant 008. This participant suffers from respiratory problems (e.g., asthma), allergies, endometriosis, and other chronic conditions such as lupus. In one of the daily survey, they wrote:

“I woke up [from] another poor night of sleep. The pain is very severe today. Bright sunlight triggers my lupus symptoms which in turn aggravates my [...] pain and I cannot sit up. I logged in and tried to get on with my day from my bed, but I quickly realised that I would not be able to cope with the prolonged periods of concentration, research and sitting at a desk typing that are typical of a normal day at work for me, especially if I end up with a migraine later.” (Participant 008, Stage 1)

“I tried to work for all the reasons detailed in previous diaries. However, after trying to struggle through work for an hour it quickly became apparent that I just could not continue today. I reached this decision within the first couple of hours of working.” (Participant 008, Stage 3)

Likewise, it is worth mentioning that when ill-health symptoms worsen or persist, how individuals evaluate their options changes from reflexive to nuanced, this shift may be caused by the increase of uncertainty and the reduced level of the illusion of control. For example, when asked to describe their evaluation, Participant 014 wrote:

“In the morning I evaluated the options [...] in the same way as yesterday and the day before. I thought that I needed to work as I have looming deadlines and [...] enquiries do not stop just because I am not there to deal with them. It also means there are consequences for other people [...] if the deadlines are not met. Once the symptoms got a lot worse, I relooked at the options and thought that I was no use to people in the condition I was in. So my thinking was it would be better to try and improve my symptoms by resting etc so that I can be productive tomorrow, rather than carrying on and being unwell for longer.” (Participant 014)

Moreover, when Participant 042 had a migraine for three consecutive days, he/she wrote the following in his/her daily survey:

“For the third consecutive day, I had a severe migraine. This is how my migraines usually work, I experience them in clusters that last a few days at a time. I felt horrible after I had been up for

about an hour this morning, so I knew that it was going to be a bad health day. I knew that the migraine was going to make my work day difficult today [...] While migraines complicate my workday when I am forced to work in front of a monitor all day, it's even worse when I'm expected to present in front of a group of 20 or more people.” (participant 042, Stage 1)

“I honestly felt like I really didn't have any options today. I feel like postponing a class full of my company's leadership would have been a very poor career decision, so I decided to go [to] work today and present to the class. [...] while I officially had options, I really didn't. I needed to take the action that was best for my future career prospects with this company, so I needed to teach today's class. [...] The only other part of my thought process involved whether I thought that I could be effective today with my health condition. I gave serious consideration to taking the day off if I felt like I would have been significantly impaired enough to make my presentation bad. I hoped that once I got started, my adrenaline would kick in and that I'd be able to ignore my migraine.” (Participant 042, Stage 2)

“As I alluded to in the last question, while I officially had options, I really didn't. I needed to take the action that was best for my future career prospects with this company [...] I made the decision to work about 5 minutes after I felt the aura associated with my migraine begin.” (Participant 042, Stage 3)

Up to this point, it is evident that most study participants utilised the first three stages of the PDM model in their decision-making process regarding presenteeism. While several sub-themes (e.g., reflexive and nuanced evaluation for Stage 3) have emerged from this thesis, it is clear that the PDM model remains a valid framework for understanding these decisions. Moreover, it is noticeable that when the diary study participants answered the open-ended questions in terms of how they decided to enact presenteeism or resting, they often mixed up the stages, which to some degree proved that individuals' decision-making process is not entirely linear. More discussion regarding this will be provided in the Chapter 7 General Discussion.

#### *Stage 4 Feedback*

The final stage that has been outlined in the PDM model is Stage 4, feedback (Whysall et al., 2023). As discussed in the Chapter 2 Literature Review, feedback, also known as reflection, is considered an important stage in decision-making, as it could be beneficial for optimising individuals' decisions when they encounter a similar situation in the future. However, in the current study, the data showed that participants seldom reflect on the decisions they made. When prompted to reflect, most participants provided brief responses that primarily focused on their work accomplishments. For example, when participants were asked to reflect on their attendance decision for the day, particularly regarding presenteeism, they wrote:

"I made the right decision as I was able to accomplish the important tasks before leaving work early." (Participant 004)

"I didn't change my mind at all. I feel I made the right decision for the company and my job safety/prospects, not myself or my health." (Participant 008)

"I think I made the right decision. In spite of severe anxiety, I managed to [fulfil] my duties well." (Participant 028)

Upon categorising participants' Stage 4 responses into "work-related reflection" (coded as 1), "health-related reflection" (coded as 2), "both work and health reflection" (coded as 3) and "no reflection" (coded as 0), it was found that out of 343 diary entries in which participants had responded to the open-ended questions, 169 reflections (49.3%) pertained exclusively to work-related concerns, while 76 reflections (22.2%) considered both health and work-related concerns. In addition, only 32 reflection (9.3%) focused solely on health-related needs, whereas in 66 incidents (19.2%), no reflection was indicated at all. The predominance of work-related reflections indicates that participants prioritise their job responsibilities and deadlines over their health. The relatively low number of health-related reflections suggests that health considerations are secondary in the presenteeism decision-making.

Generally, individuals tend not to reconsider or reflect on their decision. However, when their ill-health symptoms worsen or persist, their approach changes. In such cases, they are more likely to reconsider their decisions and include health considerations in their reflections. For example:

“*[I reconsidered my decision]* 2 times - The pain was severe in the early hours of the morning, but later on the day the pain saddled” (Participant 073)

“I did reconsider my decision when I felt really unwell. As I'm working from home, I was able to step away and do something else once or twice. But I still went back to work.” (Participant 105)

Moreover, Participant 008 had been experiencing ill-health symptoms from his/her first diary entry, and on their 7<sup>th</sup> diary entry, Participant 008 wrote the following in his/her reflection:

“I reconsidered my decision because ultimately it became quickly apparent that I was far too unwell to continue struggling through the working day. Ultimately I do believe that I am so unwell today because I have 'powered through' work in days previously when I have been too unwell to work (realistically) but have forced myself to do so anyway at the expense of my own health.” (Participant 008)

Another example is Participant 030, similar to Participant 008, who experienced ill-health symptoms throughout the diary study. In his/her final diary entry, he/she wrote the following in their reflection:

“I imagined the impact of my absence on my colleagues who would be at work next week , given that they may be short staffed as others may be taking holidays. I debated whether to extend my sick leave several times, but in the end taking account my previous medical history and the advice of my doctor, I made the decision to take next week off.” (Participant 030)

These examples demonstrate a trend where individuals only reflect on their presenteeism decisions when their health issues worsen or persist. In such instances, they often shift their focus from work-related considerations to health-related concerns. However, many participants still choose to engage in presenteeism despite worsening health conditions, indicating dysfunctional presenteeism as described by Karanika-Murray and Biron (2020).

#### 5.4 Discussion

The diary study involved participants responding to a survey repeatedly every working day over a period of 2-6 weeks, designed to capture the process of individuals deciding whether to work

when they are feeling unwell. If the survey respondents reported a health incident on a workday, they were prompted to specify the health issue(s) they were experiencing, assess the perceived severity of their symptoms, indicate their attendance outcome for the day, and answer a series of open-ended questions incorporating the stages outlined in the PDM model (Whysall et al., 2023) to elaborate how they decide their work attendance for that day.

Through a deductive thematic analysis and other quantitative analyses (i.e., **logistic regression and multiple linear regression**), the diary study disclosed several patterns of how individuals make their decision to work when they experience ill-health symptoms. Consistent with Johns (2010), the decision-making process usually begins with an assessment of how severe the symptoms are and the extent to which the symptoms impact their work capacity. If their symptoms were very severe and greatly hindered their ability to work, sickness absence would take over the default choice (presenteeism) and become the dominant option in their decision-making process. In contrast, if the symptoms are mild or moderate and have a relatively limited impact on their work capacity, they could either bypass the subsequent stages and directly decide to enact presenteeism or proceed to the next stage, which is identifying their perceived available options.

It is worth noting that how individuals assess their ill-health symptoms would be influenced mainly by their person-related factors, such as the level of self-efficacy and emotional distress they experience at that moment, though the current study did not reveal any statistically significant associations between these. A study by Muris (2002) revealed that a low level of self-efficacy is typically connected with elevated levels of symptoms of anxiety disorders and depression and trait anxiety/neuroticism among adolescents, while Jackson et al. (2014) found that self-efficacy has negative associations with pain severity for individuals who suffer from chronic pain. It suggests that individuals with a higher level of self-efficacy are more inclined to embrace challenges, and they have a stronger belief in their ability to overcome discomfort. This influences their attendance behaviour when they experience ill-health symptoms on a working day through a lower rating of symptom severity, resulting in a higher threshold of taking sick leave. However, higher self-efficacy can moderate the negative impact associated with presenteeism (Lu et al., 2014; McGregor et al., 2016; Tang et al., 2019). Thus, to encourage functional presenteeism at the workplace, it is crucial to enhance social resources

such as self-efficacy and social support. Simultaneously, it is important to ensure that individuals with high self-efficacy and strong motivation to tackle challenges do not veer into an unhealthy pattern of overachieving presenteeism that could harm their health and well-being.

After individuals assess their ill-health symptoms and how much the symptoms impact their work capability, the decision-making process moves to stage 2, the identification of available options and stage 3, the evaluation of options. The thematic analysis revealed that individuals will skip or simplify the evaluation process if they perceive that their options are restricted. For example, when survey participants faced high job demands, they felt that taking sick leave was a less viable option. Similarly, having low adjustment latitude, limited social support, and poor leadership also restricted their choices. Under these circumstances, research participants in the diary study exhibited behaviour of quickly deciding on their attendance behaviour through a simplified evaluation that is mostly influenced by their heuristics, defined as reflexive evaluation in the present study. One of the cognitive biases that can explain this simplified and quick evaluation process is effort avoidance. Bogdanov et al. (2021) revealed that acute psychological stress increases the likelihood of individuals choosing less demanding behaviour. In the case of presenteeism behaviour, opting for sick leave is effortful, compared to sticking with the default attendance behaviour of continuing to work, since it entails the effort of notifying their line manager, which would potentially lead to them being questioned, and upon returning to work, they might have to navigate mandatory procedures.

In contrast, if more options are available to individuals, a more thorough consideration of the identified options will be enabled. This is defined as a nuanced evaluation, where a primary focus on work-related factors is shown in these considerations. Another situation where individuals may thoroughly evaluate their options is when they experience persistent ill-health symptoms. In such instances, the heightened health demands can render sick leave a more appealing choice, thereby prompting individuals to prioritise their health needs more significantly. Moreover, individuals with chronic health issues also appear to have a higher tendency to opt for a thorough evaluation of their options and a higher threshold of taking sick leave. When confronted with persistent symptoms, individuals may be influenced by status quo and loss aversion biases, resulting in prolonged consideration of strategies to mitigate potential losses. Conversely, individuals managing chronic



conditions often perceive a greater sense of control over their symptoms due to their familiarity with their management (Stefan and David, 2013). This increased illusion of control may contribute to greater resistance to taking sick leave, leading to a more cautious evaluation and a higher threshold for transitioning from presenteeism to absenteeism.

Furthermore, the logistic regression analysis results reveal that individuals are significantly more inclined to choose presenteeism over sickness absence. This can be explained by the status quo bias (Samuelson and Zeckhauser, 1988). Continuing working is the default option when individuals experience ill-health symptoms on a working day. Taking sick leave is considered risky, as it could cause negative consequences in relation to individuals' work, such as a poor attendance record, a bad reputation among co-workers and management, and the risk of missing out on promotion opportunities (Grinyer and Singleton, 2000). When individuals subconsciously place more significance on negative outcomes than positive ones, they are influenced by the negativity bias (Rozin and Royzman, 2001), also known as loss aversion (Kahneman and Tversky, 1979). In addition, individuals will feel more regretful if unfavourable outcomes happen because they change their default option (Kahneman and Tversky, 1982), which is referred to as omission bias (Baron and Ritov, 1994). To reduce the influence of cognitive biases, such as loss aversion and status quo bias, and moderate the overweighed work-related demands in individuals' decision-making process of working when unwell, a positive work environment consisting of positive leadership and social support is essential. Through a randomised experiment, Kiken and Shook (2011) discovered that improved mindfulness can reduce individuals' negativity bias and promote positive judgements. Grounded in the Conservation of Resources theory (Hobfoll, 1989), which indicates that people will make efforts to protect their valued assets that assist them in achieving their goals, Hülshager et al. (2018) employed an experience sampling approach to investigate the relationship between an individual's mindfulness and their experience with workload and recovery experiences (i.e., psychological detachment and sleep quality). They found out that the level of mindfulness the next day would be compromised if individuals were not able to detach from work due to a heavy workload and sleep properly the previous day. This highlights the need for a supportive work environment to help individuals counteract cognitive biases and reduce the stress of work-related demands on their well-being and decision-making.

In addition, as discussed earlier in this section, two main themes have been identified from the current thesis regarding how individuals evaluate their perceived available options (Stage 3), which are reflexive and nuanced evaluation. Reflexive evaluation indicates a simple and quick decision-making approach where a primary factor, either work-related or psychological, heavily influences the decision. **Connecting this finding to existing decision-making theories**, this is akin to System 1 thinking in Prospect theory (Kahneman and Tversky, 1979), involving quick, instinctive decisions based on heuristics. In contrast, nuanced evaluation takes into account multiple factors, options and possible outcomes, resembling System 2 thinking in Prospect theory, which is a more analytical and rational decision-making process. Likewise, a feature of Prospect theory, known as the framing effect, has the potential to impact individuals' approach to their attendance behaviour. The way a choice is presented, whether as a potential gain or a potential loss, can lead people to react differently to the same decision (Gong et al., 2013). As an illustration, when individuals find their available choices limited by work-related constraints, they may perceive working when unwell as the sole viable option while considering taking sick leave as a potential or certain loss. **In such circumstances, their attitude toward taking sick leave will become increasingly negative**, influenced by the framing effect. While this might seem acceptable initially, over time it can result in dysfunctional presenteeism (Karanika-Murray and Biron, 2020), where individuals continue working when unwell, putting their health at risk, and exhibiting weak work performance.

Another perspective to look at the decision between presenteeism and sickness absenteeism is what individuals want to do versus what they feel like they should. This is an intrapersonal conflict (Bazerman et al., 1998). When deciding whether to work when unwell or rest, a significant number of participants in the diary study indicated a predominant preference for continuing to work. This inclination is primarily driven by work demands, such as the desire to meet deadlines or maintain a positive attendance record and reputation, suppressing individuals' health needs. A study conducted by O'Connor et al. (2002) highlights that when experiencing intrapersonal conflict, individuals react to what they should do in a more rational manner and what they want to do more emotionally. In addition, they also pointed out that based on what perspective an individual incorporates with a specific option, either a "want" or a "should" perspective, the decision of his/her behaviour will change accordingly.

An example of this change of perspective can be when individuals experience severe symptoms, their “should” response switches from continuing to work to taking sick leave and prioritising their health demands. Moreover, it is important to acknowledge that contextual factors will have an impact on when this switch happens and the extent of this intrapersonal conflict. For instance, when job demands increase, individuals’ idea that they should continue working even though they are not feeling well becomes stronger. The same pattern can be found between a low level of support from supervisors and colleagues and a high tendency to work when unwell.

In relation to stage 4 feedback, the study revealed that individuals do not tend to reflect on their work attendance decisions. They are more inclined to engage in such reflection when their ill-health symptoms become more severe or continue for more than a day. Additionally, when encouraged to evaluate whether their decision to work while unwell was appropriate, their primary focus centred more on the benefits associated with working while unwell rather than considering their health-related demands. Dolphin (2013) describes reflection as a systematic process that consists of the assessment of past events, the analysis of their consequences, and the identification of potential implications for similar situations in the future. It is a way to encourage continuous learning (Enuka and Evawoma-Enuka, 2015). Rooted in dual system decision-making theory, cognitive reflection is important for prompting better decision-making (De Neys, 2006; Tversky and Kahneman, 1974) by managing the interaction between system 1 (intuitive) and system 2 (deliberate) thinking, and it intervenes when necessary, shifting from intuitive responses to a more conscious and analytical decision-making process, thereby enhancing the quality of decisions (Frederick, 2005). To offer more context regarding presenteeism behaviour, individuals who decide to work while unwell can reflect on the impact their attendance behaviour has on their current state of health, such as whether their symptoms are deteriorating or improving, and they can assess their level of productivity up to that point as well and reassess their decision to continue soldiering on at the remainder of the day. This reflection can occur either during or after a day of presenteeism, enabling individuals to make decisions that strike a balance between their health and work performance demands. It will also help to prevent individuals from descending into the downward spiral of dysfunctional presenteeism and reduce the likelihood of them needing extended sick leave due to symptoms becoming unmanageable.

## 5.5 Conclusion

In summary, based on the PDM model (Whysall et al., 2023) and employing an experience sampling design, this diary study discovered several common decision-making patterns regarding presenteeism behaviour. The traits of the four stages outlined in the PDM model were witnessed in the data and individuals usually begin their decision-making process of presenteeism with an evaluation of their ill-health symptoms. However, it's important to note that the decision-making process does not strictly adhere to a linear progression, as suggested by the PDM model. Furthermore, work-related considerations are given priority in individuals' evaluation of available options, yet they also constrain the range of choices. For instance, when individuals believe they need to continue to work even if they feel unwell because of a heavy workload and impending deadlines, they tend to simplify their option evaluation (Stage 3) and decide to engage in presenteeism quickly. These findings not only provide empirical evidence for the PDM model introduced by Whysall et al. (2023) but also bridge the knowledge gap in presenteeism studies. Understanding how individuals perceive the array of options available to them, how they assess these options, and subsequently determine their work attendance behaviour when feeling unwell within specific situations is of paramount importance. Such insight delves into the core of effective management and offers a means to mitigate the detrimental consequences associated with presenteeism. Organisations should create effective managerial interventions to address presenteeism in the workplace and mitigate its negative impact. This can be achieved by fostering a positive and resourceful work environment, along with strong leadership, social support, enhanced self-efficacy, and improved mental health. Following, the next chapter presents the final stage of the three-stage mixed-method approach employed in the current study, which consists of semi-structured interviews.

## Chapter 6. Study 3 – Semi-structured interviews

### 6.1 Introduction

The final phase of the current study is the semi-structured interviews. All interviewees were from the same pool of participants in the other two stages (i.e., the cross-sectional survey and the diary study). They were invited through follow-up emails sent by the author, and most interviews were conducted through Microsoft Teams, with only one conducted via a phone call and recorded by Microsoft Teams as requested by the interviewee. Through semi-structured interviews, this stage aims to address the last research question: 'How can presenteeism be effectively managed, and how can we promote informed decision-making to balance health and work performance demands?' These interviews also provided additional context, such as individuals' feelings about their decisions, and details of attendance management policies and norms in the workplace that were not captured through the diary study and the cross-sectional survey.

Aligning with the pragmatism perspective (Riga, 2020), this study not only aims to further develop an understanding of the presenteeism decision-making process in theory but also intends to guide practitioners in developing effective managerial interventions to address presenteeism. Therefore, a more in-depth investigation from the individuals' perspective through semi-structured interviews is necessary.

Currently, not many organisations have adopted specific interventions to manage presenteeism. A recent research report published by the CIPD (2022) discovered that, out of the 804 organisations sampled, nearly half (47%) failed to take any action to manage presenteeism. It is common for managers to send home their subordinates when they realize they are very ill but still working (CIPD, 2019). Organisations and their culture play a critical role in the decision-making process of presenteeism as they create the overall atmosphere of individuals' work environments. Organisations should promote a healthier dynamic at work (Mori et al., 2022) and higher organisational support can help manage presenteeism prevalence at the workplace, leading to a decrease in individuals' intention to resign (Wu et al., 2023), or a higher tendency of long-term sickness absence (Bergström et al., 2009).

Moreover, since the outbreak of COVID-19, remote working has become more common, and

individuals find it challenging to disconnect from work due to the blurred boundary between work and home (Kniffin et al., 2021). Managers may struggle to detect signs of ill health through online communication (Kinman and Clements, 2023). Therefore, managers should adopt a health-promoting leadership that can have an impact on individuals' well-being in two ways (Jiménez et al., 2017). Firstly, it can directly strengthen health awareness in the workplace. Secondly, resource-oriented working conditions will be established, fostering a healthy work environment that enables individuals to make decisions that consider their health needs.

In addition, Kinman et al. (2019) pointed out that individuals usually harbour negative sentiments towards attendance management policies and procedures, including the trigger point system and return-to-work interviews. To encourage individuals to focus more on their health needs when deciding to work when unwell, attendance management policies should provide more flexibility for individuals who suffer from chronic health issues to take short-term sick leave to prevent their symptoms from worsening and not imply any potential disciplinary actions (Munir et al., 2008).

**By involving employees in the decision-making process of attendance management policies,** organisations can emphasise the importance of maintaining good health and well-being and fostering an environment where taking sick leave is not only encouraged but also considered acceptable (Kinman and Grant, 2021). Furthermore, Brunner et al. (2019) suggested that organisations should adopt a more personalised approach to adjusting job demands for their employees, since their research revealed that an increase in job demands affects individuals differently, depending on their roles and the resources available to them. To create a more personalised approach to managing presenteeism, more resources should be allocated to managers, to regularly monitor and adjust their staff members' workloads, which can prevent excessive stress and burnout (Kinman and Clements, 2023).

The semi-structured interviews in the final stage aim to inform the development of effective managerial interventions to manage presenteeism in the workplace and ultimately create a positive working environment for individuals. These interviews invited a number of participants from those who had completed both the initial cross-sectional survey and the diary study. These participants worked in various countries and held different roles and responsibilities, both at work and within their households.

The diversity of their backgrounds and experiences provided a comprehensive understanding of presenteeism across different cultural and occupational contexts.

To justify the decision to interview regular employees and not solely managers, there are a couple of reasons. Firstly, while managers play a significant role in the implementation of workplace policies and practices, regular employees have a ground-level understanding of how these policies and practices impact their health-related behaviour and how to decide their behaviour when experiencing ill-health symptoms on a working day. Secondly, including both regular employees and managers in the interviews allows for an exploration of their perspectives on presenteeism and sickness absenteeism at the workplace, providing deeper insights into the underlying cognitive process of presenteeism decisions. This can help to ensure that employee voices are heard and fosters the development of realistic and effective interventions. Next, the details and the rationale for using semi-structured interviews are presented.

## 6.2 Methodology

In general, interviews can be distinguished as unstructured, structured, and semi-structured (Brinkmann, 2014). The structure of an interview provides a frame to guide interviewees to discuss the questions with specific themes, rather than leading their opinions about these themes towards a certain direction. Interviews with no structure at all do not exist (Parker, 2005). It is important to support the interviewees with a flexible structure that enables them to voice their concerns and questions in their own words during the interviews (Brinkmann, 2014). Semi-structured interviews are one of the common data collection methods when it comes to qualitative research (Kallio et al., 2016; DiCicco-Bloom and Crabtree, 2006), and they can increase the depth of mixed-methods research by supplementing other approaches (Adams, W.C., 2015). In addition, semi-structured interviews are known to be versatile and flexible, and the interviewer can improvise the follow-up questions based on the responses from the interviewees (Rubin and Rubin, 2005), compared to structured interviews, in which the interviewer is supposed to read the questions word by word, and instructed not to provide any information beyond what is written in the interview questions (Conrad and Schober, 2008). Moreover, given that individuals might have different understandings towards a single word (Treece

and Treece, 1986), semi-structured interviews allow the interviewer to change some wording accordingly but not to change the meaning of the questions. The semi-structured interviews are useful in gaining new and in-depth insights from the participants' perspectives (Adams, E., 2010).

### 6.2.1 Approach

At the initial cross-sectional questionnaire, participants were asked whether they would like to be invited back for subsequent online interviews, that aimed to investigate their emotions regarding their presenteeism and sickness absenteeism decisions, and the type of assistance and accommodations they have received or desire from their employer and co-workers. Of 399 initial questionnaire respondents, 120 (30.1%) agreed to participate in the interviews. An email was sent to these 120 participants to ask whether they were willing to join the online interviews and their preferred time and date for conducting the interview. As a result, 28 individuals replied and gave their preferences of when to have the interviews and 21 of them turned up to the scheduled interviews in November 2021.

It is worth noting that all 21 interviewees have completed the diary study, and only 1 of them did not report experiencing any ill-health symptoms on a working day throughout the diary study. Most interviews were conducted and recorded through Microsoft Teams, and one interview was conducted by telephone, as requested by the participant. All interviews were audio recorded and subsequently fully transcribed.

### 6.2.2 Interview Questions

Aiming to address the ultimate research question, "How can presenteeism be effectively managed, and how can we promote informed decision-making to balance health and work performance demands?" and provide additional details regarding attendance management policies at work, the semi-structured interviews were designed to delve into four key aspects: (1) attendance management policies and procedures; (2) feelings and perceptions of their work attendance decisions; (3) the impact of COVID-19 and change of work mode to their presenteeism/sickness absenteeism decisions; (4) support and resources that can encourage them to prioritise their health when deciding whether to engage in presenteeism.

While the first two aspects of the semi-structured interviews offer in-depth insights into the



working environment of the interviewees and their emotional responses to their decisions, the significance of the third aspect cannot be overstated. According to Ferreira et al. (2022), the COVID-19 pandemic ushered in a new normal for most individuals, fundamentally reshaping the landscape of work. Therefore, examining how the pandemic influenced individuals' work behaviour and integrating this in the post-pandemic context is essential. Furthermore, the fourth aspect of the semi-structured interviews serves a pivotal role by addressing and mitigating the pronounced bias towards work-related factors that emerged in the previous stages of this thesis. This bias urges the need to explore strategies for balancing health and work-related considerations in individuals' presenteeism decision-making process.

The attendance management policies and procedures at the interviewees' workplace have been identified as one of the factors influencing presenteeism decisions (Kinman et al., 2019). At the beginning of the interview, the interviewees were asked to describe the process of taking sick leave in their organisations, if there are any procedures they need to go through when they return to work, and if these procedures affect how they decide to work when unwell.

Moving to the second part, which focused on interviewees' feelings and perceptions about their work attendance decisions, questions regarding how they feel about their decisions of working when unwell and taking sick leave, and whether they ever think about whether they made the right decision, in terms of their health and recovery were asked. (see Appendix 3 for the complete list of interview questions). In addition, the interviewees also answered the following questions:

- What would take for them to take sick leave when they experience ill-health symptoms instead of continuing to work when feeling unwell,
- What would happen if a member of staff with chronic illness was often absent for a short period,
- How has the Covid pandemic influenced your decision to work when feeling unwell or take sick leave

Moreover, discussions regarding what kinds of support and resources are offered to them regarding health and wellness in general, any support is offered to staff who experience long-term health issues, what supports they would like to receive but are currently not in place within their company,

and what would make them feel more comfortable to take sick leave were also included in the interviews.

Additionally, if the interviewee claimed that they manage subordinates at work, they would be asked a question about how they feel about their subordinates taking sick leave, and what advice they would give the subordinates if they showed up to work sick.

### 6.2.3 Demographic characteristics

Of 21 interviewees, 14 (66.7%) were female, whilst 6 (23.8%) were male, and 1 did not disclose their gender. The mean age was 38.3 years old ( $SD = 14.6$ , ranging from 22 to 60 years old), and the average tenure was 7.7 years ( $SD = 6.0$ , ranging from  $< 1$  to 23.8 years). The mean weekly working hours were 40 ( $SD = 10.6$ , ranging from 15 to 60 hours). Regarding their work locations, 13 interviewees (61.9%) were based in the UK, 2 in South Africa (9.5%), and 1 each from Canada, Indonesia, the Netherlands, and Portugal (4.8% each). Two interviewees (9.5%) did not disclose their work location. Among the 21 interviewees, the majority, 17 (81.0%), worked in large-sized organizations, while 2 (9.5%) were in medium-sized, 1 (4.8%) in small-sized organizations, and 1 did not specify the size of their employer.

In addition, 19 interviewees (90.5%) had a permanent full-time contract, whilst 1 interviewee (4.8%) had a fixed-term full-time contract, and another interviewee (4.8%) had a permanent part-time contract. Regarding their overall health, 6 interviewees (28.6%) rated it as slightly bad, 4 rated it as moderately bad and moderately bad (19.0% respectively), 3 rated it as neither good nor bad (14.3%), and 2 rated it as extremely good and slightly good (9.5% respectively). In terms of their financial situation, 8 (38.1%) were able to keep up with all their bills without any difficulties, whereas 6 (28.6%) indicated that it was a struggle to keep up with all the bills occasionally, 5 (23.8%) described it as a constant struggle to keep up with their bills, and 2 (9.5%) were not able to keep up with their bills. Moreover, more than half of the interviewees (52.4%) did not manage anyone at work, while two-thirds of them (66.7%) did not have caring responsibilities at home.

Moreover, 12 out of 21 interviewees (57.1%) did not need to work on-site during lockdown, while 8 (38.1%) were required to work on-site and 1 of them (4.8%) needed to work on-site sometimes. The interviewees worked in a variety of sectors, such as accountancy, banking, or finance (14.3%),

business, consultancy, or management (9.5%), healthcare (9.5%), and teacher training or education (14.3%). More details regarding each of the interviewees can be found on Table 8. The mean duration of interviews was 20.5 minutes (SD = 5.80, ranging from 10.5 to 30.5). Finally, it is worth noting that one of the interviewees (Participant 122) did not experience any ill-health symptoms during the diary study.

Table 8. Information related to the interview participants

	Sector	Country of working	Contract type	Financial situation	Overall health	Emotional distress	self-efficacy	Organisation adjustment norms	Job demands	Leadership	Social support	Adjustment latitude
Participant 014	Teacher training or education	UK	Permanent full-time	Not keeping up with all bills - have fallen behind with many of them	Moderately bad	Slightly stressed	Moderate	High	Moderate	Moderate	Moderate	High
Participant 022	Business, consultancy or management	UK	Permanent part-time	Keeping up with all bills - without any difficulties	Moderately bad	Not stressed	High	Low	Moderate	Moderate	Moderate	Low
Participant 033	Law	Netherlands	Permanent full-time	Keeping up with all bills - without any difficulties	Slightly good	Slightly stressed	Moderate	Moderate	Moderate	Moderate	Moderate	High
Participant 052	Public services or administration	Canada	Permanent full-time	Keeping up with all bills - but it is struggle from time to time	Moderately good	Not stressed	moderate	Moderate	Moderate	Moderate		High
Participant 053	Accountancy, banking or finance	South Africa	Permanent full-time	Keeping up with all bills - but it is struggle from time to time	Slightly good	Moderately stressed	Moderate	High	High	Moderate	High	Low
Participant 060	Teacher training or education	UK	Permanent full-time	Keeping up with all bills - but it is a constant struggle	Slightly bad	Moderately stressed	moderate	Moderate	Moderate	Moderate	Moderate	Low
Participant 061	Engineering and manufacturing	Portugal	Permanent full-time	Keeping up with all bills - without any difficulties	Extremely good	Slightly stressed	Low	Low	moderate	Low	moderate	Low
Participant 078	healthcare	South Africa	Permanent full-time	Not keeping up with all bills - have fallen behind with some of them	Slightly bad	Moderately stressed	Low	Low	High	Low	Moderate	Low

Participant 083	Accountancy, banking or finance	UK	Permanent full-time	Keeping up with all bills - without any difficulties	Moderately good	Moderately stressed	High	High	High	High	Moderate	Low
Participant 085	Computing or IT	UK	Permanent full-time	Keeping up with all bills - but it is struggle from time to time	Slightly bad	Highly stressed	High	Low	High	Low	Low	Low
Participant 087	Facility management	UK	Permanent full-time	Keeping up with all bills - without any difficulties	Neither good nor bad	Slightly stressed	High	High	High	High	High	High
Participant 091	Teacher training or education	UK	Permanent full-time	Keeping up with all bills - without any difficulties	Slightly bad	Slightly stressed	High	Moderate	High	Moderate	Low	Low
Participant 093	Transport management	UK	Permanent full-time	Keeping up with all bills - without any difficulties	Neither good nor bad	Slightly stressed	High	High	High	Moderate	Moderate	Low
Participant 096	Retail	UK	Permanent full-time	Keeping up with all bills - but it is struggle from time to time	Extremely good	Not stressed	High	High	Moderate	High	High	High
Participant 098	Accountancy, banking or finance	Indonesia	Permanent full-time	Keeping up with all bills - without any difficulties	Slightly bad	Slightly stressed	Moderate	Moderate	Moderate	High	Moderate	High
Participant 100	Healthcare	UK	Fixed-term full-time	Keeping up with all bills - but it is struggle from time to time	Moderately good	Slightly stressed	Low	High	High	Low	Moderate	Low
Participant 102	Hospitality or events	UK	Permanent full-time	Keeping up with all bills - but it is struggle from time to time	Moderately bad	Moderately stressed	Low	Moderate	High	Moderate	High	Low
Participant 106		UK	Permanent full-time	Keeping up with all bills - but it is struggle from time to time	Moderately bad	Moderately stressed	high	Moderate	High	Moderate	Moderate	High
Participant 111	Hospitality or events	UK	Permanent full-time	Keeping up with all bills - but it is struggle from time to time	Slightly bad	Moderately stressed	Moderate	Moderate	Moderate	Moderate	Moderate	High

Participant 115	Science or pharmaceuticals	UK	Permanent full-time	Keeping up with all bills - but it is struggle from time to time	Neither good nor bad	Highly stressed	high	Moderate	High	Low	Low	Low
Participant 122	healthcare		Permanent full-time	Keeping up with all bills - but it is struggle from time to time	Moderately good	Moderately stressed	Moderate	High	High	High	High	High

#### 6.2.4 Analytic Approach

Since all interviewees have participated in the previous two stages of the current doctoral research project, combining the interview data with the other two stages is more insightful. Thus, the narrative analysis approach has been adopted to analyse the data generated from the semi-structured interviews. Epistemologically speaking, narrative analysis is a method that researchers can use to explore how interview participants memorise, structure, and voice their experiences, and it is a path that leads the researcher to understand the complexity of the interviewees' lives and relations (Esin, 2011). Moreover, this qualitative analytic method considers each interview participant as an analysis unit, and the researcher will investigate the interviewees' experiences closely through their narratives (or stories) and examine how they make sense of their surroundings (Josselson and Hammack, 2021; Squire, 2008).

Narrative analysis is particularly beneficial because it provides a holistic understanding of participants' experiences (Bamberg, 2012). This method captures the richness and depth of personal stories, providing a comprehensive view of the participants' perspectives and the contexts in which they live. Narrative analysis is more than storytelling. It suggests a broader approach where individuals actively assign meaning to the particularity of events and their involvement, accountability, and responsibility, including others and themselves, within their social contexts (Bruner, 1986, 1991).

Bamberg (2012) explained that there are two approaches to analysing narratives: Top-down and Bottom-up. Akin to an inductive approach, the bottom-up orientation begins with the data and allows themes to emerge naturally, rather than imposing preconceived categories, while the researcher can develop a grounded understanding of the participants' experiences (Azungah, 2018). On the other hand, the top-down approach starts with the overall structure or concept of the text and then looks at how the smaller parts fit into this larger structure, which is more similar to the deductive method. This process enables researchers to dissect the narrative into components for individual analytic scrutiny while also relating them to the broader context, thereby ensuring a comprehensive understanding of the narrative (Bamberg, 2012).

It is worth noting that the interviews conducted in the current research were semi-structured. The interview questions fall into four core categories, including the attendance management policies at

the interviewees' workplace, whether those procedures influence their decision to work when unwell, how they perceive their decisions of working when unwell or taking sick leave, and what kind of support and resources they have and would like to receive from their employer. The overall structure has been provided by the interview questions, making a top-down deductive approach more suitable for the narrative analysis in the current study.

To conduct this analysis, the study adapted the steps introduced by Esin (2011) to fit the requirements of the current research. First, after transcribing the interview recording, a narrative was composed for each interviewee. Each narrative includes the interviewee's background information from the initial cross-sectional survey, a summary of their diary study entries, and a conclusion of their interview from a third-person perspective. Second, subtexts or segments from all narratives were selected by highlighting relevant content related to the interview questions (e.g., what is the process of taking sick leave?; how do they feel about their presenteeism/sickness absenteeism decisions?; what kinds of resources and support are provided by their employer?). Third, the content was categorised and assigned to the relevant themes. Finally, conclusions were drawn.

As an example of a narrative for the study, Participant 096, a 46-year-old female, has been employed in a large UK retail organization since August 2006 under a permanent full-time contract, working 42 hours per week. She does not hold any managerial responsibilities at work and does not have caregiving duties at home. While she manages to keep up with her bills, she occasionally finds it challenging. At the time of completing the initial survey for this study, she reported good health and low stress levels. She holds conservative views regarding absenteeism. The attendance pressure norms and organizational adjustment norms in her workplace are moderately relaxed. Participant 096 experiences a high level of latitude in adjusting her work, as well as strong social support and leadership. Her job demands are moderate, and she expresses high self-efficacy and job security.

During the diary study, she completed 12 daily surveys and reported 2 health incidents. During her first health incident, she mentioned having trouble breathing while wearing face masks at work but did not elaborate on her thought process through open-ended questions. Despite this, she continued working as usual. In her second health incident, she suffered from musculoskeletal pain. She noted that she could have taken sick leave but chose not to because she felt she was not ill enough and did not



want to disappoint her team. She described it as a quick decision. Additionally, she noted that her absence record had been affected by the track and trace app mandated by the UK Government for COVID-19.

During the interview, she informed the researcher that her workplace was quite understanding. She emphasised the importance of promptly notifying management of her illness on the day she was not feeling well enough to work and mentioned that she only needed to provide a sick note after five days of sick leave. Moreover, she received full sick pay rather than just statutory sick pay. Upon returning to work, she was required to attend an interview. Working in the retail sector, her employer actively encouraged her to stay home when feeling unwell during the pandemic.

She also indicated that she rarely became seriously ill and generally continued working when possible. However, she expressed feeling comfortable about taking sick leave when necessary as it is not frequent for her. The return-to-work interview, she noted, did not significantly influence her decision-making process when working while unwell. She described such interviews as a formality, varying in length based on the reason for her absence. For instance, when she was off work due to a broken back, she had a detailed discussion about her capabilities, limitations, and how her employer could assist her in returning to work. Interestingly, she highlighted a norm in her organisation where employees face an informal hearing if they take two episodes of sick leave, potentially affecting their eligibility for a pay rise that year. This norm influences her decision-making regarding working while unwell, as she is keen to avoid a poor sickness record. Furthermore, she praised her employer for offering various resources, including Headspace, a wellness room, free physiotherapy sessions, and access to occupational health consultants for confidential discussions about her health issues.

As illustrated by the example, each narrative comprises the interviewee's background information, a summary of her diary study, and a conclusion based on her interview. Moving on to the analysis of these narratives, Riessman (2008) outlines three distinct approaches to present narrative analysis findings: thematic, structural, and dialogic/performative. The thematic approach focuses on identifying the topics and themes that emerge within the narrative's content. Structural analysis, on the other hand, examines the linguistic elements and the overall sequence of the story, paying close attention to how the narrative is constructed. Lastly, the dialogic/performative approach typically

considers the interaction between the storyteller and the audience, looking at how the narrative is delivered and perceived.

In the current study, the thematic approach for presenting the narrative analysis findings has been adopted in the current thesis since it provides a structured yet flexible method for exploring the rich content and meaning embedded within narratives. This approach provides insights into both individual experiences and broader social phenomena (Esin, 2011; Riessman, 2008).

### 6.3 Results

As demonstrated above, four primary themes have emerged from the interview questions, including attendance management policies and procedures, feelings and perceptions towards work attendance decisions, the impact of COVID-19, and the perception of current support and desired future resources. These themes offer valuable context for addressing the research question: “How do people make their decisions to work when they are physically or mentally unwell? And under what circumstances?”. They also serve as a solid foundation for addressing the final research question: “How can presenteeism be effectively managed, and how can we promote informed decision-making to balance health and work performance demands?”. Sub-themes will be presented under each of the primary themes.

#### 6.3.1 Common Practice of Attendance management norms, policies and procedures

Workplace attendance management policies and norms are among the contextual factors identified as influencing presenteeism decisions. In the United States, research has shown that paid sick leave can reduce the prevalence of presenteeism at work (Callison and Pesko, 2022), whereas in the Nordic region (e.g., Sweden, Norway, Italy), less paid sick leave correlates with higher levels of presenteeism (Rostad et al., 2017). Paid sick leave policy is just one component of attendance management norms, policies, and procedures at work. The process of declaring sick leave and the procedures for returning to work also significantly influence how individuals decide whether to engage in presenteeism. However, evaluating them through a survey can pose difficulties. To gain insights into these policies, at the beginning of each interview, every interviewee was asked to describe how they normally declare sick leave at work.

Even though the interviewees work in various countries, it emerged that most interviewees follow a similar protocol, involving direct communication with their line manager when declaring sick leave. Upon their return to work, participants often undergo an interview or are required to report their absence through a designated system. This practice emphasises a consistent approach across countries, reflecting the importance of direct supervisor involvement and structured reporting mechanisms in managing sick leave declarations.

#### *Contact the line manager to declare sick leave*

To declare sick leave, most interviewees indicated that they needed to contact their line manager directly and inform them that they were not working due to sickness on the day. For example, when asked about their process for claiming sick leave, Participant 033 described:

“I would just give my boss a call or send him a text and say that I'm not feeling well.”

(Participant 033, 34-year-old female, worked in a small-sized law firm in the Netherlands, permanent full-time contract, managed 3 people at work)

Participant 083 shared a similar experience.

“On the morning you feel ill, you have to phone [...] your direct line manager to tell them that you won't be in for the day.” (Participant 083, 47-year-old female, worked in a large-sized organization in the UK, permanent full-time contract, managed more than 50 people at work)

Some interviewees were able to self-certify their sick leave for up to a certain number of working days, particularly for interviewees who were working in the UK and South Africa. After that, they either need to provide a sick note or a doctor's note if they have a longer period of sickness absence.

For instance, Participant 111 stated:

“So [for the day we don't feel well] we phone up and tell them that we're not coming in and then get a sick note after seven days [of self-certified].” (Participant 111, 31-year-old female, permanent full-time contract, no managerial responsibilities)

Moreover, Participant 052 also illustrated:

“[The need for a doctor’s note is] the manager's decision, but I would say a week would be fine, like five days [of self-certified]” (Participant 052, 54-year-old female, worked in a large-sized organisation in Canada, permanent full-time contract, managed 1 person at work)

This finding supports the research of Halbesleben et al. (2014) which uses dialectical theories to investigate how employees choose to engage in presenteeism. Their research proposed that employees often evaluate this relationship when deciding whether to disclose health issues and take sick leave or to continue working while concealing their symptoms. The importance of supervisor-employee relationships in shaping presenteeism behaviours has been highlighted.

#### *Return-to-work interviews and Electronic Attendance Management Systems*

Moreover, mirroring the findings of Baker-McClearn et al. (2010), most interviewees needed to either attend a return-to-work interview or report to a system when they went back to work from sick leave. For example, Participant 083 shared:

“On the morning you feel ill, you have to phone [...] to your direct line manager to tell them that you won't be in for the day. And then when you return to work, you have a return-to-work interview. You update the HR system to say [...] how long you have been off and what your symptoms were” (Participant 083, 47-year-old female, worked in a large-sized organization in the UK, permanent full-time contract, managed more than 50 people at work)

In addition, Participant 100 expressed:

“If you're not feeling well, we're not going to come in and then we just keep them updated. My boss gets in touch and just find out how you doing. So again, to say when we're coming back, and then we do a return to work interview.” (Participant 100, 34-year-old female, worked in the healthcare sector in the UK, fixed-term full-time contract, no managerial responsibilities)

Moreover, some companies also adopted an electronic system to manage their employees’ sick leave. For instance, Participant 087 described:

“We have an independent system [...] and the employees are expected to phone them on a daily basis to confirm the absence up to the point that a sixth certificate is issued” (Participant 087,

48-year-old male, worked in a large-sized facility management company in the UK, permanent full-time contract, managed 11 people at work)

Similarly, Participant 014 also needed to report her return on a system using an electronic form. “Once we're back [from sick leave], we fill out a return-to-work form. And that's it really, it's quite a simple process” (Participant 014, worked in a large-sized organisation in the UK, permanent full-time contract, managed 2 people at work)

Some interviewees find the need to justify their sick leave stressful. For instance, Participant 106 had to email the department and copy their line manager to declare sick leave, expressing clear frustration about the requirement for justification during return-to-work interviews.

“After I've got a bit better and come back to work. That can be when the issues begin. Because then I will have to have some kind of interview. [They will ask] are you better? Are you going to be sick again, [...] And that makes it feel as if I have to justify why I've taken sick leave” (Participant 106, female, worked in a large-sized organisation in the UK, permanent full-time contract, no managerial responsibilities)

However, different from the study of Baker-McClearn et al. (2010), in the current study, several interviewees expressed favourable sentiments regarding these procedures and indicated that they had a minimal impact on their decision-making process between presenteeism and sickness absence. For example:

“I think it's a good idea to have the return-to-work interviews to make sure that you're right to go back” (Participant 122, 33-year-old female, worked in a large-sized organisation, permanent full-time contract, no managerial responsibilities)

“[when you return to work from sick leave], there is usually a quick chat with your line manager, and [it has] no [influence on my decision of presenteeism]” (Participant 091, 35-year-old female, worked in a large-sized organisation in the UK, permanent full-time contract, managed 13 people at work)

“I [don't] think [the return-to-work interview affects my decision-making] because the place I'm working at the moment is really supportive. [...] When I went back to work [my boss] was

just making sure that everything was okay.” (Participant 100, 34-year-old female, worked in a large-sized organisation in the UK, fixed-term full-time contract, no managerial responsibilities)

Among the 21 interviewees, only a few individuals expressed feeling pressured by return-to-work interviews, while the majority felt comfortable with them, especially when they perceived them as supportive. This suggests that a structured procedure for returning to work can be beneficial when it functions as a supportive mechanism, providing useful insight for RQ3 to offer effective managerial interventions targeting presenteeism. Such procedures ensure that employees receive the necessary assistance and accommodations to facilitate their return to full productivity. These findings highlight the importance of creating a supportive work environment to effectively manage presenteeism and promote informed decision-making, balancing health and work performance demands.

*Attendance records and tangible ill-health symptoms influence managers' attitudes towards sick leave*

Interviewees who had managerial responsibilities at work also discussed how they felt about their direct reports taking sick leave. They expressed that they were fine with their staff members taking sick leave, with some interviewees mentioning that they could tell whether someone was genuinely sick or not since they knew them. They also highlighted the significance of maintaining a strong attendance record and noted that tangible signs of sickness could evoke greater sympathy and understanding from them. For example:

“Generally, I'm [...] very supportive, but [...] sometimes [...] they [*take sick leave*] all the time. [...] and their records [...] kind of make me [*wonder if*] they're [...] actually poorly.”

(Participant 083, 47-year-old female, worked in a large-sized organization in the UK, permanent full-time contract, managed more than 50 people at work)

“Some [...] are clearly ill because they never go ill. Therefore [*if*] they do, they must be ill, [*but*] there were others that seem to find an excuse or reason just to be ill. [...] I think it [...] very much depends on the individual.” (Participant 087, 48-year-old male, worked in a large-sized facility management company in the UK, permanent full-time contract, managed 11 people at work)

Managers highlighted the balance between supporting their team's health needs and maintaining operational efficiency. They recognised the value of a compassionate approach towards sick leave, which fosters a supportive work environment. The ability to distinguish genuine illness from other reasons for absence was seen as crucial, allowing managers to provide appropriate support while ensuring organisational needs are met effectively. **When developing interventions for presenteeism, it is crucial to provide managers with appropriate training to enhance their understanding and empathy. Additionally, organisational support should ensure that managers have the flexibility and resources needed to make necessary adjustments for their subordinates.**

#### *Sick pay policy variance*

The majority of the interviewees had access to paid sick leave, with the exception of one participant (Participant 102) who was under a 0-hour contract. **Participant 102, a 56-year-old female employed in a large-sized organization in the hospitality or events sector in the United Kingdom on a permanent full-time basis, did not have any entitlement to paid sick leave. Throughout the project, she demonstrated a remarkably high incidence of presenteeism. In the initial cross-sectional questionnaire, she reported 365 days of presenteeism but zero absenteeism days or episodes in the past 12 months. During the diary study phase, she completed 19 daily diary surveys and documented 19 health incidents. In most instances of ill health, she continued working despite her condition, citing financial pressures as her primary reason. She expressed fear of losing her job and her home if she were to take sick leave. During the interview, she told the author that she used up all her annual leave when she had COVID.**

**“I've recently had COVID. It is what it is? Isn't it? I had to use all my holidays. [When I worked while unwell] I quite often think I've made the wrong decision. However, I don't feel that have much choice in the matter.” [Participant 102, 56-year-old female, worked in a large-sized organization in the UK, 0-hour contract, no managerial responsibilities]**

**Paid sick leave significantly influences the presenteeism decisions of interviewees experiencing financial difficulties. For these individuals, the absence of paid sick leave compels them to prioritise work demands over their health needs. This financial pressure drives them to continue working despite illness, fearing potential repercussions such as loss of income or job security. The lack of a safety net**

from paid sick leave increases their likelihood of enacting presenteeism, as they perceive taking time off work due to illness as a luxury they cannot afford. To foster a positive and supportive work environment, which is crucial for managing presenteeism effectively, it is essential to include paid sick leave for employees.

### 6.3.2 Feelings and perceptions towards presenteeism and sickness absenteeism

How individuals perceive their behaviour has an impact on their decisions in the future when encountering a similar situation. Individuals are more likely to make the same decision if they experience positive outcomes in similar past situations (Verharen et al., 2020). Many interviewees exhibited mixed emotions when discussing their decisions to work while unwell. Simultaneously, they often highlighted feelings of guilt when considering taking sick leave.

#### *Mixed feelings towards presenteeism*

During the interviews, interviewees were asked to reflect on their presenteeism decisions and discuss how they felt about them. The internal conflict between “what they should do” and “what they want to do” was evident. For example, Participant 014 knew that working while unwell was not the best thing to do for her health, but she felt good about getting work done. A quote from Participant 014 will be:

“I kind of know [*working when unwell*] is probably not the best thing to do for my health. [...] If I'm not feeling well, about halfway through the day, I just get really irritated that I've put myself in a position where I'm making myself feel worse because I'm trying to keep up with work at the same time, even though I'm clearly nowhere near as productive. [...] I feel good that I'm doing my best and trying to get things done and happy that I'm not going to return from sick leave with a mountain of things to do. But at the same time, I get very frustrated with myself for doing that.” (Participant 014, 34-year-old female, worked in a large-sized organisation in the UK, permanent full-time contract, managed 2 people at work)

Moreover, Participant 087 found himself torn between the need to take care of his health and the pressure to meet work demands. He knew that sick leave was available, but he rarely felt that he



could take it without consequences, such as his workload piling up and falling behind his workload, even though he was entitled to take sick leave. During the interview, he described:

“In one breath, [...] I'm [*working when unwell*] to manage the [...] workload [...] you can feel conflicted [*as*] one breath you're sick, you get paid sick [...] I would say rarely, if ever get afford the luxury of going sick without [...] knowing that there's consequences to your sickness [...]” (Participant 087, 48-year-old male, worked in a large-sized facility management company in the UK, permanent full-time contract, managed 11 people at work)

#### *Feeling guilty about taking sick leave*

Alternatively, echoing several presenteeism and sickness absenteeism studies (e.g., Borsi and Gerpott, 2023; Grinyer and Singleton, 2000; Henderson et al., 2012), many interviewees showcased feelings of guilt when discussing their feelings towards taking sick leave. For instance:

“If I'm really unwell, then it doesn't bother me [...] But then if I'm just kind of mildly ill, could push through if I really wanted to, I tend to feel quite guilty and then I'll like, check my emails [...] quickly attend that one meeting [...] even though I'm signed off sick.” (Participant 014, 34-year-old female, worked in a large-sized organisation in the United Kingdom, permanent full-time contract, managed 2 people at work)

“If I take sick leave [...] when I actually have a lot of work, I tend to feel guilty.” (participant 098, 25-year-old female, worked in a large-sized organisation in Indonesia, permanent full-time contract, managed 4 people at work)

“Sometimes you do feel a bit guilty, you feel a bit of a fraud, because you're like, [...], I'm at home, and I feel fine. [...] but actually if I'd gone to work, I would be feeling a lot worse than I actually am.” (Participant 115, 39-year-old female, worked in a large-sized organisation in the UK, permanent full-time contract, managed 1 person at work)

#### *Being physically unable to work to switch to sickness absenteeism*

Intriguingly, the interviewees revealed that to take sick leave without feeling guilty, they would need to be physically incapable of working or exhibit tangible signs of illness, which would make their need for sick leave more convincing and legitimate. For instance,

“[For me to take sick leave, I will need to be] struggling to get up out of bed, [...] like I was the other week with my hip because I think something [...] noticeable. [makes a] difference. So if people [...] asking me all day, are you okay [...] that would make me think about taking it off.” (Participant 100, 34-year-old female, worked in a large-sized organisation in the UK, fixed-term full-time contract, no managerial responsibilities)

“[For me to take sick leave instead of continuing to work] it has to be something where I just don't feel physically capable.” (Participant 060, 58-year-old male, worked in a large-sized organisation in the UK, permanent full-time contract, no managerial responsibilities)

“I took some sick leaves, because of some surgeries I had that prevented me [from working] physically. [...] I would say [...] either surgery or a sudden illness or like high fevers, [or] something that would prevent me [from] [...] moving myself and [being] independent, [then I will take sick leave].” (Participant 061, 37-year-old male, worked in a large-sized organisation in Portugal, permanent full-time contract, managed 6 people at work)

Moreover, other interviewees who have a high level of self-efficacy also exhibit similar patterns of working when unwell. For example, Participant 022 completed 9 daily diary surveys and reported 9 health incidents, all of which resulted in presenteeism. In her diary study responses, she repeatedly expressed a desire not to let her colleagues down and conveyed feelings of guilt about not working. During her interview, she reemphasised:

“Part of me, it's a constant battle in my head, because I'm just a type A personality who likes [...] to do what I say I'm going to do.” (Participant 022, 60-year-old female, worked in a medium-sized company in the UK, permanent part-time contract, no managerial responsibilities)

Similarly, Participant 083 completed 11 diary entries and reported experiencing ill-health symptoms on 3 working days. For example, on the first day of her daily diary survey, she experienced severe symptoms of anxiety, depression, and stress. When asked what triggered her decision-making process, she wrote "Pressure to perform," "Workload increasing" and "Anxiety makes it difficult to concentrate and make decisions." Although she had the option of taking sick leave, she decided to work

as usual and she wrote "I would not take time off for anxiety as it would make it difficult to return for me" in her evaluation.

During her interview, she reiterated that she would need to be debilitated to stop working. She emphasised that she generally prefers to go to work, especially since she can work from home. Additionally, she mentioned that she did not feel pressured to work and would take sick leave if she truly could not work.

"I don't feel like I'm under any pressure to work. I've got a really good sickness record. And I never would be in trouble [...] I won't feel like I'd be able to have time off if I were underperforming [...] I just enjoy going to work. I'm probably one of those strange people who are exceedingly engaged with my job [...] and therefore I never want to be out of work when I could be working" (Participant 083, 47-year-old female, worked in a large-sized organization in the UK, permanent full-time contract, managed more than 50 people at work)

After reviewing the initial cross-sectional survey data, it was evident that the interviewees who did not face any financial difficulties and mostly held permanent full-time contracts exhibited a very high threshold for taking sick leave. They tended to continue working despite experiencing health issues, demonstrating a strong commitment to their roles and responsibilities. This high threshold for taking sick leave, while indicative of dedication, also raises concerns about potential negative impacts on both their health and work performance. If not managed appropriately, it might lead to dysfunctional presenteeism, where individuals work inefficiently while compromising their health (Karanika-Murray and Biron, 2020).

Therefore, to manage presenteeism effectively among these individuals, organisations should consider implementing strategies that address both health and work-related factors. For instance, promoting a culture that values health and well-being can encourage employees to take necessary sick leave without fear of judgement or negative repercussions. Providing regular health screenings and wellness programs can also help in early identification and management of health issues, reducing the likelihood of employees working while ill. Additionally, fostering open communication between employees and management can create an environment where employees feel supported and are more likely to make informed decisions about taking time off when needed.

Moreover, the interviewees in the current study did not exhibit a tendency to use sick leave as an excuse to avoid work, which is a common suspicion among managers. This finding challenges the assumption that employees might misuse sick leave to evade work responsibilities. Instead, the data suggests that most individuals genuinely strive to fulfil their job duties, even when struggling with their health issues. This highlights the importance of addressing such misconceptions among management and focusing on supportive practices that genuinely facilitate employee well-being and productivity.

### 6.3.3 The Impact of COVID-19 and the Shift to Working From Home

The COVID-19 pandemic has shifted many companies and organisations to work from home. Among the interviewees, only a small number of them did not have the option of working from home during COVID, primarily due to the nature of their jobs. While remote work offers increased flexibility and comfort for the interviewees, it also amplifies their inclination to work when unwell. Similar to the findings from Hayes, S.W. et al. (2020) and Shimura et al. (2021), many interviewees mentioned feeling a heightened sense of obligation to work even when they were slightly unwell because they didn't have to commute to the workplace and could work in a comfortable environment at home. Furthermore, they disclosed that they tended to work longer hours when working from home as compared to when they worked in the office.

#### *More inclined to work when unwell*

For the interviewees who were able to work from home, many of them expressed that COVID-19 and working from home made them more inclined to work when they were feeling unwell. For instance, Participant 022 described that working from home made enacting presenteeism easier since she could wear comfortable clothing while working, and Participants 087 and 085 seconded this opinion in the interview and stated:

“You can stop [*whenever*], you can start [*whenever*]. You do not need to worry about having to get dressed. [...] You do not have to worry about the commute to [...] work or anything like that. You don't need to worry about [*whether you are*] going to pass on whatever is making you ill to somebody else because at the end of the day, you are in your own house” (Participant 087, 48-year-old male, worked in a large-sized facility management company in the UK, permanent

full-time contract, managed 11 people at work)

“[COVID and the shift to working from home] probably made the decisions worse. [...] Before [COVID] I would kind of have a think and be like, alright, am I feeling well, can I get out of bed, that sort of thing. Now, when I'm working at home, [...] I feel like there's almost more pressure to still try and log on, because [...] you're in the comfort of your own home, you can sit in your bed with your laptop” (Participant 085, 29-year-old male, worked in a large-sized organisation in the UK, permanent full-time contract, no managerial responsibilities)

“I probably work more when I'm unwell now than I did before [...] when you just feeling a bit under the weather, it's not like you're having to go out and travel to work and do all the extra things as well. You can just sign on and get on with your work. And also, you're not passing anything to anyone, either” (Participant 014, 34-year-old female, worked in a large-sized organisation in the UK, permanent full-time contract, managed 2 people at work)

The COVID-19 pandemic and the subsequent shift to working from home have reshaped the dynamics of presenteeism. While remote working offers unparalleled comfort and flexibility, it also blurs the boundaries between home and work. This change has led many employees to feel a heightened obligation to work through illness, potentially exacerbating the issues associated with presenteeism (Ferreira et al., 2022; Schmitz et al., 2023; Shimura et al., 2021). The experiences of the interviewees underscore the need for organisations to develop clear policies and support systems that address the challenges of remote work, ensuring that employees can prioritise their health without feeling pressured to maintain productivity at the expense of their well-being.

### *Working Longer Hours*

Another impact of COVID that has been highlighted in the interviews is the tendency to work longer hours increases when they work from home. For example, Participant 014 described that one night she had trouble sleeping and decided to do some work in the middle of the night.

“I do [work longer hours when I work from home]. Definitely. [...] I was online the other night, I couldn't sleep. So I went online in the middle of the night to get some work done that I haven't finished that day.” (Participant 014, 34-year-old female, worked in a large-sized organisation

in the UK, permanent full-time contract, managed 2 people at work)

“COVID has [...] changed the way a lot of us think. [...] since we've been working from home, we actually work longer hours.” (Participant 053, 27-year-old female, worked in a large-sized organisation in South Africa, permanent full-time contract, no managerial responsibilities)

“If I am unwell, I still work. [...] I can rest in between meetings, or, like, in between work [tasks], because [...] I'm at home [...] I can't be completely absent, because [...] they contact me via WhatsApp. [Prior COVID] in the workplace [...] we leave our laptops there, [...] and then we go home, and we tend to rest, [but now if] I'm feeling unwell and I come back home from work at like 8 pm, and [...] I still do the work until [...] it's done. Like, because the laptop is with me.” (Participant 098, 25-year-old female, worked in a large-sized organisation in Indonesia, permanent full-time contract, managed 4 people at work)

The shift to remote working has blurred the boundary between work and home, making it difficult for individuals to detach from their professional responsibilities even when they are physically at home (Felstead and Henseke, 2017). This lack of separation can lead to increased stress and burnout, as the distinction between work hours and personal time becomes increasingly ambiguous. This ongoing challenge requires individuals and organisations to develop strategies to create clear boundaries and promote a healthier integration of work and personal life.

#### 6.3.4 The perception of current support and desired future resources

Support and resources at the workplace can reduce the negative impact associated with presenteeism. In the discussion regarding the support and resources provided by the interviewees' employer, they mentioned a wide range of offerings, including mental health and well-being workshops, wellness rooms, free physio sessions, occupational health consultants, a contact they could discuss their issues with, company medical doctors and psychologists, and internal medicine department and medical assistants.

“We have our internal medicine department. If we have any issues or questions regarding COVID or anything else, we have a very good support system for all our employees. Plus, we have [...] medical assistants, [they are] paid by our company. We can consult doctors outside

of our company in private hospitals or clinics.” (Participant 061, 37-year-old male, worked in a large-sized organisation in Portugal, permanent full-time contract, managed 6 people at work)

“There's like, lots of seminars regarding mental health. During the pandemic, there was a COVID-19 briefings seminar. So we are aware of what to do. The vaccine seminar was there as well. And recently [seminars about] combating burnout” (Participant 098, 25-year-old female, worked in a large-sized organisation in Indonesia, permanent full-time contract, managed 4 people at work)

However, despite the availability of various support mechanisms and resources, some interviewees expressed that these measures felt more like a superficial or token gesture and did not believe they were effective.

“We have [...] like a mental health app that you can listen to meditations on. And there's also the Employee Assistance helpline, which you can call [but] probably not that useful, because I tried to use them, and they were not great.” (Participant 085, 29-year-old male, worked in a large-sized organisation in the UK, permanent full-time contract, no managerial responsibilities)

“There is a lot of information [...] The only problem with it is like nobody has time to read 20 different articles telling you to just chill and relax when you've got too much work to do.” (Participant 091, 35-year-old female, worked in a large-sized organisation in the UK, permanent full-time contract, managed 13 people at work)

When asked about the support and resources they would appreciate from their employer, particularly when deciding between presenteeism and sickness absence, several suggestions were offered. These included improved work-life balance, additional staff to cover workloads, annual health checks, on-site nurses, a more supportive working culture, an automated system for requesting sick leave, and organisation-wide training on mental health and personal effectiveness. More importantly, many highlighted that support from their supervisor is more effective.

#### *Efficient support from line managers*

The direct support from one's supervisor was highlighted significantly during the interviews, underscoring its pivotal role in employee well-being and effectiveness. Interpersonal support was seen

as more impactful compared to broader organisational policies, suggesting that a positive supervisor-subordinate relationship can profoundly influence individuals' presenteeism decision-making and encourage them to prioritise their health needs when necessary.

For example, Participant 083 described:

“*[In the organisation the resources and support provided are]* absolutely huge [...], *[but]* it just depends [on] who your line manager is and whether or not they can champion you and support you in the work that you do and, and value the work that you do when you're in.” (Participant 083, 47-year-old female, worked in a large-sized organization in the UK, permanent full-time contract, managed more than 50 people at work)

“My manager did her best. So she did arrange team meetings. But the team dynamic is a bit tricky. And we've never really gelled as a team. So she then try to organise a support system group for all of the admins across [...] And then [...] she recognised how I was struggling, and spoke to me about returning back to the office. And when things got a little bit better, [when] everybody else was still at home, they arranged for me to be able to go into the office.” (Participant 111, 31-year-old female, permanent full-time contract, no managerial responsibilities)

Additionally, it was suggested that line managers should be granted greater flexibility to make necessary work adjustments for their team members. For instance:

“To be honest, my best source of support is my line manager. She's quite happy to talk through any issues that I'm having, how I'm feeling, how I'm managing, and make suggestions to actually physically help me with my workload rather than tell me to have a cup of tea take a walk or meditate.” (Participant 091, 35-year-old female, worked in a large-sized organisation in the UK, permanent full-time contract, managed 13 people at work)

“If I need, my line manager, my supervisor, even the directors, [...] if I pick up the telephone, they will answer no matter what the call is, no matter what the time of day.” (participant 093, 56-year-old male, worked in a medium-sized organisation in the UK, permanent full-time contact, no managerial responsibilities)

To create a workplace environment that better supports employees in making informed



decisions regarding their health and attendance, it is important to make them feel more secure about taking sick leave. To achieve so, more resources should be allocated to the supervisors to make appropriate adjustments to their direct reports.

*Eager for a more personalised approach*

Moreover, the interviewees also highlighted the desire for a more personalised approach to individuals' circumstances and needs, rather than a blanket approach. For example, Participant 091 stated:

“[In terms of the support I would like to receive], I think more individual support rather than blanket support, treat a person's needs as individual and personal to them because blanket approaches very rarely really work. [...] flexible working scheme would be absolutely fantastic, especially for new parents or parents who've had to prioritise their children's welfare and work, expected them to sit at a desk nine to five is just absolutely unattainable.” (Participant 091, 35-year-old female, worked in a large-sized organisation in the UK, permanent full-time contract, managed 13 people at work)

Moreover, Participant 053 shared a similar sentiment, highlighting the necessity for more tailored approaches to individuals' circumstances and requirements, ideally originating from the line manager, as they were the ones who were in touch with employees.

“[The company is] offering these programmes, but they are not in touch with the people if you just send an email, it doesn't feel personalised. [...] I wish they could just develop a programme that is focused on the realities of what some of us are going through, not on a high level.” (Participant 053, 27-year-old female, worked in a large-sized organisation in South Africa, permanent full-time contract, no managerial responsibilities)

Most interviewees' employers provide support and resources, but opinions about their effectiveness vary among them. While some find them useful and commendable, others consider them ineffective. The significance of direct support from their line manager and a more personalised approach to their circumstances were key suggestions from the interviewees. They emphasised the value of supervisors who understand their individual needs and provide tailored assistance, highlighting that this

approach could make them feel more secure about taking sick leave when needed.

#### 6.4 Discussion

The online semi-structured interviews aim to investigate how individuals feel about their decision to work when unwell or take sick leave and rest, as well as the support and resources they receive from their employer and what else they would like to receive in the future regarding their health, wellbeing, and attendance behaviour. Additionally, the impact of COVID-19 and the change of work mode on their presenteeism decision-making has been discussed in these interviews. Through narrative analysis, a list of themes and subthemes has been identified, **providing valuable insights of developing effective managerial interventions for presenteeism**. For example, in terms of attendance management norms, policies and procedures, the interviewees indicated that contacting their line manager is how they usually declare sick leave at work, **underscoring the critical role that line managers play in the presenteeism decision-making process**. In addition, return-to-work interviews are common practice for them, mirroring the study results of Baker-McClearn et al. (2010). **Several interviewees expressed a positive view towards these interviews as long as they function as a supportive mechanism**.

Furthermore, when discussing how the interviewees felt about their presenteeism and sickness absenteeism decisions, they expressed that they had mixed feelings towards presenteeism. Yet when interviewees took sick leave, they felt guilty about their decision, and they felt like they let their colleagues down and put more burden on them. This guilt exerts a pull effect on sickness absence while simultaneously pushing individuals toward presenteeism. Several studies have recognised the sense of guilt associated with taking sick leave (e.g., Biron et al., 2006; Brosi and Gerpott, 2023; Kinman et al., 2019), with nurses being more susceptible to experiencing this guilt when compared to individuals in other occupations (Plant and Coombes, 2003; Rainbow, 2019). This guilty feeling in relation to sickness absence could be explained by social desirability bias, which illustrates individuals would choose an option that seems to be socially acceptable (Grimm, 2010). Social norms in the workplace play a vital role in the decision-making process related to presenteeism behaviour. Several studies have investigated the reasons why employees in the healthcare industry choose to work when they are unwell, with concerns about not wanting to appear lazy and feeling pressured by their colleagues and supervisors

emerging as the primary factors (Johnson, D.H., et al., 2021; Mitchell and Coatsworth, 2020; Rebmann et al., 2013). Moreover, it is worth noting that the threshold for the interviewees to take sick leave was high, and they would need to be physically incapable of working. The high threshold for presenteeism may be associated with strong work ethics, which are strongly influenced by social norms. For example, in countries with a Confucian culture, there is often a higher prevalence of presenteeism (Cooper and Lu, 2016).

In addition, the interviewees also revealed that the COVID-19 pandemic and the shift to working from home increase the likelihood of individuals choosing to work when they are unwell and lengthen their working hours, echoing the findings of multiple studies (e.g., Ruhle and Schmoll, 2021; Steidelmüller et al., 2020). Most companies enable working from home during the pandemic, providing greater flexibility for employees. For example, individuals can work in a more comfortable setting, allowing for extended breaks if necessary and eliminating the need for dressing up and commuting to a physical workplace. However, the enhanced flexibility also makes individuals feel more inclined to continue working when they are unwell. This tendency may be associated with the blurred boundary between work and personal lives, which could disrupt work-life balance (Ferreira et al., 2022), **reinforcing the need for effective managerial interventions for presenteeism.** Moreover, a study by Shimura et al. (2021) emphasised that remote working can alleviate psychological and physical stress to a certain degree, but if individuals work fully remotely, the risk of heightened presenteeism will also increase. Likewise, while working from home has become more common during the pandemic, it is important to note that certain individuals do not have this option due to the nature of their roles, such as those in customer-facing positions. Their tendency to work while sick also escalated during the pandemic. This can be attributed to the extra strain that COVID-19 imposed on the global economy, leading to a higher unemployment rate and a more challenging financial climate. In the United Kingdom, as of the end of June 2021, approximately 1.9 million people had been put on furlough, a situation in which these employees received only a percentage of their usual income (Office for National Statistics, 2021). The fear of facing furloughed or potential redundancy increases individuals' tendency to work when unwell regardless of whether one is working from home or at their regular workplace. The

importance of addressing the impact of the macro environment on individuals' work attendance behaviour has been highlighted by Johns (2010) and Lohaus and Habermann (2019).

Furthermore, regarding the current support and desired future resources, the interviewees disclosed that the support from their line managers was more impactful, and they would like to have a more tailored approach from their employers to better meet their needs. Seconding this, it has been recognised that weak supervisory support can increase the prevalence of presenteeism (Gilbreath and Karimi, 2012; Mori et al., 2022), whereas strong supervisory support can mitigate the unfavourable impact of presenteeism on individuals' level of exhaustion (Lu et al., 2013). Grounded in the dialectical approach to personal relationships developed by Baxter and Montgomery (1996) and Baxter (2010), Halbesleben et al. (2014) examine how different types of supervisory-subordinate relationships influence the decision-making process of presenteeism. To illustrate, when individuals' relationships with their supervisor align with the openness–closedness dialectic, whether to disclose their health issues becomes the key. To maintain a positive relationship with their supervisor and a degree of privacy at the same time, individuals will be more likely to enact presenteeism till the ill-health symptoms become too severe to conceal. At that point, they may opt for sickness absence to mitigate the potential adverse effects on the supervisory-subordinate relationship.

Moreover, in the context of fostering a positive work environment for employees, a supportive line manager has a more significant impact compared to other forms of support and resources provided by the employer. The relationship between individuals and their supervisors has an influence on their attendance behaviour, as does their supervisors' leadership style. For example, health-promoting leadership has a substantial and direct influence on enhancing employees' resources, resulting in a reduction of stress and burnout by modifying the work environment and conditions, leading to a healthy working environment (Jimenez et al., 2017). To exemplify, supervisors can promote employee well-being by encouraging them to take time off, managing work hours, and adjusting workload and its nature in a way that supports employee health. Additionally, the interviewees did not feel significant pressure regarding return-to-work interviews when these procedures aimed to ensure that they were well enough to return to work. This contrasts with the findings of Baker-McClearn et al. (2010). This difference can be attributed to the interviewees perceiving stronger supervisory support and benefiting

from a healthy and positive work environment, which can mitigate the psychological distress associated with these procedures.

Alternatively, it is observed among the interviewees that when they felt more secure about taking sick leave, they were more likely to become overachievers, leading to a higher likelihood of overachieving presenteeism and raising **their threshold for taking sick leave to rest**. This finding contrasts with a previous study by McGregor et al. (2016), which suggests that an increase in resources can lead to a potential reduction in presenteeism. This disagreement in findings can be attributed to the heightened level of resources, which bolsters individuals' self-efficacy and subsequently leads to a transition into an overachieving mindset. However, overachieving presenteeism indicates that individuals maintain a high level of productivity but compromise their own health (Karanika-Murray and Biron, 2020), and the productivity level will decrease when individuals' health continues to deteriorate, resulting in dysfunctional presenteeism. To prevent this, organisations need to address presenteeism appropriately, encourage individuals not to overwork themselves, and take sick leave when necessary. Creating and maintaining a positive work environment characterised by strong supervisory support and personalised adjustments can be instrumental in achieving this goal.

## 6.5 Conclusion

Through semi-structured interviews, a deeper understanding of common workplace practices in relation to attendance management policies and procedures, how individuals perceived their decisions of working when unwell or taking sick leave, the impact of the COVID-19 pandemic on these decisions, and the support and resources they received and desired for the future have been obtained. Direct contact with one's line manager to declare sick leave and return to work interviews afterwards are common practices in the workplace. Additionally, the COVID-19 pandemic has increased the likelihood of employees working while feeling unwell. When working from home, they also tend to work longer hours. Many employees have mixed emotions about their decisions to work when unwell and often feel guilty when taking sick leave. When asked about the support and resources they would like from their employers, they highlighted the importance of support from their line manager and tailored adjustments to their circumstances. These findings once again highlight the significance of a

positive and psychologically resourceful work environment when it comes to mitigating the negative impact of presenteeism (Bergström et al., 2020), providing valuable insights into how this attendance behaviour can be managed. The next chapter will be a general discussion of the findings generated by this thesis.

## Chapter 7 - General Discussion

### 7.1 Introduction

Numerous studies have explored the factors influencing decisions regarding presenteeism, yet limited research has delved into how individuals make the decision to work when feeling unwell, and the specific circumstances in which these decisions are made. To comprehensively address the research questions and respond to this knowledge gap, the current thesis employs a three-stage mixed-method approach with a primary focus on a diary study to investigate the cognitive processes underpinning individuals' presenteeism decisions. Drawing on the PDM model that Whysall et al. (2023) developed, this thesis contributes valuable and novel insights into how individuals decide to engage in presenteeism. The findings revealed a series of decision-making patterns and characteristics associated with specific circumstances while highlighting the complex interplay between health and work demands, offering valuable guidance for developing interventions and support systems aimed at promoting informed decision-making and enhancing overall workplace well-being (see Table 9 for an overview).

It is revealed that individuals do not decide to engage in presenteeism behaviour in a systematic manner, even though, when answering the daily diary survey, the PDM model (Whysall et al., 2023) provided a framework for them to explain their thoughts. Instead, they change their approach to the decision based on their work environment, personal circumstances, the type of their health issues and the severity of the symptoms. They exhibit tendencies to either omit, streamline, or prolong certain stages of the decision-making process. Notably, the evaluation phase, which is stage 3, emerges as particularly susceptible to these fluctuations. This departure from the linear progression outlined in the PDM model highlights the nuanced and multifaceted nature of presenteeism decision-making. Such insights prompt a reconsideration of traditional models and call for a more nuanced understanding of the complexities inherent in presenteeism behaviour. Furthermore, a strong bias towards work-related considerations within the decision-making process has been identified. Additionally, when it comes to their desired support from their employers so that they can put more focus on their health needs when decide to work while unwell, the preference for receiving direct support from one's line manager and customised adjustments tailored to individual circumstances has emerged as a significant factor for

effectively managing presenteeism. The following discussion will conclude the key findings of this thesis.



Table 9. A summary of research questions, research methods, and findings

Research questions	Research methods	Findings		
<p><i>1. How do people make their decisions to work when they are physically or mentally unwell? And under what circumstances?</i></p> <p><i>2. How do individuals assess contextual factors in their decision-making and the influences of person-related factors on this consideration?</i></p>	Initial cross-sectional survey	Individuals who face high job demands, experience significant emotional distress, have low self-efficacy, and rate their overall health positively are more likely to engage in presenteeism.		
		The level of presenteeism is positively associated with sickness absence, indicating that individuals are not substituting sick leave with presenteeism.		
	Diary study	Stage 1 - Trigger	The decision-making process is triggered by a health event, prompting individuals to consider the severity of their symptoms and how these symptoms affect their work capability	
			There is a threshold between presenteeism and sickness absence, which is negatively associated with the severity of symptoms.	
			When symptoms become unbearable, taking sick leave becomes automatic, indicating the threshold is at its lowest. Until then, individuals tend to resist taking sick leave.	
		Stage 2 - Options	Work-related factors and financial circumstance were found to be limiting the one's feasibility of taking sick leave, resulted in pushing them to choose presenteeism	
		Stage 3 - Evaluation	Individuals with mild ill-health symptoms are more likely to engage in presenteeism and their decision-making process is simplified and usually focus on a single factor	
			When individuals experience severe ill-health symptoms, they tend to adopt a nuanced evaluation, considering multiple factors when evaluating their identified options.	
			Individuals who suffer from chronic and long-term health issues are more likely to adopt system 2 thinking when deciding between presenteeism and sickness absenteeism	
		Stage 4 - Feedback	Individuals will only reflect on their presenteeism decisions and shift their focus from work to health when their ill-health symptoms worsen or persist.	
<p><i>3. How can presenteeism be effectively managed, and how can we promote informed decision-making to balance health and work performance demands?</i></p>	Semi-structured interviews	To manage presenteeism effectively, it is crucial to foster a positive and supportive work environment for employees. Paid sick leave is one of the important elements for creating a supportive work environment		
		Attendance management procedures, such as return-to-work interviews, are beneficial for both employers and employees if they serve as a support mechanism		
		When developing interventions for presenteeism, it is essential to train managers to improve their understanding and empathy, and to provide organisational support that allows them the flexibility and resources to make necessary adjustments for their subordinates		
		Remote work during COVID-19 has blurred work-life boundaries, increasing presenteeism and discouraging sick leave. Organisations should implement clear policies and support systems to help employees prioritise health without compromising productivity		
		Support from direct line managers is most effective, with employees preferring a personalised approach from their employers.		

## 7.2 The presenteeism decision-making process is non-linear

Grounded in the PMD model (Whysall et al., 2023) and through thematic analysis, the diary study within this thesis has uncovered multiple patterns of how individuals make their decision to engage in presenteeism behaviour. Echoing the findings of Baker-McClearn et al. (2010), this thesis revealed that the process of individuals deciding to work when feeling unwell is not linear but somewhat cyclical. It usually begins with an assessment of how severe their ill-health symptoms are and how much they affect their work capability, namely stage 1. Based on this assessment, depending on the symptom severity and the contextual factors, individuals may skip Stages 2 and 3, which involve identifying available options, evaluating those options, and proceeding directly to determine their course of action. For example, using headache as an example. When individuals experience a mild headache on day one, it is highly likely that they would automatically opt for presenteeism, without considering other options. Alternatively, if the headache persists for more than a day and the symptoms were not too severe, they may move to Stage 2 and navigate a simplified version of Stage 3, which is heavily biased by work-related factors. However, when the headache worsens day by day, they may start prioritising their health needs and find themselves in a back-and-forth loop between Stages 2 and 3 before deciding whether to engage in presenteeism or take sickness absence. In addition, the PDM model (Whysall et al., 2023), upon which the present study is built, incorporates a feedback stage following individuals' actions on their decisions, indicating a continuous learning cycle. However, the findings indicate that not many study participants engage in reflection upon their attendance decisions, except when their ill-health symptoms persist or deteriorate. This suggests that presenteeism often holds a predominant influence when individuals are making decisions about their work attendance while experiencing ill-health symptoms. Instead of automatically opting for sickness absence, individuals are usually more inclined to continue working despite feeling unwell. Factors such as perceived job demands, fear of potential job loss, or a sense of responsibility towards colleagues may drive this preference. Indeed, findings from the semi-structured interviews conducted in this thesis revealed that many participants harboured mixed feelings about presenteeism. While they acknowledged the necessity of taking sick leave in certain situations, they often reported guilt, reflecting the internal

conflict between their health needs and perceived workplace expectations. This conflict underscores the complex nature of presenteeism decision-making, where personal health needs are weighed against professional and social expectations, leading to decisions that are not purely rational but deeply influenced by work-related factors and individual values.

Moreover, the PDM model (Whysall et al., 2023) offers a valuable theoretical framework to the current thesis for understanding the presenteeism decision-making process and facilitates a systematic investigation into how individuals decide to engage in presenteeism. It is worth noting that the qualitative data from the diary study highlight the effectiveness of this framework, as the distinct characteristics of each stage outlined in the model are identifiable. However, unlike the linear process suggested by the PDM model (Whysall et al., 2023), the data revealed that the decision-making process underlying individuals' presenteeism behaviour is rather dynamic and highly influenced by various factors, particularly those related to work. For instance, individuals might choose to engage in presenteeism or take sick leave immediately after evaluating their ill-health symptoms (stage 1), bypassing stages 2, 3, and 4 of the decision-making process. This tends to occur when the symptoms are either very mild, allowing them to continue working with minimal disruption, or very severe, compelling them to prioritise their health and opt for sick leave without further deliberation. As illustrated above, individuals tend to adjust their decision-making strategies based on changes in their health issues, symptom severity, and work conditions. This aligns with the findings of Karanika-Murray and Biron (2020), who have portrayed presenteeism as an adaptive behaviour that individuals employ to balance their health-related needs and work-related demands. Their research further suggests that presenteeism is inherently dynamic, with individuals modifying their approach in response to their unique circumstances.

### 7.3 Strong bias towards work-related considerations

It is noteworthy that in both the diary study and the initial cross-sectional questionnaire of the current thesis, work-related factors carry a more significant weight in individuals' decision-making processes regarding presenteeism, compared to individuals' person-related factors. This mirrors the study results of Hansen and Andersen (2008), which point out that individuals weigh more on their

work-related factors in their decision to work while ill, compared to their personal circumstances or attitudes. The significance of work-related factors regarding the behaviour of presenteeism has been emphasised by Pohling et al. (2016) and Merrill et al. (2012), while the prevalence of presenteeism has been found to be associated with leadership (e.g., Dietz and Scheel, 2017; Vänni et al., 2017), teamwork (e.g., Grinyer and Singleton, 2000; Fiorini et al., 2018), ease of replacement (e.g., Caverley et al., 2007; Johns, 2011), job demands (e.g., Demerouti et al., 2009; Derry et al., 2014; Jiang et al., 2023) and job control (e.g., Aronsson and Gustafsson, 2005; Gerich, 2019). Moreover, Dietz et al. (2020) indicate that supervisors' behaviour influences their direct reports. In the context of presenteeism, if a supervisor tends to work when they are unwell, their team members are more likely to emulate their behaviour. Furthermore, in Gerich's study (2019), when individuals perceive a very high level of job control or autonomy, they tend to engage in presenteeism more. This may be attributed to their motivation to meet work targets and endeavour for achievements (Ma et al., 2018), which is distinguished from individuals with a very low level of job control. Those individuals perceive presenteeism with avoidance motives, such as the fear of negative consequences related to taking sick leave.

While individuals' person-related, organisational, and environmental factors have a certain degree of influence on their decision-making process of presenteeism, it is evident that work-related factors demonstrate a more pronounced, direct, and immediate impact. For example, it is proposed in this thesis that individuals' person-related factors would affect how individuals evaluate their ill-health symptoms by moderating their evaluation of the ill-health symptoms. Better self-efficacy is associated with lower ratings in impairment, affective distress, and pain severity in the study by Jackson et al. (2014). Alternatively, the level of stress individuals experience also influences how they decide their behaviour (Starcke and Brand, 2012). Excessive stress levels may lead to a shift toward a more emotionally driven decision-making process in individuals when deciding their behaviour. Moreover, previous presenteeism research (i.e., Gerich, 2016; Miraglia and Johns, 2016) has highlighted the correlation between individuals' subject health and the prevalence of presenteeism. **However, while the cross-sectional survey established a connection between person-related factors and the prevalence of presenteeism and absenteeism, this thesis did not find a statistically significant association between individuals' symptom severity and their person-related factors, such as emotional distress and self-**

efficacy through either the cross-sectional survey or the diary study. This disparity may be attributed to the time gap between the initial cross-sectional questionnaire and the diary study due to challenges in recruiting an adequate number of participants. Moreover, certain person-related factors assessed in the cross-sectional survey, including health locus of control and over-commitment, exhibited relatively low Cronbach's alpha values. This indicates that the items used to measure these constructs may not be as consistent or cohesive as desired, which could have implications for the validity of the findings (Tavakoi and Dennick, 2011). Future research should focus on reducing the time lag between studies by implementing more efficient data collection management and participant recruitment strategies. Additionally, it is vital to use more consistent scales for measuring person-related factors and to develop a more comprehensive tool that allows individuals to accurately and thoroughly assess the severity of their ill-health symptoms.

#### 7.4 Cognitive biases play a vital role in the presenteeism decision-making process

Several cognitive biases, such as status quo, loss aversion, illusion of control, present bias, and desirability bias, can help explain the strong tendency towards presenteeism observed among the study participants. For instance, status quo bias and loss aversion may compel individuals to continue working despite feeling unwell, as they prefer to maintain their current state and avoid the potential losses associated with taking sick leave. The status quo bias makes them reluctant to change their routine or disrupt their work, while loss aversion (Kahneman and Tversky, 1984) heightens their concern over the potential negative consequences of taking time off, such as falling behind at work or being seen as less committed by colleagues and supervisors. Moreover, the illusion of control might lead individuals to believe they can effectively manage their symptoms while working, reinforcing the decision to stay at work rather than rest. On the other hand, desirability bias may cause them to downplay the severity of their illness and overestimate their ability to perform well despite being unwell, driven by the desire to meet workplace expectations or personal goals. This mirrors the finding of Chambers et al. (2017), where sociocultural norms at work are positively associated with the prevalence of presenteeism. Another cognitive bias that would pull individuals away from taking sick leave is present bias, referred to as the tendency to choose immediate rewards over potential future advantages is defined as present

bias (O'Donoghue and Rabin, 1999). Working while sick can prevent potential losses associated with taking sick leave, which is seen as an immediate gain for individuals, even though it might hinder individuals' health and well-being in the long run (Dudenhöffer et al., 2017). **These cognitive biases collectively shape a decision-making process that leans towards presenteeism predominantly, even when it might not be the most beneficial choice for the individual's health or long-term productivity.**

It is crucial to foster a more logical and rational approach to presenteeism decisions to mitigate the impact of these cognitive biases and stimulate a nuanced consideration between individuals' health and work performance demands in presenteeism decision-making. To facilitate a shift towards a more systematic and rational thought process, often referred to as system 2 thinking, individuals can adopt a linear decision-making model, as suggested by the PDM model (Whysall et al., 2023), to help avoid the errors caused by judgment biases (Milkman et al., 2009; Moore et al., 2010), or consider the opposite of their impending decisions (Larrick, 2004; Mussweiler et al., 2000). Moreover, individuals should be encouraged to reflect on the decisions made, which can promote better decision-making (De Neys, 2006; Tversky and Kahneman, 1974) and elevate the quality of decisions (Frederick, 2005). **The current research revealed that individuals tend to avoid reflecting on their work attendance decisions unless their ill-health symptoms persist or worsen. This pattern needs to be addressed, as it is crucial for individuals to regularly assess how their decisions, especially the choice to engage in presenteeism, affect their health and productivity. Encouraging a more balanced reflection on these decisions could lead individuals to consider their health needs more in future situations, potentially making more informed choices that better align with their long-term well-being.**

#### 7.5 The preference for direct support from line managers and individualised adjustment

**During the semi-structured interviews, participants were asked about the types of support they wished to receive from their employers. They emphasised the crucial role that support from their line managers plays in their well-being and presenteeism decision-making, echoing the study of Mori et al. (2022). The significance of the supervisory-subordinate relationship in presenteeism decision-making is underscored by Halbesleben et al. (2014). Additionally, Lu et al. (2013) demonstrated that robust supervisory support can alleviate presenteeism's negative effects on individuals' exhaustion levels.**

Given their direct managerial relationships, line managers serve as role models for their subordinates. Their behaviours and attitudes towards work, including how they handle health issues and presenteeism, significantly influence their subordinates (Dietz et al., 2020). Individuals frequently look to their line managers for guidance on navigating workplace challenges, including decisions related to attendance and health. As such, how line managers address their health and manage their workload can set a precedent for their team members.

Moreover, the interviewees also highlighted that the conventional one-size-fits-all approach often used by organisations is less effective. Instead, they found that tailored adjustments, specifically customised to meet their needs, provided them with more meaningful and impactful support. As a result, to effectively manage presenteeism in the workplace, it is essential to provide line managers with additional resources and flexibility to make tailored adjustments for their subordinates. By empowering line managers with the tools and autonomy needed to address the needs of their subordinates, organisations can cultivate a positive and supportive work environment. This approach promotes functional presenteeism and helps mitigate the negative consequences associated with presenteeism, ensuring a healthier and more productive work environment. In addition, organisations should also provide more resources to their employees. Hobfoll's theory of employee well-being (1988) points out the importance of personal resources in predicting individuals' work behaviour. In addition, through a lens of the Job Demands-Resource model (Bakker and Demerouti, 2007), McGregor et al. (2016) pointed out that an increase in job resources can improve employees' level of engagement, leading to a decrease in the prevalence of presenteeism. Similarly, Baeriswyl et al. (2017) also highlight that a demanding workload with a low level of support from colleagues increases presenteeism, resulting in a higher probability of emotional exhaustion. More importantly, several interviewees state that even if taking sick leave would not affect or negatively impact their work, they would opt for presenteeism since it gives them a sense of achievement. This echoes research about the meaning of work, which emphasises engaging in employment is beneficial for individuals' health and well-being and provides a sense of significance (Rosso et al., 2010; Miraglia and Johns, 2018), further substantiating the potential positive impact associated with presenteeism behaviour (Giæver et al., 2016; Karanika-Murray and Biron, 2020; Karanika-Murray and Cooper, 2018; Whysall et al., 2018). Moreover, several

studies have also discussed the moderating effect of individuals' psychological factors on the adverse consequences of presenteeism (e.g., Li et al., 2019; Lu et al., 2014; Tang et al., 2019). However, without proper management, the positive impact of presenteeism will be diminished. Functional presenteeism may transit into overachieving presenteeism, where individuals strive to maintain a high level of productivity at the expense of their health, or dysfunctional presenteeism, a situation in which individuals are unproductive and experience a deterioration in their health (Karanika-Murray and Biron, 2020).

Furthermore, **higher organisational support can help manage presenteeism in the workplace, decreasing individuals' intention to resign (Wu et al., 2023) and reducing the associated costs.**

Organisations can emphasise the importance of maintaining good health and well-being and fostering an environment where taking sick leave is encouraged and considered acceptable (Kinman and Grant, 2021). As Jiménez et al. (2017) illustrated, health-promoting leadership exerts a dual influence on individual well-being. In the first instance, it directly promotes health awareness within the workplace. Secondly, it creates resource-enriched working conditions, cultivating a healthy work environment that empowers individuals to make health-conscious decisions. Alternatively, Brunner et al. (2019) suggested that organisations should adopt a more personalised approach to adjusting job demands for their employees, echoing the findings of this thesis. In addition, under the guidance of occupational health practitioners, organisations can implement wellness programs and self-care guides to improve their employees' overall health and well-being (Kinman, 2019). Furthermore, these practitioners can also assist and advise managers in ensuring that their staff members take sick leave when necessary and do not rush back to work before fully recovering (Kinman and Clements, 2023).

## 7.6 Conclusion

To unwrap the underlying cognitive process of how individuals decide to engage in presenteeism behaviour, this research has yielded valuable insights into the decision-making process associated with presenteeism and **provided guidance of how to manage presenteeism effectively.** The presenteeism decision-making process emerged as a more cyclical and dynamically adaptive phenomenon, in contrast to the linear framework suggested by the PDM model (Whysall et al., 2023).



Moreover, the study results highlighted a pronounced inclination towards work-related considerations when individuals make attendance decisions while experiencing ill-health symptoms on a working day, which several cognitive biases, such as status quo and loss aversion, can explain. Finally, the effective management of presenteeism and the promotion of functional presenteeism hinge upon the implementation of personalised adjustments tailored to individuals' circumstances, accompanied by increased support from their line managers. **The next chapter presents a discussion regarding the contributions and limitations of the current thesis and directions for future research.**

## Chapter 8 - Implications, Limitations, and Directions for Future Research

### 8.1 Theoretical Implications

In response to the knowledge gap in presenteeism studies, the current thesis employed a three-stage mixed-methods approach to investigate several aspects. This includes how individuals decide to engage in presenteeism and under what circumstances; how different factors influence the decision-making process of presenteeism; and how to manage it effectively at the workplace; and to provide an empirical examination of the PDM model introduced by Whysall et al. (2023). This conceptual model integrates multiple theories and presenteeism studies around four decision-making stages: Trigger, Options, Evaluation, and Feedback. To the best of my knowledge, this is the first model that delineates the steps within the decision-making process aimed specifically at addressing presenteeism and this is the first thesis that explores the presenteeism decision-making process in situ.

Through applying the conceptual model with empirical data, four common decision-making patterns regarding presenteeism behaviour have been identified. These patterns include different combinations of the stages of the presenteeism decision-making model (Whysall et al., 2023, see Figure 6 for the revised model). In addition, the results substantiated the existence of the four stages outlined in the PDM model, but revealed a potentially cyclical association among them, implying that the decision-making process may not strictly adhere to the linear progression as shown in the PDM model. For example, Pattern 1 only includes Stage 1, the evaluation of the health issues, followed by a direct move to the course of action. This pattern typically emerges when individuals experience either mild or very severe ill-health symptoms, and their decision-making process primarily relies on heuristics. In contrast, Pattern 2 involves both Stage 1 (the evaluation of the health issues) and Stage 2 (identification of available options), along with a simplified version of Stage 3 (evaluation of identified options). Different from Pattern 2, Pattern 3 consists of Stages 1, 2, and 3, along with a potential back-and-forth loop between Stages 2 and 3. Moreover, Pattern 4 has Stages 1, 2, and 3, a potential back-and-forth loop between Stages 2 and 3, and an additional Stage 4 (reflection of the decision made). Pattern 2 normally arises when individuals perceive a single available option, obviating the need for extensive evaluation, while Pattern 3 usually emerges when multiple options are presented to individuals. It is

worth noting that work-related factors significantly constrain the diversity and feasibility of options available to individuals when deciding on work attendance. This observation elucidates the evident bias towards work-related considerations in the presenteeism decision-making process among the participants in the diary study.

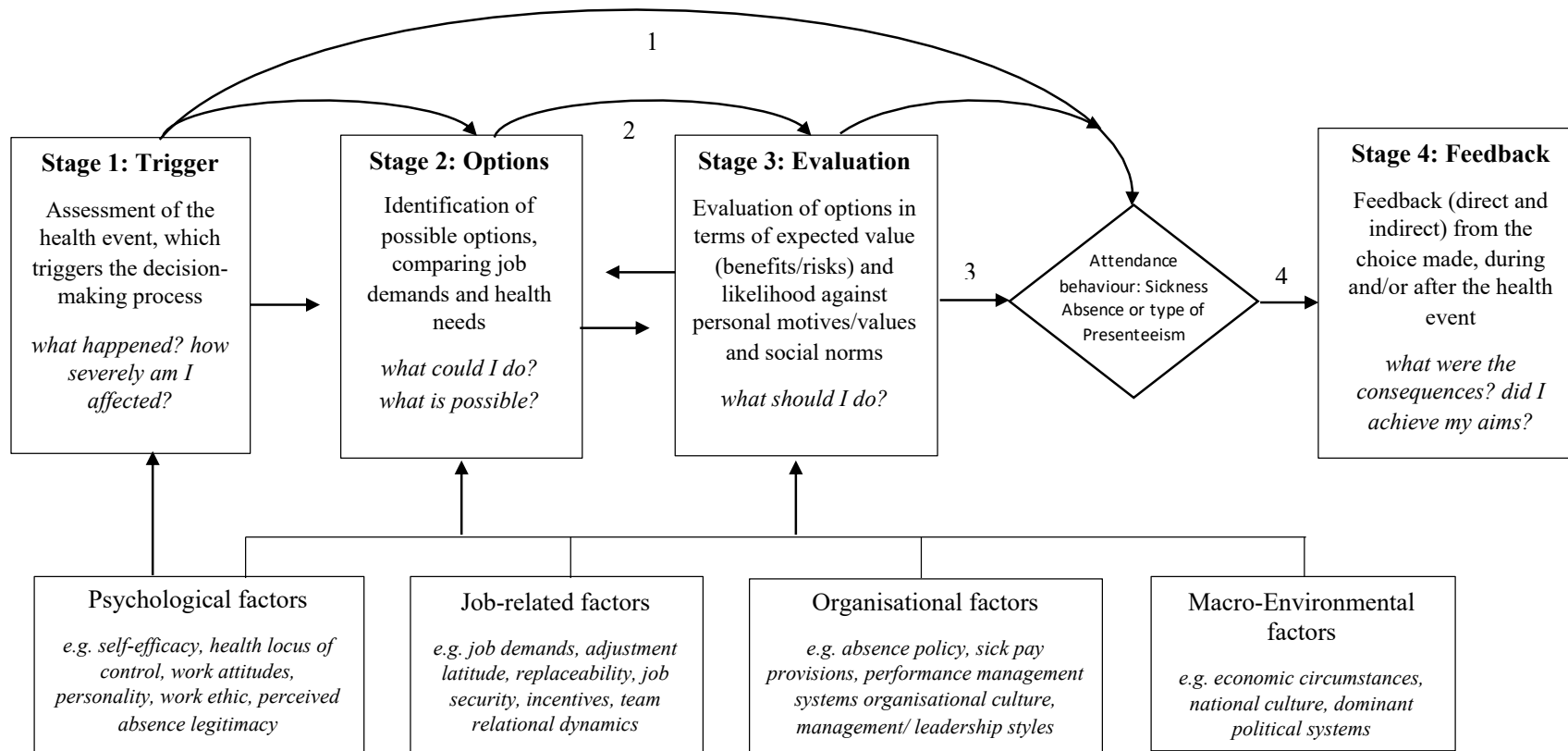
Moreover, the revised model highlights a distinct cyclic nature in presenteeism decision-making. This reinforces Karanika-Murray and Biron's (2020) conceptual study, which characterises presenteeism as an adaptive and goal-orientated behaviour, as well as the study conducted by Baker-McCleary et al. (2010), that considers presenteeism decisions are multifaceted, suggesting a nature of continuous evaluation and adjustment. Furthermore, this thesis has significantly contributed to our understanding of presenteeism behaviour by disclosing various decision-making patterns that individuals employ when deciding whether to work while feeling unwell. Different from previous presenteeism studies that primarily concentrated on identifying the influencing factors behind this work attendance behaviour (Lohaus and Habermann, 2019; Ruhle et al., 2020), this research has taken a more comprehensive approach to shed light on the cognitive processes that underlie these decisions. By doing so, it has enriched our knowledge of the thought processes and considerations that drive individuals to choose presenteeism, offering a more holistic view of this phenomenon in the workplace.

In addition, different from previous studies, the current thesis expands the existing understanding of presenteeism by introducing a nuanced categorisation of this phenomenon. While previous studies primarily focused on the binary distinction between presenteeism and sickness absenteeism, this thesis has unveiled a spectrum of presenteeism behaviours, encompassing various degrees of productivity. This novel categorisation differentiates between individuals who maintain full productivity while unwell and those who exhibit partial productivity, such as attending to urgent tasks only or delivering suboptimal work performance. Moreover, the recognition of individuals continuing work-related tasks during officially declared sick leave as a form of presenteeism represents a paradigm shift in the conceptualisation of work behaviour. Traditionally categorised as sickness absenteeism in earlier studies, this practice is redefined within the present thesis as an integral part of the broader presenteeism spectrum. This shift in categorisation highlights the interconnectedness of these behaviours, suggesting that presenteeism and sickness absenteeism are not necessarily distinct or

mutually exclusive. Moreover, this theoretical expansion underscores the multifaceted nature of presenteeism and highlights the need for a more refined and inclusive understanding of how individuals navigate their work commitments and well-being, particularly in the context of illness.

A greater understanding of how individuals decide whether to work when unwell or take sick leave and rest is pivotal. This understanding is essential for developing effective managerial interventions that encourage individuals to adopt more logical and rational decision-making in terms of presenteeism behaviour. By encouraging individuals to prioritise their health needs over work demands, these interventions can contribute to the cultivation of a more supportive work environment and foster a positive work experience for individuals. Moreover, when the support and resources at work increase, the negative impacts related to presenteeism behaviour on organisations will be mitigated too (Brunner et al., 2019; Lu et al., 2014).

Figure 6. The revised PDM model



1. A decision-making pattern that only includes the evaluation of the health issues
2. A decision-making pattern that involves the evaluation of the health issues, the identification of available options, and a simplified evaluation of the identified options
3. A decision-making pattern that consists of the first three stages, and a potential back-and-forth loop between stages 2 and 3
4. decision-making pattern that includes all stages, and a potential back-and-forth loop between stages 2 and 3

## 8.2 Practical implications

The results of the current thesis emphasise the great likelihood of individuals choosing presenteeism instead of sickness absence, which urges the need for effective managerial interventions targeting presenteeism, to mitigate the negative impact of this behaviour. Indeed, presenteeism can help prevent placing an extra workload on one's colleagues and avoid potential negative impacts on one's performance review (Lohaus et al., 2021). When managed appropriately, presenteeism can also serve as a form of therapy, aiding employees in gradually returning to work after a period of sickness absence (Kinman and Grant, 2020).

Employers need to make certain adjustments to mitigate the negative consequences of presenteeism behaviour. Firstly, in a border context, employers should provide a positive work environment, combined with supportive leadership and a high level of social support. Enforcing mandatory sick leave for employees is not an effective approach. Instead, managers should encourage their team members to carefully consider their health needs over work-related demands, when deciding whether to work while feeling unwell. To encourage individuals to make a more informed attendance decision that balances the health and work performance demands, a positive work environment with supportive leadership and a high level of social support is the key. Training and workshops can be provided to managers and employees, focusing on fostering a greater understanding of how working when unwell has a negative impact on individuals' health and well-being. These sessions can highlight the significance of prioritising employee health and encourage them not to push themselves to work when they are unwell.

Furthermore, to foster a positive and supportive work environment, a transparent and well-defined attendance management policy is essential. The attendance management policies adopted by organisations should provide more flexibility for individuals who suffer from chronic health issues to take short-term sick leave to prevent their symptoms from worsening and not imply any potential disciplinary actions. A well-structured attendance management policy can serve as a guide for employees and show an organisation's commitment to the well-being of their employees. By offering such flexibility, organisations can demonstrate their understanding of the unique challenges faced by employees with chronic health issues, promoting a more supportive and inclusive workplace culture.

Moreover, reflecting several presenteeism studies (e.g., Aronsson et al., 2021; Deery et al., 2014; Kinman and Wray, 2018; Lackner and Sonnabend, 2023; Miraglia and Johns, 2016), the findings of this thesis again highlighted the pivotal roles of job demands and supervisory support as decisive factors in individuals' presenteeism decision-making processes. The interview data revealed that support directly from line managers is more impactful. Organisations should allocate more resources to line managers, enabling them to make appropriate workload adjustments for their direct reports. In addition, line managers should regularly monitor and adjust their staff members' workloads to prevent excessive stress and burnout. Moreover, since the outbreak of COVID-19, remote working has become more common, and individuals find it challenging to disconnect from work due to the blurred boundary between work and home (Kniffin et al., 2021). Managers may struggle to detect signs of ill health through online communication. Regular individual meetings are recommended to maintain a positive and open relationship between supervisors and their direct reports, especially for companies that have adopted remote working fully.

Moreover, the development and implementation of a digital tool aimed at supporting individuals in making informed decisions regarding presenteeism would yield significant benefits. Similar to System 2 thinking (as proposed by Kahneman, 2012), Pattern 4 in the revised PDM model (see Figure 6) comprises all four stages outlined in the model and introduces a potential back-and-forth loop between stages 2 and 3. This suggests a more nuanced and comprehensive decision-making pattern compared to Patterns 1 and 2. The additional feedback stage in Pattern 4 prompts decision-makers to reflect on the choices they have made and offer feedback for subsequent decisions in similar situations that may be encountered in the future. This digital tool can function as an educational resource, providing decision-makers with access to relevant information and data regarding their prior decisions made with its assistance. It has the potential to enhance individuals' understanding of various factors influencing their decisions, including health and work-related considerations. In addition, this tool can assist in the evaluation of risks and benefits associated with work attendance during illness, aiding individuals in making more rational and informed choices. This feature is especially crucial in a post-pandemic world, where health and safety considerations have taken on heightened importance. Finally, by promoting individuals' informed decision-making, the tool can contribute to reducing the prevalence

of presenteeism and its potential negative consequences, such as decreased productivity, increased health risks, and an adverse impact on workplace culture (Lohaus and Habermann, 2019).

Additionally, many diary study participants expressed that they felt guilty about not working when their ill-health symptoms improved after they declared sick leave, and some interviewees of study 3 revealed that they felt fine with the return-to-work interview if it was to ensure that they were fit to return to work. As a result, a mid-day wellness check-up conducted by line managers can be beneficial and introduced as a support mechanism to encourage individuals to reconsider their attendance decisions. Line managers can schedule catch-up meetings with their direct reports either mid-day when their direct reports take a day of sick leave or at the beginning of the workday if the sick leave was taken the previous day. These catch-up meetings should be short and precise and focus on reassuring if the direct reports are well enough to return to work. One might argue that these procedures can pressure individuals to rush back to work before they recover (e.g., Kinman et al., 2019). Nevertheless, the presence of a supportive work environment, coupled with a positive relationship with one's line manager, should help mitigate this risk.

In conclusion, working while unwell, commonly referred to as presenteeism, can offer certain advantages. However, these advantages can only be fully realised when this behaviour is managed effectively, thereby mitigating the usually associated negative impacts. To achieve this, organisations should pay more attention to cultivating a healthy working environment. This can be achieved through introducing practices that promote well-being in the workplace, along with providing personalised resources and support tailored to employees' health needs and circumstances. Additionally, it is critical that line managers develop and maintain positive relationships with their subordinates and possess the necessary skills to facilitate informed decision-making concerning presenteeism behaviour. To fulfil these objectives, organisations should offer comprehensive training and workshops for line managers. These sessions should aim to equip managers with the knowledge and skills required to encourage more informed and nuanced decision-making regarding presenteeism and to foster a supportive relationship with their subordinates. Such initiatives can contribute to the creation of a workplace culture that prioritises employee health and well-being while concurrently maintaining productivity and performance standards.



### 8.3 Limitations and Future Research

Understanding the limitations of the thesis results is crucial for interpreting the findings accurately and making informed decisions based on the research. These limitations provide a more comprehensive perspective on the scope and applicability of the thesis, helping to prevent over-generalisation or misinterpretation.

This thesis adopted a mixed-method experience sampling approach to investigate the presenteeism decision-making process. Within the domain of experience sampling methods, there are time-based designs, fixed schedules, variable schedules and event-based designs (Bolger et al., 2003). The one adopted in this thesis was an event-based diary study. Although participants were prompted to complete the diary survey daily, the length of the survey varied depending on whether participants reported experiencing ill-health symptoms on a working day. This type of experience sampling method is typically suitable for phenomena or processes that are not common (Bolger et al., 2003). It is unpredictable when participants might feel unwell, and it is important to capture these occurrences as they happen to gather accurate data on the experience of ill-health symptoms. Therefore, the event-based diary method is appropriate for examining the decision-making process of presenteeism.

Bolger et al. (2003) also indicated two potential risks associated with this method. The first is that not every relevant event would be consistently recognised by participants, while the second is the probability of overgeneralising from the event-based responses to the individual's overall experience. Participants need to be educated about which events they should report and what they should report regarding each event. In addition, compared to other traditional research methods (e.g., interviews, surveys), diary studies need repeated responses over time, which requires participants to commit and dedicate themselves to the whole duration. This places a demand on the participants. Moreover, participants may become used to answering the survey and develop a habit of skimming over sections of the diary questionnaire that do not apply to their experiences usually, leading to omitting responses even when they are relevant (Bolger et al., 2003).

To address these risks, the initial cross-sectional survey highlighted the definition of presenteeism in the information sheet and consent form. Sickness absence was referred to as taking sick leave. Simple and easy-to-understand language was used throughout both the diary study and the initial

survey. Additionally, in the diary study, when participants did not experience any ill-health symptoms, the survey contained only a few questions, taking just a few minutes to complete. This approach aims to prevent participants from developing habitual responses to the daily survey.

After careful consideration of the pros and cons, experience sampling methods remain as most suitable for studying individuals' life experiences, culminating in a more comprehensive understanding of how they determine their attendance behaviour when confronted with health-related issues. One of the strengths of the experience sampling approach is the minimised recall bias, which was a common problem of retrospective studies. In addition, it can also prevent post-hoc reasoning, which is about individuals creating explanations that were not present in their original thought process to make their actions or decisions seem more reasonable or logical in hindsight.

Alternatively, the first stage, a cross-sectional survey, is used to capture participants' perceptions of their work environment, some personal variables related to presenteeism behaviour, and their demographic data. It provides a solid foundation for the subsequent diary study. To determine whether the participants in this thesis had similar experiences to those in other studies regarding the prevalence of presenteeism/absenteeism, their work environment, and personal values, a negative binomial regression test was employed. The data generated from the initial survey was over-dispersed, making the typical multiple linear regression test inapplicable (Schober and Vetter, 2021; Ver Hoef and Boveng, 2007). Therefore, a negative binomial regression, a type of generalised linear regression (Nelder and Wedderburn, 1972), was adopted in this thesis due to its suitability for over-dispersed data with an abundance of zeros (Green, 2021).

Other models can be used to analyse over-dispersed count data with an excess of zero counts, such as zero-Inflated Models (Weaver et al., 2015) or quasi-Poisson regression (Ver Hoef and Boveng, 2007). In a quasi-Poisson model, as the average value increases, the variability also increases in a straight line. In contrast, in a negative binomial model, as the average value increases, the variability increases in a curved or quadratic manner. Different from a Poisson model, a negative binomial model provides greater flexibility and better fit to the data as it allows the variance to be greater than the mean, making it suitable for count data with varying levels of dispersion (Ver Hoef and Boveng, 2007; Yirga et al., 2020). Alternatively, a zero-inflated model, which has different implications regarding zeros, is

not relevant to the current thesis (Weaver et al., 2015). Consequently, a negative binomial regression is used to test the data from the initial cross-sectional survey.

However, the necessity to transform coefficients for interpretability and the risk of the model overfitting are the limitations of negative binomial regressions (Green, 2021). When the primary goal is assessing associations between variables, the necessity for interpretability through coefficient transformation may be less crucial (Musunuru et al., 2020). Despite these challenges, the negative binomial model demonstrates robustness in capturing intricate relationships between predictors and the response variable, offering dependable estimates of association even in scenarios of overdispersion.

Moreover, participants in the current thesis were selected using convenience sampling from diverse countries and various industries. Many participants exhibited strong motivation and interest in the topic of presenteeism, which potentially contributed to the high prevalence of presenteeism observed within the study group. Concerns regarding the generalisability of findings from this data arise as a result (Andrade, 2021; Mujere, 2016). However, the initial survey serves as an introductory phase of the research, capturing data related to participants' work environments, personal variables, and demographics. In this context, generalizability is considered less critical. Moreover, the mixed-method design aims to enhance the credibility and validity of the study by complementing the convenience sampling approach (Denzin, 2012, 2017). While convenience sampling facilitated access to a diverse participant pool, the mixed-method approach integrates qualitative and quantitative data collection methods to provide deeper insights into the phenomenon of presenteeism (Turner et al., 2017).

Furthermore, this thesis heavily relied on self-report measures (Csikszentmihalyi and Larson, 2014), which may not always provide optimal data. Despite using published scales and adapting items for clarity in the cross-sectional questionnaire, certain scales showed reduced Cronbach's Alpha values, indicating inconsistency among items measuring specific variables (Tavakoi and Dennick, 2011). It's essential to note that Cronbach's Alpha reflects scale reliability within a specific sample, influenced by factors like sample size, response biases, and cultural differences (Lamb et al., 2015).

Regarding data collection, participants received daily email reminders but chose their response times. Some health issues may have begun influencing work decisions the night before, persisting over several days, complicating decisions between work and rest. Future studies should explore in-depth

how individuals weigh perceived options, trade-offs, control perceptions, and external influences on decision-making.

Additionally, there was a significant gap between the initial survey and the diary study, potentially impacting data consistency. Participant recruitment posed challenges despite efforts to involve large organizations, with limited participation in subsequent diary studies (Fisher and To, 2012). The COVID-19 pandemic's influence during data collection in 2021 heightened presenteeism concerns amid remote work and economic uncertainty (Ruhle et al., 2020).

Transitioning to semi-structured interviews, the final phase explored employee perspectives on workplace adaptations and support mechanisms, though limited participant numbers constrained generalizability. Insights highlighted the need for targeted manager empowerment initiatives to mitigate presenteeism's impact (Karanika-Murray et al., 2021). Future research should focus on managerial training for recognizing and supporting recovery needs associated with presenteeism.

## Chapter 9 – Conclusion

Presenteeism, defined as working when unwell (Ruhle et al., 2020), is common in workplaces across countries, industries and occupations. While existing research has predominantly focused on answering the questions of "what" influences the decision to engage in presenteeism and its effects on individuals' health and employers, this thesis takes a different approach by delving into the question of "how" individuals decide to participate in presenteeism. Gaining a deeper understanding of the presenteeism decision-making process can help mitigate the negative consequences often associated with presenteeism, such as productivity loss, economic costs, and negative impact on individuals' health. Certain studies disclosed that with appropriate adjustments at work, presenteeism could be positive and therapeutic (Karanika-Murray, 2020; Whysall et al., 2018).

To explore the decision-making process of presenteeism in situ and minimise recall bias and post hoc reasoning, this thesis employs an experience sampling method utilising a daily diary approach, supplemented with an initial cross-sectional questionnaire and subsequent semi-structured interviews. Underpinning the view of pragmatism, the mixed qualitative and quantitative approach is essential for examining the complex decision-making process of presenteeism, as these processes are situation-specific and idiosyncratic (Baker-McClearn et al., 2010). The initial cross-sectional questionnaire provides contextual information regarding participants' work environments, person-related factors, and demographics. The diary study offers deep insights into how participants decide to engage in presenteeism. Finally, the semi-structured interviews delve into the attendance management practices in the interviewees' workplaces, their perceptions of presenteeism and sickness absenteeism, and the support and resources they desire from their employers. This approach ensures a comprehensive investigation of presenteeism decision-making in real-life settings, making the findings more rigorous and robust. Moreover, the daily diary survey included a list of open-ended questions based on the four stages outlined in the PDM model (Whysall et al., 2023) to unwrap individuals' presenteeism decision-making process systematically.

The results obtained from the initial cross-sectional questionnaire further support the notion that a combination of work-related factors and person-related factors influences presenteeism. Notably,

high job demands, coupled with low levels of social support and limited adjustment latitude within the workplace, were associated with a higher prevalence of presenteeism. Furthermore, heightened emotional distress and reduced self-efficacy also contributed to an increased likelihood of presenteeism in the workplace. Similar to the initial cross-sectional questionnaire, a bias towards work-related considerations was also evident in the diary study, particularly in stage 2 (identifying available options) and stage 3 (evaluating individuals' perceived options). It was observed in the diary study that both stages are heavily biased by work-related factors, which limit individuals' available options and primarily lead the evaluation process. Moreover, results from the diary study also indicated that the decision-making process for presenteeism is not as linear as the PDM model implies; it is potentially cyclical and adapts to individuals' circumstances. Several decision-making patterns have been identified, and each pattern emerges under different situations. For instance, Pattern 1 involves only the initial self-evaluation of health issues before directly reaching a decision outcome. This pattern typically arises when individuals experience either mild or severe symptoms, leading to either presenteeism or sickness absenteeism as an autopilot decision, heavily relying on individuals' heuristics. Furthermore, the diary study was grounded in the PDM model (Whysall et al., 2023), which provided a framework for examining the decision-making process of presenteeism. By utilising the PDM model as a foundation, the diary study gathered empirical evidence to assess the suitability and validity of this model for investigating presenteeism decision-making.

Moreover, semi-structured interviews were conducted to enhance our comprehension of the underlying cognitive processes behind presenteeism behaviour and to facilitate the development of effective managerial interventions concerning presenteeism. These interviews have provided more valuable insights. For example, they need to contact their line manager directly to declare sick leave if they want, and when they return to work, they need to go through an interview. These procedures exert a certain level of influence on “pushing” individuals toward the decision to engage in presenteeism. In addition, the COVID-19 pandemic accelerated the shift to remote work, with many individuals now working from home (Kinman and Grant, 2021). The blurred boundary between work and home further heightens the likelihood of individuals working when unwell, emphasising the immediate need for interventions. The interviews with both regular employees and managers revealed that the support from

line managers to their direct reports is much more impactful than general organisational policies. Personalised adjustments tailored to individuals' circumstances are more effective than generic, one-size-fits-all approaches. To summarise, it is essential to foster a positive and supportive work environment to mitigate the negative consequences of presenteeism and harness its potential positive effects. This can be achieved by organisations through various means, such as allocating additional resources to support employees' well-being, granting line managers the flexibility to adjust their direct reports' workloads based on individual needs, and tailoring these adjustments to the unique circumstances of each employee. By creating such a supportive workplace culture, companies can enhance employee morale, well-being, and overall productivity, resulting in a more resilient and healthier workforce.

## References

- Acharya, A.S., Prakash, A., Saxena, P. and Nigam, A., 2013. Sampling: Why and how of it. *Indian journal of medical specialties*, 4 (2), 330-333.
- Adams, E., 2010. The joys and challenges of semi-structured interviewing. *Community Practitioner*, 83 (7), 18-22.
- Adams, W.C., 2015. Conducting semi-structured interviews. In: Newcomer, K.E., Hatry, H.P. and Wholey, J.S., ed. *Handbook of Practical Program Evaluation*. San Francisco: Wiley, 2015, 492-505.
- Ajzen, I., 1991. The theory of planned behavior. *Organizational behavior and human decision processes*, 50 (2), 179-211.
- Ajzen, I., 1985. From intentions to actions: A theory of planned behavior. In Kuhl, H. and Beckmann, J., ed. *Action control: From cognition to behavior*. Berlin, Heidelberg: Springer, 11-39
- Allen, D., Hines, E.W., Pazdernik, V., Konecny, L.T. and Breitenbach, E., 2018. Four-year review of presenteeism data among employees of a large United States health care system: a retrospective prevalence study. *Human Resources for Health*, 16, 1-10.
- Allen, T.D., Golden, T.D. and Shockley, K.M., 2015. How effective is telecommuting? Assessing the status of our scientific findings. *Psychological science in the public interest*, 16 (2), 40-68.
- Altheide, D.L. and Johnson, J.M., 1994. Criteria for assessing interpretive validity in qualitative research. In Denzin, N.K. and Lincoln, Y.S., ed. *Handbook of qualitative research*. Sage Publications, Inc, 485-499.
- Andrade, C., 2021. The inconvenient truth about convenience and purposive samples. *Indian Journal of Psychological Medicine*, 43 (1), pp.86-88.
- Antonakis, J., Avolio, B.J. and Sivasubramaniam, N., 2003. Context and leadership: an examination of the nine-factor full-range leadership theory using the multifactor leadership questionnaire. *Leadership Quarterly*, 14 (3), 261-295.



Aronsson, G. and Gustafsson, K., 2005. Sickness presenteeism: prevalence, attendance-pressure factors, and an outline of a model for research. *Journal of Occupational and Environmental Medicine*, 47 (9), 958-966.

Aronsson, G., Gustafsson, K. and Dallner, M., 2000. Sick but yet at work. An empirical study of sickness presenteeism. *Journal of Epidemiology & Community Health*, 54 (7), 502-509.

Aronsson, G., Hagberg, J., Björklund, C., Aboagye, E., Marklund, S., Leineweber, C. and Bergström, G., 2021. Health and motivation as mediators of the effects of job demands, job control, job support, and role conflicts at work and home on sickness presenteeism and absenteeism. *International Archives of Occupational and Environmental Health*, 94, 409-418.

Azmat, G., Hensvik, L. and Rosenqvist, O., 2022. Workplace presenteeism, job substitutability and gender inequality. *Journal of Human Resources*, 59 (4), 1121-1201.

Azungah, T., 2018. Qualitative research: deductive and inductive approaches to data analysis. *Qualitative research journal*, 18 (4), 383-400.

Bacharach, S.B., Bamberger, P. and Biron, M., 2010. Alcohol consumption and workplace absenteeism: the moderating effect of social support. *Journal of Applied Psychology*, 95 (2), 334-348.

Bandura, A., 1977. Self-efficacy: toward a unifying theory of behavioral change. *Psychological review*, 84 (2), 191-215.

Baeriswyl, S., Krause, A., Elfering, A. and Berset, M., 2017. How workload and coworker support relate to emotional exhaustion: The mediating role of sickness presenteeism. *International journal of stress management*, 24 (S1), 52-73.

Baker-McClearn, D., Greasley, K., Dale, J. and Griffith, F., 2010. Absence management and presenteeism: The pressures on employees to attend work and the impact of attendance on performance. *Human Resource Management Journal*, 20 (3), 311-328.

Bakker, A.B. and Demerouti, E., 2007. The job demands-resources model: State of the art. *Journal of Managerial Psychology*, 22 (3), 309-328.

Bakker, A.B., Demerouti, E. and Sanz-Vergel, A.I., 2014. Burnout and work engagement: The JD-R approach. *Annu. Rev. Organ. Psychol. Organ. Behav.*, 1 (1), 389-411.

Baldwin, A., Birks, M., Mills, J., and Budden, L., 2014. Putting the philosophy into PhD. *Working Papers in the Health Sciences*, 1-4.

Bamberg, M., 2012. Narrative analysis. In: Cooper, H., Camic, P. M., Long, D. L., Panter, A. T., Rindskopf, D., and Sher, K. J., ed. *APA Handbook of Research Methods in Psychology, Vol. 2. Research designs: Quantitative, qualitative, neuropsychological, and biological*. American Psychological Association, 85–102.

Baron, J. and Ritov, I., 1994. Reference points and omission bias. *Organizational behavior and human decision processes*, 59 (3), 475-498.

Baxter, L.A., 1990. Dialectical contradictions in relationship development. *Journal of Social and Personal relationships*, 7 (1), 69-88.

Baxter, L.A. and Montgomery, B.M., 1996. *Relating: Dialogues and dialectics*. Guilford Press.

Bazerman, M.H., Tenbrunsel, A.E. and Wade-Benzoni, K., 1998. Negotiating with yourself and losing: Making decisions with competing internal preferences. *Academy of Management Review*, 23 (2), 225-241.

Beal, D.J. and Weiss, H.M., 2003. Methods of ecological momentary assessment in organizational research. *Organizational Research Methods*, 6 (4), 440-464.

Bergström, G., Bodin, L., Hagberg, J., Lindh, T., Aronsson, G. and Josephson, M., 2009. Does sickness presenteeism have an impact on future general health?. *International Archives of Occupational and Environmental Health*, 82 (10), 1179-1190.

Bergström, G., Gustafsson, K., Aboagye, E., Marklund, S., Aronsson, G., Björklund, C. and Leineweber, C., 2020. A resourceful work environment moderates the relationship between presenteeism and health. A study using repeated measures in the swedish working population. *International Journal of Environmental Research and Public Health*, 17 (13), 4711.

Biron, C., Brun, J.P., Ivers, H. and Cooper, C., 2006. At work but ill: psychosocial work environment and well-being determinants of presenteeism propensity. *Journal of Public Mental Health*, 5 (4), 26-37.

Blake, M.K., 2007. Formality and friendship: Research ethics review and participatory action research. *ACME: An International Journal for Critical Geographies*, 6 (3), 411-421.

- Bland, J.M. and Altman, D.G., 1997. Statistics notes: Cronbach's alpha. *Bmj*, 314 (7080), 572.
- Böckerman, P. and Laukkanen, E., 2009. Presenteeism in Finland: Determinants by gender and the sector of economy. *Ege Academic Review*, 9 (3), 1007-1016.
- Bogdanov, M., Nitschke, J.P., LoParco, S., Bartz, J.A. and Otto, A.R., 2021. Acute psychosocial stress increases cognitive-effort avoidance. *Psychological Science*, 32 (9), 1463-1475.
- Bolger, N., Davis, A. and Rafaeli, E., 2003. Diary methods: Capturing life as it is lived. *Annual review of psychology*, 54 (1), 579-616.
- Bolger, N. and Laurenceau, J.P., 2013. *Intensive longitudinal methods: An introduction to diary and experience sampling research*. Guilford press.
- Braun, V. and Clarke, V., 2006. Using thematic analysis in psychology. *Qualitative research in psychology*, 3 (2), 77-101.
- Brinkmann, S., 2014. Unstructured and semi-structured interviewing. In: Leavy, P., ed. *The Oxford handbook of qualitative research*, New York: Oxford University Press, 2014, 277-299.
- Brooks, J., McCluskey, S., Turley, E. and King, N., 2015. The utility of template analysis in qualitative psychology research. *Qualitative research in psychology*, 12(2), 202-222.
- Brosi, P. and Gerpott, F.H., 2023. Stayed at home—But can't stop working despite being ill?! Guilt as a driver of presenteeism at work and home. *Journal of Organizational Behavior*, 44 (6), 853-870.
- Bruner, J.S., 1986. *Actual minds, possible worlds*. Harvard university press.
- Bruner, J.S., 1991. The narrative construction of reality. *Critical Inquiry*, 18 (1), 1-21.
- Brunner, B., Igetic, I., Keller, A.C. and Wieser, S., 2019. Who gains the most from improving working conditions? Health-related absenteeism and presenteeism due to stress at work. *The European Journal of Health Economics*, 20, 1165-1180.
- Bujang, M.A., Omar, E.D. and Baharum, N.A., 2018. A review on sample size determination for Cronbach's alpha test: a simple guide for researchers. *The Malaysian Journal of Medical Sciences: MJMS*, 25(6), p.85-99.
- Burr, V., 2015. *Social constructionism*. London: Routledge.

Burton, W.N., Pransky, G., Conti, D.J., Chen, C.Y. and Edington, D.W., 2004. The association of medical conditions and presenteeism. *Journal of Occupational and Environmental Medicine*, 46 (6), S38-S45.

Busemeyer, J.R. and Townsend, J.T., 1993. Decision field theory: a dynamic-cognitive approach to decision making in an uncertain environment. *Psychological Review*, 100 (3), 432-459.

Busemeyer, J.R. and Johnson, J.G., 2004. Computational models of decision making. In: Koehler, D.J. and Harvey, N., ed. *Blackwell handbook of judgment and decision making*. Oxford: Blackwell, 133-154.

Canada Life., 2020. Redundancy fears causing increase in presenteeism during lockdown. Workplace protection. Available at <https://www.canadalife.co.uk/news/redundancy-fears-causing-increase-in-presenteeism-during-lockdown/> [accessed 20<sup>th</sup> September 2023].

Caers, R., Akgul, K.L., Baert, S., De Feyter, T. and De Couck, M., 2019. Too sick or not too sick? The importance of stress and satisfaction with supervisor support on the prevalence of sickness presenteeism. *International Journal of Occupational Safety and Ergonomics*, 27 (1), 278-289.

Callen, B.L., Lindley, L.C. and Niederhauser, V.P., 2013. Health risk factors associated with presenteeism in the workplace. *Journal of Occupational and Environmental Medicine*, 55 (11), 1312-1317.

Callison, K. and Pesko, M.F., 2022. The effect of paid sick leave mandates on coverage, work absences, and presenteeism. *Journal of Human Resources*, 57 (4), 1178-1208.

Caverley, N., Cunningham, J.B. and MacGregor, J.N., 2007. Sickness presenteeism, sickness absenteeism, and health following restructuring in a public service organization. *Journal of Management Studies*, 44 (2), 304-319.

Chambers, C., Frampton, C., and Barclay, M., 2017. Presenteeism in the New Zealand senior medical workforce-a mixed-methods analysis. *The New Zealand medical journal*, 130 (1449), 10-21.

Chen, J.W., Lu, L. and Cooper, C.L., 2021. The compensatory protective effects of social support at work in presenteeism during the coronavirus disease pandemic. *Frontiers in Psychology*, 12, 643437.

CIPD. (2019). *Health and wellbeing at work survey 2019* [online]. Available at:

[https://www.cipd.co.uk/Images/health-and-well-being-at-work-2019.v1\\_tcm18-55881.pdf](https://www.cipd.co.uk/Images/health-and-well-being-at-work-2019.v1_tcm18-55881.pdf)

[Accessed 10 September 2023]

CIPD. (2022). *HEALTH AND WELLBEING AT WORK 2022* [online]. Available at: [https://www.cipd.co.uk/Images/health-wellbeing-work-report-2022\\_tcm18-108440.pdf](https://www.cipd.co.uk/Images/health-wellbeing-work-report-2022_tcm18-108440.pdf) [Accessed 12 Mar 2023]

CIPD. (2023). *HEALTH AND WELLBEING AT WORK 2023* [online]. Available at: <https://www.cipd.org/globalassets/media/knowledge/knowledge-hub/reports/2023-pdfs/8436-health-and-wellbeing-report-2023.pdf> [Accessed 12 Mar 2023]

Clark, V.L.P., Creswell, J.W., Green, D.O.N. and Shope, R.J., 2008. Mixing quantitative and qualitative approaches. In Hesse-Biber, S.N. and Leavy, P., ed. *Handbook of emergent methods*. New York, The Guilford Press, 363-387.

Coledam, D.H.C., de Arruda, G.A., Ribeiro, E.A.G. and Cantieri, F.P., 2021. Self-rated health among teachers: prevalence, predictors, and impact on absenteeism, presenteeism, and sick leave. *Revista brasileira de medicina do trabalho*, 19 (4), 426-436.

Connors, B.L., Rende, R. and Colton, T.J., 2016. Beyond self-report: Emerging methods for capturing individual differences in decision-making process. *Frontiers in psychology*, 7.

Conrad, F.G. and Schober, M.F., 2008. New frontiers in standardized survey interviewing. In: Hesse-Biber, S.N. and Leavy, P., ed. *Handbook of emergent methods*. London, England: Guilford Press, 2008, 173-188.

Conway, N. and Briner, R.B., 2012. Investigating the effect of collective organizational commitment on unit-level performance and absence. *Journal of Occupational and Organizational Psychology*, 85 (3), 472-486.

Conway, P.M., Hogh, A., Rugulies, R. and Hansen, Å.M., 2014. Is Sickness Presenteeism a Risk Factor for Depression?. *Journal of Occupational and Environmental Medicine*, 56 (6), 595-603.

Cooper, C.L. and Lu, L., 2016. Presenteeism as a global phenomenon: Unraveling the psychosocial mechanisms from the perspective of social cognitive theory. *Cross Cultural & Strategic Management*, 23 (2).

Coxe, S., West, S.G. and Aiken, L.S., 2009. The analysis of count data: A gentle introduction to Poisson regression and its alternatives. *Journal of personality assessment*, 91 (2), 121-136.

Creswell, J.W., and Clark, V.L.P., 2011. *Designing and Conducting Mixed Methods Research*. 2nd ed. Thousand Oaks: Sage

Cronbach, L.J., 1951. Coefficient alpha and the internal structure of tests. *psychometrika*, 16 (3), 297-334.

Csikszentmihalyi, M. and Larson, R., 2014. Validity and reliability of the experience-sampling method. In: M, Csikszentmihalyi., ed. *Flow and the foundations of positive psychology: The collected works of Mihaly Csikszentmihalyi*, Dordrecht: Springer, 2014, 35-54.

Deery, S., Walsh, J. and Zatzick, C.D., 2014. A moderated mediation analysis of job demands, presenteeism, and absenteeism. *Journal of occupational and organizational psychology*, 87 (2), 352-369.

Deloitte. (2022). Mental Health and Employers. Available at: <https://www.deloitte.com/content/dam/assets-zone2/uk/en/docs/services/consulting/2023/deloitte-uk-mental-health-report-2022.pdf> [ Accessed 06 June 2024]

Demerouti, E., Le Blanc, P.M., Bakker, A.B., Schaufeli, W.B. and Hox, J., 2009. Present but sick: a three-wave study on job demands, presenteeism and burnout. *Career Development International*, 14 (1), 50-68.

Denzin, N.K., 2012. Triangulation 2.0. *Journal of mixed methods research*, 6(2), pp.80-88.

Denzin, N.K., 2017. *The research act: A theoretical introduction to sociological methods*. Routledge.

Denzin, N.K. and Lincoln, Y.S., 2008. Introduction: The discipline and practice of qualitative research. In Denzin N.K. and Lincoln Y.S., ed. *Strategies of qualitative inquiry*. Thousand Oaks: Sage, 2008, 1-43

De Neys, W., 2006. Automatic-heuristic and executive-analytic processing during reasoning: Chronometric and dual-task considerations. *Quarterly Journal of Experimental Psychology*, 59 (6), 1070-1100.

Dew, K., Keefe, V. and Small, K., 2005. Choosing' to work when sick: workplace presenteeism. *Social Science & Medicine*, 60 (10), 2273-2282.

Dewey, J., 1925. The development of American pragmatism. In: Hickman, L.A. and Alexander, T.M., eds. *The essential Dewey. Volume 1. Pragmatism, education, democracy*. Bloomington and Indianapolis: Indiana University Press, 227-243.

Diatchenko, L., Slade, G.D., Nackley, A.G., Bhalang, K., Sigurdsson, A., Belfer, I., Goldman, D., Xu, K., Shabalina, S.A., Shagin, D. and Max, M.B., 2005. Genetic basis for individual variations in pain perception and the development of a chronic pain condition. *Human molecular genetics*, 14 (1), 135-143.

DiCicco-Bloom, B. and Crabtree, B.F., 2006. The qualitative research interview. *Medical Education*, 40 (4), 314-321.

Dietz, C. and Scheel, T., 2017. Leadership and presenteeism among scientific staff: The role of accumulation of work and time pressure. *Frontiers in Psychology*, 8, 1885.

Dietz, C., Zacher, H., Scheel, T., Otto, K. and Rigotti, T., 2020. Leaders as role models: Effects of leader presenteeism on employee presenteeism and sick leave. *Work & Stress*, 34 (3), 300-322.

Dolphin, S., 2013. How nursing students can be empowered by reflective practice. *Mental Health Practice*, 16 (9), 20-23.

Donaldson, B. and McNicholas, C., 2004. Understanding the postgraduate education market for UK-based students: a review and empirical study. *International Journal of Nonprofit and Voluntary Sector Marketing*, 9 (4), 346-360.

Dudenhöffer, S., Claus, M., Schöne, K., Letzel, S. and Rose, D.M., 2017. Sickness presenteeism of German teachers: prevalence and influencing factors. *Teachers and Teaching*, 23 (2), 141-152.

Dvorsky, G., 2013. The 12 cognitive biases that prevent you from being rational. Available at: <http://io9.com/5974468/the-most-common-cognitivebiases-that-prevent-you-from-being-rational>.

[Accessed on 90 September 2023]

Edwards, W., 1954. The theory of decision making. *Psychological bulletin*, 51 (4), 380-417.

Esin, C., 2011. Narrative analysis approaches. In: Nollaig, F., ed. *Qualitative research methods in psychology: Combining core approaches*. Berkshire: Open University Press, 2011, 92-117.

Eurofound., 2012. *Health and well-being at work: A report based on the fifth European Working Conditions Survey* [online]. Dublin: Eurofound. Available at: [https://www.eurofound.europa.eu/sites/default/files/ef\\_publication/field\\_ef\\_document/ef1302en.pdf](https://www.eurofound.europa.eu/sites/default/files/ef_publication/field_ef_document/ef1302en.pdf) [Accessed 12 Feb 2020]

Felstead, A. and Henseke, G., 2017. Assessing the growth of remote working and its consequences for effort, well-being and work-life balance. *New Technology, Work and Employment*, 32 (3), 195-212.

Ferreira, A.I., Mach, M., Martinez, L.F., Brewster, C., Dagher, G., Perez-Nebra, A. and Lisovskaya, A., 2019. Working sick and out of sorts: a cross-cultural approach on presenteeism climate, organizational justice and work–family conflict. *The International Journal of Human Resource Management*, 30 (19), 2754-2776.

Ferreira, A.I., Mach, M., Martinez, L.F. and Miraglia, M., 2022. Sickness presenteeism in the aftermath of COVID-19: is presenteeism remote-work behavior the new (Ab) normal?. *Frontiers in Psychology*, 12, 6372.

Fisher, C.D. and To, M.L., 2012. Using experience sampling methodology in organizational behavior. *Journal of Organizational Behavior*, 33 (7), 865-877.

Fiorini, L., Griffiths, A. and Houdmont, J., 2018. Reasons for presenteeism in nurses working in geriatric settings: A qualitative study. *Journal of Hospital Administration*, 7 (4), 9-16.

Frederick, S., 2005. Cognitive reflection and decision making. *Journal of Economic Perspectives*, 19 (4), 25-42.

Galon, T., Briones-Vozmediano, E., Agudelo-Suárez, A.A., Felt, E.B., Benavides, F.G. and Ronda, E., 2014. Understanding sickness presenteeism through the experience of immigrant workers in a context of economic crisis. *American Journal of Industrial Medicine*, 57 (8), 950-959.

Galotti, K.M., 2005. *Making decisions that matter: How people face important life choices*. Psychology Press.



Galotti, K.M., Tandler, J.M. and Wiener, H.J., 2014. Real-life decision making in college students II: Do individual differences show reliable effects?. *The American journal of psychology*, 127 (1), 33-42.

García-Iglesias, J.J., Gómez-Salgado, J., Apostolo, J., Rodrigues, R., Costa, E.I., Ruiz-Frutos, C., Martínez-Isasi, S., Fernández-García, D. and Vilches-Arenas, Á., 2023. Presenteeism and mental health of workers during the COVID-19 pandemic: a systematic review. *Frontiers in Public Health*, 11, p.1224332.

Gardner, W., Mulvey, E.P. and Shaw, E.C., 1995. Regression analyses of counts and rates: Poisson, overdispersed Poisson, and negative binomial models. *Psychological bulletin*, 118 (3), 392-404.

Gerich, J., 2016. Determinants of presenteeism prevalence and propensity: Two sides of the same coin?. *Archives of Environmental & Occupational Health*, 71 (4), 189-198.

Gerich, J., 2019. Sickness presenteeism as coping behaviour under conditions of high job control. *German Journal of Human Resource Management*, 33 (2), 96-112.

Giæver, F., Lohmann-Lafrenz, S. and Løvseth, L.T., 2016. Why hospital physicians attend work while ill? The spiralling effect of positive and negative factors. *BMC health services research*, 16, 1-7.

Gigerenzer, G. and Gaissmaier, W., 2015. Decision making: Nonrational theories. *International Encyclopedia of the Social & Behavioural Sciences*, 5, 911-916.

Gilbreath, B. and Karimi, L., 2012. Supervisor behavior and employee presenteeism. *International Journal of Leadership Studies*, 7 (1), 114-131.

Goldberg, D.P. and Williams, P., 1988. *A user's guide to the General Health Questionnaire*. Windsor, United Kingdom: NFER-Nelson.

Gong, J., Zhang, Y., Yang, Z., Huang, Y., Feng, J. and Zhang, W., 2013. The framing effect in medical decision-making: a review of the literature. *Psychology, health & medicine*, 18 (6), 645-653.

Gosselin, E., Lemyre, L. and Corneil, W., 2013. Presenteeism and absenteeism: differentiated understanding of related phenomena. *Journal of Occupational Health Psychology*, 18 (1), 75-86.

Goto, E., Ishikawa, H., Okuhara, T., Ueno, H., Okada, H., Fujino, Y. and Kiuchi, T., 2020. Presenteeism among workers: health-related factors, work-related factors and health literacy. *Occupational Medicine*, 70 (8), 564-569.

Green, J.A., 2021. Too many zeros and/or highly skewed? A tutorial on modelling health behaviour as count data with Poisson and negative binomial regression. *Health Psychology and Behavioral Medicine*, 9 (1), 436-455.

Grimm, P., 2010. Social desirability bias. *Wiley international encyclopedia of marketing*.

Griffin, M.A., Neal, A. and Parker, S.K., 2007. A new model of work role performance: Positive behavior in uncertain and interdependent contexts. *Academy of Management Journal*, 50 (2), 327-347.

Grinyer, A. and Singleton, V., 2000. Sickness absence as risk-taking behaviour: a study of organisational and cultural factors in the public sector. *Health, Risk & Society*, 2 (1), 7-21.

Guba, E.G. and Lincoln, Y.S., 1994. Competing paradigms in qualitative research. In Denzin, N.K. and Lincoln, Y.S., ed. *Handbook of qualitative research*. Sage Publications, Inc, 105-117.

Gustafsson Sendén, M., Schenck-Gustafsson, K. and Fridner, A., 2016. Gender differences in Reasons for Sickness Presenteeism—a study among GPs in a Swedish health care organization. *Annals of occupational and environmental medicine*, 28, 1-7.

Haase, J.E. and Myers, S.T., 1988. Reconciling paradigm assumptions of qualitative and quantitative research. *Western Journal of Nursing Research*, 10, 128-137.

Halbesleben, J.R.B., Whitman, M.V. and Crawford, W.S., 2014. A dialectical theory of the decision to go to work: Bringing together absenteeism and presenteeism. *Human Resource Management Review*, 24 (2), 177-192.

Hansen, C.D. and Andersen, J.H., 2008. Going ill to work—What personal circumstances, attitudes and work-related factors are associated with sickness presenteeism?. *Social science & medicine*, 67 (6), 956-964.

Hansen, C.D. and Andersen, J.H., 2009. Sick at work—a risk factor for long-term sickness absence at a later date?. *Journal of Epidemiology & Community Health*, 63 (5), 397-402.

Hardman, D., 2009. Judgment and decision making: Psychological perspectives (Vol. 11). John Wiley & Sons.

Hayes, B.K., 2007. The development of inductive reasoning. In Feeney, A. and Heit, E., ed. *Inductive reasoning: Experimental, developmental, and computational approaches*. Cambridge, UK: Cambridge University Press, 25-54.

Hayes, S.W., Priestley, J.L., Ishmakhametov, N. and Ray, H.E., 2020. "I'm not Working from Home, I'm Living at Work": Perceived Stress and Work-Related Burnout before and during COVID-19. *Sage Open*, 11 (4).

Hektner, J.M., Schmidt, J.A. and Csikszentmihalyi, M., 2007. *Experience sampling method: Measuring the quality of everyday life*. Thousand Oaks: Sage.

Hemp, P., 2004. *Presenteeism: At work—But out of it* [online]. Harvard Business Review. Available at: <https://hbr.org/2004/10/presenteeism-at-work-but-out-of-it> [Accessed 12 Feb 2023]

Henderson, M., Brooks, S.K., Del Busso, L., Chalder, T., Harvey, S.B., Hotopf, M., Madan, I. and Hatch, S., 2012. Shame! Self-stigmatisation as an obstacle to sick doctors returning to work: a qualitative study. *BMJ open*, 2 (5), p.e001776

Heponiemi, T., Elovainio, M., Pentti, J., Virtanen, M., Westerlund, H., Virtanen, P., Oksanen, T., Kivimäki, M. and Vahtera, J., 2010. Association of contractual and subjective job insecurity with sickness presenteeism among public sector employees. *Journal of Occupational and Environmental Medicine*, 52 (8), 830-835.

Hyers, L.L., 2018. *Diary methods*. Oxford University Press.

Hilton, M.F., Sheridan, J., Cleary, C.M. and Whiteford, H.A., 2009. Employee absenteeism measures reflecting current work practices may be instrumental in a re-evaluation of the relationship between psychological distress/mental health and absenteeism. *International journal of methods in psychiatric research*, 18 (1), 37-47.

Hinse, E. and Mathieu, C., 2022. The impact of leadership on employee presenteeism: A comparison between police and non-police samples. *International Journal of Police Science and Management*, 25 (1), 3-16.

Hobfoll, S.E., 1989. Conservation of resources: A new attempt at conceptualizing stress. *American psychologist*, 44 (3), 513-524.

Holmes, A., Byrne, A. and Rowley, J., 2013. Mobile shopping behaviour: insights into attitudes, shopping process involvement and location. *International Journal of Retail & Distribution Management*, 42 (1), 25-39.

Howell, K.E., 2012. *An introduction to the philosophy of methodology*. Thousand Oaks: Sage.

Hülsheger, U.R., Walkowiak, A. and Thommes, M.S., 2018. How can mindfulness be promoted? Workload and recovery experiences as antecedents of daily fluctuations in mindfulness. *Journal of Occupational and Organizational Psychology*, 91 (2), 261-284.

Institute For Government, 2022. *Timeline of UK government coronavirus lockdowns and restrictions* [online]. Available at: <https://www.instituteforgovernment.org.uk/data-visualisation/timeline-coronavirus-lockdowns> [Assessed 10 September 2023].

Irvine, A., 2011. Fit for work? The influence of sick pay and job flexibility on sickness absence and implications for presenteeism. *Social Policy & Administration*, 45 (7), 752-769.

Jackson, T., Wang, Y., Wang, Y. and Fan, H., 2014. Self-efficacy and chronic pain outcomes: a meta-analytic review. *The Journal of Pain*, 15 (8), 800-814.

Jia, H., Shang, P., Gao, S., Cao, P., Yu, J. and Yu, X., 2022. Work stress, health status and presenteeism in relation to task performance among Chinese medical staff during COVID-19 pandemic. *Frontiers in public health*, 10, p.836113.

Jiang, W., Wang, Y., Zhang, J., Song, D., Pu, C. and Shan, C., 2023. The Impact of the Workload and Traumatic Stress on the Presenteeism of Midwives: The Mediating Effect of Psychological Detachment. *Journal of Nursing Management*, 2023.

Jiménez, P., Bregenzer, A., Kallus, K.W., Fruhwirth, B. and Wagner-Hartl, V., 2017. Enhancing resources at the workplace with health-promoting leadership. *International journal of environmental research and public health*, 14 (10), 1264-1281.

Johansen, V., Aronsson, G. and Marklund, S., 2014. Positive and negative reasons for sickness presenteeism in Norway and Sweden: a cross-sectional survey. *BMJ open*, 4 (2), e004123.

Johansson, G. and Lundberg, I., 2004. Adjustment latitude and attendance requirements as determinants of sickness absence or attendance. Empirical tests of the illness flexibility model. *Social science & medicine*, 58 (10), 1857-1868.

Johansson, G., Gustafsson, K. and Marklund, S., 2015. Association between adjustment latitude and sickness presence—A panel study of Swedish employees. *International journal of occupational medicine and environmental health*, 28 (3), 507-518.

Johansson, F. and Melin, M., 2018. Fit for flight? Inappropriate presenteeism among Swedish commercial airline pilots and its threats to flight safety. *The International Journal of Aerospace Psychology*, 28 (3-4), 84-97.

Johns, G., 2010. Presenteeism in the workplace: A review and research agenda. *Journal of Organizational Behavior*, 31 (4), 519-542.

Johns, G., 2011. Attendance dynamics at work: the antecedents and correlates of presenteeism, absenteeism, and productivity loss. *Journal of Occupational Health Psychology*, 16 (4), 483-500.

Johnson, R.B., Onwuegbuzie, A.J. and Turner, L.A., 2007. Toward a definition of mixed methods research. *Journal of Mixed Methods Research*, 1 (2), 112-133.

Johnson, D.H., Osman, F., Bean, J., Stevens, L., Shirley, D., Keating, J.A., Johnson, S. and Safdar, N., 2021. Barriers and facilitators to influenza-like illness absenteeism among healthcare workers in a tertiary-care healthcare system, 2017–2018 influenza season. *Infection Control & Hospital Epidemiology*, 42 (10), 1198-1205.

Josselson, R. and Hammack, P.L., 2021. *Essentials of narrative analysis*. American Psychological Association.

Kacelnik, A. and Bateson, M., 1997. Risk-sensitivity: crossroads for theories of decision-making. *Trends in cognitive sciences*, 1 (8), 304-309.

Kahneman, D., 2012. *Thinking fast and slow*. Penguin.

Kahneman, D. and Tversky, A., 1979. Prospect theory: An analysis of decision under risk. *Econometrica*, 47, 263-292.

Kahneman, D. and Tversky, A., 1982. The simulation heuristic. In: Kahneman, D., Slovic, P. and Tversky, A., ed., *Judgment under Uncertainty: Heuristics and Biases*. Cambridge University Press, 201-208

Kahneman, D. and Tversky, A., 1984. Choices, values, and frames. *American psychologist*, 39 (4), 341-350.

Kallio, H., Pietilä, A.M., Johnson, M. and Kangasniemi, M., 2016. Systematic methodological review: developing a framework for a qualitative semi-structured interview guide. *Journal of Advanced Nursing*, 72 (12), 2954-2965.

Karademas, E.C. and Kalantzi-Azizi, A., 2004. The stress process, self-efficacy expectations, and psychological health. *Personality and individual differences*, 37 (5), 1033-1043.

Karanika-Murray, M. and Biron, C., 2020. The health-performance framework of presenteeism: Towards understanding an adaptive behavior. *Human Relations*, 73 (2), 242-261.

Karanika-Murray, M. and Cooper, C.L., 2018. Presenteeism: An introduction to a prevailing global phenomenon. In: Cooper, C.L. and Lu, L., ed. *Presenteeism at Work*. Cambridge: Cambridge University Press, 2018, 9-34.

Karanika-Murray, M., Pontes, H.M., Griffiths, M.D. and Biron, C., 2015. Sickness presenteeism determines job satisfaction via affective-motivational states. *Social Science & Medicine*, 139, 100-106.

Karasek, R. and Theorell, T., 1990. *Healthy work: Stress, productivity, and the reconstruction of working life*. New York, Basic Books.

Kigozi, J., Jowett, S., Lewis, M., Barton, P. and Coast, J., 2017. The estimation and inclusion of presenteeism costs in applied economic evaluation: a systematic review. *Value in Health*, 20 (3), 496-506.

Kiken, L.G. and Shook, N.J., 2011. Looking up: Mindfulness increases positive judgments and reduces negativity bias. *Social Psychological and Personality Science*, 2 (4), pp.425-431.

Kim, J.H., Yoon, J., Bahk, J. and Kim, S.S., 2020. Job insecurity is associated with presenteeism, but not with absenteeism: A study of 19 720 full-time waged workers in South Korea. *Journal of Occupational Health*, 62 (1), p.e12143.

King, N., 2004. Using templates in the thematic analysis of text. In: Cassell, C. and G. Symon., ed. *Essential guide to qualitative methods in organizational research*. London, UK: Sage, 2004, 257–270.

King, N., 2012. Doing template analysis. In: Cassell, C. and Symon, G., eds. *Qualitative organizational research: Core methods and current challenges*. Sage Publications, 426-450.

Kınkoğlu, C.N. and Can, A., 2021. Negotiating the different degrees of precarity in the UK academia during the Covid-19 pandemic. *European Societies*, 23 (sup1), S817-S830.

Kinman, G., 2019. Sickness presenteeism at work: prevalence, costs and management. *British Medical Bulletin*, 129 (1), 69-78.

Kinman, G. and Clements, A.J., 2022. Sickness presenteeism in prison officers: risk factors and implications for wellbeing and productivity. *International Journal of Environmental Research and Public Health*, 19 (6), 3389-3399.

Kinman, G., Clements, A.J. and Hart, J., 2019. When are you coming back? Presenteeism in UK prison officers. *The Prison Journal*, 99 (3), 363-383.

Kinman, G. and Grant, C., 2021. Presenteeism during the COVID-19 pandemic: risks and solutions. *Occupational medicine*, 71 (6-7), 243-244.

Kinman, G. and Wray, S., 2018. Presenteeism in academic employees—occupational and individual factors. *Occupational Medicine*, 68 (1), 46-50.

Knani, M., 2022. What motivates tourism and hospitality employees to practice presenteeism?. *Journal of Hospitality and Tourism Management*, 52, 198-207.

Kniffin, K.M., Narayanan, J., Anseel, F., Antonakis, J., Ashford, S.P., Bakker, A.B., Bamberger, P., Bapuji, H., Bhawe, D.P., Choi, V.K. and Creary, S.J., 2021. COVID-19 and the workplace: Implications, issues, and insights for future research and action. *American Psychologist*, 76 (1), 63-77.

KPMG., 2011., Sick At work: the Cost of Presenteeism to Your Business and the Australian economy. Medibank, Australia (2011). Retrieved from:

[https://www.medibank.com.au/Client/Documents/Pdfs/sick\\_at\\_work.pdf](https://www.medibank.com.au/Client/Documents/Pdfs/sick_at_work.pdf) [accessed 20<sup>th</sup> September 2023]

Lackner, M. and Sonnabend, H., 2023. Presenteeism when employers are under pressure: evidence from a high-stakes environment. *Economica*, 90 (358), 477-507.

Lamb, R., Akmal, T. and Petrie, K., 2015. Development of a cognition-priming model describing learning in a STEM classroom. *Journal of Research in Science Teaching*, 52 (3), 410-437.

Larrick, R.P., 2004. Debiasing. In: Koehler, D.J. and Harvey, N., ed. *Blackwell handbook of judgment and decision making*. Oxford, United Kingdom: Blackwell, 316–337.

Lazarus, R.S. and Folkman, S., 1984. *Stress, appraisal, and coping*. Springer publishing company.

Leedy, P. and Ormrod, J., 2001. *Practical research: Planning and design* (7th ed.). Upper Saddle River, NJ: Merrill Prentice Hall. Thousand Oaks: SAGE Publications.

Leigh, J.P., 1985. The effects of unemployment and the business cycle on absenteeism. *Journal of Economics and Business*, 37 (2), 159-170.

Letvak, S.A., Ruhm, C.J. and Gupta, S.N., 2012. Nurses' presenteeism and its effects on self-reported quality of care and costs. *The American Journal of Nursing*, 112 (2), 30-38.

Levin, K.A., 2006. Study design III: Cross-sectional studies. *Evidence-based dentistry*, 7 (1), 24-25.

Li, Y., Zhang, J., Wang, S. and Guo, S., 2019. The effect of presenteeism on productivity loss in nurses: the mediation of health and the moderation of general self-efficacy. *Frontiers in Psychology*, 10, 1745.

Lohaus, D. and Habermann, W., 2019. Presenteeism: A review and research directions. *Human Resource Management Review*, 29 (1), 43-58.

Lohaus, D., Habermann, W., El Kertoubi, I. and Röser, F., 2021. Working while ill is not always bad—positive effects of presenteeism. *Frontiers in Psychology*, 11, 620918.

Lohaus, D. and Röser, F., 2019. Millennials: sickness presenteeism and its correlates: a cross-sectional online survey. *BMJ open*, 9 (7), e026885.

Lu, L., Cooper, C.L. and Lin, H.Y., 2013. A cross-cultural examination of presenteeism and supervisory support. *Career Development International*, 18 (5), 440-456.



Lu, L., Peng, S.Q., Lin, H.Y. and Cooper, C.L., 2014. Presenteeism and health over time among Chinese employees: The moderating role of self-efficacy. *Work & Stress*, 28 (2), 165-178.

Ma, J., Meltzer, D., Yang, L.Q. and Liu, C., 2018. Motives and presenteeism: The whys and whats. In: Lu, L. and Cooper, C., eds. *Presenteeism at Work*. Cambridge: Cambridge University Press, 2018, 97-122.

MacGregor, J.N., Cunningham, J.B. and Caverley, N., 2008. Factors in absenteeism and presenteeism: life events and health events. *Management Research News*, 31 (8), 607-615.

Magalhães, S., Barbosa, J. and Borges, E., 2022. Presenteeism in Non-Academic Staff in a Public University Context: Prevalence, Associated Factors, and Reasons to Work While Sick during the COVID-19 Pandemic. *International Journal of Environmental Research and Public Health*, 19 (22), p.14966.

March, J.G., 1994. *Primer on decision making: How decisions happen*. New York: The Free Press.

Markham, S.E., 1985. An investigation of the relationship between unemployment and absenteeism: A multi-level approach. *Academy of Management Journal*, 28 (1), 228-234.

Martinez-Calderon, J., Zamora-Campos, C., Navarro-Ledesma, S. and Luque-Suarez, A., 2018. The role of self-efficacy on the prognosis of chronic musculoskeletal pain: a systematic review. *The Journal of Pain*, 19 (1), 10-34.

Martinez, L.F. and Ferreira, A.I., 2012. Sick at work: presenteeism among nurses in a Portuguese public hospital. *Stress and Health*, 28 (4), 297-304.

Maule, A.J. and Svenson, O., 1993. Theoretical and empirical approaches to behavioral decision making and their relation to time constraints. *Time pressure and stress in human judgment and decision making*, 3-25.

McGregor, A., Magee, C.A., Caputi, P. and Iverson, D., 2016. A job demands-resources approach to presenteeism. *Career Development International*, 21 (4), 402-418.

Meijman, T.F. and Mulder, G., 1998. Psychological aspects of workload. In Drenth, P.J., Thierry, H. and de Wolff, C.J., ed. *Handbook of Work and Organizational Psychology*, 2nd ed., Hove: Taylor & Francis, 5-33.

Merrill, R.M., Aldana, S.G., Pope, J.E., Anderson, D.R., Coberley, C.R. and Whitmer, and the HERO Research Study Subcommittee, R.W., 2012. Presenteeism according to healthy behaviors, physical health, and work environment. *Population Health Management*, 15 (5), 293-301.

Meyer, J.P. and Allen, N.J., 1991. A three-component conceptualization of organizational commitment. *Human Resource Management Review*, 1 (1), 61-89.

Milkman, K.L., Chugh, D. and Bazerman, M.H., 2009. How can decision making be improved?. *Perspectives on psychological science*, 4 (4), 379-383.

Mintel. (2024). Occupational Health – UK – 2024. Available at: <https://clients.mintel.com/content/report/occupational-health-uk-2024?fromSearch=%3Ffreetext%3Doccupational%2520health%26resultPosition%3D1> [Accessed at 06 June 2023]

Mintel. (2024). Attitudes towards Health Management – UK – 2024. Available at: <https://clients.mintel.com/content/report/attitudes-towards-health-management-uk-2024?fromSearch=%3Ffreetext%3Doccupational%2520health%26resultPosition%3D5> [Accessed at 06 June 2023]

Miraglia, M. and Johns, G., 2016. Going to work ill: A meta-analysis of the correlates of presenteeism and a dual-path model. *Journal of Occupational Health Psychology*, 21 (3), 261-283.

Miraglia, M. and Johns, G., 2018. Presenteeism and well-being at work. In: Cooper, C.L. and Lu, L., eds. *Presenteeism at Work*, Cambridge: Cambridge University Press, 2018, 183-218.

Mitchell, L. and Coatsworth, N., 2021. Sick leave accessibility in junior doctors at an Australian health service. *Infection, Disease & Health*, 26 (1), 3-10.

Mongin, P., 1997. Expected Utility Theory. In Davis, J., Hands, W. and Maki, U., ed. *Handbook of Economic Methodology*. London, United Kingdom, Edward Elgar, 342-350.

Mori, T., Nagata, T., Nagata, M., Odagami, K. and Mori, K., 2022. Perceived supervisor support for health affects presenteeism: a cross-sectional study. *International Journal of Environmental Research and Public Health*, 19 (7), 4340-4350.

Moore, D.A., Swift, S.A., Sharek, Z.S. and Gino, F., 2010. Correspondence bias in performance evaluation: Why grade inflation works. *Personality and Social Psychology Bulletin*, 36 (6), 843-852.

Morris, L., 2005. The process of decision-making by stressed social workers: To stay or leave the workplace. *International Review of Psychiatry*, 17 (5), 347-354.

Mowday, R.T., Porter, L.W. and Steers, R.M., 1982. *Employee-organization linkages: the psychology of commitment, absenteeism and turnover*. New York: Academic Press.

Mujere, N., 2016. Sampling in research. In: Baran, M.L. and Jones, J.E., eds. *Mixed methods research for improved scientific study*. IGI Global, 107-121.

Munir, F., Yarker, J. and Haslam, C., 2008. Sickness absence management: encouraging attendance or 'risk-taking' presenteeism in employees with chronic illness?. *Disability and Rehabilitation*, 30 (19), 1461-1472.

Muris, P., 2002. Relationships between self-efficacy and symptoms of anxiety disorders and depression in a normal adolescent sample. *Personality and individual differences*, 32 (2), 337-348.

Mussweiler, T., Strack, F. and Pfeiffer, T., 2000. Overcoming the inevitable anchoring effect: Considering the opposite compensates for selective accessibility. *Personality and Social Psychology Bulletin*, 26 (9), 1142-1150.

Musunuru, A., Proffitt, D., Ewing, R. and Greene, W.H., 2020. Poisson and negative binomial regression analysis. In: Ewing, R. and Park, K., eds. *Advanced quantitative research methods for urban planners*. Routledge, 74-94.

Nelder, J.A. and Wedderburn, R.W., 1972. Generalized linear models. *Journal of the Royal Statistical Society Series A: Statistics in Society*, 135 (3), 370-384.

NHS staff survey. (2023). National Results Briefing 2023. Available at: <https://www.nhsstaffsurveys.com/static/8fce170a75e46bc5b531253d2966c04b/National-Results-Briefing-2023-V3.pdf> [Accessed 06 June 2024]

O'Connor, K.M., De Dreu, C.K., Schroth, H., Barry, B., Lituchy, T.R. and Bazerman, M.H., 2002. What we want to do versus what we think we should do: An empirical investigation of intrapersonal conflict. *Journal of Behavioral Decision Making*, 15 (5), 403-418.

O'Donoghue, T. and Rabin, M., 1999. Doing it now or later. *American Economic Review*, 89 (1), 103-124.

Office for National Statistics, 2020. Leading causes of death, UK: 2001 to 2018 [online]. Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/causesofdeath/articles/leadingcausesofdeathuk/2001to2018> [Accessed 12 Mar 2023]

Office for National Statistics, 2021. An overview of workers who were furloughed in the UK: October 2021 [online]. Available at: <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/articles/anoverviewofworkerswhowerefurloughedintheuk/october2021> [Accessed 12 Mar 2023]

O’Gorman, K. and MacIntosh, R., 2015. Mapping research methods. In: O’Gorman, K. and MacIntosh, R., ed. *Research methods for business and management: A guide to writing your dissertation*, Oxford: Goodfellow, 2015, 50-74.

Patton, E. and Johns, G., 2012. Context and the social representation of absenteeism: Absence in the popular press and in academic research. *Human Relations*, 65 (2), 217-240.

Pichler, S., 2015. Sickness absence, moral hazard, and the business cycle. *Health economics*, 24 (6), 692-710.

Plant, M. and Coombes, S., 2003. Primary care nurses’ attitude to sickness absence: a study. *British Journal of Community Nursing*, 8 (9), 421-427.

Pohling, R., Buruck, G., Jungbauer, K.L. and Leiter, M.P., 2016. Work-related factors of presenteeism: The mediating role of mental and physical health. *Journal of occupational health psychology*, 21 (2), 220-234.

Radcliffe, L.S., 2013. Qualitative diaries: Uncovering the complexities of work-life decision-making. *Qualitative Research in Organizations and Management: An International Journal*, 8 (2), 163-180.

Rainbow, J.G., 2019. Presenteeism: Nurse perceptions and consequences. *Journal of Nursing Management*, 27 (7), 1530-1537.

Rebmann, T., Turner, J.A. and Kunerth, A.K., 2016. Presenteeism Attitudes and Behavior Among Missouri Kindergarten to Twelfth Grade (K–12) School Nurses. *The Journal of School Nursing*, 32 (6), 407-415.

Rebmann, T., Wang, J., Swick, Z., Reddick, D. and Minden-Birkenmaier, C., 2013. Health care versus non-health care businesses' experiences during the 2009 H1N1 pandemic: financial impact, vaccination policies, and control measures implemented. *American Journal of Infection Control*, 41 (6), e49-e54.

Reichardt, C.S. and Rallis, S.F., 1994. The qualitative-quantitative debate: New perspectives. *New directions for program evaluation*, 61, 1-98.

Reja, U., Manfreda, K.L., Hlebec, V. and Vehovar, V., 2003. Open-ended vs. close-ended questions in web questionnaires. *Developments in applied statistics*, 19 (1), 159-177.

Reuter, M., Wahrendorf, M., Di Tecco, C., Probst, T.M., Ruhle, S., Ghezzi, V., Barbaranelli, C., Iavicoli, S. and Dragano, N., 2019. Do temporary workers more often decide to work while sick? Evidence for the link between employment contract and presenteeism in Europe. *International Journal of Environmental Research and Public Health*, 16 (10), p.1868.

Ridic, G., Gleason, S. and Ridic, O., 2012. Comparisons of health care systems in the United States, Germany and Canada. *Materia socio-medica*, 24 (2), 112-120.

Riessman, C.K., 2008. *Narrative methods for the human sciences*. London: Sage.

Riga, F., 2020. Pragmatism—John Dewey. In: Akpan, B. and Kennedy, T.J., eds. *Science Education in Theory and Practice: An Introductory Guide to Learning Theory*. Springer, 227-239.

Ritchie, J. and Spencer, L., 2002. Qualitative data analysis for applied policy research. In: Bryman, A. and Burgess, B., eds. *Analyzing qualitative data*. Routledge, 173-194.

Rivkin, W., Diestel, S., Gerpott, F.H. and Unger, D., 2022. Should I stay or should I go? The role of daily presenteeism as an adaptive response to perform at work despite somatic complaints for employee effectiveness. *Journal of Occupational Health Psychology*, 27 (4), 411-425.

Röser, F. and Lohaus, D., 2021. Krank zur Arbeit - und das ist auch gut so?! Positive Effekte von Präsentismus. *Wirtschaftspsychologie*.

Rosso, B. D., Dekas, K. H. and Wrzesniewski, A., 2010. On the meaning of work: A theoretical integration and review. *Research in organizational behavior*, 30, 91-127.

Rostad, I.S., Fridner, A., Sendén, M.G. and Løvseth, L.T., 2017. Paid sick leave as a means to reduce sickness presenteeism among physicians. *Nordic Journal of working life studies*, 7 (2), 71-85.

Rozin, P. and Royzman, E.B., 2001. Negativity bias, negativity dominance, and contagion. *Personality and social psychology review*, 5 (4), 296-320.

Rubin, H.J. and Rubin, I.S., 2005. *Qualitative Interviewing: The Art of Hearing the Data*. Thousand Oaks: Sage.

Ruhle, S., Breitsohl, H., Aboagye, E., Baba, V., Biron, C., Correia-Leal, A. C., Dietz, C., Ferreira, A., Gerich, J., Johns, G., Karanika-Murray, M., Lohaus, D., Løkke, A., Lopes, S. L., Martinez, L. F., Miraglia, M., Muschalla, B., Poethke, U., Sarwat, N., Schade, H., Steidelmüller, C., Vinberg, S., Whysall, Z. and Yang, T., 2019. "To work, or not to work, that is the question" – Recent trends and avenues for research on presenteeism. *European Journal of Work and Organizational Psychology*, 29 (3), 344-363.

Ruhle, S. and Schmoll, R., 2021. COVID-19, telecommuting, and (virtual) sickness presenteeism: Working from home while ill during a pandemic. *Frontiers in Psychology*, 12, 734106.

Sale, J.E., Lohfeld, L.H. and Brazil, K., 2002. Revisiting the quantitative-qualitative debate: Implications for mixed-methods research. *Quality and quantity*, 36 (1), 43-53.

Samuelson, W. and Zeckhauser, R., 1988. Status quo bias in decision making. *Journal of risk and uncertainty*, 1, 7-59.

Sanderson, K. and Cocker, F., 2013. Presenteeism: Implications and health risks. *Australian Family Physician*, 42 (4), 172-175.

Saunders, B., Sim, J., Kingstone, T., Baker, S., Waterfield, J., Bartlam, B., Burroughs, H. and Jinks, C., 2018. Saturation in qualitative research: exploring its conceptualization and operationalization. *Quality & quantity*, 52, 1893-1907.

Schinckus, L., Dangoisse, F., Van den Broucke, S. and Mikolajczak, M., 2018. When knowing is not enough: Emotional distress and depression reduce the positive effects of health literacy on diabetes self-management. *Patient Education and Counseling*, 101 (2), 324-330.

Schildmann, J., Ritter, P., Salloch, S., Uhl, W. and Vollmann, J., 2013. 'One also needs a bit of trust in the doctor...': a qualitative interview study with pancreatic cancer patients about their perceptions and views on information and treatment decision-making. *Annals of Oncology*, 24 (9), 2444-2449.

Schmid, J.A., Jarczok, M.N., Sonntag, D., Herr, R.M., Fischer, J.E. and Schmidt, B., 2017. Associations between supportive leadership behavior and the costs of absenteeism and Presenteeism. *Journal of Occupational and Environmental Medicine*, 59 (2), 141-147.

Schmidt, K. and Pförtner, T.K., 2020. Job insecurity, sickness presenteeism and the moderating effect of workplace health promotion. *Journal of Occupational and Environmental Medicine*, 62 (11), 937-942.

Schmitz, H., Bauer, J.F. and Niehaus, M., 2023. Working Anytime and Anywhere-Even When Feeling Ill? A Cross-sectional Study on Presenteeism in Remote Work. *Safety and Health at Work*, 14 (4), 375-383.

Schober, P. and Vetter, T.R., 2021. Count data in medical research: Poisson regression and negative binomial regression. *Anesthesia & Analgesia*, 132 (5), 1378-1379.

Schultz, A.B. and Edington, D.W., 2007. Employee health and presenteeism: a systematic review. *Journal of Occupational Rehabilitation*, 17 (3), 547-579.

Schwarz, N., Kahneman, D. and Xu, J., 2009. Global and episodic reports of hedonic experiences. In Belli, R.F., Stafford, F.P. and Alwin D.F., ed. *Calendar and time diary methods in life course research*. Thousand Oaks: Sage, 2009, 157-174.

Schwarzer, R. and Jerusalem, M., 1995. Generalized self-efficacy scale. In Weinman, J., Wright, S. and Johnston, M., ed. *Measures in health psychology: A user's portfolio. Causal and control beliefs*. Windsor, UK, NFER-NELSON, 35-37.

Scollon, C.N., Kim-Prieto, C. and Diener, E., 2003. Experience sampling: Promises and pitfalls, strengths and weaknesses. *Journal of Happiness studies*, 4 (1), 5-34.

Sellers, K.F. and Shmueli, G., 2010. A flexible regression model for count data. *The Annals of Applied Statistics*, 943-961.

Shafir, E., Simonson, I. and Tversky, A., 1993. Reason-based choice. *Cognition*, 49 (1-2), 11-36.

Shimabuku, R.H. and Mendonça, H., 2018. Moderating role of social support on the relationship between job demand and presenteeism. *Paidéia (Ribeirão Preto)*, 28.

Shimura, A., Yokoi, K., Ishibashi, Y., Akatsuka, Y. and Inoue, T., 2021. Remote work decreases psychological and physical stress responses, but full-remote work increases presenteeism. *Frontiers in psychology*, 12, 730969.

Shook, J.R., 2023. *Pragmatism*. MIT Press.

Siegrist, J., Starke, D., Chandola, T., Godin, I., Marmot, M., Niedhammer, I. and Peter, R., 2004. The measurement of effort–reward imbalance at work: European comparisons. *Social science & medicine*, 58 (8), 1483-1499.

Skagen, K. and Collins, A.M., 2016. The consequences of sickness presenteeism on health and wellbeing over time: a systematic review. *Social Science & Medicine*, 161, 169-177.

Slovic, P. and Monahan, J., 1995. Probability, danger, and coercion: A study of risk perception and decision making in mental health law. *Law and human behavior*, 19 (1), 49-65.

Squire, C., 2008. Experience-centred and culturally-oriented approaches to narrative. In: Andrews, M., Squire, C. and Tamboukou M., ed. *Doing narrative research*. London, England: Sage, 2008, 41-63.

Starcke, K. and Brand, M., 2012. Decision making under stress: a selective review. *Neuroscience & Biobehavioral Reviews*, 36 (4), 1228-1248.

Steers, R.M. and Rhodes, S.R., 1978. Major influences on employee attendance: A process model. *Journal of applied Psychology*, 63(4), 391-407.

Steidelmüller, C., Meyer, S.C. and Müller, G., 2020. Home-based telework and presenteeism across Europe. *Journal of Occupational and Environmental Medicine*, 62 (12), 998-1005.

Stefan, S. and David, D., 2013. Recent developments in the experimental investigation of the illusion of control. A meta-analytic review. *Journal of Applied Social Psychology*, 43 (2), 377-386.

Strömberg, C., Aboagye, E., Hagberg, J., Bergström, G. and Lohela-Karlsson, M., 2017. Estimating the effect and economic impact of absenteeism, presenteeism, and work environment–related problems on reductions in productivity from a managerial perspective. *Value in Health*, 20 (8), 1058-1064.

Susser, P. and Ziebarth, N.R., 2016. Profiling the US sick leave landscape: presenteeism among females. *Health services research*, 51 (6), 2305-2317.



Suzuki, T., Miyaki, K., Song, Y., Tsutsumi, A., Kawakami, N., Shimazu, A., Takahashi, M., Inoue, A. and Kurioka, S., 2015. Relationship between sickness presenteeism (WHO-HPQ) with depression and sickness absence due to mental disease in a cohort of Japanese workers. *Journal of Affective Disorders*, 180, 14-20.

Svenson, O., 1996. Decision making and the search for fundamental psychological regularities: What can be learned from a process perspective?. *Organizational behaviour and Human Decision Processes*, 65 (3), 252-267.

Taloyan, M., Aronsson, G., Leineweber, C., Magnusson Hanson, L., Alexanderson, K. and Westerlund, H., 2012. Sickness presenteeism predicts suboptimal self-rated health and sickness absence: a nationally representative study of the Swedish working population. *PLoS ONE*, 7 (9), e44721

Tang, N., Han, L., Yang, P., Zhao, Y. and Zhang, H., 2019. Are mindfulness and self-efficacy related to presenteeism among primary medical staff: A cross-sectional study. *International Journal of Nursing Sciences*, 6 (2), 182-186.

Tashakkori, A., and Teddlie, C., 1998. *Mixed Methodology: Combining Qualitative and Quantitative Approaches*. Thousand Oaks: Sage Publications.

Taylor, P., Cunningham, I., Newsome, K. and Scholarios, D., 2010. 'Too scared to go sick'—reformulating the research agenda on sickness absence. *Industrial Relations Journal*, 41 (4), 270-288.

Tavakol, M. and Dennick, R., 2011. Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2, 53-55.

Tebes, J.K., 2012. Philosophical foundations of mixed methods research: Implications for research practice. In Jason, L. and Glenwick, D., ed. *Methodological approaches to community-based research*. American Psychological Association, 13-31.

Teddlie, C. and Tashakkori, A., 2009. *Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and behavioral sciences*. Sage.

Thun, S., Saksvik, P.Ø., Ose, S.O., Mehmetoglu, M. and Christensen, M., 2013. The impact of supervisors' attitudes on organizational adjustment norms and attendance pressure norms. *Scandinavian Journal of Organizational Psychology*, 5 (2), 15-31.

Treece, E.W. and Treece, J.W., 1986. *Elements of Research in Nursing*. 4<sup>th</sup> edition. Mosby.

Turner, S.F., Cardinal, L.B. and Burton, R.M., 2017. Research design for mixed methods: A triangulation-based framework and roadmap. *Organizational research methods*, 20 (2), 243-267.

Tversky, A. and Kahneman, D., 1974. Judgment under Uncertainty: Heuristics and Biases: Biases in judgments reveal some heuristics of thinking under uncertainty. *science*, 185 (4157), 1124-1131.

Van Der Feltz-Cornelis, C.M., Varley, D., Allgar, V.L. and De Beurs, E., 2020. Workplace stress, presenteeism, absenteeism, and resilience amongst university staff and students in the COVID-19 lockdown. *Frontiers in psychiatry*, 11, 588803.

Van Gyes, G. and Szekér, L., 2013. *Impact of the crisis on working conditions in Europe*. European Dublin: Foundation for the Improvement of Living and Working Conditions.

Vänni, K.J., Neupane, S. and Nygård, C.H., 2017. Associations between perceived leadership and presenteeism in an industrial population. *Occupational Medicine*, 67 (9), pp.672-677.

Van Teijlingen, E. and Hundley, V., 2001. The importance of pilot studies. *Social research update*, 35.

Verhagen, S.J., Hasmi, L., Drukker, M., van Os, J. and Delespaul, P.A., 2016. Use of the experience sampling method in the context of clinical trials. *Evid Based Mental Health*, 19 (3), 86-89.

Verharen, J.P.H., Adan, R.A. and Vanderschuren, L.J., 2020. How reward and aversion shape motivation and decision making: a computational account. *The Neuroscientist*, 26 (1), 87-99.

Ver Hoef, J.M. and Boveng, P.L., 2007. Quasi-Poisson vs. negative binomial regression: how should we model overdispersed count data?. *Ecology*, 88 (11), 2766-2772.

Vroom, V.H., 1964. *Work and motivation*. New York: Wiley.

Von Neumann, J. and Morgenstern, O., 1947. *Theory of games and economic behavior*. Princeton University Press.

Waddell, G. and Burton, A.K., 2006. Is work good for your health and well-being?: The Stationery Office. Available at: <https://sjukvardskompetens.com/wp-content/uploads/2015/09/Is-work-good-for-your-health-and-well-being.pdf> [Accessed 13th August 2024]

Waizenegger, L., McKenna, B., Cai, W. and Bendz, T., 2020. An affordance perspective of team collaboration and enforced working from home during COVID-19. *European Journal of Information Systems*, 29 (4), 429-442.

Wallston, B.S., Wallston, K.A., Kaplan, G.D. and Maides, S.A., 1976. Development and validation of the health locus of control (HLC) scale. *Journal of consulting and clinical psychology*, 44 (4), 580-585.

Weaver, C.G., Ravani, P., Oliver, M.J., Austin, P.C. and Quinn, R.R., 2015. Analyzing hospitalization data: potential limitations of Poisson regression. *Nephrology Dialysis Transplantation*, 30(8), 1244-1249.

Williams, C., 2007. Research methods. *Journal of Business & Economics Research*, 5 (3), 65-72.

Whysall, Z., Bowden, J. and Hewitt, M., 2018. Sickness presenteeism: measurement and management challenges. *Ergonomics*, 61 (3), 341-354.

Whysall, Z., Karanika-Murray, M. and Chen, H., 2023. Understanding the process of decision-making for presenteeism behavior: an integration and conceptual model. In: Lapierre, L. and Cooper, C., ed., *Cambridge companion to organizational stress and well-being*. Cambridge: Cambridge University Press, 2023, 185-213.

Wood, S., Michaelides, G. and Ogonnaya, C., 2020. Recessionary actions and absence: A workplace-level study. *Human Resource Management*, 59 (6), 501-520.

Wu, T.J., Yuan, K.S. and Yen, D.C., 2023. Leader-member exchange, turnover intention and presenteeism—the moderated mediating effect of perceived organizational support. *Current Psychology*, 42 (6), 4873-4884.

Wynen, J., Boon, J., and Op de Beeck, S., 2021. Fear of missing out? Linking workplace changes and presenteeism. *Australian Journal of Public Administration*, 80 (4), 690-712.

Yang, T., Guo, Y., Ma, M., Li, Y., Tian, H. and Deng, J., 2017. Job stress and presenteeism among Chinese healthcare workers: the mediating effects of affective commitment. *International Journal of Environmental Research and Public Health*, 14 (9), 978-992.

Yang, T., Ma, T., Liu, P., Liu, Y., Chen, Q., Guo, Y., Zhang, S. and Deng, J., 2019. Perceived social support and presenteeism among healthcare workers in China: the mediating role of organizational commitment. *Environmental health and preventive medicine*, 24 (1), 1-9.

Yang, T., Zhu, M. and Xie, X., 2016. The determinants of presenteeism: a comprehensive investigation of stress-related factors at work, health, and individual factors among the aging workforce. *Journal of Occupational Health*, 58 (1), 25-35.

Yirga, A.A., Melesse, S.F., Mwambi, H.G. and Ayele, D.G., 2020. Negative binomial mixed models for analyzing longitudinal CD4 count data. *Scientific reports*, 10 (1), p.16742.

Yu, X., Wang, P., Zhai, X., Dai, H. and Yang, Q., 2015. The effect of work stress on job burnout among teachers: The mediating role of self-efficacy. *Social Indicators Research*, 122, 701-708.

Zhang, J., Wang, S., Wang, W., Shan, G., Guo, S. and Li, Y., 2020. Nurses' job insecurity and emotional exhaustion: the mediating effect of presenteeism and the moderating effect of supervisor support. *Frontiers in Psychology*, 11, 2239.

Zhang, K.Z., Zhao, S. J., Cheung, C.M. and Lee, M.K., 2014. Examining the influence of online reviews on consumers' decision-making: A heuristic–systematic model. *Decision Support Systems*, 67, 78-89.

Zhang, W., Sun, H., Woodcock, S. and Anis, A., 2015. Illness related wage and productivity losses: Valuing 'presenteeism'. *Social Science & Medicine*, 147, 62-71.

Zhou, Q., Martinez, L.F., Ferreira, A.I. and Rodrigues, P., 2016. Supervisor support, role ambiguity and productivity associated with presenteeism: A longitudinal study. *Journal of Business Research*, 69 (9), 3380-3387.

# Presenteeism General Survey

---

## Start of Block: Survey brief and consent

Q1 Presenteeism, defined as a phenomenon of working while ill, is common amongst the global workforce. For example, in the UK workforce, more than 80% of participants in the 2019 CIPD annual survey said that they had observed presenteeism at their workplace. Since the start of Covid-19 pandemic, with around 66% of businesses now working remotely, many employees are feeling compelled to demonstrate availability to their employers, which increased the possibility of presenteeism, and when home has become office, it becomes even harder for employees to switch off from work. The potential impact on employees' health and well-being in relation to presenteeism urges employers to manage presenteeism. This study is designed to examine how employees decide whether or not to work when they feel unwell. Greater understanding of the decision-making process underlying presenteeism could help to optimise these decisions, enable more effective managerial or organisational support and create a more positive experience for employees. **How will the study be carried out?** This study is in three parts, and we invite you to participate in **as many or few elements as you wish** (for instance, Stage 1 only, Stage 1 and 2, or all three Stages): **Part 1: The general questionnaire (Stage 1 - current stage)** A general questionnaire (approximately 20 minutes) which all employees are invited to complete. The general questionnaire will focus on the work environment around you, the social climate of the workplace, the types of health conditions experienced or experiencing, perceptions of presenteeism and absenteeism, including how legitimate you feel about engaging in each, and how those experiences were managed. Additionally, the questionnaire will also collect general information from participants, such as gender, age, employment status, and other more important demographic or work-related information. **Part 2: Daily diary survey (Stage 2)** The second part of the study involves completing a short daily survey for 10 consecutive working days (taking less than 5 minutes per day). An email will be sent to you daily as a reminder. The daily survey will ask questions such as how you feel today, and if you feel at all unwell, what comes into your mind first when you try to decide whether to work or take sick leave, and the factors taken into consideration. **Part 3: Interviews (Stage 3)** We will look to invite 20-30 individuals to take part in the final phase, which comprises of a single interview to explore how individuals feel about their decision, the impacts caused by their decision, what kind of support and adjustment respondents received and would want from the employer and colleagues and more. Interviews will be conducted online through Skype or Microsoft Teams, with audio recorded with the participants' permission to help with collecting the data accurately. The length of the interview will be 45 minutes maximum. **Stage 2 and Stage 3 would be commencing after stage 1. You will be asked later if you would like to take part in the other stages, apart from the general survey and if you do, you would need to provide your email address for further contact.** **How will the information that I share be used?** Any personal information that we collect (such as information on demographics) will only be used for the purposes of understanding the study group. Any personal information that you share with us (e.g., email address, comments) will be kept separate from the main data. In this way, the data that we collect will not be linked back to specific individuals. **Who has access to the data?** Only the researchers in the team carrying out the study will have access to the raw data. No information or data that participants share with us will be shared with anyone outside the research team, except for in anonymised and aggregated report form, as outlined above. **What if I change my mind?** Any participant can change their mind about taking part in any future element of the study. You can withdraw yourself from the study and/or withdraw the data that you have shared by contacting the researchers within 10 days after the last survey that you have completed, without giving a reason for your decision. You will receive a completion letter through email if you choose to take part in the diary study and/or the interviews. We will ask you to provide your **unique code** which you would create later, so that we can find and remove your data. It will not be possible to remove your data at a much later stage, as we will have already completed our analysis and started to write up the project findings. **The research team** Huijun Chen, Dr. Zara Whysall and Dr. Maria Karanika-Murray  
Huijun Chen: Nottingham Business School, Email:  
huijun.chen2012@my.ntu.ac.uk Dr Zara Whysall: Nottingham Business  
School, Tel: 0115 8482746, Email: zara.whysall@ntu.ac.uk Dr Maria Karanika-  
Murray: Department of Psychology, Tel: 0115 8482425, Email: maria.karanika-  
murray@ntu.ac.uk



**Q2 Before we can start** First, we need your approval for the data that you share with us to be used for the study. Please read and confirm that you are happy to take part in this work by ticking the boxes below. Participation in the study should be **completely voluntary**. **Please note that by clicking the first 3 options, your consent will be given regarding participating in the stage 1 survey, and by clicking all the options, it would mean that you are happy to take part in all elements of the study.**

I confirm that I have read the participant information sheet and understand the purpose of the study and I have had the opportunity to consider the information and understand that I can ask the researchers any questions I may have.

I understand that my participation is voluntary and that I can withdraw without providing a reason for this decision

I agree to take part in the current general survey

I agree to take part in the subsequent daily diary study

I agree to take part in a subsequent research interview

---



**Q3** If you're happy to participate in the diary study (Stage 2) and/or the interviews (Stage 3). Please provide your email address for further contact.

**Please note that only study related information would be sent to you and all your details would be stored in a highly safe place.**

---

---

**Q4** Please create a unique identification code which will help us to protect your anonymity and connect your data altogether. **To help you create and remember your unique code, you can use the following formula or any other method to generate the unique identification code:**

- Mother's maiden name and birthday
- For example, your mother's maiden name is Hill and her birthday is 14th August
- This gives the unique code of Hill0814
- Please make sure that you have noted your unique code down in case you decide to withdraw from the study at a later stage.

---

End of Block: Survey brief and consent

---

Start of Block: Presenteeism prevalence

Q5 The following questions will be asking how many **days** and **separate times** you **worked** when you are not feeling well physically or mentally in the last 12 months.

Example: if you had the flu **once** and it lasted for **4 days** in the last 12 months and you worked through it, for question a, you will enter **4 days** and for question b, you will enter **1 time**.

In addition, if you had the flu **once** and migraine **twice** in the last 12 months, all of the health events lasted **6 days** in total (4days for the flu and 2 days for migraine) and you worked through it, for question a, you will enter **6 days** and for question b, you will enter **3 times**.

---

Q6 As far as you can recall, in the last 12 months

a. How many **days** did you work when you were not feeling well, either physically or mentally (Please answer in approximate number of days, enter 0 if not at all)

\_\_\_\_\_

---

Q7 b. How many **separate times** (regardless of duration) did you work when you were not feeling well, either physically or mentally (Please answer in approximate number of times, enter 0 if not at all)

\_\_\_\_\_

End of Block: Presenteeism prevalence

---

Start of Block: Absenteeism prevalence

Q8 The following questions will be asking how many **days** and **separate times** you have taken **sick leave** in the last 12 months.

Example: if you had the flu **once** in the last 12 months and you have taken **4 sick days**, for question a, you will enter **4 days** and for question b, you will enter **1 time**.

In addition, if you had the flu **once** and migraine **twice** in the last 12 months, and you had taken **3 days** of sick leave in total (1 day for the flu and 2 days for migraine), for question a, you will enter **3 days** and for question b, you will enter **3 times**.

---

Q9 As far as you can recall, in the last 12 months

a. How many **days** of sick leave did you take because you did not feel well, either physically or mentally? (Please answer in approximate number of days, enter 0 if not at all)

\_\_\_\_\_

---

Q10 b. How many **separate times** (regardless of duration) were you absent from work because you did not feel well, either physically or mentally? (Please answer in approximate number of times, enter 0 if not at all)

---

End of Block: Absenteeism prevalence

---

Start of Block: Mental health status

**Q50 In the last 3 months**

---

Q11 Have you recently been able to concentrate on whatever you are doing?

- Better than usual
  - Same as usual
  - Less than usual
  - Much less than usual
- 

Q12 Have you recently lost much sleep over worry?

- Not at all
  - No more than usual
  - Rather more than usual
  - Much more than usual
-



Q13 Have you recently felt that you were playing a usual part in things?

- More than usual
  - Same as usual
  - Less than usual
  - Much less than usual
- 

Q14 Have you recently felt capable of making decisions about things?

- More so than usual
  - Same as usual
  - Less so than usual
  - Much less capable
- 

Q15 Have you recently felt constantly under strain?

- Not at all
  - No more than usual
  - Rather more than usual
  - Much more than usual
-

Q16 Have you recently felt you could not overcome your difficulties?

- Not at all
  - No more than usual
  - Rather more than usual
  - Much more than usual
- 

Q17 Have you recently been able to enjoy your normal day-to-day activities?

- More than usual
  - Same as usual
  - Less so than usual
  - Much more than usual
- 

Q18 Have you recently been able to face up to problems?

- More so than usual
  - Same as usual
  - Less able than usual
  - Much less able
-

Q19 Have you recently been feeling unhappy or depressed?

- Not at all
  - No more than usual
  - Rather more than usual
  - Much more than usual
- 

Q20 Have you recently been losing confidence in yourself?

- Not at all
  - No more than usual
  - Rather more than usual
  - Much more than usual
- 

Q21 Have you recently been thinking of yourself as a worthless person?

- Not at all
  - No more than usual
  - Rather more than usual
  - Much more than usual
-

Q22 Have you recently been feeling reasonably happy, all things considered?

- More so than usual
- About the same as usual
- Less so than usual
- Much less than usual

End of Block: Mental health status

---

Start of Block: Health locus of control



Q23 Please rate the following statements

	Strongly disagree (1) 6	Disagree (2) 5	Slightly disagree (3) 4	Slightly agree (4) 3	Agree (5) 2	Strongly agree (6) 1
If I take care of myself, I can avoid illness	(	(	(	(	(	(
Whenever I get sick, it is because of something I've done or not done	(	(	(	(	(	(
E: Good health is largely a matter of good fortune	(	(	(	(	(	(
E: No matter what I do, If I am going to get sick I will get sick	(	(	(	(	(	(
E: Most people do not realise the extent to which their illnesses are controlled by accidental happenings	(	(	(	(	(	(
E: I can only do what doctor tells me to do	(	(	(	(	(	(
E: There are so many strange diseases around that you can never know how or when you might pick one up	(	(	(	(	(	(
When I feel ill, I know it is because I have not been getting the proper exercise or eating right	(	(	(	(	(	(
E: People who never get sick are just plain lucky	(	(	(	(	(	(

People's ill health results from their own carelessness

( ( ( ( ( ( (

I am directly responsible for my health

( ( ( ( ( ( (

End of Block: Health locus of control

---

Start of Block: Attitude towards absence

Q24

Sometimes situations arise in which you might consider calling

in sick, so as to manage a situation. State for each of the following examples - on a scale from 1 to 7 - how reasonable you feel it would be to call in sick in the situation in question



	Completely unreasonable to call in sick (1)	(2)	(3)	(4)	(5)	(6)	Completely reasonable to call in sick (7)
<p>A's 7-year-old child has an upset stomach for the second day running. The child could also be looked after by friends</p> <p>B has just had a major argument with his/her partner and cannot really concentrate until the situation is clarified</p> <p>There is so much work that C cannot manage, and feels that he/she soon will not be able to take it much longer</p> <p>D has a slight cold with a runny nose, but is otherwise fine. Even though D could still work, he/she knows that his/her colleagues would have called in sick in a similar situation</p> <p>E's children have the Friday off between Ascension day and the following Saturday. There is not much to do at work that day</p>							

F has a temperature of 38.2 degree Celsius and feel a bit uncomfortable.

F knows, however, that there are already too few colleagues to carry out the work tasks

G has pains all over his/her body after a hard week at work. G knows that he/she will be fine again if he/she takes Monday off

End of Block: Attitude towards absence

Start of Block: Attendance pressure norms



Q25 Please rate the following statements regarding the current climate **in your team**

	Strongly disagree (1)	Somewhat disagree (2)	Disagree (3)	Neither agree nor disagree (4)	Agree (5)	Somewhat agree (6)	Strongly agree (7)
It is expected here that you work irrespective of how you feel							
Employees who are absent are seen as disloyal							
Employees who come to work late and leave early are frowned upon							

End of Block: Attendance pressure norms

Start of Block: Organisational adjustment norms



Q26 Please rate the following statements with regard to **the organisation** in which you work

	Strongly disagree (1)	Somewhat disagree (2)	Disagree (3)	Neither agree nor disagree (4)	Agree (5)	Somewhat agree (6)	Strongly agree (7)
At your workplace, It is easy to find alternative work for those who need less strain							
Around your workplace, people with health problems get help and support to manage their job							
At your workplace, work is looked upon as health promoting and positive, also for those with health problems							
At your workplace, it is taken into consideration that different health problems may demand different arrangements							

End of Block: Organisational adjustment norms

Start of Block: Leadership

Q27 Please answer the following questions (on a scale from 1 to 7) about the leadership style in your current work environment

	Very seldom or never (1)	(2)	(3)	(4)	(5)	(6)	Very often or always (7)
Does your line manager encourage you to participate in important decisions?							
Does your line manager encourage you to speak up, when you have different opinions?							
Does your line manager help you develop your skills?							
Does your line manager tackle problems as soon as they surface?							
Does your line manager distribute the work fairly and impartially?							
Does your line manager treat the workers fairly and equally?							
Is the relationship between you and your line manager a source of stress to you?							

Q28 Do you trust the ability of the management to look after the future of the company/organisation?

Very little or not at all (1)

(2)

(3)

Somewhat (4)

(5)

(6)

Very much (7)

End of Block: Leadership

---

Start of Block: Adjustment Latitude

Q29 What opportunities do you have for adjusting your work if you do not feel well? (Rate the following options on a scale from 1 to 7)

	Never (1)	(2)	(3)	(4)	(5)	(6)	Always (7)
Doing only the necessary work and postponing the rest							
Choosing among work tasks							
Getting help from one's colleagues							
Working at a slower pace than usual							
Taking longer breaks							
Shortening the working day							
Postponing the work and going home (or postponing work and rest, If you're currently working from home)							

End of Block: Adjustment Latitude

Start of Block: Job related demands

Q30 Please answer the following questions on a scale from 1 to 7 in relation to demands at work

	Never (1)	(2)	(3)	(4)	(5)	(6)	Always (7)
Q: How often do you not have time to complete all your work tasks?							
Q: Do you get behind with your work?							
Q: Is your workload unevenly distributed so it piles up?							
Q: Do you have enough time for your work tasks?							
W: Do you have to work very fast?							
E: Do you have to deal with other people's personal problems as part of your work?							
E: Does your work put you in emotionally disturbing situations?							
C: Do you have to keep your eyes on lots of things while you work?							
C: Does your work require that you remember a lot of things?							



C: Does your work demand that you are good at coming up with new ideas?

C: Does your work require you to make difficult decisions?

Q31 Please answer the following questions in relation to demands at work

	To an extremely small extent (1)	To a very small extent (2)	To a small extent (3)	Somewhat (4)	To a large extent (5)	To a very large extent (6)	To an extremely large extent (7)
W: Is it necessary to keep working at a high pace?							
E: Do you work at a high pace throughout the day?							
E: Is your work emotionally demanding?							

End of Block: Job related demands

Start of Block: Job Insecurity

Q32 Please answer the following questions in relation to job insecurity

	To an extremely small extent (1)	To a very small extent (2)	To a small extent (3)	Somewhat (4)	To a large extent (5)	To a very large extent (6)	To an extremely large extent (7)
Are you worried about becoming unemployed?							
Are you worried about new technology making you redundant?							
Are you worried about it being difficult for you to find another job if you became unemployed?							

End of Block: Job Insecurity

Start of Block: Social support from colleagues and supervisors

Q33 Please answer the following questions regarding social support in your workplace on a scale from 1 to 7

	Never/hardly ever (1)	(2)	(3)	(4)	(5)	(6)	Always (7)
How often is your line manager willing to listen to your problems at work, if needed?							
How often do you get help and support from your line manager, if needed?							
How often does your line manager talk with you about how well you carry out your work?							
How often do you get help and support from your colleagues, if needed?							
How often do your colleagues talk with you about how well you carry out your work?							
How often are your colleagues willing to listen to your problems at work, if needed?							

End of Block: Social support from colleagues and supervisors

Start of Block: Over-commitment



Q34 Please rate the following statements regarding your work commitment

	Strongly disagree (1)	Somewhat disagree (2)	Disagree (3)	Agree (4)	Somewhat agree (5)	Strongly agree (6)
I get easily overwhelmed by time pressure at work	(	(	(	(	(	(
As soon as I get up in the morning, I start thinking about work problems	(	(	(	(	(	(
When I get home (or stop working), I can easily relax and switch off work	(	(	(	(	(	(
People close to me say I sacrifice too much for my job	(	(	(	(	(	(
Work rarely lets me go, it is still on my mind when I go to bed	(	(	(	(	(	(
If I postpone something that I was supposed to do today, I'll have trouble sleeping at night	(	(	(	(	(	(

End of Block: Over-commitment

Start of Block: Self-efficacy



Q35 Please rate the following statements on a scale from 1 to 7

	Not at all true (1)	(2)	(3)	(4)	(5)	(6)	Exactly true (7)
I can always manage to solve difficult problems if I try hard enough							
If someone opposes me, I can find the means and ways to get what I want							
It is easy for me to stick to my aims and accomplish my goals							
I am confident that I could deal efficiently with unexpected events							
Thanks to my resourcefulness, I know how to handle unforeseen situations							
I can solve most problems if I invest necessary effort							
I can remain calm when facing difficulties because I can rely on my coping abilities							
When I am confronted with a problem, I can usually find several solutions							
If I am in trouble, I can usually think of a solution							
I can usually handle whatever comes my way							

End of Block: Self-efficacy

---

Start of Block: Demographics

Q36 What is your gender?

Male

Female

Transgender

Prefer not to tell

---

Q37 How old are you?

---

Q38 What is your ethnic group?

- Prefer not to say
- English / Welsh / Scottish / Northern Irish / British
- Irish
- Gypsy or Irish Traveller
- Any other White background
- White and Black Caribbean
- White and Black African
- White and Asian
- Any other Mixed / Multiple ethnic background
- Indian
- Pakistani
- Bangladeshi
- Chinese
- Any other Asian background
- African
- Caribbean
- Any other Black / African/ Caribbean background



Arab

Any other ethnic group

JS

Q39 When did you start working for the current employer?

	Month	Year
Please Select:	▼ January ... December	▼ 1900 ... 2049

Q53 Which country are you currently working in?

\_\_\_\_\_

Q52 In which sector do you currently work?

▼ Business, consultancy or management ... Others

Q54 What is the size of the organisation you are currently working in?

- Small (Less than 50 employees)
- Medium (Between 50 and 250 employees)
- Large (More than 250 employees)
- Not sure

Q40 How many other employees do you manage as part of your job? (if none, enter 0)

\_\_\_\_\_

Q41 What is your contract type?

- Permanent, full time
- Permanent, part time
- Fixed term, full time
- Fixed term, part time
- Flexi hours
- 0 hour contract
- Others \_\_\_\_\_

---

Q42 How many hours do you usually work per week?

\_\_\_\_\_

---

Q44 Do you need to work on-site during lockdown?

- Yes
- Sometimes
- No

Q45 Have you had an unpleasant experience of requiring / taking sick leave with your current employer?

Yes

No

---

Q46 How many people are under your care? (such as children under 16 or elderly relatives) (if none, enter 0)

\_\_\_\_\_

---

Q47 Which one of the following statements best describe how well your household has been keeping up with bills and credit commitments in the last 12 months?

Keeping up with all bills - without any difficulties

Keeping up with all bills - but it is struggle from time to time

Keeping up with all bills - but it is a constant struggle

Not keeping up with all bills - have fallen behind with some of them

Not keeping up with all bills - have fallen behind with many of them

---

Q48 Have you experienced or been experiencing any health issues in the last 12 months? (Tick all that applies)

- I haven't experienced any health issues in the last 12 months
- Infectious illnesses (e.g. flu, gastro, Covid-19)
- Cardiovascular disease/hypotension
- Digestive issues
- Cancer
- Respiratory problems (e.g. asthma)
- Cerebrovascular disease/Stroke
- Musculoskeletal problems/pain (e.g. neck and shoulder pain)
- Diabetes
- Kidney diseases
- Headache/migraine
- Allergies
- Sleep problems
- Alcohol or other drug-related problems

Anxiety, depression, stress

Others \_\_\_\_\_

---

Q49 In general, would you say your health is

Extremely bad

Moderately bad

Slightly bad

Neither good nor bad

Slightly good

Moderately good

Extremely good

End of Block: Demographics

---

## Appendix 2. The daily diary survey

# Presenteeism Diary Study

---

Start of Block: Diary study

### Brief Welcome to the second stage of the presenteeism study - Daily diaries

This stage invites you to answer a daily survey, which records how you made the decision of working or not and other related elements (e.g. the experiencing health issues, self-rated work performance) when you feel unwell, either mentally or physically. The diaries will help us to understand how you make the decision to work or not when you are feeling unwell. This knowledge will help us to develop ways to support employees and create more positive working experiences.

The diary will only take 1 minute to complete when you are feeling well on a working day and it takes no more than 10 minutes to complete when you feel unwell. The survey is recommended to be answered when you finish work or decide to stop working.

A daily reminder for the diary survey will be sent to you and you can decide when to stop answering the diary survey. Email [us](#) when you would like to stop receiving the daily reminder.

If you are experiencing very severe symptoms, please do not hesitate to contact your GP or NHS (if you are in the UK).

---

### Q0 Please provide the Unique Identification Number that you created

This will help us to put all your responses together. If you have forgotten your unique identification number, please enter your **email address**.

As a reminder, the suggested format was mother's maiden name and her day and month of her birthday (e.g. Hill0814)

*Through entering the box below and going forward to the next page, you are agreeing to take part in the diary survey.*

*You can withdraw yourself from the study and/or withdraw the data that you have shared by contacting the researchers within 10 days after the last survey that you have completed, without giving a reason for your decision.*

---

Q1 Is today a working day for you?

Yes

No

---

*Skip To: End of Survey If Is today a working day for you? = No*

---

Q2 Have you experienced any health issue(s) today? (e.g. headache, back pain, depressed symptoms)

Yes

No

No - but I want to report a health issue experienced previously - please indicate the date(s)

---

*Skip To: Q13 If Have you experienced any health issue(s) today? (e.g. headache, back pain, depressed symptoms) = No*

Page Break

---





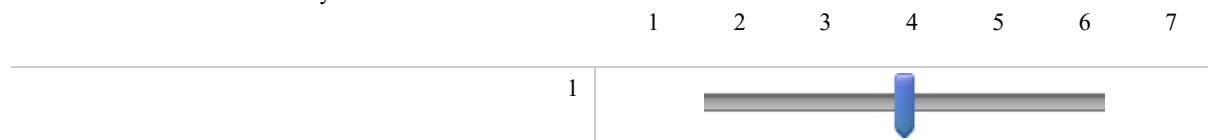
**Q3 What health issue(s) are you experiencing?** Please choose as many as apply

- Infectious illnesses (e.g. flu, gastro, Covid-19)
- Cardiovascular disease / Hypotension
- Digestive issues
- Cancer
- Respiratory problems (e.g. asthma)
- Cerebrovascular disease / Stroke
- Musculoskeletal problems/pain (e.g. neck and shoulder pain)
- Diabetes
- Kidney diseases
- Headache / Migraine
- Allergies
- Sleep problems
- Alcohol or other drug-related problems
- Anxiety, depression, stress

Other (please describe in detail) \_\_\_\_\_

**Q4 Please rate the overall severity of the health issue(s) you selected in the last question**

1 is not severe and 7 is extremely severe



**Q5 Please choose the most accurate statement for you**

- I did not take sick leave and I worked (from home, my work place or elsewhere) even though I am / was feeling unwell
- I did not take sick leave and I had the flexibility to work part of my day or complete part of my tasks only
- I took sick leave after I worked for part of my day
- I took sick leave but still did some work-related tasks (e.g. replying to work emails) after I have officially declared myself as on sick leave
- I took sick leave and I did not do any work-related tasks (e.g. replying work emails) all day
- Other (please describe in detail) \_\_\_\_\_

*Display This Question:*

*If Have you experienced any health issue(s) today? (e.g. headache, back pain, depressed symptoms) = Yes*

**Q7 Did you experience the same health issue(s) yesterday?**

Yes

No

---

*Display This Question:*

*If Did you experience the same health issue(s) yesterday? = Yes*

**Q8 Did you get to write down your thought process in the survey yesterday?**

Yes

No

---

*Skip To: Q10 If Did you get to write down your thought process in the survey yesterday? = No*

*Display This Question:*

*If Did you get to write down your thought process in the survey yesterday? = Yes*

**Q9 Did you have any different considerations today when you made your decision whether to work or not? (e.g. you may feel more pressured to work today)**

Yes -- There were some different considerations in my decision today

No -- My answer of how I made the decision would be the same as yesterday

---

*Skip To: Q13 If Did you have any different considerations today when you made your decision whether to work or no... = No -- My answer of how I made the decision would be the same as yesterday*

---

Page Break

Q10

**We want to know HOW you made your decision to work or not.**

**Please read the questions below and write down your thoughts in as much detail as you like chronologically, based on how you made the decision.**

The questions aim to assist you to reflect on your thought process. Please ignore them, if they do not apply to you.

---

**Q10-1 Stage 1: Trigger**      What made you start thinking about working or not?      In what ways did your health issue(s) affect you or your work ability?

---

---

---

---

---

---

**Q10-2 Stage 2: Options**      What were the available options you had? (e.g. taking sick leave; working on urgent tasks only and postpone the rest for later when I feel better; working as usual etc.)      What made you feel that you have those options?      What tasks were you able to carry out with your health issue(s)?

---

---

---

---

---

---

**Q10-3-a Stage 3: Evaluation**      How did you evaluate the available options?      What did you consider when making the decision?      At which point did you feel like you had reached the preferred option?

---

---

---

---

---

Q10-3-b During your thought process

	One by one	Altogether
Did you consider everything that is related to your decision one by one or altogether?	<input type="radio"/>	<input type="radio"/>

Display This Question:

*If Please choose the most accurate statement for you = I did not take sick leave and I worked (from home, my work place or elsewhere) even though I am / was feeling unwell*

*Or Please choose the most accurate statement for you = I did not take sick leave and I had the flexibility to work part of my day or complete part of my tasks only*

*Or Please choose the most accurate statement for you = I took sick leave after I worked for part of my day*

*Or Please choose the most accurate statement for you = I took sick leave but still did some work-related tasks (e.g. replying to work emails) after I have officially declared myself as on sick leave*

*Or Please choose the most accurate statement for you = Other (please describe in detail)*

### Q10-3-c Presenteeism reasons

- The discomfort is manageable and/or does not prevent me from doing my job
- I don't think my health issue is a legitimate reason to take sick leave
- It is what most other people in my team/organisation seem to do when they are unwell
- I enjoy working and/or work gives me sense of accomplishment
- I have too much work to do and/or work deadline is close
- I don't want to add extra work to co-workers
- Calling in sick would mean a loss of income
- I could lose my bonus or promotion opportunities
- I am afraid of the possibility of losing my job
- I can adjust my work tasks, workload and/or work speed, to accommodate my health issue
- I feel pressured to work as my work would build up if I take sick leave
- My manager and/or colleagues would not like the idea of me taking sick leave
- No one at work could take over my work duties
- Taking sick leave from work could cause extra administrative work (e.g. a return to work interview)
- I took sick leave before and it was not a good experience
- It is more tiring if I stay home because of home duties
- Other (please describe in detail)

Display This Question:

*If Please choose the most accurate statement for you = I took sick leave after I worked for part of my day*

*Or Please choose the most accurate statement for you = I took sick leave and I did not do any work-related tasks (e.g. replying work emails) all day*

*Or Please choose the most accurate statement for you = I took sick leave but still did some work-related tasks (e.g. replying to work emails) after I have officially declared myself as on sick leave*

*Or Please choose the most accurate statement for you = Other (please describe in detail)*

**Q10-3-d Absenteeism reasons**

- The discomfort is too much and/or symptoms make it impossible to work
- My manager will do the same if he/she is feeling unwell
- My colleagues will do the same if they have the same issue
- My workload is not urgent
- I really need a break
- My employer encourages me to do that
- I am just using my sick leave
- I am feeling annoyed/dissatisfied with work
- I cannot face people/customers at work
- My manager or employer aren't willing or able to make modifications to my work that would allow me to continue working
- Other (please describe in detail)

**Q10-4-a Stage 4: Feedback**

	Yes	No
Did you think about the possible outcomes for your options?	<input type="radio"/>	<input type="radio"/>
Did you consider whether you made the right decision?	<input type="radio"/>	<input type="radio"/>
Did you reconsider your decision?	<input type="radio"/>	<input type="radio"/>

Q10-4-b Please explain in detail why you answered YES / NO to any of the questions above.

The following questions are only for assisting you to write down your thoughts, please ignore them if they don't apply to you. What were the possible outcomes you estimated? Why did you feel that you made the right decision? How many times did you change your mind and why?

---



---



---



---



---

**Q10-5 What else was going through your mind which we may have missed?**

---

---

---

---

---

-----  
Page Break

---

**Q11 We care about how you felt about your decision.**

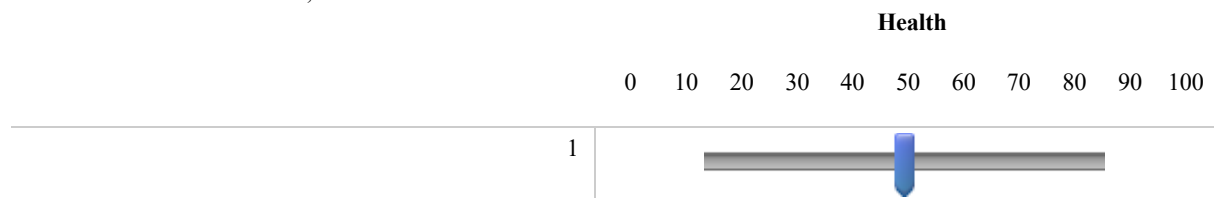
**Do you feel that the decision you made reflects what you want, as opposed to something you feel you have to/should do?**

1 reflects a decision based entirely on what you want to do, and 7 reflects a decision based entirely on what you feel you have to/should do



**Q12 When you were deciding whether to work while experiencing health issue(s), how much did you weigh your health, against your work commitment?**

The slider below indicates the weight of your health (in percentage) in your decision. For example, if you select 20 on the scale below, that means 20% on health vs. 80% on work commitments, or if you choose 70, that means 70% on your health vs. 30% of work commitments, and so on.

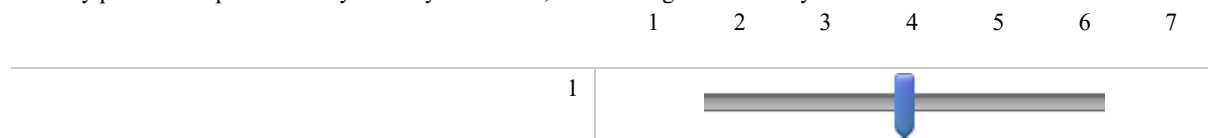


*Display This Question:*

*If Please choose the most accurate statement for you != I took sick leave and I did not do any work-related tasks (e.g. replying work emails) all day*

**Q13 How would you rate your work performance today, compared to days when you are not experiencing any ill-health symptoms?**

1 is very poor in comparison to days when you are well, and 7 is as good as when you are well



*Display This Question:*

*If Please choose the most accurate statement for you != I took sick leave and I did not do any work-related tasks (e.g. replying work emails) all day*



**Q14 How productive have you been today?**

	Very little (1)	(2)	(3)	(4)	A great deal (5)
Carried out the core parts of your job well	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Completed your core tasks well using the standard procedures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ensured your tasks were completed properly	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Diary study

---

### Appendix 3. Semi-structured interview questions

1. Describe the process of taking sick leave in your organisation
2. How do you generally feel about your decisions of working when unwell?
3. After you made your decision, do you ever think about whether you made the right decision, in terms of your health and recovery?
4. How do you generally feel about your decision of taking sick leave?
5. What would it take for you to take sick leave when you are unwell, rather than to work through illness?
6. If they are managers, how do they feel about their subordinates taking sick leave? If an employee shows up to work sick, what advice would you give him/her? And how do you assess the situation?
7. Are there any procedures that you need to go through when you come back from sick leave? If there are, what are they? And does it influence your decisions about whether to take sick leave or not, in any way?
8. What would typically happen if a member of staff with a chronic illness was often absent for short period of time?
9. How has the Covid pandemic influenced your decision to work when feeling unwell or take sick leave?
10. How did working from home change your decision of working or not when you experience some health symptoms on a working day? In what way?
11. What kinds of support and resources are offered to you regarding health and wellness in general? Are there any extra support offered to you for working from home?
12. What supports are offered to staff, particularly for people who experience long-term health issues?
13. What supports would you like to receive but are currently not in-place within your company? (What kind of changes you can think of, to make the workplace happier and healthier?)
14. What would make you feel more comfortable to take sick leave?

