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Employees' orientations, job control and workload: A Future Time
Perspective on the role of the preferred self in engagement

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This thesis is submitted to Birkbeck, University of London
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Declaration

I confirm that the work presented in this thesis is the result of entirely my own work.

Alison Kelleher
March 2024

Abstract

This thesis examines person-related factors as one way to explain the preferred self from the needs-satisfaction theory of engagement (Kahn, 1990); and consequently, extend our understanding of the relationship between Job Demands and Resources (JD-R) and engagement. The two studies draw upon the philosophical concepts of eudaimonia and hedonia, the JD-R theory, the Future Time Perspective theory, and Self-Determination Theory. Eudaimonic and hedonic orientations align with present and future focused FTPs, respectively, to explain how employees express their preferred selves; and addresses the inherent time perspective differences in eudaimonic and hedonic processes. To explain engagement, employees' FTPs also extend our understanding of JD-R antecedents, their task perceptions (psychological meaningfulness and utility value), and their autonomous motivation.

In Study 1, employees' eudaimonic orientations consistently predict their task perceptions, autonomous motivation, and engagement. Higher levels of a future focused FTP strengthen these relationships. Eudaimonic and hedonic orientation's positive relationships with their associated FTPs are supported using path analysis. These findings consolidate the importance of eudaimonia and support the conceptualisation of employees' preferred selves.

In Study 2, general and momentary levels of job control consistently predict employees' task perceptions and autonomous motivation. The multilevel path analysis indicates that both levels of workload consistently predict engagement. Employees' eudaimonic orientations and their future focused FTP strengthened the relationship between job control and general levels of autonomous motivation.

Overall, this thesis contributes to the engagement literature by contextualising employees' preferred selves based on their motivational orientations and FTPs. It establishes the importance of the FTP for motivation, and JD-R antecedents, which includes promoting the effects of job resources. The findings also challenge assumptions on job demands and their relationship with engagement. Employees' characteristic long-term perspectives sustain their engagement and underpin the expression of their preferred selves, with practical implications for employees' careers intentions and job design.

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Contents

Abstract	Page 3
Acknowledgements	4
Contents pages	5
References Index	8
Appendices Index	9
Tables & Figures Index	10

Chapter 1: Introduction

1.Introduction	12
1.1. Engagement: Our Current Understanding & Motivational Processes	16
1.2. Engagement & Motivational Processes...	20
1.3. The Importance of the Role of Orientations and FTPs...	24
1.4. Motivational Processes driving Engagement...	26
1.5. Overview of the Chapters	30

Chapter 2: Literature Review

2.1. Current Debates within the Literature: Competing Theoretical Perspectives	33
2.1.1. Competing Theories on Engagement	34
2.1.2. Eudaimonia and Hedonia: Four Competing Conceptualisations	37
2.1.3. What is Eudaimonia and where does it fit?	45
2.2. Employees' Orientations & Time Perspectives...	48
2.3. Psychological Mechanisms explaining the link between Orientations and Engagement	52
2.3.1. Psychological Meaningfulness vs Meaning: what is the difference...	52
2.3.2. Orientations & Utility Value	54
2.3.3. Orientations & Autonomous Motivation	55
2.4. Conceptual and Theoretical Frameworks	56
2.4.1. Employees' FTP and the Role of SDT: A Theoretical Framework	57
2.5 Job Demands-Resources, and Engagement - via Needs Satisfaction	59
2.6. Motivational Orientations, Job Demands-Resource....	63

2.6.1. The role of JD-R as Situational Antecedents: Task Perceptions, and Autonomous Motivation	63
2.6.2. The Role of the FTP: JD-R, Task Perceptions and Autonomous Motivation	66
2.7. Summary	69

Chapter 3: Employees' Orientations and FTP as Motivational Characteristics: The Role of the Preferred Self in understanding Engagement.

3.1. Introduction & Study Rationale	71
3.2. The Preferred Self: Orientations & FTP	73
3.2.1. The Motivational Power of the FTP	73
3.2.2. Motivational Orientations & FTP	75
3.3. Hypotheses Development	77
3.3.1. Motivational Orientations as antecedents of Engagement...	77
3.3.2. Study 1: Conceptual Framework	84
3.3.3. The Moderating Role of Employees' FTP	85
3.4. Methodology	90
3.4.1. Measurement Considerations: Motivational Orientations & FTP	90
3.4.2. Research Design and Participants	93
3.4.3. Procedure	94
3.4.4. Measures	95
3.5. Summary	97

Chapter 4: Employees' Orientations, their FTP, & the Psychological Mechanisms explaining Engagement. A Path Analysis.

4.1. Measurement Analysis	101
4.1.1. Reliability	101
4.1.2. Missing Values Analysis & Model Fit Indices	101
4.2. Measurement Models and Scale Development	103
4.2.1. Independent Variables: Eudaimonic and Hedonic Orientations	103
4.2.2. Psychological Mechanisms (Mediators): Psychological...	105
4.2.3. Moderator: Employees' FTP (present and future focused)	108
4.2.4. DV: Engagement	110
4.2.5. Convergent and Discriminant Validity of the Study's Measures	112
4.3. Preliminary Analysis	115

4.4. Main Analysis	116
4.5. Discussion & Conclusions	125
4.5.1. Motivational Orientations and FTPs: Motivational Processes...	126
4.5.2. Motivational Orientations and Engagement: The Role of...	129
4.5.3. Strengths, Limitations, and Recommendations for Future Research	131

Chapter 5: The Preferred Self and JD-R: Explaining their Task Perceptions and Engagement across the working week

5.1. Introduction & Study Rationale	134
5.2. Conceptual Framework & Hypotheses Development	136
5.2.1. A Two-theory Approach: The FTP theory & SDT	136
5.2.2. The Role of JD-R and Orientations in Engagement: Expanding...	140
5.2.3. The influencing Role of Employees' FTP: The appraisal of....	149
5.3. Methodology	154
5.3.1. Research Design	154
5.3.2. Meeting the Overarching Aim of this thesis via a Daily Diary Design	155
5.3.3. Sample Size	156
5.3.4. Participants	158
5.3.5. Procedure	158
5.3.6. Measures	160
5.4. Summary	162

Chapter 6: Situational and Person-related Factors that explain Employees' Perceptions of, and Engagement in, their work: A multilevel Analysis

6.1. Measurement Analysis & Analytical approach	166
6.1.1. Reliability Analysis	166
6.1.2. Missing Values & (level specific) Fit Indices	171
6.2. Measurement Models	173
6.2.1. Time-invariant Measures	174
6.2.2. Measurement Models for Repeated Observations	177
6.3. Person-level Measures: A Latent Means Centering approach...	187
6.3.1. Time Invariant and Repeated Observations Measures: Convergent...	188
6.4. Preliminary Analysis	191
6.5. Main Analysis	191
6.5.1. Building the Multilevel Path Model & testing the Hypothesised....	192

6.6. Discussion & Conclusions	202
6.6.1. Person-related & Situational factors: Antecedents of Employees’...	203
6.6.2. Situational Factors that explain Engagement via Psychological Mechanisms	207
6.6.3. What did the addition of Job Demands and Resources as IVs achieve?	208
6.6.4. Study Limitations & Future Research	210

Chapter 7: General Discussion

7.1. Overview of thesis: The aims of Two Studies	212
7.2. Extending our understanding of Motivational Processes & Engagement...	213
7.2.1. Motivational Processes: Orientations, JD-R, and the FTP	213
7.2.2. Psychological Mechanisms: Explaining Engagement...	215
7.3. Theoretical Considerations in this thesis: Answering the...	221
7.3.1. Consideration of the Preferred Self in Engagement Research	221
7.3.2. The Conceptualisation of Eudaimonia and Hedonia as Motivational...	222
7.3.3. JD-R and Engagement: The Momentary Nature of Employees’...	224
7.4. The wider Theoretical Contributions	225
7.4.1. Engagement and the Meaningfulness of work: The Employees’...	226
7.4.2. Extending our understanding of JD-R Perspective on Engagement	227
7.4.3. The Conceptualisation of Motivational Person-related Factors...	229
7.4.4. FTP: The Role of the Time Perspective...	231
7.5. Practical Implications	234
7.6. Methodological Implications	239
7.7. Limitations & Future Research	240
7.8. Final Conclusions	243
References	246

Appendices Index

Appendix 1 Study 1: Recruitment advertisement and Information Sheet	282
Appendix 2.1 Study 1 measures	286
Appendix 2.2. Comparison of ZTPI-S measures in the literature	290
Appendix 2.3. Study 1 Data Collection online survey	291
Appendix 3A Reliability and validity (full measures)	300
Appendix 3B Inter-item correlations for all measures: Measurement models (CFA).	301

Appendix 3C Additional Correlations	307
Appendix 4A Study 2 Information Sheet	308
Appendix 4B Study 2 Description example: Prolific	311
Appendix 4C Study 2 Measures	312
Appendix 4D Study 2 Days 2-5: Study purpose reminder & consent	316
Appendix 4E Study 2 Data Collection Online Survey Day 1	317
Appendix 5 Additional CFA Tables (Chapters 5 & 6)	323

Tables & Figures

Tables

Table 2.1. Categories of analysis & levels of measurement in definitions of eudaimonia & hedonia.	39
Table 4.1. Goodness-of-fit Indices of models for HEMA scale	104
Table 4.2. Standardised Loadings & Standard Errors for two-factor CFA model of Eudaimonic and Hedonic orientations (HEMA scale).	105
Table 4.3. Goodness-of-fit Indices of models for Psychological Meaningfulness scale & the Job Challenge scale (Utility value)	106
Table 4.4. Standardised Loadings & Standard Errors for two-factor CFA model for Psychological Meaningfulness scale & Job Challenge scale	107
Table 4.5. Goodness-of-fit Indices of models for Autonomous Motivation (R-MAWS)	107
Table 4.6. Standardised Loadings & Standard Errors for two-factor CFA models of Autonomous Motivation (R-MAWS).	108
Table 4.7. Goodness-of-fit Indices for ZTPI-S scales	109
Table 4.8. Standardised Loadings & Standard Errors for three-factor CFA Model of ZTPI-S (FTP).	110
Table 4.9. Goodness-of-fit Indices of models of Job Engagement Scale	111
Table 4.10. Standardised Loadings & Standard Errors for one-factor (Reduced) CFA model of Job Engagement scale	112
Table 4.11. Mean, standard deviations and correlations between the modified measures	114
Table 4.12. Standardised coefficients for the direct relationships (only) in the hypothesised model	118
Table 4.13. Standardised coefficients for the indirect effects explaining the relationship between eudaimonic orientations and engagement	121
Table 4.14.: Conditional indirect effects of employees' future focused FTP...	125
Table 6.1. Cronbach alphas for Day 1 variables & number of items	167
Table 6.2. Cronbach alphas and number of items for repeated observation measures	168
Table 6.3. Inter-Class Correlations, $R^*_{WG(j)}$, Confidence Intervals...	171
Table 6.4. Goodness-of-fit Indices of models for HEMA scale	175
Table 6.5. Goodness-of-fit Indices of models for ZTPI-S scale	176
Table 6.6. MCFA models for two-factor Job Control & Workload	178
Table 6.7. Standardised Loadings & Standard Errors for two-factor MCFA Model of Job Control and Workload.	180
Table 6.8. MCFA models for the Psychological Meaningfulness scale & the Job Challenge Scale (Utility Value).	181
Table 6.9. Standardised Loadings & Standard Errors for two-factor MCFA Model of the Psychological Meaningfulness scale, and the Job Challenge Scale (Utility value).	183
Table 6.10. MCFA models for two-factor Autonomous motivation (R-MAWS).	184
Table 6.11. Standardised Loadings & Standard Errors for one-factor MCFA Model of autonomous motivation (R-MAWS).	185
Table 6.12. MCFA models for one-factor Engagement (Job Engagement scale).	186
Table 6.13. Standardised Loadings & Standardised Errors for one-factor MCFA Model of Engagement	187

Table 6.14. Means, Standard Deviations, and correlations between measures at both levels of analysis	190
Table 6.15: Standardised coefficients for the direct relationships in the hypothesised model (Model 2)	195
Table 6.16. Standardised coefficients for the indirect effects autonomous motivation, and direct effects of job control, on engagement	199
Table 6.17. Employees' future-focused FTP conditional indirect effects	202
Table 7.1. Summary of the key findings in the two studies	217

Figures

Figure 2.1. The expected relationships in Study 1 (cross-sectional) and Study 2 (daily diary) – addition of JD-R antecedents	57
Figure 3.1. Conceptualisation of the preferred self – eudaimonic and hedonic orientations and their respective FTPs	76
Figure 3.2. Eudaimonic and hedonic orientations and FTPs as motivational processes, which explain their levels of engagement via their task perceptions and levels of autonomous motivation.	85
Figure 4.1. Full path analysis model: direct and moderated relationships	120
Figure 4.2. Simple slope plot for the interaction effect of eudaimonic orientations*future focused FTP on the relationship between eudaimonic orientations and psychological meaningfulness	123
Figure 4.3. Simple slope plot for the interaction effect of eudaimonic orientations*future focused FTP on the relationship between eudaimonic orientations and identified regulation (autonomous motivation)	124
Figure 5.1. The collective examination of employees' levels of JD-R and their motivational orientations, as antecedents of the perceived meaningfulness and utility value of tasks, their levels of autonomous motivation; which are moderated by employees' FTP (present and future focused) leading to engagement.	139
Figure 6.1. Multilevel path model of person-related (orientations) and situational factors (job control and workload), as antecedents of engagement	197
Figure 6.2.: Simple slope plot for the three-way interaction between job control, eudaimonic orientations and future focused FTP on autonomous motivation	201

Chapter 1

Introduction

The introduction of engagement in organisational literature provides the means to theorise about the reasons employees will engage in, or withdraw from, their work (Kahn, 1990). Hence, research on engagement holds great importance to our understanding of employees' behaviour, and the motivation that drives their actions. Since its conception, research on engagement has expanded rapidly with a series of meta-analysis and systematic reviews attempting to amalgamate our current understanding of this construct (cf. Halbesleben, 2010; Harter, Schmidt & Hayes, 2002; Knight, Patterson & Dawson, 2017; Shuck, 2011). There is prevailing support for antecedents such as autonomy and self-efficacy (Bakker & Demerouti, 2017), and positive outcomes such as job performance (Christian, Garza, & Slaughter, 2011), and organisational commitment (Halbesleben, 2010). There is also notable interest in engagement from a management perspective (Crawford, Rich, Buckman, & Bergeron, 2014), including the role of engagement in understanding the employment relationship (cf. Godard, 2014). However, despite the consistent interest from researchers and practitioners (cf. Meyer & Gagné, 2008), there is limited understanding of the way an individual's motivational characteristics underpin how they express their preferred selves in their work and sustain their engagement. Therefore, the aim of this thesis is to examine the motivational processes, both person-related and situational, which inform employees' levels of engagement.

In the engagement literature, a prominent perspective exists for theorising about its antecedents, and a prevailing conceptualisation that maintains our current understanding of engagement. Research on engagement often adopts the Job Demands-Resources (JD-R) perspective (Bailey, Madden, Alfes, & Fletcher, 2017), with job resources as well-established antecedents (Bakker & Demerouti, 2017; Bakker, Demerouti, & Sanz-Vergel, 2014). Research finds that the concurrent existence of job demands and resources promote engagement levels at work (Bakker, Hakanen, Demerouti, et al., 2007; Kühnel, Sonnentag & Bledow, 2012). The JD-R literature adopts the prevailing conceptualisation of engagement, which is based on factors that indicate employees' levels of engagement (Shuck, 2011), with the consensus that it is "a positive, fulfilling, work-related state of mind" (Schaufeli, Salanova, Gonzalez, & Bakker, 2002, p. 74). This conceptualisation is how engagement is most often assessed within the literature, yet the foundation of engagement originated from a different perspective.

In its development, Kahn's (1990) seminal work defined engagement as "the employment and expression of a person's 'preferred self' in task behaviours that promote connections to work and to others, personal presence (physical, cognitive, and emotional) and active full performance" (p.700). The premise of this definition is underpinned by whether employee's personal values and identity (i.e., their preferred selves) align with their work, which enables them to be fully present (Kahn, 1992), and thus engaged in their work. Therefore, Kahn's (1990) theory of engagement aimed to encapsulate the reasons employees will engage in or withdraw from, their work. This theory arguably provides a pathway to understanding the motivational processes leading to engagement, based on employees finding their work psychologically meaningful, having the available cognitive resources to engage, and the safety to express themselves in their work roles (Kahn 1990; Shuck, 2011). Recent research recognises the need to examine individual cognitive processes that employees use to alter the impact of job characteristics, which promote more self-focused advantageous outcomes (Demerouti, Bakker, & Xanthopoulou, 2019). This recognition signals the necessity of understanding the psychological processes that explain the person-related factors which sustain engagement (Bakker, Oerlemans & Brummelhuis, 2012). Hence, it is imperative to examine the existing problems within the prevailing approach to understand the antecedents of engagement, and the way it is conceptualised in the literature.

The prominence of JD-R theory in engagement research requires evaluating its limitations for our understanding of person-related (thus, proximal) factors (Bakker et al., 2012), which shape the motivational, and psychological, processes leading to engagement. The premise of JD-R theory is that job demands and job resources, such as social support and autonomy, act as situational factors that explain the impact of working conditions on engagement (Bakker & Demerouti, 2017). However, a key limitation of this theory is its descriptive nature resulting in a lack of specificity, and thus, understanding of the psychological processes that explain engagement. An array of variables are classified as either a job resource or demand without adequate explanation of the processes supporting their relationships (Schaufeli & Taris, 2014). For example, the reasons certain resources may be appropriate in mitigating specific demands are not explicitly clear in the propositions of this theory. In addressing this lack of specificity, additional frameworks are required to explain the interaction between job demands and job resources, and their associated processes (Schaufeli & Taris, 2014). The preceding issues on the descriptive nature of JD-R theory mean that engagement research has yet to capture the way employees' express themselves in their work roles, for example via their 'preferred selves' (Kahn, 1990, p.700). The lack of

understanding about the preferred self as a concept prevails due to two key issues: first, the limited adoption of the needs-satisfaction theory of engagement (cf. Shuck, 2011). Second, the need for a motivational theory and its associated processes, which will explain the way employees' person-related factors shape motivation, and act as proximal antecedents of engagement. In essence, JD-R theory enables theorising about situational but not person-related factors that explain the reasons employees are engaged at work.

As the first known empirical examination of the 'preferred self' proposed by Kahn (1990), an aim of this thesis is to address the issues with our current understanding of engagement, that places the focus on employees' motivational characteristics and their associated processes. It is asserted within engagement research that motivation theories do not incorporate fully the idea that employees use both their conscious and unconscious minds to determine the effort they invest at work (Kahn, 2010). Correspondingly, research on motivational processes has not adequately acknowledged the future-orientated nature of motivation (Husman, Brem, Banegas, et al., 2014), including research that adopts the JD-R theory to explain engagement. This dearth in motivation theory is acknowledged in a recent systematic review, which advocates for integrating more time-related constructs, such as a Time Perspective, in organisational psychology theory (Kooij, Kanfer, Betts, & Rudolph, 2018). One argument underpinning this thesis is that the concept of the 'preferred self' can be attributed to employees' eudaimonic and hedonic orientations and their associated Future Time Perspectives (FTP). Their anticipated relationships are posited to act as motivational characteristics that explain the unconscious cognitive processes that sustain employee engagement. Employees' motivational orientations embody the human need for self-development (eudaimonia) and the pursuit of pleasure from their work (hedonia) (Huta & Waterman, 2014). Research indicates that both eudaimonic and hedonic orientations align with the goals pursued by individuals that are valuable due to their alignment with their identity (cf. Bauer, McAdams & Pals, 2008). Eudaimonic orientations refer to the value attributed to growth and seeking challenges, while hedonic orientations refer to seeking pleasure in one's daily activities (Huta, 2013). Additionally, employees' FTPs represent their willingness to engage in present-day tasks, based on their perceptions of a task's value for immediate and distant future outcomes (Lens, Paixão & Grobler, 2012). Therefore, to capture the concept of the preferred self (cf. Kahn, 1990) and the future-orientated nature of motivation (Husman et al., 2014), eudaimonic and hedonic orientations and employees' FTPs are anticipated to explain the cognitive-motivational processes that promote and sustain engagement.

In addressing the research issues relating to our current understanding of engagement, there is a need for theoretical clarity relating to the lack of specificity in JD-R theory (cf. Schaufeli & Taris, 2014), and the ability to assess the preferred self that is synonymous with the needs-satisfaction theory of engagement (Kahn, 1990). To address both issues, two theories are adopted in this thesis. First, Self-Determination Theory (SDT) is central to our current understanding of motivation (Van den Broeck, Ferris, Chang et al., 2016), and focuses on needs fulfilment based on three psychological needs, that is, autonomy, relatedness, and competence (Gagné & Deci, 2005). SDT provides a partial explanation of both the psychological processes lacking in JD-R theory and aligns with the focus on Kahn's (1990) needs-satisfaction theory of engagement via assessing employees' preferred selves. Second, the FTP theory (Lens et al., 2012), acts as an additional framework in extending our understanding of engagement beyond JD-R theory (cf. Schaufeli & Taris, 2014). Furthermore, this additional theory provides one way to examine the concept of the preferred self from Kahn's (1990) theorisation of engagement. SDT alone will not enable capturing the inherent time perspective differences in eudaimonic orientations (long-term) and hedonic orientations (short-term) processes, which are anticipated to contribute to our understanding of the way employees' express their preferred self at work, and subsequently their levels of engagement. Additionally, SDT does not account for the way employees' needs differ based on whether they align with immediate (present FTP) or distant future (future FTP) outcomes. Hence, adopting the FTP theory accounts for these differences in needs. Its adoption alongside eudaimonic and hedonic orientations, and SDT, will support explaining the psychological processes missing in JD-R theory (Schaufeli & Taris, 2014).

Finally, research recognises that the effects of job demands can be reduced when demands are viewed as a challenge leading to future gains (Crawford, LePine & Rich, 2010). This is contrary to the propositions of JD-R theory (cf. Bakker & Demerouti, 2017). Therefore, assessing eudaimonic and hedonic orientations and employees' FTPs, as person-related factors, builds on recent enquiries in the literature (cf. Demerouti et al., 2019), by acting as individual strategies that reduce further the effect of job demands. Their application extends our understanding of the relationship between job demands and engagement, where the prevailing JD-R literature views demands as antecedents of burnout rather than engagement (Bakker & Demerouti, 2017; Schaufeli & Taris, 2014). Taken together, the alignment between eudaimonic and hedonic orientations and their associated FTPs are theorised to address the need for time-related constructs in understanding motivation, leading

to one way to explain the role of the preferred self, and extend our understanding of the psychological processes that promote and sustain engagement.

The purpose of this chapter is to introduce the research problems central to this thesis, which aims to extend our understanding of the role of the preferred self, and the associated motivational processes underpinning person-related and situational factors, to extend our understanding of engagement. There are four sections in this chapter. The first three sections cover: engagement and its associated processes; the research gaps in this understanding; and the solutions and contributions of this thesis. The final section provides the structure and the purpose of each chapter that follows.

1.1. Engagement: Our Current Understanding & Motivational Processes

1. *The JD-R Perspective: Is it all about Job Resources?*

The JD-R model was introduced to explain the relationship between job characteristics and burnout (Demerouti, Bakker, Nachreiner, et al., 2001), and later revised as a theory to explain the relationship between engagement and its antecedents (Bakker, Demerouti & Verbeke, 2004). The positive relationship between job resources and engagement is widely supported (Bakker et al., 2014; Hakanen, Schaufeli, & Ahola, 2008) with job resources well established as antecedents of engagement (Bakker & Bal, 2010; Bakker & Demerouti, 2008). One proposition of the JD-R theory is the existence of dual processes, first, that job resources align with a motivational process, with the premise that resources promote goal achievement, personal growth, and development (Bakker & Demerouti, 2007). Second, it is assumed that job demands align with a health impairment process, due to the associated costs to the employee, in meeting those demands (Demerouti et al., 2001). A second proposition of JD-R theory is the notion that job resources mitigate the impact of job demands and therefore strain on employees. For example, social support and opportunities for professional development are found to reduce the effects of high workload and burnout (cf. Xanthopoulou, Bakker, Dollard, et al., 2007), and this interaction between job resources and demands is widely supported (Bakker et al., 2014). Job demands are operationalised in the current research as employees' levels of workload which refers to the quantity and pace of work, and the effort required to complete work tasks (cf. Bakker, Demerouti & Verbeke, 2004), as opposed to the amount of work to be completed (Bakker &

Demerouti, 2017). Despite support for these two propositions of JD-R theory, research is evolving to re-examine the idea of job demands and their association with negative outcomes.

The prevalence of job resources as antecedents of engagement has led to questions on the role of job demands, and their current utility for understanding engagement. Within JD-R theory, job demands primary role is as antecedents of negative outcomes such as burnout (cf. Schaufeli & Taris, 2014). However, this premise is challenged in this thesis and supported by theoretical and empirical arguments, in the literature. To date, JD-R research has developed from previous assertions that there are two types of demands, hindrance demands that align with the health impairment assumption of JD-R (cf. Cavanaugh, Boswell, Roehling, & Boudreau, 2000), and challenge demands that promote positive outcomes (Podsakoff, J. LePine & M. LePine, 2007). However, there are arguments that this distinction may be contextual (Bakker & Demerouti, 2017), and dependent on employees' perceptions of those demands (cf. Searle & Auton, 2015). In a meta-analysis, research assessing the assumptions pertaining to job demands found that when they are viewed as a challenge, they lead to positive outcomes, such as personal growth, valued future gains, and engagement (Crawford, LePine & Rich, 2010). Furthermore, in a review of JD-R theory, it was argued that the relationship between job resources and motivation is enhanced by job demands and promote employees' levels of motivation (Bakker & Demerouti, 2017). For example, job demands challenge employees to employ their existing resources, which lead to motivated actions such as sustained engagement. Hence, the existing findings pertaining to challenge demands, compared to the alignment between hindrance demands and JD-R theory, offers one way to reconsider the role of job demands in understanding employee engagement. In sum, while the role of job resources is embedded in our current understanding of engagement, the role of job demands requires further examination in how those demands can act as positive antecedents of engagement.

2. *The Satisfaction of Needs: SDT Perspective on Engagement*

Responding to a review of existing engagement theories (cf. Macey & Schneider, 2008), research proposed that SDT could strengthen our understanding of engagement, both theoretically and from a practitioner's perspective (Meyer & Gagné, 2008). SDT is founded upon the assertion that employees have inherent psychological needs, such as autonomy, which when satisfied will promote motivation (Deci, Olafsen & Ryan, 2017). There is a precedence within SDT research that individuals are predisposed to proactively seek

opportunities for growth in fulfilling their psychological needs, which enhance their levels of engagement (Deci, Ryan, Gagné, et al., 2001). For example, from an SDT perspective, engagement is an outcome of employees' motivation-based needs being met by their work tasks. A meta-analysis of the research on SDT's basic psychological needs found positive relationships with engagement, with autonomy and relatedness acting as stronger antecedents compared to competence (Van den Broeck, et al., 2016). The assumptions of SDT on the satisfaction of psychological needs to promote motivation, has similarities with the premise of the needs-satisfaction theory of engagement (Kahn, 1990). Under this needs-satisfaction perspective, there are three psychological conditions that when fulfilled promote engagement, that is, psychological meaningfulness, availability, and safety (Kahn, 1990; May, Gilson & Harter, 2004). Of particular interest, in this thesis, is psychological meaningfulness which refers to the perceived return of investment from work that promotes 'physical, cognitive, or emotional energy' (Kahn, 1990, p. 704). The alignment between two needs-satisfaction approaches to motivation (SDT) and engagement (Kahn, 1990), respectively, has yet to receive attention in engagement research. However, both psychological meaningfulness from Kahn's (1990) theory, and autonomous motivation from SDT, are prominent in the engagement literature (Bakker et al., 2014; Rich, LePine & Crawford, 2010).

Kahn (1990) suggests that engagement exists on a motivational continuum that incorporates intrinsic and extrinsic motivation (Shuck, 2011). Correspondingly, a key proposition of SDT is that motivation is volitional and informed by two types, that is, autonomous (intrinsic) motivation and controlled (extrinsic) motivation (Gagné & Deci, 2005). Research often operationalises autonomous motivation as intrinsic motivation, which refers to the work task being the reward due to experienced interest and enjoyment (Deci et al., 2017). The concept of autonomous motivation also incorporates identified regulation in its operationalisation in SDT literature, which refers to work tasks that are initially underpinned by extrinsic motivation, which become autonomous, thus intrinsic, when the employee begins to identify with a goal and can 'express one's sense of self (integration)' (Meyer & Gagné, 2008, p.60). In the current research, intrinsic motivation is posited to underpin tasks employees engage in due to person-related factors, such as their motivational orientations, that is, the pursuit of personal growth (eudaimonic orientations) or short-term pleasure (hedonic orientations). It is recognised that employees also engage in tasks that are initially dependent on their working conditions, such as their levels of job control, which underpin their extrinsic motivation for engaging in their work tasks (cf. Bakker & Demerouti, 2017). Job control refers to employees' decision-making ability over the way they do their

work, and the skills they use (Van der Doef & Maes, 1999). As a job resource, it aligns with motivation in JD-R and identified regulation in SDT. The importance of autonomous motivation for engagement is well established in SDT research (Deci et al., 2017), for example high levels of autonomous motivation explain the relationship between challenging work and engagement (Tadić, Oerlemans & Bakker, 2015), and reduces the effects of job demands (Trépanier, Fernet & Austin, 2013). In sum, autonomous motivation is operationalised, in the current research, based on employees' levels of intrinsic motivation and identified regulation. Whereby, both dimensions of autonomous motivation align with an aim to collectively examine both person-related and situational factors that shape the motivational processes underpinning engagement.

In summary, both JD-R theory and SDT have contributed to our current understanding of engagement, with the emphasis primarily on the role of job resources (JD-R), and the satisfaction of basic psychological needs (SDT). In recognition of the contributions of both theories to our understanding of engagement, research has also applied the assumptions of SDT to explain the relationship between JD-R antecedents and engagement. The most notable point of convergence is the role of autonomy (JD-R) and autonomous motivation (SDT). While autonomy is a prominent antecedent in the JD-R literature (Bakker & Demerouti, 2017; Habe & Tement, 2016), autonomous motivation, as a motivational process, has informed our understanding of the role of job resources in engagement. The alignment between job resources and intrinsic motivation is argued to satisfy employees' psychological needs for autonomy (Deci & Ryan, 2000), which underpins the relationship between job resources and engagement (Schaufeli & Taris, 2014). Thus, these findings infer that needs-satisfaction acts as a mechanism that explains how job resources translate into engagement (Van den Broeck, Vansteenkiste, De Witte, et al., 2008). In addition, the influencing role of autonomous motivation has been applied to understand job demands and the assumed health impairment process from JD-R theory. Research has found that when employees are autonomously motivated, they are less likely to be affected by demands such as role overload and role ambiguity (Trépanier, et al., 2013). Despite support for the notion that engagement should be grounded within SDT (Meyer & Gagné, 2008), the application of SDT in engagement research is overshadowed by the prominence of JD-R.

1.2. Engagement & Motivational Processes: The Missing Role of Employees' Preferred Selves

1. *Understanding Engagement via the Preferred Self*

The basis for theorising about the reasons employees are engaged originated from the seminal work of Kahn (1990), whose definition of engagement was presented in the introduction to this chapter. From his perspective, the concept of the 'preferred self' manifests in employees' ability to express themselves in their work roles, based on the integration of their cognitive, physical, and emotional needs being met by their work (Kahn, 1990). The concept of the preferred self was developed further with the assertion that the depth to which employees can express and meet their need for growth and development, is reflected in their efforts at work (Kahn, 1992). This effort is thought to involve the ability to be fully present and experience meaning from work, which places demands on the self – not easily quantified (Kahn, 1992). In essence, the concept of the preferred self from the needs-satisfaction approach to engagement (Kahn, 1990, 1992; Shuck, 2011) is the basis for evaluating the gaps in our understanding of engagement. For example, the associated motivational processes that underpin the person-related factors (motivational orientations & FTP) inform the theorised explanation of how the preferred self is expressed, which then act as an antecedent of engagement.

The need to recognise the unconscious cognitive processes underlying engagement was introduced in the previous section (Section 1.1). This need can be equated with the difficulty in measuring the psychological presence subsumed within the concept of the preferred self, which involves the personal engagement of the self that drives work motivation (Kahn, 1992). It has been argued that the current understanding of engagement does not explain adequately the cognitive motivational processes which sustain employees' levels of engagement (cf. Bakker et al., 2012; Shuck, 2011). First, the prevalence of the JD-R theory in engagement research impedes capturing the person-related thought processes that govern the reasons employees will invest themselves in their work. Second, the limited adoption of Kahn's (1990) theory of engagement is due, in part, to struggles in the literature to operationalise, thus measure, his conceptualisation of engagement (Byrne, Peters & Weston, 2016), and capture how employees exert their preferred selves in their work roles (Kahn, 1990). In contrast, the prevailing approach to engagement is supported by an accepted

operationalisation of this construct, and a measure that aligns with the way research conceptualises this construct, that is, the Utrecht Work Engagement Scale (UWES) (Saks & Gruman, 2014; Schaufeli, Bakker & Salanova, 2006).

Finally, previous research has indicated that, under the needs-satisfaction conceptualisation, engagement is an outcome of the alignment between the self and the employees' work role (Soane, Shantz, Alfes, et al., 2013), that is the expression of their preferred selves (cf. Kahn, 1990, 1992). This alignment has been linked to the emphasis on the cognitive processes required in employees' role performance, which translate as engagement (Rich et al., 2010; Soane et al., 2013). Despite a renewed interest in Kahn's (1990) conceptualisation of engagement (cf. Fletcher, 2016), how the concept of the 'preferred self' can be operationalised to inform our understanding of engagement requires further examination. Our current understanding continues to stem from the JD-R perspective on engagement, and Kahn's (1990) conceptualisation is often briefly acknowledged within engagement research (cf. Bakker et al., 2014) or not at all (Lesener, Gusy, Jochmann, et al., 2020). In essence, the prevailing approach to the antecedents (JD-R) and the way engagement is conceptualised (cf. Schaufeli et al., 2002; Schaufeli, et al., 2006), has hindered the ability to capture the unconscious cognitive processes stemming from the self, which explain the reasons employees sustain their engagement.

2. Descriptive and non-Specific: The issues that lie within the JD-R Perspective

The descriptive nature of JD-R theory supports its continued, and wide, application in engagement research. However, a review of the JD-R theory posits that this impacts the generalizability of research findings, based on the way job demands and resources are conceptualised without explanation of their supporting psychological processes (Schaufeli & Taris, 2014). The assumption that job resources are pivotal to our understanding of engagement relies on the appropriate resources being available, and their ability to mitigate the demands placed on employees (Bakker et al., 2004; Demerouti et al., 2001). Additionally, research has argued that JD-R theory presents resources and demands as distinct, despite a lack of resources being a potential job demand (Schaufeli & Taris, 2014). A reduction in available job resources arguably will not always translate to a lack of engagement as there are other (cognitive) processes adopted by employees' which sustain their engagement (cf. Demerouti et al., 2019). Within the engagement literature an empirical focus on emotional and physical engagement (Shuck, 2011) was identified as hindering our understanding of the

cognitive processes underpinning engagement (cf. Johnson, 2003). Hence, the current understanding of engagement does not explain adequately the proximal and distal processes of engagement (cf. Bakker et al., 2012; Bakker & Demerouti, 2017; Shuck, 2011), which corresponds with the lack of specificity of JD-R theory (Schaufeli & Taris, 2014).

A theoretical review of JD-R advocated for research assessing the interaction of job demands and resources over time, with the premise that there is insufficient evidence for continued engagement under demanding conditions beyond more than one time point (Bakker & Demerouti, 2017). A related avenue of enquiry is how employees' anticipation of the future in their present actions may influence the available job resources they adopt to meet the demands of their work. One argument underpinning this thesis, is that the enduring nature of employees' time perspectives, and their motivational orientations, extend our understanding of the relationship between job resources and its associated theorised alignment with motivation, in the JD-R theory. For instance, different time perspectives can explain the relationship between work-family demands and organisational commitment (Treadway, Duke, Perrewé, Breland, et al., 2011). However, the influence of this acknowledgment of different time perspectives on job demands has yet to be extended to our understanding of job resources. For example, whether employee's use of appropriate resources is dependent on whether demanding tasks align with immediate or distant future outcomes. Correspondingly, whether employees' perceptions of their job demands are driven by their motivational orientations, that is eudaimonic and hedonic. The idea that challenging, thus demanding, work can act as motivation is in relative infancy in organisational research. Studies challenge the view that demands always lead to health impairments (cf. Tadić, Bakker & Oerlemans, 2015), and suggest that employees different time perspectives can impact their appraisals of their job demands (cf. Treadway et al., 2011).

In summary, the lack of specificity in JD-R theory has hindered extending the explanation of the psychological processes underpinning the relationship between job demands and engagement. Most notably, the prevailing assumptions relating to job resources limit our understanding of the cognitive process's employees use, to sustain their engagement when there is a lack of available job resources. Hence, it is theorised in this thesis, that person-related factors such as employees' eudaimonic and hedonic orientations and their FTPs can bridge this gap in our understanding of engagement. For example, by providing one way to explain how employees' express their preferred selves at work. An inter-related issue pertains to the static approach to the relationship between job resources and engagement (cf. Bakker & Demerouti, 2017), which does not extend our understanding of how employees can

sustain engagement when faced with demands over time, that is, their characteristic (future) time perspectives.

3. *The Satisfaction of Needs: Is this all we need to be engaged?*

The foundation of Kahn's (1990) theory of engagement assumes that its related processes are underpinned by the regulation of the self through self-determined actions. For example, the ability of employees to be cognitively, emotionally, and physically present and engaged in their work roles (Kahn, 1990, 1992). Hence, it is reasonable that previous research advocates for SDT acting as the motivation theory that explains the processes underpinning engagement (Deci et al., 2017; Meyer & Gagné, 2008). The assumptions of SDT pertaining to the distinction between intrinsic and extrinsic processes, and the satisfaction of basic psychological needs, have gained traction in the engagement literature (cf. Schaufeli & Taris, 2014; Van den Broeck, et al., 2016). While there is a lack of research adopting Kahn's (1990) conceptualisation of engagement that would enable the alignment of the two needs-satisfaction theories, there are some issues within SDT itself. The most prominent contribution of SDT to our understanding of engagement is autonomous motivation (Deci et al., 2017; Van den Broeck, et al., 2008), and its indirect role in explaining the relationship between engagement and its antecedents, such as challenging demands (Tadić et al., 2015). The prevailing literature focuses on employees' levels of autonomy or their need for autonomy, as antecedents of engagement (Bakker & Demerouti, 2017). However, there remains a disparity within our understanding of the role of needs-satisfaction as antecedents of, and processes which underpin, engagement. The focus of SDT is on employees' levels of needs-satisfaction to predict outcomes (Ryan & Deci, 2000), but not individual differences relating to the strength of those needs and the timeframe for their satisfaction. An argument in this thesis, akin to the limitations of JD-R theory (cf. Schaufeli & Taris, 2014), is that an additional motivation framework is required to understand these individual differences in the strength and timeframe for needs-satisfaction.

1.3. The Importance of the Role of Motivational Orientations and FTPs in our understanding of Engagement

An aim of this thesis is to understand, and explain, the role of the preferred self in engagement, from two interrelated perspectives – eudaimonic and hedonic orientations and employees' FTPs. It is anticipated that their associated motivational processes explain, first, one way employees' express their preferred selves at work leading to engagement. Second, this explanation of the preferred self will promote the positive effects of JD-R antecedents, and their relationship with engagement. Fundamentally, employees are motivated by the way their present actions lead to both personally valued and job required outcomes in the future. These outcomes are captured by their cognitive needs aligning with valued outcomes (employees' motivational orientations) and their characteristic tendencies to express their preferred time perspective (FTP), to achieve future outcomes. Hence, the premise of the needs-satisfaction approach (that is, Kahn, 1990, 1992), alongside employees' motivational orientations and their FTP, are central to our understanding of the processes associated with capturing the preferred self. First, in relation to orientations, the philosophical constructs of eudaimonia and hedonia are asserted to represent the way individuals demonstrate these characteristics (need for growth and seeking pleasure, respectively) based on their levels of task persistence. As motivational orientations, they refer to "the aims and priorities a person habitually pursues" (Huta & Waterman, 2014, p1433), and represent the "why" of behaviour (Huta, 2013, p 236). It is asserted that dispositional individual differences are likely to shape people's tendencies towards engagement (Christian et al., 2011; Kahn, 1990). In the current research, it is argued that eudaimonic and hedonic orientations determine how the preferred self is expressed, and their associated long-term (eudaimonic) and short-term (hedonic) needs determine the tasks pursued to explain engagement. Second, eudaimonic orientations are posited to be pivotal to understanding the role of the preferred self in engagement and underpinned by three motivational characteristics that represent long-term cognitive processes. Eudaimonic orientations refer to the need for, and value attributed to, 1) growth (achieving one's potential via self-development); 2) the pursuit of excellence (maintaining high standards); and 3) authenticity (increased self-knowledge) (Bujacz, Vittersø, Huta, et al., 2014). As enduring cognitive-motivational processes, the adoption of the orientations perspective in this thesis facilitates explaining the way employees align and express themselves with their work roles (cf. Soane et al., 2013); capture different person-related time

perspectives underpinning their levels of motivation; and act in conjunction with JD-R antecedents, to extend our current understanding of engagement.

In addition to addressing the lack of specificity in JD-R theory, eudaimonic and hedonic orientations anticipated relationship with employees' FTPs are also theorised to address the disparities within individual differences in needs-satisfaction (SDT). The FTP, both as a theory (Lens et al., 2012) and a construct (employees' FTP), offers a way to examine the impact of different time perspectives on motivation in the present, and the achievement of personally valued outcomes. "Despite strong individual differences in future time perspective, no theory of work motivation explicitly addresses this construct... knowledge about the time span an individual is considering when making decisions is important for predicting how the individual will act" (Seijts, 1998, p. 64). A solution arrived with the development of the FTP theory (Lens, et al., 2012), that enables an understanding of different FTPs that explain the psychological processes underpinning motivation. Previous research has advocated for the importance of employees' FTP as a motivational antecedent in explaining how work promotes motivation (Kooij & Van de Voorde, 2011). The FTP theory proposes that individuals hold a degree of different motivational dispositions: a present focused perspective on goals which align with their values for immediate future outcomes; a future focused FTP which aligns with their values for distant future outcomes; and the necessary actions in the present to achieve both those outcomes (Lens et al., 2012). Both present and future focused FTPs represents the way an individual's characteristic time perspectives influence their long- and short-term cognitive processes, respectively. Hence, the expected integration of the FTP and employees' motivational orientations will capture how the cognitive needs of individuals are expressed in, and met by, their job roles (thus the expression of their preferred selves) (cf. Kahn, 1990, 1992). It is also recognised in the literature that the FTP relates to differences in individual's cognitive orientations (Kooij, et al., 2018), which will arguably have implications for the cognitive processes underpinning engagement. Hence, employees' characteristic time perspectives from the FTP theory enable: an understanding of the long and short-term motivational processes inherent in eudaimonic and hedonic orientations; explain the proximal and distal cognitive processes underpinning engagement; and address disparities in our understanding of individual differences in needs-satisfaction (SDT).

1.4. Motivational Processes Driving Engagement: A Two-Study Approach

The first aim of this thesis is to extend our understanding of engagement by presenting one way to conceptualise the preferred self, based on person-related factors, and their associated motivational processes. A secondary aim is to examine the role of the preferred self in expanding our understanding of the relationship between JD-R antecedents and engagement. To achieve this aim, two studies were conducted to answer the following overarching question: To what extent do employees' orientations and the future time perspective explain the preferred self, and extend our understanding of the relationship between job resources, job demands, and engagement?

1. Engagement via the Preferred Self: A Cross-sectional Study and its Contributions

A cross-sectional approach was adopted in Study 1 to examine person-related, thus proximal, motivational processes that lead to engagement. This study provides the first known empirical examination of the inherent time perspective differences in eudaimonic and hedonic processes, which supports the alignment of the orientation's perspective and employees' FTP as one way to conceptualise the 'preferred self' proposed in Kahn's (1990) explanation of engagement. Employees are expected to be characteristically future-orientated or 'here and now' (thus, present focused) in their approach to the way they engage in their work tasks. The limited application of the FTP in our understanding of motivation (Kooij et al., 2018; Seijts, 1998), and consequently engagement means that the association between eudaimonic and hedonic orientations, and their associated future and present focused FTPs respectively, requires empirical evidence, before assessing their role in engagement. The adoption of SDT in conjunction with the FTP theory enables a novel examination of the alignment between two needs-satisfaction theories, that is, Kahn's (1990) theory of engagement and SDT. This alignment is supported further by additional motivational processes that indirectly explain the relationship between employees' motivational orientations and engagement. Building on the existing evidence of the role of psychological meaningfulness (May et al., 2004; Rich et al., 2010) and autonomous motivation (Deci, et al., 2017) in engagement, this study also draws from the concept of utility value. This concept stems from the FTP theory and refers to the perceived usefulness of tasks for distant future outcomes (Lens et al., 2012). Correspondingly, utility value aligns with "how well a task

relates to current and future goals” (Eccles & Wigfield, 2002, p. 120). The mediating role of the psychological meaningfulness and utility value of tasks, and autonomous motivation will provide the psychological mechanisms that explain further the role eudaimonic and hedonic orientations, as antecedents of engagement.

This study makes four anticipated theoretical contributions to the literature. First, the adoption of FTP as a theory and construct acknowledges the need for more time-related constructs in motivation theory, which addresses gaps in our understanding of motivational antecedents of engagement, and the psychological processes absent from prevailing theories (that is JD-R and SDT) in the engagement literature. In doing so, this will clarify the importance of the FTP to improving our understanding of the cognitive-motivational processes underpinning engagement; and address the inherent time perspective differences in eudaimonic and hedonic processes. Second, the conceptualisation of eudaimonia and hedonia as motivational orientations address the conceptual and theoretical issues in the literature adopting these constructs (Huta & Waterman, 2014; Kashdan, Biswas-Diener & King, 2008), by consolidating the importance of eudaimonia as a motivational process. Correspondingly, the alignment between eudaimonic and hedonic orientations and employees’ FTPs provides a way to conceptualise about, and thus explain the preferred self, which underpins the needs-satisfaction theory of engagement.

Third, the gap in our understanding of the utility of aligning two needs-satisfaction based theoretical approaches, in this study, to understanding engagement, that is SDT and Kahn (1990) theory of engagement. This theoretical alignment is anticipated to extend our understanding of the relationship between motivational processes and engagement and have practical implications This includes the provision of a greater understanding of the way person-related needs, when aligned with work that provides the fulfilment of those needs, leads to an engaged workforce. Finally, the inclusion the perceived psychological meaningfulness and utility value of tasks, and levels of autonomous motivation address further: the importance of psychological processes in understanding engagement (cf. Bakker et al., 2012); and act as a pathway to supporting the aims of Study 2.

2. The Situational and Person-related Context of Engagement: A Daily Diary approach and its Contributions

A daily diary approach was adopted in Study 2 which drew from the JD-R theory, by adding two antecedents to underpin the situation factors, that is job control and workload. This is supported by the alignment between job resources and intrinsic motivation (Bakker &

Demerouti, 2007), and the potential motivating properties of job demands, to explain short-term variation in employees' levels of engagement. This study builds on Study 1 to collectively examine both person-related factors (motivational orientations and employees' FTPs) and situational factors (JD-R antecedents), which address the need for more person-related factors when examining the relationship between JD-R and engagement (Bakker et al., 2012). In addressing the perceived lack of specificity of JD-R (Schaufeli & Taris, 2014), the application of SDT in conjunction with the FTP enables extending our understanding of the way JD-R antecedents interact, which clarifies the psychological processes underpinning their role in engagement. The conceptualisation of the preferred self via eudaimonic and hedonic orientations and employees' FTPs is expected to promote the positive effects of JD-R antecedents on engagement and explain the person-related factors employees' use to reduce the effects of their job demands (cf. Demerouti et al., 2019).

The adoption of the FTP is a novel approach to understanding the relationship between job resources and job demands, and their relationship with engagement. It is anticipated to offer additional insight on the way employees time perspectives influence resource use and perceptions of job demands. As cognitive-motivational processes, employees' FTPs are expected to influence their perceptions of their ability to exert control over their working conditions when engaging in tasks (cf. Demerouti et al., 2019). For example, the way employees perceive their level of job demands enables the inclusion of situational contexts (cf. M. Tomic & E. Tomic, 2011) that can be influenced by valued immediate or distant future gains. Therefore, the adoption of FTP in Study 2 addresses the idea that job demands depend on context, and the way they are appraised (cf. Bakker & Demerouti, 2017). The daily diary approach of this study will also extend Study 1 by addressing the momentary nature in the way employees perceive their tasks (for example, psychological meaningfulness) and their levels of autonomous motivation. For instance, research on the meaningfulness of work has advocated for the need to account for the interrelationships between time and experienced meaningfulness (cf. Cox & Hassard, 2007), and the acknowledgment of the subjectivity of time as instilled in the individual (Bailey & Madden, 2015). Assessing employee's short-term perceptions of their tasks, and their levels of engagement, will add unique insight into the less empirically tested concept of the preferred self, and the alignment of employees' whole selves (SDT), and their working conditions (JD-R) leading to engagement.

The anticipated theoretical contributions of Study 2 include challenging the assumption on the perceived negative value attributed to job demands in JD-R theory (cf.

Schaufeli & Taris, 2014). For example, the association between job demands and the associated health impairments for employees, and their role as an antecedent of burnout and not engagement (cf. Bakker & Demerouti, 2017). Next, the novel conceptualisation of eudaimonic and hedonic orientations and employees' FTPs, as motivational person-related factors, that explain the concept of the 'preferred self' (Kahn, 1990, p.700) extends our understanding of engagement by providing proximal antecedents, of engagement. The interaction between eudaimonic and hedonic orientations and employees' FTPs with their levels of JD-R(antecedents), is anticipated to strengthen the effects of job resources, and explain the way positive perceptions of job demands lead to engagement.

In addition to the theoretical contributions, there are three methodological contributions arising from Study 2. First, the daily diary design facilitates capturing the inherent momentary perceptions that shape employees' evaluations of their job resources, job demands, and tasks that impact their levels of engagement. Second, the adoption of the Job Engagement Scale (Rich et al., 2010) enables assessing engagement using a measure that is theoretically aligned with Kahn's (1990) needs-satisfaction theory of engagement. Study 2 is one of the few existing studies to apply a shorter (11-items vs 18-items) version of this measure within a daily diary design to capture accurately employees' momentary levels of engagement (cf. Houle, Rich, Comeau et al., 2022). Finally, engagement research has only begun to scratch the surface of the importance of adopting a daily diary design and multilevel analytical perspective (Chapter 6), to extend our understanding of the needs-satisfaction theory of engagement (cf. Fletcher, Bailey, & Gilman, 2018; Kahn, 1990).

Finally, there are three practical implications arising from Study 2, which will enhance the ability of organisations to have a better understanding of their employees' motivational characteristics, in sustaining their engagement. First, the way employees' motivational person-related characteristics can mitigate the effects of their job demands. Second, the anticipated findings will emphasise the importance of work tasks that align with their employees' expression of their preferred selves, which promote both their levels of motivation and engagement. Finally, the ways in which employees' characteristic time perspectives, that is, present vs future focused (via their FTP), can explain not only their levels of engagement, but also the meaning and value attributed to different tasks.

1.5. Overview of the Chapters

Chapter Two presents a comprehensive general literature review which expands on the research problems introduced in this chapter. This includes examining the conceptual and theoretical frameworks for addressing the overarching research question. The conceptualisation issues that have arisen in the key literature are also examined, which include the debate within the literature on eudaimonia and hedonia. The importance of the alignment between eudaimonic and hedonic orientations and employees' FTP is also extended in supporting the proposed conceptualisation of the preferred self from the need-satisfaction theory of engagement (Kahn, 1990). The novel adoption of the FTP theory, both for answering the research question, and addressing the research gaps in the literature, is extended in Chapter 2; first by addressing the conceptual arguments concerning FTP as a construct; and second, how they are overcome within the context of this thesis. The literature on JD-R is examined further to situate the research problems in the literature and establish further the context underpinning Study 2 (Chapters 5 & 6). The second chapter also builds on the merit and appropriateness of adopting the need-satisfaction theory of engagement (Kahn, 1990), and its alignment with JD-R antecedents, and employees' FTP, are also examined.

Chapter Three presents the empirical arguments and evidence, the hypothesised relationships, and the methodology for Study 1. The purpose of this study is explained, and the key theoretical debates are presented relating to eudaimonia and hedonia, the meaningfulness of work, and engagement. This chapter situates the importance of the FTP theory, in conjunction with SDT, to inform the study's theoretical framework. The influencing role of employees' FTP is examined, to extend our understanding of preferred self and the motivational processes underpinning engagement. An integrated literature review provides a focus on the literature supporting the hypothesised relationships. The measurement of two central variables, eudaimonic and hedonic orientations and employees' FTPs are examined, before presenting the methodology employed in this study. The chapter concludes with a summary of the central arguments presented in Study 1, which seek to address the role of employees' orientations and the FTP, as motivational traits, in answering the overarching research question.

Chapter Four presents the results of Study 1. The reliability and validity of the measures are assessed prior to an examination of the measurement development in preparation for Study 2 (Chapters 5 & 6). A series of Confirmatory Factor Analysis (CFA)

models were tested and compared, before using path analysis to test the hypothesised relationships. The results are presented and discussed in the context of the hypotheses and research problems the study sought to answer. The chapter concludes with the theoretical discussion and implications of the results, study limitations, and recommendations for future research.

Chapter Five presents the empirical rationale, hypotheses, and methodology for Study 2. This study aims to complete the answer to the overarching research question, and our understanding of the motivational processes underpinning engagement. The theoretical debates concerning both job demands and job resources, and the insight provided by also assessing the role of the preferred self (motivational orientations and FTP), are presented to situate the research problems addressed by this study. This chapter illustrates the way JD-R antecedents expand our understanding of the perceived psychological meaningfulness and utility value of tasks, and employees' levels of autonomous motivation, leading to engagement. A focused literature review is presented in support of the rationale for the hypothesised relationships. The conceptual model informing Study 2, and the supporting theoretical framework, are discussed. The chapter closes with the methodology employed, which enabled the testing of the hypothesised relationships provided in the next chapter.

Chapter 6 presents the results of Study 2. This chapter starts by outlining the measurement analysis, which includes an examination of the inter-class correlations for all measures. The steps taken to assess the appropriateness of employing a multilevel approach in the analysis are then presented. The measurement models necessitated both single-level and Multilevel Confirmatory Factor Analysis (MCFA) models. A series of MCFA models enabled the confirmation of the multilevel structure inherent in the repeated observation variables (for example, engagement). In the second half of the chapter, the preliminary analysis, including the latent means centering approach taken, are presented. The analytical methods for testing the theorised relationships are outlined, followed by the multilevel path analysis models that tested the hypothesised relationships. Chapter 6 concludes with a discussion of the key findings, their implications for answering the overarching research question, and the implications of the study for theory and future research.

Chapter 7 presents the general discussion, which concludes this thesis. The key objectives of this thesis are re-examined, and a review of the associated key research considerations addressed in both Study 1 (cross-sectional) and Study 2 (daily diary), is undertaken. The results of the analysis that tested the hypothesised relationships in both studies, are summarised and compared, in relation to the overarching research question, and

their implications for this thesis. This is followed by a discussion of the wider theoretical contributions, the practical implications, and the methodological contributions of the findings in both studies. The final part of this chapter examines limitations of the thesis and presents avenues for future research. This thesis concludes with a final summary of the contributions made to key areas of the literature, and how the findings met the overall purpose of this thesis.

Chapter 2

Literature Review

The purpose of this chapter is to examine the literature and present the conceptual and theoretical frameworks, which underpin Study 1 (Chapters 3 & 4) and Study 2 (Chapters 5 & 6). The key research problems are extended from the first chapter, including the competing theoretical perspectives that shape our current understanding of engagement; and the conceptual limitations within the research on eudaimonia and hedonia. These limitations provide a pathway to explaining the role of the preferred self to understand engagement, and the value of adopting the construct of FTP. This includes the appraisal of challenges in the existing FTP research, alongside the conceptual problems impeding its wider application in motivation research. Within the examination of the theoretical framework, the merits of the FTP theory, and its implications for the motivational processes underpinning engagement, are examined alongside its points of convergence with SDT. Taken together, the conceptual and theoretical frameworks form the basis for extending our current understanding of engagement, by examining the pertinent motivational processes.

The literature and theory are examined to explain the expected relationships in both studies, which supports seeking to answer the overarching research question. This includes the role of JD-R as situational factors, the collective examination of these factors alongside the person-related factors (motivational orientations and employees' FTP), and the psychological mechanisms that explain their relationships with engagement.

2.1. Current Debates within the Literature: Competing Theoretical Perspectives

The key theoretical perspectives underpinning our current understanding of engagement, such as JD-R theory, are examined in this section. These perspectives include the theory central to meeting the aims of this thesis, the needs-satisfaction theory of engagement (Kahn, 1990, 1992), and the proposed approach for explaining the preferred self, that is, the relationship between motivational orientations and employees' FTPs. The debates within the literature are examined in alignment with the overarching research question: to what extent do orientations and the future time perspective explain the preferred self, and extend our understanding of the relationship between job resources, job demands, and engagement?

2.1.1. Competing Theories on Engagement

The widely adopted definition of engagement in the literature defines it as “A positive, fulfilling work-related state of mind characterised by vigour, dedication and absorption” (Schaufeli et al., 2002, p.74). This definition corresponds with conceptualising engagement as a positive psychological construct, that is supported by the popular way to measure engagement, that is, UWES (cf. Schaufeli et al., 2006). Indeed, in its infancy researchers developing the now prevalent approach to engagement argued that, while Kahn’s theory on engagement was noted as comprehensive, ‘he does not propose an operationalisation of the construct’ (Schaufeli, et al., 2002, p. 73). This argument upholds our existing understanding of engagement and partially explains the inability of research to understand the concept of the preferred self, from Kahn’s (1990) definition, as central to the construct of engagement. Hence, an aim of this thesis is to address this gap in our existing understanding of engagement.

The prevailing approach to engagement initially developed from attempts to discover how engagement might offer a positive antithesis to burn out (Maslach, Schaufeli & Leiter, 2001; Shuck, 2011). This perspective was based on the idea that engagement and burnout exist on a continuum, where both concepts are direct opposites of each other (Leiter & Maslach, 2004). Research drawing from this concluded that the work environment greatly influences employees’ engagement levels, which may facilitate the relationship between engagement and work outcomes (Bakker, van Emmerik & Euwena, 2006). This conclusion also offers insight into the prevalence of JD-R theory in engagement research, whereby the three characteristics of engagement in the agreed definition (cf. Schaufeli et al., 2002) act as indicators of engagement. Correspondingly, a key proposition is that job demands (health impairment process), and job resources (motivational process) are indicators of the dual pathways leading to burnout and engagement, respectively (Demerouti & Bakker, 2011; Demerouti et al., 2001; Schaufeli & Bakker, 2004).

A second proposition of JD-R theory that has established job resources as pivotal antecedents of engagement, is their theoretical alignment with intrinsic and extrinsic motivation. For example, job resources are argued to promote growth and development, and be instrumental for achieving work outcomes (Demerouti & Bakker, 2011). These assertions build from the Conservation of Resources theory (Hobfoll, 2002), which argues that motivation stems from the drive to accumulate and maintain resources. The positive

perspective on resources is evident in JD-R theory, and the proposition that they mitigate demanding working conditions to promote engagement (cf. Bakker, Van Veldhoven & Xanthopoulou, 2010; Bakker et al., 2007). However, there are shortcomings within these propositions that are prevalent in our current understanding of engagement. It is recognised in JD-R literature that there are differing roles of demands and their effects on engagement, when considering the timeframe of those demands (Demerouti & Bakker, 2011).

Consequently, this identified issue alongside the focus of JD-R theory on working conditions, and the prevailing conceptualisation, has led to calls for an understanding of proximal as well as distal processes that explain engagement. In essence, there is a need to extend our understanding to cognitive-motivational processes that sustain employees' levels of engagement. In the development of defining engagement, research concurrent to the work of Schaufeli et al (2002) viewed it as a discretionary effort, employees of their own volition invest themselves in their work (Fredric, Finnegan & Taylor, 2004). The needs-satisfaction theory of engagement captures this form of effort and autonomy (Kahn 1990, 1992), which is supported by examining one way to conceptualise the preferred self in the current research.

Kahn's (1990) theoretical perspective on engagement is based on the integration of cognitive, emotional, and physical energy, thus needs, that are expressed by how employees engage in their work. Hence, the focus of this theory is the volitional effort exerted when work meets these three needs – supported by the expression of the preferred self (Kahn, 1990, 1992). As outlined in the introductory chapter, Kahn's (1990) definition of engagement implies that employees need to be able to express what they think, believe, and feel, which underpins the yet to be empirically captured concept of the preferred self. For example, it is argued that employees make decisions on the extent to which they express their real selves based on their job roles (Kahn, 1992; 2010). In contrast to indicators of engagement such as levels of dedication as dimensions of engagement within the prevailing approach (cf. Schaufeli, et al., 2002; Schaufeli et al., 2006). A recognised issue in engagement research is the multiple existing understandings of what it means to be engaged (cf. Kahn, 2010). The adoption of this needs-satisfaction theory of engagement represents a shift away from the prevailing approach in the literature, and back to the foundation of this construct to broaden our current understanding of employee engagement. Though the experience of engagement is thought to be psychological, there are behavioural consequences. The adoption of an employee-centred perspective to engagement (that is Kahn, 1990) and its antecedents, will explain the individual, thus proximal, factors that promote or inhibit engagement (via needs-satisfaction).

In identifying the person-related factors that underpin how employees express of their preferred selves, and thus sustain their engagement, this provides the means to extend our understanding of the needs-satisfaction perspective of engagement (Kahn, 1990, 1992). The prevalent approach does not recognise adequately the cognitive aspect of engagement (cf. Shuck, 2011), where the focus is on the prominence of working conditions (JD-R) as antecedents of engagement. In contrast, the ability to be cognitively vigilant is vital for engagement in how work enables employees' needs-satisfaction (Kahn, 1990). This conceptualisation is argued to enhance the understanding of engagement (Crawford, et al., 2014), and the way the Kahn's (1990) defines engagement is argued to add value to the aim of finding a unified definition (Christian, et al., 2011). It offers a psychological base for engagement, rather than taking an attitude-based approach relating to the organisation. Employees have cognitive, emotional, and physical needs they require from their work, which when aligned with their personal values and identity, enable them to express their preferred self and remain engaged (Kahn, 1990, 1992). Hence, this theory of engagement places the emphasis on person-related cognitive motivational process, as antecedents of engagement, which provides the foundation for the empirical examination of engagement (Kahn, 1990; Saks, 2006; Shuck, 2011). In sum, the needs-satisfaction perspective on engagement views it as a motivational concept, and as a mechanism determining whether employees reach their potential.

In engagement research, Kahn's (1990) conceptualisation has received limited attention. However, it is not without empirical support. An early study, adopting this conceptualisation, examined the effects of two psychological conditions for engagement, i.e., psychological meaningfulness and availability, as mediators in the direct relationships between job enrichment and work role fit, with engagement (May et al., 2004). Based on Kahn's propositions, they developed questionnaires to test part of his conceptualisation. This research provided useful insight into the relationship between the psychological conditions proposed by the needs-satisfaction approach to engagement. They recognised that work leads to overcoming challenges and investment of physical energy, both of which can vary at job and individual level (May et al., 2004). However, while this study provided initial support for the importance of psychological meaningfulness, an understanding of the preferred self from Kahn's (1990) definition of engagement was not achieved. For example, the primary premise of employees' expressing their preferred self, is that work needs to align with the integration of employees' cognitive, emotional, and physical energy. A later study, taking a different approach, provided further empirical support for the needs-satisfaction approach to

engagement (Olivier & Rothman, 2007). It examined the psychological conditions as antecedents of engagement. Akin to the earlier study (May et al., 2004), they assessed the role of psychological meaningfulness in explaining the relationship between co-worker relations and engagement. They proposed that work perceived as meaningful will promote engagement based on external inter-relationships (Oliver & Rothman, 2007), rather than motivational processes underpinning the preferred self. The Work Engagement Scale (May et al., 2004) was employed to test their hypotheses and found support for the indirect role of psychological meaningfulness in explaining engagement. However, they acknowledged that future research needs to examine individual characteristics that promote or sustain engagement (Olivier & Rothman, 2007). In sum, there is empirical support for the psychological conditions of engagement (Kahn, 1990), with a supported measure of psychological meaningfulness (cf. May et al., 2004), which receives wide application in research measuring this construct (cf. Bailey, et al., 2017; Fletcher, 2016). Yet, the issue of achieving a fuller understanding of Kahn's (1990) theory of engagement, by providing a theorised explanation of the preferred self, is yet to be achieved.

Finally, a prominent study that adopted Kahn's (1990) theory of engagement examined its role in the relationships between antecedents such as value congruence and core self-evaluations, and job performance (Rich, et al., 2010). A notable result in their research, was the support found for the relationship between value congruence and engagement. This finding resembles the notion that eudaimonic and hedonic orientations are aligned with employees' values. However, the focus was on the way employees' values aligned with their organisation (Rich et al., 2010), rather than the expression of their preferred selves. While this deviates from the employee-centered approach proposed by Kahn (1990), the measure they developed (Job Engagement scale) addresses methodological criticisms of the needs-satisfaction approach by incorporating the dimensions of cognitive, physical, and emotional engagement. This measure continues to provide the only current reliable way to measure Kahn's (1990) theoretical perspective, in organisational research. Yet, it does not enable capturing the yet to be understood concept of the preferred self, and its theoretical importance in extending our understanding of engagement.

2.1.2. Eudaimonia & Hedonia: Four Competing Conceptualisations

The adoption of the needs-satisfaction theory of engagement (Kahn, 1990) aligns with the orientation's perspective on eudaimonia and hedonia (Huta & Ryan, 2010). As person-

related factors, both motivational orientations are argued to support one way to understand how employees' express their preferred self. Akin to the different conceptualisations of engagement, there are four competing perspectives within the literature on eudaimonia and hedonia: 1) orientations; 2) experiences; 3) behaviours; and 4) positive functioning. These differing perspectives have prolonged the debates in the literature and influenced the operationalisation difficulties most frequently related to eudaimonia. Within the field of wellbeing research, a way to classify the different conceptualisations has been proposed (Huta & Waterman, 2014), to ascertain where they align and diverge from one another. The main area of agreement is that both constructs are distinct but correlated, and this underpins how research has approached their assessment. The analysis and measurement of eudaimonia and hedonia as orientations, within this recent conceptual classification approach, draws on Huta and Ryan's (2010) perspective, and situates them as trait level antecedents (Table 2.1.) of engagement.

The orientations perspective facilitates incorporating the future-orientated nature underlying eudaimonic orientations, and the present focused nature of hedonic orientations. Hence, this conceptualisation supports addressing the inherent time perspective differences between eudaimonic and hedonic processes, which aligns with their anticipated relationships with the FTP, how the preferred self is expressed (Section 2.2.). In contrast to most of the research presented in the table which follows (Table 2.1.), the conceptualisation of eudaimonia and hedonia as orientations relates to person-related characteristic motives for engaging in a task (Huta & Waterman, 2014). Hence, the orientations perspective is examined first, before presenting the subsequent arguments on the limitations of the other conceptualisations which follow.

Table 2.1.: Categories of analysis & levels of measurement (x) in definitions of eudaimonia and hedonia (Adapted from Huta & Waterman, 2014)

	Waterman (1993, 2008, 2011)	Ryff (1989, 1994, 1995)	Keyes (1995, 2002)	Fowers (2010)	Ryan & Deci (2000, 2006, 2009)	Seligman (2002, 2004, 2005, 2011)	Vittersø (2003, 2004, 2005, 2009)	Bauer (2004, 2006, 2008, 2010)	Steger (2008)	Huta (2010, 2013)	Delle Fave (2009, 2011)
Definition of eudaimonia											
Orientations				Constitutive Goal Orientation	Intrinsic goals: Autonomous motivation	Life of meaning	Personal growth composite	Personal growth goal narrative		Eudaimonic motives for activities	Psychological Selection
Behaviours					Mindfulness			Eudaimonic behaviour checklist			Challenges & skills
Experiences	Feelings of Personal Expressiveness				Volition, willingness, vitality		Engagement & interest; Flow simplex	Subjective & psychological well-being			Flow experiences
Functioning	Eudaimonic Well-being	Psychological well-being	Psychological & Social well-being	Psychological well-being	Autonomous functioning			Ego Development			
Definition of hedonia											
Orientations						Life of pleasure	Evaluative mind-set, Life satisfaction			Hedonic motives for activities	
Behaviours								Hedonic behaviour checklist			
Experiences	Hedonic enjoyment; Life satisfaction	Life satisfaction; PA; NA	Emotional well-being; Life satisfaction	Life satisfaction; PA; NA.	Pleasure; Subjective well-being		Pleasure	Subjective well-being			Happiness; Life satisfaction
Trait only		x	x	x	x	x		x			
Trait & state	x						x		x	x	x

1. Orientations Perspective

Eudaimonic and hedonic orientations are argued to shape the motivational processes underpinning the pursuit and engagement in different tasks. Taking this perspective, they are viewed as motivational characteristics, thus traits, where individuals have an average level of both. However, differences in the levels of each (Huta, 2015), will lead to divergence in the way employees habitually pursue and value a task. For example, a higher value may be attributed to meeting the need for growth over momentary pleasure. Eudaimonic and hedonic orientations are argued to explain one's self-determined actions, where motivation stems from the self, via internal values, to facilitate expressing their preferred selves. The notion that employees' actions are underpinned by their values and interests has been recognised in the literature (Nix, Ryan, Manly, & Deci, 1999). A theory introduced previously (Chapter 1), which is central to theorising about eudaimonic orientations, is SDT. In its development, the "self" consists of the motivational properties of self-determined actions, with variations in motivational processes influenced by how one assimilates and regulates their purpose (Gagné & Deci, 2005). In the current context, self-determined actions are based on either a characteristic need for growth, authenticity, and the pursuit of excellence (eudaimonic orientations) (cf. Bujacz et al., 2014), or the short-term pursuit of pleasure (hedonic orientations) (cf. Huta & Waterman, 2014). Thus, employees will exhibit tendencies to initiate actions and sustain their engagement based on these motivational characteristics. The adoption of SDT as part of the theoretical framework, is argued to strengthen our theoretical understanding of eudaimonic orientations and their associated motivational processes. Consequently, they underpin the pursuit of autonomous actions, and support the conceptualisation of employees' preferred selves (cf. Kahn, 1990).

There are three proposed dimensions of eudaimonic orientations in the literature: self-expressive orientation; prosocial orientation; and (learning and) growth orientation. This last orientation aligns with eudaimonic orientations as a motivational antecedent (Huta & Waterman, 2014), that includes the need for, and value of, growth. This conceptually aligns with the growth orientation dimension, which refers to "an individual's desire to learn, gain insight, and develop as a person" (Yan, 2011, p.33). Therefore, this perspective of eudaimonic orientations can be applied to employees' need for self-development, including learning new skills and gaining personal insights from their work, which supports their expression of their preferred selves. It is asserted that understanding growth orientations will enable organisations to recognise why different tasks promote varying levels of engagement.

For example, the literature suggests that intrinsic values promote higher levels of needs-satisfaction (Kasser, 2002), which aligns with valuing growth in the workplace (Ryan & Deci, 2000).

Hedonia as an orientation is better understood than eudaimonic orientations, as it stems from the recognised construct of hedonism. It has been suggested that hedonists believe in engaging in activities that are pleasant, in their pursuit of pleasure (McMahan & Estes, 2011). Thus, hedonism relates to short-term goals and values, which aligns with the proposition that hedonia relates to short-term processes (Ryff & Keyes, 1995). However, when operationalised as an orientation, hedonia's related motivational processes are argued to align with employees' need to seek pleasure, when they initiate their engagement in a task. Hence, if their work aligns with their personal value for seeking pleasure, as orientations hedonia represents expressing their preferred self to meet the need for work to provide instant gratification of valued outcomes. Research has asserted that hedonic orientations are by their nature self-focused (Huta, Pelletier, Baxter, & Thompson, 2012), which has both practical and theoretical implications. It can explain the reasons employees will pursue or engage in different tasks, for example, meeting their preferred short-term needs. Arguably, having a hedonic orientation underpins the choices individuals make when seeking pleasure (Huta, 2015). Choices, in the current context, relate to the hedonic motives which explain their perceptions of their tasks, based on one's tendencies towards hedonic orientations (cf. Huta & Waterman, 2014; Huta & Ryan, 2010). Furthermore, assessing hedonia as an orientation can provide different insights, compared to eudaimonic orientations, into the reasons individuals engage in similar behaviour, but with different motives. For example, the premise of the preferred self relates to the integration of person-related needs being fulfilled by work, which are determined by employees eudaimonic or hedonic motivational characteristics.

2. Experience Perspective

The second perspective adopted in the literature to conceptualise eudaimonia and hedonia is via experience. There is common ground between the perspectives of eudaimonia as an orientation and as an experience. The latter infers that when individuals experience eudaimonia, they use both cognitive and emotive appraisals of a situation (Huta, 2015), leading to feelings of interest and meaning. This idea relates to the theorisation that eudaimonic orientations underpin the way employees perceive and value their tasks. However, conceptualising eudaimonia as an experience leaves it primarily as an outcome,

which raises notable conceptual issues with taking an experience perspective. The concept of growth values and the subjective experiences of growth cannot be understood within the same relationship (Kashdan et al., 2008). For example, when employees value growth this does not equate with predicting they will experience growth during their work tasks. Therefore, eudaimonia as an experience creates an issue where both the antecedent and outcome overlap conceptually (Kashdan, Rose & Fincham, 2004). It follows that the experience of eudaimonia has not been deemed sufficiently credible to warrant the use of this conceptualisation in research. In contrast, eudaimonia as an orientation allows for a theoretical understanding of the way employee's express their preferred selves in their pursuit and engagement in tasks, which align with the characteristic values of the individual.

The most common conceptualisation of hedonia is as an experience. However, this is not without its own conceptual problems. The view of hedonia as an experience outcome places pleasure as a feeling. To challenge this conceptualisation, it is imperative to understand the meaning of pleasure (Vittersø, 2013). It is inferred in the literature that high levels of pleasure, operationalised as positive affect, represent the individual experiencing well-being from a hedonic perspective (Huta, 2015). However, this raises two issues. First, it departs from the philosophical origins of hedonia by equating it with positive affect, rather than the pursuit of pleasure. Second, examining the experience of pleasure, from a neuropsychology perspective, suggests "The feeling that is experienced.....is not pleasure as such, but the expectation that pleasure will be experienced" (Vittersø, 2013, p. 389). In contrast, hedonia as an orientation implies that employees pursue hedonic (short-term) processes, with the expectation they will derive pleasure from those tasks, for example, low levels of challenge, and more immediate outcomes. Therefore, perceived pleasure acts as an incentive to sustain engagement in a task, rather than an experienced outcome.

3. Behaviour Perspective

The third perspective on conceptualising both eudaimonia and hedonia is the behaviour approach. When research conceptualises eudaimonia and hedonia as behaviours, it is based on two critical points: the behaviour actioned by the individual; and the characteristics of the activities. This perspective suggests that some behaviour is more eudaimonic than hedonic (Steger, Kashdan & Oishi, 2008), such that an individual's actions are for the benefit of others and not directly for oneself (Huta, 2015). Hence, this perspective departs from the philosophical origins of eudaimonia and hedonia and it asserts that hedonic

behaviours can be separated from eudaimonic behaviours. In contrast, when both are operationalised as motivational orientations, it enables assessing both as traits that underpin how employees' express their preferred self, and subsequently engage, at work. The focus on behavioural content, in the behaviour perspective, does not provide an understanding of the motives for that behaviour. For example, similar behaviours can be initiated by individuals, for different reasons (Huta, 2013). The behaviour approach implies that the contents of the tasks are motivating to all employees, thus lacking in an understanding of the motivating factors stemming from the self.

The behavioural approach also creates practical difficulties when testing eudaimonia and hedonia. Employees' eudaimonic and hedonic tendencies are fundamentally trait characteristics (Huta & Waterman, 2014) underpinning their actions. As behaviours, the activities they engage in are likely to vary in different contexts. The behavioural approach alone is not sufficient for understanding these behaviours, such as explaining when and why employees might engage in eudaimonic or hedonic activities. This is evidenced in the limited empirical support for this perspective, with only one known daily diary study adopting this conceptualisation. Both eudaimonic and hedonic behaviours were assessed as being distinct (Steger et al., 2008), despite the consensus that they are related concepts (Huta & Ryan, 2010; Ryff & Keyes, 1995). The different behaviours were hypothesised to explain the relationship between eudaimonia and hedonia, and well-being outcomes (Steger et al., 2008). Daily questionnaires involved completing a behaviour checklist to determine the frequency of engagement in eudaimonic or hedonic behaviours. The ability to ascribe accurately behaviour that can be categorised as eudaimonic or hedonic is questionable. One example includes "listening to music" as a hedonic behaviour (Steger et al., 2008). This could also be attributed to eudaimonic behaviour, for example, promoting increased focus during a challenging task. The results of this study indicated that individuals reported higher levels of engagement in eudaimonic behaviours compared to hedonic behaviours. It was concluded that it was not possible to understand changes in eudaimonia or hedonia as contributing to engaging in more eudaimonic activities (Steger et al., 2008). This sole study of the behaviour perspective was also unable to establish its aim to distinguish between eudaimonic and hedonic behaviour. These conclusions illustrate both the issues with the behaviour conceptualisation, and the reasons for the limited empirical support.

4. The Functioning Perspective: What is meant by ‘Functioning’?

The fourth, and most frequently used, conceptualisation of eudaimonia implies that it equates to an individual’s ability to be fully functioning. This conceptual approach does not exist for hedonia. Thus, research assessing both constructs adopt different conceptualisations of eudaimonia and hedonia despite examining them as related constructs (cf. Huta & Waterman, 2014). The functioning approach to eudaimonia is based on individuals having positive psychological functioning underpinned by having a sense of purpose in their lives; opportunities for personal growth; and the ability to invest effort (Huta, 2015). This perspective on eudaimonia is argued to impede our understanding of the value of eudaimonia in organisational research. A fundamental question is: what does the term ‘functioning’ mean?

Research on the Functional Approach to Well-Being has offered insight (Vittersø, 2013) to the question above, suggesting that optimal functioning refers to the process’s individuals undertake when planning meaningful goals, and attempting to satisfy their basic needs. These processes involve aligning one’s thoughts and behaviour, “when creating and executing goals” (Vittersø, 2013, p. 235). However, these assertions fail to extend our understanding of the meaning of functioning, and how it can be tested in organisational research. For example, how can an individual’s ability to function fully be captured accurately? The theory of the Fully Functioning Person (Rogers, 1961) provides theoretical insight into positive functioning. It infers that fully functioning people are able, psychologically, to assess their existence in their internal and external worlds. They can access the choices available to them, and then take actions to satisfy their needs (Rogers, 1961). A prominent researcher who developed this conceptualisation of eudaimonia, attempted to use Rogers’ theory when implementing her propositions (that is Ryff, 1989).

The most influential approach from a functioning perspective (Ryff, 1989) attempted to present the concept of Psychological Well-Being as being a eudaimonic form of well-being (that is Eudaimonic Well-Being). This creates another problem. From its conception, the functioning approach to eudaimonia stemmed from an individual’s Psychological Well-Being, and not from eudaimonia’s philosophical origins. In the amalgamation of previous conceptualisations of eudaimonia, six dimensions of Psychological Well-Being were proposed (Ryff, 1989): purpose in life; personal growth; autonomy; self-acceptance; environmental mastery; and positive relationships with others. Each dimension is argued to relate to the different ways an individual overcomes challenges, when striving for positive

functioning. This conceptualisation of eudaimonia is therefore undermined by the recurring issue of the lack of clarity with how functioning is defined. This underpins the need to be cautious when assessing research that conceptualises eudaimonia as positive functioning (cf. Vittersø, Søholt, Hetland, et al., 2010). Furthermore, treating eudaimonia and hedonia as well-being outcomes (Huta & Waterman, 2014), means that to date their motivational properties have not been adequately addressed in the literature. Consequently, research continues to assess eudaimonia and hedonia from different levels of analysis (cf. Table 2.1.).

Finally, the orientations perspective and the functioning perspective differ in their view of eudaimonia. The orientations perspective focuses on traits underpinning the pursuit of values and seeking challenges (Huta, 2015). In contrast, the functioning perspective views eudaimonia as outcomes via Psychological Well-Being dimensions (Ryff, 1989). In doing so, this inhibits explaining the motivational processes underpinning the direction of employees' actions, and consequently an understanding of the preferred selves and engagement. For example, the ambiguity surrounding the conceptualisation of eudaimonia as positive functioning undermines our ability to make inferences on the extent of eudaimonia's role in explaining the motivational processes which sustain engagement. In sum, the prevailing approach in the literature, with eudaimonia as functioning and hedonia as experiences, has failed to reconcile two key issues: first, the inherent time perspective characteristics underpinning eudaimonic and hedonic processes; second, the way eudaimonic and hedonic orientations can be assessed simultaneously as motivational antecedents, to explain the preferred self (cf. Kahn, 1990, 1992).

2.1.3. What is Eudaimonia and where does it fit?

Understanding the motivational processes which shape engagement requires examining person-related factors that sustain the pursuit of different tasks. Central to achieving this, is the concept of eudaimonia as an orientation, and motivational trait antecedent. Building on the competing conceptualisations of eudaimonia and hedonia, the debates within the literature on these two constructs are examined here. Eudaimonia and hedonia are often conceptualised as wellbeing outcomes within the literature (cf. Fowers, 2010; Keyes & Ryff, 1995). Definitional issues have arisen due to the adoption of trait (eudaimonia) and state (hedonia) wellbeing constructs, that impedes their application as motivational characteristics in organisational research. Hence, our understanding of the way they shape the motivational processes has yet to be examined to explain how employees'

express their preferred selves (Kahn, 1990). Within the literature on eudaimonia and hedonia, there are disagreements which have led to debates on how two philosophical concepts, most notably eudaimonia, can be appropriately assessed. This includes the challenges with the way eudaimonia is defined (Kashdan et al., 2008), which also hamper identification of its practical implications. However, as work provides opportunities for self-development (Bidwell & Briscoe, 2010), and growth is uniquely eudaimonic (Keyes, Schmotkin, & Ryff, 2002), eudaimonic orientations offer one part, in defining and understanding employees' preferred selves. Hence, it is imperative to introduce the origins of eudaimonia and hedonia, in laying the foundations for their conceptualisation as motivational orientations, and the importance of eudaimonic orientations in this thesis.

Eudaimonia originated from Aristotle's perception of human nature, who defined it as the need to acquire knowledge that is associated with human reasoning (T. Irwin, Trans., 1985). This definition directly relates to Aristotle's proposition that individuals choose motives and goals which align with their values (Huta, 2013). Therefore, eudaimonia corresponds with individual's motivation and the goals they pursue, which support the reasons employees will engage in tasks that are inherently challenging. For example, employees' eudaimonic orientations are underpinned by the pursuit of growth (self-development) and authenticity (self-knowledge) (Bujacz et al., 2014). Hedonia stems from the philosophical view which proposes that "pleasure is the sole good, but also that only one's own physical, psychological, momentary pleasure is a good, and is so regardless of its cause" (Tatarkiewicz, 1975, p.317). This view implies that employees have an inherent need to seek pleasure from their work. Empirical research has sought to understand this need from a psychological perspective. This is argued to involve the value and accumulation of pleasure, by engaging in tasks that promote it (Brdar, Rijavec & Miljkovic, 2009). Therefore, hedonic orientations align with the need to seek momentary pleasure, which promotes engagement when this need is personally valued.

In attempts to reconcile the issues surrounding eudaimonia in the literature (cf. Kashdan et al., 2008), the initial efforts to introduce eudaimonia into organisational literature are now examined. Eudaimonia was initially operationalised within the psychological literature, as Personal Effectiveness (Waterman, 1993). This refers to individuals' ability to live their lives in alignment with their true selves, with the assertion that this provides more fulfilment than hedonism. For example, eudaimonia contributes to more enduring factors in life, such as continued growth and development. In contrast, the idea of hedonic happiness focuses on avoidance of problems and being relaxed (Waterman, 1993), both inherently

short-term processes. The concept of Personal Effectiveness does not enhance our understanding of how eudaimonia can be assessed in organisations nor lead to an understanding of employees' preferred selves. First due to the lack of a reliable measure, and second, the limited empirical support for this perspective on eudaimonia. In contrast, the more consistent perspectives on hedonia have enabled reliable measures to be developed, and for this concept to be assessed in the literature (cf. Table 2.1.). This initial empirical attempt to incorporate eudaimonia into organisational research, however, increased the interest on its implications for employee motivation, by expanding our knowledge beyond hedonism (Huta & Waterman, 2014).

Despite the increased interest in the literature, conceptual issues surrounding eudaimonia have continued, when assessing its role alongside hedonia. Research attempting to address these conceptual issues began associating it with any non-hedonic concepts with eudaimonia, including concepts such as flow (Csikszentmihalyi, 1990), which was proposed as an antecedent of eudaimonia (Waterman, Schwartz & Goldbacher, et al., 2003). Hence, the use of attributing non-hedonic concepts to eudaimonia impedes the ability of research to assess eudaimonia and produce consistent findings (cf. Huta, 2013). The issues underpinning the use of eudaimonia, were all combined into a review (Kashdan, et al., 2008), which sparked a debate in the literature. This review of the eudaimonic literature concluded: that as a construct eudaimonia should not be used in organisational research; that using SDT to theorise about eudaimonia adds a layer of unnecessary complexity; and that the multiple conceptualisations of the construct do little to provide clarity on its definition. This last issue is addressed by a recognised definition of eudaimonic orientations that aligns with its philosophical origins in this thesis (cf. Bujacz et al., 2014). The arguments from the review of eudaimonia stem from the inability of psychological research to translate eudaimonia's philosophical origins into contemporary research, for example, how to distinguish between its correlates, antecedents, and consequences. The critical responses from prominent researchers in the field (Keyes & Annas, 2009; Ryan & Huta, 2009; Waterman, 2008), and the research that followed, have challenged the conclusions proposed in Kashdan and colleagues' (2008) review. In parallel, an aim in Study 1 is to consolidate the importance of eudaimonia, supported by SDT, and overcome some of the conceptual issues that have mired this construct in organisational research.

A different perspective taken by researchers on eudaimonia, concerns the issue of eudaimonia's philosophical origins. The central argument is that contemporary philosophers of eudaimonia have not tried to operationalise it from Aristotle's perspective (Waterman,

2008). Although the research up to that point (Kashdan et al., 2008) viewed eudaimonia as a broad concept, it was argued that while difficult, it is “not impossible” (Huta, 2013, p.209) to operationalise it in the literature. The conceptual issues, raised by the review, can be addressed by providing clarity to any proposed theoretical associations (Waterman, 2008), and by viewing eudaimonia as an orientation. The argument that it was problematic to use SDT as the theoretical base for the relationships on eudaimonia (Kashdan et al., 2008), has been challenged by the subsequent use, and successful application, of SDT in research assessing eudaimonic concepts (cf. Deci & Ryan, 2008; Huta & Waterman, 2014). It is asserted, in this thesis, that eudaimonic orientations hold considerable importance for our theoretical understanding of employee motivation. Furthermore, as an individual characteristic stemming from the self, they will explain employees’ motivational processes that underpin their alignment with the preferred self, that lead to higher levels of engagement.

In reconciling the issues within the literature, there is one prominent point of agreement, there are differences in the time perspectives inherent in eudaimonic and hedonic processes: eudaimonia is linked to long-term cognitive processes, and hedonia to short-term cognitive processes (Waterman, 2008; Ryff & Keyes, 1995). Research has argued that understanding the way time influences the decisions individuals make, provides a better understanding of their actions, and the goals they pursue (Seijts, 1998). Therefore, the influence of the two characteristic time perspectives, within eudaimonic and hedonic processes, is required to extend our understanding of both constructs as traits, and their application in organisational, thus engagement, research. Examining employees’ characteristic time perspectives are supported by defining both eudaimonia and hedonia as motivational processes within the orientations category of analysis (Huta & Ryan, 2010; Huta & Waterman, 2014). The appropriate time perspective theory is discussed next which: first, facilitates an understanding of the preferred self; and second, the motivational processes underpinning engagement.

2.2. Employees’ Orientations & Time Perspectives: Motivational Processes & the role of FTP

1. The role of the FTP & its relationship to Employees’ Orientations

The conceptualisation of the FTP as a cognitive-motivational variable, based on the FTP theory, will explain the differences in the goals employees pursue (Lens et al., 2012); and consequently, their engagement. This is anticipated to have theoretical implications for

our understanding of relationships between motivational antecedents (eudaimonic and hedonic orientations), and the satisfaction of employees' needs via the preferred self, demonstrated by their levels of engagement. Since the initial assertion of the importance of the FTP to motivation and its theory (Seijts, 1998), there has been limited adoption of the FTP within motivational literature. Despite the future focused nature implied by motivation as a construct, theories have often focused on time independent motives, and linked them to outcomes such as performance (Kanfer, 1991; Latham, 1996). The FTP theory views an individuals' FTP as a psychological time perspective, which has motivational consequences (Lens et al., 2012). The value of goals for individuals can be attributed to their characteristic view of whether goals can be achieved in the future, based on their present activities. As a theory it recognises that the present moment is influenced both by individuals past experiences, and the consequences of their present actions, for the near or distant future (Lens et al., 2012). This cognitive presence aligns with the FTP being viewed as “. . . the extent to which individuals consider the potential distant outcomes of their current behaviours and the extent to which they are influenced by these potential outcomes.” (Strathman, Gleicher, Boninger, & Edwards, 1994, p. 743). On a practical level, organisations benefit from having employees who are cognitively present in their daily tasks (cf. Kahn, 1990), which enables them to engage actively in tasks leading to valued future outcomes.

Recently systematic reviews and meta-analyses have examined the use of FTP in the literature to understand the issues impeding its wider application. The motivational strength of the FTP, after decades of research, was synthesised by examining research that adopts the FTP as a construct (Andre, van Vianen, Peetsma, & Oort, 2018). One commonality observed in the systematic reviews, is the different conceptualisations of the FTP. Research has proposed that the FTP as an attitude relating to 1) planning for the future (Savickas, 1991); 2) attitudes towards the future (Nurmi, 1991); 3) life domains over time (Peetsma, 1992); and 4) time remaining in one's life (Carstensen & Lang, 1996). These conceptualisations of the FTP have fuelled the focus on adopting it to understand how age influences perspectives at different stages in one's life. Yet, the application and harnessing of FTP as a motivation theory and construct is limited (cf. Andre et al., 2018).

A distinction made in the FTP literature, is the attempt to distinguish between general FTP (remaining time in life) and occupational FTP (remaining career opportunities) (Henry, Zacher & Desmette, 2017). The latter represents the way research has attempted to conceptualise and measure FTP in a work context. A notable issue pertaining to this distinction is the inability to tell them apart (Henry et al., 2017), and to enable a consistent

assessment of the FTP in organisational literature. For example, despite a systematic review finding that motivational and behavioural outcomes are influenced by FTP, it continues to be framed around understanding aging in a work context (Henry et al., 2017). This shifts the focus away from the intended use of the FTP as a motivation theory. For example, the way employees anticipate the temporal distance of the future in their decision making on the goals they pursue (Seijts, 1998), which determines the motivation underpinning employees' engagement in their present work tasks. Hence, due to issues with applying the FTP consistently in the literature, the next step is to examine critically our current understanding of FTP, and how it can be applied to extend our understanding of engagement and the preferred self.

There is consensus in the FTP literature that it is a trait that remains relatively stable, when viewed as an orientation towards the future. This is highlighted in a systematic review on the operationalisation of FTP as a construct (Kooij, et al., 2018). However, there are notable differences in the way research has conceptualised FTP as a trait. When first developed, a future orientation referred to individuals having a capacity to apply structure to the future (Gjesme, 1975). Later the term was applied to the extent to which individuals enjoyed planning and thinking about the future (Hershey & Mowen, 2000). The conceptualisation of the FTP construct as an attitude (cf. Nurmi, 1991) can also be viewed as FTP being a trait. This perspective was presented within a meta-analysis, with FTP viewed as "...an attitude that encompasses personal cognitions, feelings, and behavioural intentions with respect to the future" (Andre, et al., 2018; p. 7). However, the conceptual focus on FTP as an attitudinal construct has limitations. It impedes the ability to capture the motivational utility of this construct (FTP), which can explain further how the anticipation of the future, in the present, first, impacts employees' levels of motivation. Second, the expression of their preferred selves; and consequently engagement. Within the FTP theory (cf. Lens et al., 2012), this anticipation of the distant future facilitates motivation goals becoming more concrete, which aligns with the cognitive aspect of the FTP (De Volder & Lens, 1982). Hence, it is argued that employees' characteristic tendencies toward a future-focused FTP, in alignment with their eudaimonic orientations, will inform one way to explain the concept of the preferred self.

There is a recognition that eudaimonic and hedonic processes differ as motivational constructs (Section 1.2.), which when understood can extend our understanding of engagement via a novel conceptualisation of the preferred self. This merits not only the adoption of the needs-satisfaction approach to engagement (Kahn, 1990), but addressing

conceptual difficulties by operationalising both eudaimonia and hedonia as motivational orientations. For example, under their prevalent conceptualisation, eudaimonia as positive functioning implies that it is a stable construct (Ryff, 1989). Thus, aligning with longer term processes due to its enduring nature. While hedonia as an experience aligns with short-term processes suggesting its a state like construct (Huta, 2015). The adoption of the FTP theory (Lens et al., 2012) enables the gap in the literature on eudaimonia and hedonia, and their association with short- and long-term processes, to be addressed. The FTP theory suggests that those with a future-focused FTP is motivated by distant future events and the actions needed in the present, to reach long-term objectives (Lens, 1986; Seginer, 2009), thus aligning with eudaimonic orientations. Individuals with a present-focused FTP will focus on what can be achieved in the present or immediate future (Lens et al., 2012), thus aligning with hedonic orientations. Hence, employees present time actions are based on the way these actions impact future outcomes, and the attainment of valued future goals (Simons, Vansteenkiste, Lens, & Lacante, 2004). It is anticipated that employees' FTP and their alignment with eudaimonic and hedonic orientations, will extend our understanding of the cognitive-motivational processes underpinning engagement. Therefore, an important aim in this thesis is to examine the relationship between employees' eudaimonic and hedonic orientations and their associated FTPs, where their alignment underpins their motivational processes, and explains the expression of their preferred self at work.

In sum, accounting for employees' FTP extends the theoretical understanding of motivation processes that explain engagement for two reasons. First, it enables the examination of employees' FTPs as cognitive-motivational dispositions that strengthen the relationship between eudaimonic and hedonic orientations, leading to engagement based on an integrated pathway to understanding the role of the preferred self (Figure 2.1.). Second, it enables these person-related factors to be assessed, by accounting for immediate and distant future outcomes, in the present. This shifts the focus from seeing eudaimonia and hedonia as two well-being outcomes (cf. Keyes, et al., 2002), towards examining the extent to which employees' FTP strengthens the ability to understand employees' motivational orientations, and their processes, that determine their pursuit of, and engagement in, different tasks.

2.3. Psychological Mechanisms explaining the link between Motivational Orientations and Engagement

There are psychological mechanisms that are theorised, in Study 1, to explain the relationship between motivational orientations and engagement. These comprise of the way employees perceive the psychological meaningfulness and utility value of their tasks; and their levels of autonomous motivation, which lead to engagement (Figure 2.1.).

2.3.1. Psychological Meaningfulness vs Meaning: What is the difference and why does it matter?

Building on the literature that advocates for the importance of psychological processes in understanding engagement (cf. Schaufeli & Taris, 2014), the role of the perceived meaningfulness of work is examined, in conjunction with eudaimonic and hedonic orientations. Comparable to the confusion in the literature on the conceptualisation of eudaimonia (Section 2.1.), there are conflicting results in the meaningfulness of work research, based on the distinction between meaning and meaningfulness. Both concepts are often used interchangeably. This obscures our understanding of whether they are distinct concepts (Rosso, Dekas & Wrzesniewski, 2010), and how they should be operationalised in research. This issue has addressed by asserting that meaning encompasses the different types of meaning attributed to one's work, but meaningfulness is employees' perception of the significance of the work they do (Pratt & Ashforth, 2003). Research using an organisational behaviour approach to the meaning of work implies this concept is based on how employees interpret their work, and their interactions at work (Wrzesniewski, Dutton & Debebe, 2003).

The role of psychological meaningfulness in explaining the relationships between engagement and its antecedents, is well established. The extent to which a task is perceived to be psychologically meaningful differs based on the need for, and value of, the return of investment gained from engaging in a task (Kahn, 1990). The literature adopting the needs-satisfaction approach to engagement, endorses psychological meaningfulness as the strongest psychological condition underpinning engagement (cf. May et al., 2004). As a concept, it has been linked to behavioural outcomes such as performance, and attitudinal outcomes such as job satisfaction and work motivation (May, 2003). It is argued that employees find personal significance from their work when a task is psychologically meaningful. Therefore, the current research addresses gaps in our knowledge, by operationalising meaningful work via the

empirically recognised concept of psychological meaningfulness (May, et al., 2004; Rich et al., 2010).

Employees' perspective on the relationship between psychological processes and focusing on the individual perceptions of the psychological meaningfulness of their tasks, is therefore important in expanding our theoretical understanding. It has been argued that employees' perceptions of an authentic association between their life purpose and their work, explains their reasons for engaging at work (Truss & Madden, 2013). Perceptions of authenticity align with the definition of eudaimonic orientations. When valued by employees, these perceptions will lead to higher levels of engagement. However, research has yet to capture the association between eudaimonic orientations and the perceived meaningfulness of tasks. This is addressed by examining the relationship between eudaimonic and hedonic orientations, and psychological meaningfulness, in Study 1 (Figure 2.1). This examination will bring a clearer understanding of why work is psychological meaningful from employees' perspectives, and its role as a psychological mechanism that explains the relationship between both motivational orientations and engagement.

In addition to the ambiguity in the synonymous use of meaning and meaningfulness, another limitation in the meaningfulness of work research is the focus on single antecedent processes. There are complex relationships between factors that contribute to meaning, requiring integrated perspectives and dynamic models (Rosso et al., 2010). To date, research has focused on psychological meaningfulness as a static concept (cf. Olivier & Rothman, 2007), leading to research to argue for the need to understand the importance of the dynamics underpinning meaningful work (Bailey & Madden, 2015). This dynamic approach is currently lacking in the quantitative literature on the meaningfulness of work. This can be addressed by extending our theoretical understanding of the role of the time perspective and the meaningfulness of work. The combination of eudaimonic and hedonic orientations, and their cognitive-motivational characteristics towards present and future focused FTPs, are argued to enable a better understanding of the differences in perceived psychological meaningfulness (Figure 2.1). Hence, an understanding of the way employees express their preferred selves is anticipated to explain the perceived psychological meaningfulness of a task, leading to engagement.

The novel addition of employees' FTP as a second motivational process, aligns with the need for, and the value attributed to, tasks that provide a return of investment (cf. Kahn, 1990; May et al., 2004). These needs are anticipated to differ depending on whether the outcome is in the immediate or distant future. Thus, the examination of multiple processes

which influence the perceived meaningfulness of present time tasks addresses the need for integrated perspectives (Rosso et al., 2010). Correspondingly, the integration of employees' cognitive, physical, and emotional energy, that is, their preferred selves (Kahn, 1990), underpins the argument in this thesis, that this concept contributes to our understanding of psychological meaningfulness. The assertion that the meaning of work involves beliefs, values, and attitudes towards work (Ros, Schwartz & Surkiss, 1999), supports further the way the current research uses eudaimonic and hedonic orientations, as person-related factors, as antecedents of psychological meaningfulness, which lead to engagement (Figure 2.1.).

2.3.2. Orientations & Utility Value

The concept of utility value is theorised to provide an additional psychological mechanism for explaining the relationship between motivational orientations and engagement. This concept stems from the FTP theory (Lens et al., 2012), and refers to the perceived usefulness of a task, in the present moment, for valued future outcomes. As a concept, it has not received wide attention outside the literature on the FTP (cf. Andre et al., 2018; Simons, Dewitte & Lens, 2004) nor within organisational research. The FTP theory infers that the utility value of tasks will influence levels of motivation, in the present (Lens et al., 2012). FTP research has aligned utility value with the cognitive aspect of the FTP (De Volder & Lens, 1982), resulting in increased motivation in the present towards achieving distant future goals (Vansteenkiste, 2004), and promoting the perceived utility value of one's actions (Eccles & Wigfield, 2002). However, research has yet to recognise the way this FTP concept will explain motivational processes underpinning engagement. It is anticipated that employees' FTP will also inform our understanding of the relationship between eudaimonic and hedonic orientations, and the perceived utility value of a task for personally valued future outcomes (Figure 2.1.).

In the proposed classification system for eudaimonia and hedonia, one example given of orientations is "seeking challenge" (Huta & Waterman, 2014, p. 217), which relates to eudaimonic orientations. It is asserted that when work is perceived as intrinsically challenging (Hall, 1990), this work will have different relationships with eudaimonic and hedonic orientations. For example, when work is perceived as challenging or complex it is linked to eudaimonic processes (Vittersø, et al., 2010), such as individuals need for growth. In contrast, hedonic orientations correspond with the habitual pursuit of processes that are less challenging, and tasks that promote pleasure or desired immediate outcomes. Activities that are associated

with being highly eudaimonic and intrinsically motivating, are argued to involve balancing one's skills and challenges (Henderson & Knight, 2012). Research examining the relationship between a future focused FTP and students' study behaviour, assessed the utility value studying has for goals in the future. The results of this cross-sectional study found that having a future focused FTP was a strong predictor of persistence in challenging areas of their studies (de Bilde, Vansteenkiste & Lens, 2011). It is argued that when assessed in a working sample, the perceived utility value of a task will explain employees' persistence in challenging tasks, when the outcomes are achieved in the distant future. Hence, the cognitive conceptualisation of utility value as determined by employees' future-focused FTP (cf. De Volder & Lens, 1982; Vansteenkiste, 2004) is adopted to support this assessment.

Utility value is operationalised as the perceived levels of job challenge, as it relates conceptually to the perceived level of difficulty of one's job (Hackman & Oldman, 1980). Hence, the perceived usefulness of current tasks levels of challenge in achieving present and future valued outcomes (cf. Lens et al., 2012). Research has argued that higher levels of challenge presented by a job promote higher levels of meaning (Gagné & Deci, 2005). Therefore, operationalising the perceived utility value of a task via job challenge, is also argued to enable the assessment of the inherent time perspective differences associated with eudaimonic and hedonic orientations. For example, the level of perceived challenge a task holds, will determine the value attributed to that task, influencing motivation in the present towards immediate and distant future outcomes. There is support within the literature for the relationship between eudaimonic activities and levels of challenge. An early study found a strong positive association between activities perceived as eudaimonic, and perceptions of challenges from engaging in them (Waterman 1993). It was later found that intrinsic motivation sustains both eudaimonic and hedonic activities (Waterman et al., 2008). Therefore, it is anticipated that utility value will act as psychological mechanism, explaining the relationship between eudaimonic and hedonic orientations and engagement (Figure 2.1.).

2.3.3. Motivational Orientations & Autonomous Motivation

The expected relationships between motivational orientations, as person-related factors (IVs), and thus employees' personal values, relate to the propositions of SDT. Research assessing different work-related value orientations, and their relationship with autonomous motivation and work outcomes, has been sparse. The concept of Perceived Locus of Causality, stemming from SDT, is known as the "autonomy orientation".

Individuals are argued to favour activities that allow for self-determined actions, such as who initiates the start of the activity, and whether engagement in that activity is maintained (Deci & Ryan, 1985). This can be supported by examining the internal PLOC offered by eudaimonic and hedonic orientations, and their associated motivational processes. The way orientations lead to actions taken is embedded at the individual level, where "Causality orientations are conceptualised as relatively enduring aspects of people that characterise the source of initiation and regulation, and thus the degree of self-determination, of their behaviour" (Deci & Ryan, 1985, p.102). Hence, bringing together employees' motivational orientations with their internal PLOC supports first, the role of the preferred self, in how it is expressed and second, employees' levels of autonomous motivation acting as a psychological mechanism that explains the relationship between eudaimonic and hedonic orientations and engagement (Figure 2.1.). Finally, as the construct of autonomous motivation is intertwined with SDT, it is examined further as part of the theoretical framework, alongside its relationship with motivational orientations and situational factors, in the next section (Section 2.4.1).

2.4. Conceptual & Theoretical Frameworks

The conceptual framework for the whole thesis, based on the research problems examined in this chapter, is depicted in Figure 2.1., which presents an overview of the expected relationships. The arguments in the preceding sections relate to the theorised relationships in Study 1. That is, eudaimonic and hedonic orientations are expected to explain engagement via the psychological mechanisms of psychological meaningfulness and utility value, and autonomous motivation. To meet an aim to conceptualise the concept of the preferred self, employees' FTPs are expected to influence the relationships between both motivational orientations, task perceptions, and autonomous motivation (Figure 2.1.)

In study 2, JD-R antecedents are examined as additional antecedents of engagement. They also act as antecedents of employees' task perceptions and autonomous motivation which are influenced by the relationship between motivational orientations and employees' FTPs, which promotes engagement (Figure 2.1). The expected relationships support the collective examination of person-related (employees' motivational orientations and FTP) and situational factors (JD-R antecedents), and build on Study 1, to address the limitations in our current understanding of engagement (Section 2.1.). The conceptual arguments underpinning

the relationships in Study 2 are examined in the next section (Section 2.4). Foremost, the theoretical framework is presented to support the aims of Study 1, which then extend to Study 2 in this thesis.

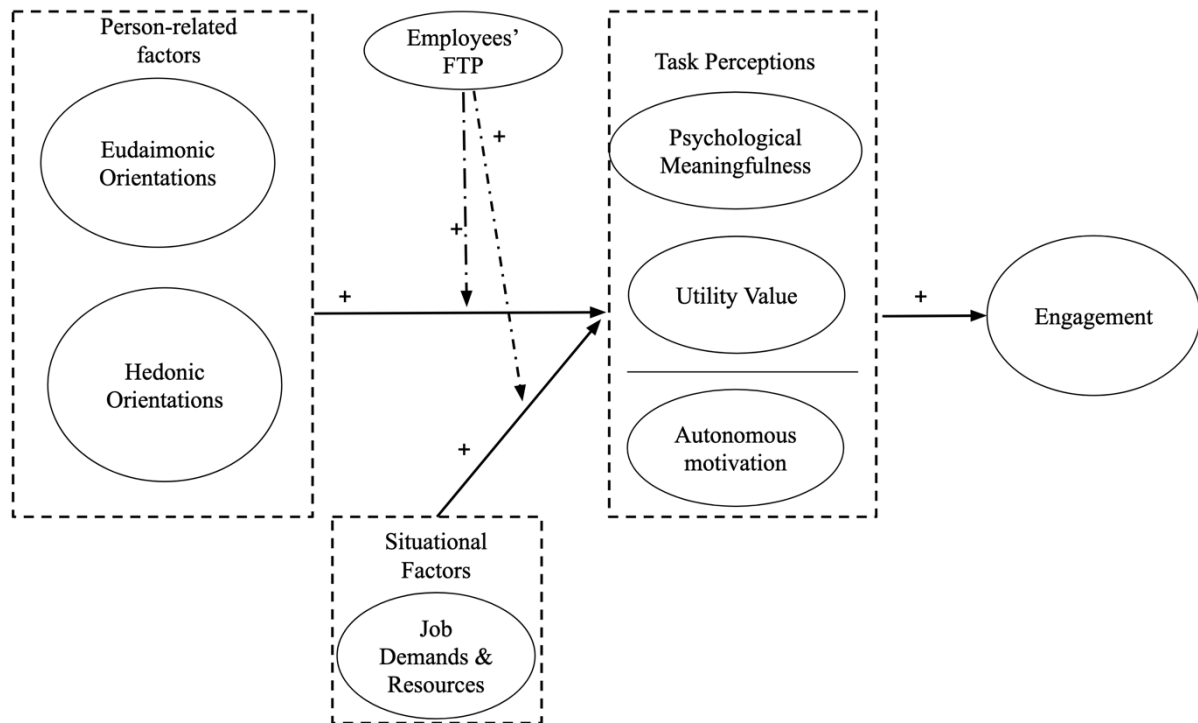


Figure 2.1.: The expected relationships in Study 1 (cross-sectional) and Study 2 (daily diary – addition of JD-R antecedents).

2.4.1. Employees' FTP and the role of SDT: A Theoretical Framework

The theoretical framework employed in the current research is a novel integration of the FTP theory (Lens et al., 2012) and SDT (Deci & Ryan, 2000; Gagné & Deci, 2005). This framework allows for a comprehensive understanding of eudaimonic and hedonic orientations, and their associated motivational processes, which explain one way to conceptualise, and understand, the preferred self. SDT focuses on the extent to which actions are self-determined, which epitomises the nature of orientations, as traits, and the premise of the preferred self from the needs-satisfaction theory of engagement (Kahn, 1990). Self-determined actions are based on whether individuals engage in a task due to its intrinsic value, or whether a task has become internally meaningful and valued (Gagné & Deci, 2005). This task distinction relates to two of the core components of this theory, namely intrinsic motivation and identified regulation. The level of self-determination of employees' actions aligns with both of the following: the operationalisation of eudaimonia and hedonia as

orientations; and as person-related factors which underpin how employees' express their preferred selves. As motivational antecedents they are theorised to explain employees' perceptions of a tasks' meaning and value. A core proposition of the FTP theory is that the way the future is anticipated in the present, will lead to variations in current levels of motivation (Lens et al., 2012). This proposition is underpinned by operationalising employees' FTP based on the degree to which they are motivated by present-focused (immediate future) and future-focused (distant future), that is, their characteristic cognitive-motivational time perspectives (cf. Kooij et al., 2018). Hence, the adoption of both SDT with the FTP theory provides an appropriate theoretical approach to examine the effects of the different time perspectives, inherent in eudaimonic (long-term) and hedonic (short-term) processes, to explain engagement.

There are additional theoretical implications for understanding employees' FTP, including elements of SDT as a supporting framework. SDT is often considered to be a eudaimonic theory (cf. Ryan et al., 2008; Ryan & Huta, 2009), with a central proposition which asserts that individuals have an inherent need to develop, and be actively engaged, leading to a collective sense of oneself (Deci & Ryan, 2002). It is argued that this proposition is fulfilled when employees engage in challenging tasks (eudaimonic orientations), and those that promote pleasure and lower levels of challenge (hedonic orientations). Furthermore, self-determination stems from regulatory processes and values that become part of the self, leading to higher levels of 'involvement of the self' (Deci & Ryan, 2002). Hence, SDT supports further the assessment of both motivational orientations as one way to understand the preferred self (cf. Kahn, 1990), and highlights the importance of autonomous motivation, as a psychological mechanism that explains engagement (Figure 2.1.)

The extent to which employees are autonomously motivated by their tasks is argued to be dependent on their eudaimonic and hedonic orientations, whereby a core proposition of SDT is that individuals pursue goals which align with their personal values and beliefs (autonomous motivation) (Gagné & Deci, 2005; Figure 2.1.). The role of the activity, that is, whether it is pursued out of interest (intrinsic motivation) or personal importance (identified regulation), encompasses the meaning of being autonomously motivated (Gagné & Deci, 2005). Early research indicated that there was a positive association between autonomous motives for pursuing goals, and self-realisation (for example, growth) (Carver & Baird, 1998). As a psychological state, levels of autonomous motivation are argued to provide a supporting mechanism, that has a positive interaction with challenging work, because the latter promotes meaning (Tadić, et al., 2015). Taken together, it is expected that employees'

levels of autonomous motivation are central to understanding the relationship between eudaimonic and hedonic orientations, and the processes they habitually pursue, leading to engagement (Figure 2.1.). Research acknowledges that self-determined actions are explained by one's orientation, which provides insight into self-motivation (Gagné & Deci, 2005).

SDT also has implications for hedonic orientations, despite being viewed as a eudaimonic theory (cf. Ryan & Deci, 2006). Research has assessed the relationship between autonomous goals, and both the eudaimonic concept of self-realisation and the hedonic concept of happiness (Miquelon & Vallerand, 2006). It was hypothesised that pursuing goals with autonomous motives would promote higher levels of these two concepts. This was supported. However, autonomous goals acted as antecedents of eudaimonic and hedonic concepts in this study (Miquelon & Vallerand, 2006). The role of motivational orientations as antecedents of autonomous motivation in the current research, will provide insight into the self-motives that explain their self-determined actions, thus engagement. SDT is based on fulfilling needs that lead to self-determined actions. Central to this is proposition of SDT is that self-determination refers to “when a person feels a sense of choice, autonomy, and purpose over their behaviours” (Parker, Jimmieson & Amiot, 2009, p54; Deci & Ryan, 2000). Eudaimonic and hedonic orientations are expected to explain self-determined actions which predict their levels of autonomous motivation. Consequently, when employees are autonomously motivated, they have autonomy over the tasks they invest in, and this will explain their levels of engagement (Figure 2.1.).

2.5. Job Demands-Resources and Engagement - via Needs-Satisfaction

The current research collectively examines person-related (eudaimonic and hedonic orientations) and situational factors (JD-R), as motivational processes in extending our understanding of the relationship between JD-R antecedents and engagement (Figure 2.1). Previous research proposed that the stability of engagement as a state, explains behaviour which is both organisationally focused and persistent (Macy & Schneider, 2008). This approach has recognised the need to assess the temporal nature of engagement, and concluded that it is transient, and fluctuates over short periods of time. In addition, they reasoned that research should focus on engagement that is more day-specific, to create a better understanding of how engagement endures (Sonnetag, Dormann & Demerouti, 2010). The premise of Kahn's (1990) needs-satisfaction approach allows gaps in our knowledge of

engagement to be addressed, by examining the relationship between employees' motivational orientations and FTP as one way to explain his concept of the preferred self. This conceptualisation of the yet to be examined concept is theorised, in Study 2, to extend our understanding of the relationship between JD-R antecedents and engagement.

Research addressing the complex and dynamic relationships, between challenging tasks and the outcome of engaging in these tasks, often takes a job resources perspective. Early research distinguished between antecedents of engagement and burnout, by examining their relationships with job resources and turnover (Schaufeli & Bakker, 2004). This study found support for the theorised positive relationships. However, the temporal nature of engagement and importantly the individual's perspective is needed to address a key issue in our current understanding of engagement. The JD-R perspective in existing engagement research, has mostly limited the ability to infer how changes in employees' levels of job resources would influence engagement over time. This limitation is also reflected in the lack of understanding of the way employees align themselves with their work roles via their preferred selves (cf. Kahn, 1990). One argument in this thesis, is that assessing job resources, as a situational factor, in conjunction with the need-satisfaction approach to engagement (an employee-centered perspective), provides an understanding of why employees invest themselves thus engage, when their tasks meet their need to be cognitively engaged at work.

Further research has adopted a different approach to assess both the antecedents and consequences of engagement (Koyunco, Burke & Fiksenbaum, 2006). This study examined individual factors such as demographics, and experiences at work, none of which related to engagement. While it moved away from external situational factors as antecedents, these factors did not explain the motivational, thus psychological, processes underpinning engagement (Koyunco et al., 2006). Later research, attempted to address some of these issues. Research assessed the role of individual characteristics including optimism and self-efficacy, as mechanisms that explain the relationship between job resources and engagement (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007). Both were found to facilitate this relationship. The indication of this approach is that other factors are required to explain the relationship between employees' characteristic levels of self-efficacy and optimism, and their relationship with engagement. Thus, engagement research has not shown adequately how person-related factors and their associated processes, act as direct antecedents of engagement.

There has been support in the literature for daily and weekly changes in engagement, based on the prevalent theoretical perspective (Bakker & Bal, 2010; Xanthopoulou, Bakker, Demerouti & Schaufeli, 2009). This support has yet to be translated to the needs-satisfaction

approach to engagement, and the concept of the preferred self. Kahn's (1990) theory of engagement focuses on employees' experiences and perceptions of work, offering an alternative way to assess short-term changes in engagement. An individuals' psychological need for meaningfulness and the utility value attributed to tasks, in the present moment, are argued in the current research to extend our theoretical understanding for the reasons employees invest their preferred selves at work. The needs-satisfaction approach therefore enables the testing of employees' motivational characteristics that underpin the processes influencing short-term levels of engagement. This theory of engagement suggests further the ways in which engagement is evident: when employees can be physically involved in their work tasks; emotionally connected to their work; and finally, be focused and attentive in how they use their cognitive resources (Kahn 1990, 1992). All three, emotional, cognitive, and physical energies, are argued to co-occur. Essentially, Kahn's (1990) theory of engagement involves the investment of "hands, head, & heart" (Ashforth & Humphrey, 1995, p.110). The physical engagement by employees in their work tasks is posited to align with the concept of work demands, which relate to the organisational or physical elements of their jobs (Bakker, Demerouti & Schaufeli, 2003). Furthermore, the available job resources afforded by employees' work roles can assist in meeting these demands, as per the propositions of JD-R theory (Section 2.1.) but requires an understanding of cognitive engagement via their motivational orientations.

As part of the motivational process pathway in the JD-R theory, job resources are argued to facilitate higher levels of engagement. Based on previous research on the Triangle Model of Responsibility, employees' sense of control over their work is a key indicator of levels of engagement (Britt, 1999). Hence, job control represent how job resources are operationalised in this thesis. Employees' perceptions of their levels of autonomy, that is job control, over their tasks are expected to vary across different working days, due to variation in their levels of this resource. Research adopting the motivational processes from the JD-R theory, and the prevailing conceptualisation of engagement (cf. Schaufeli et al., 2002), have assessed how job resources impact daily engagement. This research found that day-level job resources influence engagement and concluded that this provides support for the dynamic nature of resources as motivational processes (Xanthopoulou et al., 2009). However, this current understanding of engagement has not captured adequately the dynamic relationship between job demands and engagement. This is argued to be addressed by understanding the motivational processes underpinning engagement via the needs-satisfaction approach; and conceptualising the preferred self via the relationship between employees' motivational

orientations and FTP, as person-related factors that promote the positive effects of job demands.

It is theorised that job demands can have a positive relationship with employees' perceptions of, and engagement in, their work. For example, their perceptions of the psychological meaningfulness and utility value of their tasks, and their autonomous motivation, can explain the relationship between job demands and engagement (Figure 2.1.). Research informed by our current understanding of engagement (Section 2.1.1.) has provided findings that are inconsistent and conflicting, when examining job demands as an antecedent of engagement (Bakker, et al. 2006). Much of this research has assumed that job demands are not strong antecedents of engagement (Schaufeli & Bakker, 2004). The premise underpinning this is that demands will lead to burnout (Bakker & Demerouti, 2017; Maslach & Leiter, 1997). In contrast, when challenging work is perceived to promote the achievement of valued outcomes (Crawford et al., 2010), this can align with employees' need to be emotionally invested, thus engaged, in their work. This notion of emotional engagement is embedded within the concept of the preferred self, and Kahn's (1990) theory of engagement. Previous research supports the positive relationship between job demands, when perceived as challenges and not a hindrance, and engagement (Tadić et al., 2015). It is posited that meaningful relationships, based on employees' levels of job demands and their influence on engagement, can be achieved through simultaneously accounting for their expression of their preferred selves (Figure 2.1.).

The relationship between JD-R and engagement, can be supported by an alternative theoretical framework, that is, SDT (Gagné & Deci, 2005) (Section 2.4.1). Previous research findings on are extended further by adopting Kahn's (1990) needs-satisfaction conceptualisation of engagement. A key proposition of SDT is the way autonomous motivation leads to self-determined actions, which aligns with job control being related to the need for autonomy in the job resources literature (cf. Hakanen, Bakker & Schaufeli, 2006). A systematic review of JD-R advocated for future research adopting more longitudinal approaches to the relationship between JD-R antecedents and outcomes (Bakker & Demerouti, 2017). The limited research on the relationship between job demands and daily engagement, and the role of autonomous motivation from SDT, has found that when work demands were viewed as a hindrance, they had lower levels of autonomous motivation, and consequently lower levels of engagement (Tadić, et al., 2015). The findings of this study conceptualised engagement as a wellbeing outcome and was based on the framework by LePine and colleagues (2005), which sought to distinguish between levels of stress related to different work demands (J. LePine, Podsakoff & M LePine, 2005). Hence, this study represents the current understanding of the

relationship between job demands and engagement (that is, Tadić et al., 2015), which attempts to shift the focus away from demands as part of the health impairment process of the JD-R theory. There is also support for challenging demands promoting motivation (Crawford et al., 2010), including workload. When this demand is met it leads to the achievement of desired outcomes (Tadić et al., 2017). The arguments on the role of employees' FTP in the relationships between JD-R antecedents and their task perceptions, are examined in the next section (Section 2.6.2).

2.6. Motivational Orientations, Job Demand-Resources, and Employees' Task Perceptions

Extending from Study 1, the second study incorporates employees' perceptions of their levels of JD-R as situational constraints, and additional antecedents, which either impede or promote the motivational processes underpinning engagement. In alignment with the conceptual framework (Figure 2.1.), the theoretical arguments underpinning these relationships are examined in this section.

2.6.1. The Role of JD-R as situational antecedents: Task Perceptions and Autonomous Motivation

The work environment, as a contextual factor, may inhibit or promote support for employees' need for autonomously motivated actions (Deci & Ryan, 2008). This indicates there is also a need to consider work-related factors which may affect employees' perceptions of their tasks. Research has asserted that, from an employee perspective, perceived meaning of work is strongly influenced by external contexts (Schnell, Hoge & Pollet, 2013). Furthermore, research that advocates for eudaimonia and hedonia as orientations implies that the most critical element in the process is individual control (Huta, 2015). Given the stable nature of eudaimonic and hedonic orientations, job resources and demands are adopted as situational antecedents to extend our understanding of the motivational processes underpinning short-term variation in engagement. Job demands refer to the level of effort a job requires, and job resources refer to the availability of resources which assist employees in meeting the demands of their jobs (Bakker, et al., 2004). As a resource, job control is argued to have a direct effect on both development and growth, due to its intrinsic motivational properties, which underpins goal achievement (Hakanen, et al., 2006). Hence, employees' levels of job control compliment the inherent need for growth in employees' with eudaimonic

orientations; and is posited to explain further the motivational processes underlying their evaluations of, and engagement in, their tasks. In addition to the proposition that job demands can be mitigated by job resources, there are arguments that when those demands are met by employees, that is, their levels of workload, this will lead to the experience of meaningful work (Britt, Adler & Bartone, 2001).

The addition of the two JD-R antecedents provide further insights into the perceived psychological meaningfulness and utility value of tasks (Figure 2.1.). In the JD-R model, demands and resources relate to working conditions, and the perceptions employees attribute to their job roles (Crawford, et al., 2010). The health impairment process infers that, as job demands are physical and organisational factors that may require sustained effort and physical or psychological costs (Bakker, Demerouti & Schaufeli, 2003). This perspective on job demands has been compared to the Demands-Control model (Karasek, 1979). The JDC model has been critiqued for the way it defines demands, that is, as quantifiable job characteristics (Bakker et al., 2003). Employees' perspective of their workload, in conjunction with their eudaimonic orientations, are anticipated to reduce these perceived job demands, and explain the perceived meaningfulness of tasks, and subsequently engagement (Figure 2.1.). For example, eudaimonic orientations, as a motivational characteristic, and their associated long-term cognitive processes can act as motivation to meet the challenges, thus job demands, presented by work tasks.

Eudaimonic and hedonic orientations provide person-related factors that will explain the perceived psychological meaningfulness of tasks. The way employees perceive their work environment (JD-R) will enable the external characteristics of jobs to be examined to extend our theoretical understanding of the transient nature of psychological meaningfulness. It has been argued that experienced meaningfulness is a critical psychological state at work, which refers to employee's judgment of their work-related goals and purpose. This is based on how these judgements relate to their own values (May, 2003). In contrast, the concept of psychological meaningfulness as a psychological condition (Kahn, 1990) suggests that when employees engage in meaningful work, this results in higher levels of perceived work-related benefits for the employee (Britt, et al., 2001). It has been argued that perceptions of psychological meaningfulness are influenced, both by individuals' characteristics and by their work environment (Kahn, 1990).

Research assessing the effect of work demands being perceived as either a challenge or a hindrance, provides insight into the perceived utility value of a task and the role of autonomous motivation. A daily diary study examined teacher's perceptions of whether job

demands were viewed as a hindrance or a challenge (Tadić, et al., 2015). This questioned an assumption of the health impairment process of the JD-R theory, which is that job demands lead to psychological strain. They assessed autonomous motivation as a mediator in the relationship between challenge/hindrance demands and engagement (Tadić et al., 2015). Higher levels of autonomous motivation explained the positive association between challenging work and daily engagement, and it was concluded that both challenge and hindrance demands fluctuate substantially on an individual level (Tadić, et al., 2015). This is important, because the scientific evidence for these fluctuations is still relatively limited (cf. Bakker & Sanz-Vergel, 2013; Rodell & Judge, 2009). These findings emphasise the need to take both an employee perspective and a temporal approach, to understand the motivational properties of challenging work, such as their perceived usefulness by employees, that is, the utility value of a task for future outcomes. In addition, the conceptual argument that job demands equates only to physical strain is theorised to be addressed by the motivational properties of both job control and eudaimonic orientations, which together foster employees' need for growth and the value of work presenting a challenge. Therefore, it is anticipated that employees' levels of autonomous motivation, when faced with challenging work, will be explained by their levels of job control (situational factor) and their eudaimonic and hedonic orientations (person-related factors) (Figure 2.1.).

One common argument within the literature is that job resources via a motivational process can assist in mitigating the effects of job demands (Bakker & Demerouti, 2017). From an intrinsic motivation perspective, job resources will encourage growth and development, while from an extrinsic motivation perspective, they will lead to goal attainment (Hakanen et al., 2006). The characteristics of job resources include psychological and organisational elements of jobs (Bakker & Demerouti, 2007), and research has aligned job control with the psychological need for autonomy, and social support with the need for relatedness (cf. Hakanen et al., 2006). Building on the motivational processes in the JD-R literature, the adoption of SDT enables focusing on the psychological need for autonomy, thus a psychological mechanism, which is captured by operationalising resources as job control, which predict autonomous motivation (Figure 2.1.).

2.6.2. The Role of the FTP: JD-R, Task Perceptions, and Autonomous Motivation

The assessment of person-related (orientations) and situational factors (JD-R antecedents), as motivational antecedents, are argued to be enhanced by employees' FTP

(Figure 2.1.). The literature on the role of a Time Perspective in JD-R research has been limited. However, research interested in the relationship between work-family demands and employee commitment, has assessed the moderating effects of the FTP based on the Socioemotional Selectivity Theory (Treadway, et al., 2011). This theory places the FTP as an individual's perception of time remaining in life, which echoes the prevalent approach to FTP in the literature (Section 2.2.1.), and suggests younger people invest in distant future outcomes compared to older people, who invest in more immediate future outcomes (cf. Cleveland, Huebner, Anderson, et al., 2019). The study on work-family demands found that the relationship between work-family interference and commitment was explained by employees having a present focused FTP. In contrast, employees who were less emotionally committed to their work had a more distant focused FTP (Treadway et al., 2011). These findings indicated that a lifespan perspective on FTP corresponds with the asserted motivational properties of FTP, in the current research. For example, that the differences in valued outcomes attributed to the immediate and distant future influence present levels of motivation. The adoption of employees' FTP, as cognitive-motivational characteristics (Lens et al., 2012) is therefore anticipated to provide insights, into the way employees use their job resources, and perceive their job demands.

There is limited understanding of the role of the different time perspectives, encompassing the past, present, and future, as cognitive-motivational dispositions which explain the pursuit of meaning and pleasure. It is impeded by the focus on individual differences, in the pursuit of these two concepts (Kim, Kang & Choi, 2014). This can be addressed by shifting the attention to the reason employees will habitually pursue meaningfulness in their work (eudaimonic orientations) and engage in tasks that promote pleasure (hedonic orientations). In addition, the FTP theory as part of the framework in this thesis extends our understanding of why different tasks are pursued; and the relationship between job control and workload (JD-R antecedents) which explain further the perceived meaningfulness of work tasks. The limited research assessing the role and importance of time (Kim et al., 2014), has addressed time as a contextual factor influencing the choices made by individuals. Their research indicated that in two questionnaire-based studies "there were time-dependent changes in the relative weight of pleasure and meaning" (Kim et al., 2014, p. 265). First, the pursuit of a meaningful life had a positive association when goals related to the distant future. Second, decisions on meaningful outcomes were based on evaluating the difference between the immediate and distant future (Kim et al., 2014). It is argued that moving away from time as a contextual factor to employees' perspective of time (their FTP),

strengthens the ability to understand differences in employees' perceptions of their tasks. In summary, time as a contextual factor provides partial insights into the pursuit of meaning and pleasure (Kim et al., 2014), but does not account for the way employees' present and future focused FTPs explain the motivational processes underpinning the relationship between JD-R and engagement.

In addition to employees' FTP, the three psychological mechanisms explaining the relationship between JD-R and engagement are examined here. A previous comprehensive review of the literature on meaningful work (Rosso et al., 2010) asserted that meaningfulness research into the relationship between meaningfulness and temporality, is relatively sparse. A qualitative study later aimed to address this assertion by examining the relationship between time and the meaningfulness of work. Within this research, the asymmetry in time (that is past, present, and future) is recognised as influencing the way individual's experiences will determine an event's perceived meaningfulness (Bailey & Madden, 2015). The relationships between JD-R, and employees' perceptions of the psychological meaningfulness of their tasks, enable a greater explanation of the way these perceptions are subject to incremental variations. The influencing role of employees' FTP provides a novel approach to achieving this. The most notable psychological condition proposed by Kahn (1990), with strong empirical support, is psychological meaningfulness. The assessment of employees' levels of job control and workload, extends previous assertions that multiple processes are needed to understand the perceived meaningfulness of work (Rosso et al., 2010). The adoption of employees' FTP and its associated motivational processes will influence the relationship between JD-R antecedents and engagement via the perceived psychological meaningfulness of tasks (Figure 2.1.). Early research argued that psychological meaningfulness could facilitate motivation and growth, when work was perceived as meaningful (Spreitzer, Kizilos & Nason, 1997). There are also work characteristics which influence psychological meaningfulness, including whether employees find their work challenging, and whether it enables the development of their skills and knowledge (Kahn & Fellows, 2013). It is probable that employees' levels of job control and workload are influenced by their immediate and distant future perspectives (that is FTP), and the meaningfulness they attribute to present time tasks.

The perceived utility value of a task is argued to facilitate momentary variations in engagement and add insight into its relationship with JD-R antecedents. Akin to the lack of research adopting the FTP in motivation research (Section 2.2.1.), there exists a vacuum in the JD-R literature, on the merits of utility value in extending our current understanding of

engagement. The utility value of tasks is arguably a perceived benefit of engaging in meaningful work. The needs-satisfaction approach to engagement (Kahn, 1990) suggests that if employees find work challenging and meaningful, they will invest more of themselves in their work. For example, when a task is perceived as useful for, and related to, achieving a valued future outcome, its personal significance for employees in the present moment will promote their levels of engagement. Furthermore, the perceived level of challenge a task presents is argued to act as a measure of the perceived usefulness of tasks for the future, and thus represents how utility value is operationalised, in this thesis. Hence, employees' perceptions of the utility value of their current tasks is posited to add to our evolving understanding of the relationship between job demands and engagement (Figure 2.1.). The absence of the FTP construct of utility value in JD-R literature is addressed by building on the proposed solution to our understanding of the role of the preferred self (orientation and FTP), with the recognition that there are inherent short-term variations in the perceived utility value of daily tasks. Employees levels of job control are argued to align with individuals' need for control in eudaimonic processes (Huta, 2015), and the need for autonomy stemming from SDT, as part of the framework of this thesis (Figure 2.1.).

In addition to psychological meaningfulness and utility value, autonomous motivation is anticipated to explain the relationship between JD-R antecedents and engagement. The emphasis on the activity pursued and its role in autonomous motivation (Gagné & Deci, 2005), implies that when a task fulfils autonomous motives, it will promote the persistence of those actions, that is, engagement. For example, it is recognised that when a task's value is internalised, via identified regulation, it promotes employees' perceptions that their actions are voluntary. Therefore, it is expected that short-term changes in autonomous motivation will influence levels of engagement. Based on the propositions of SDT, it is argued that eudaimonic and hedonic orientations as person-related factors, and their relationships with autonomous motivation, equate to self-determined actions (Gagné & Deci, 2005). Employees' perceived levels of job control and workload extends this relationship in accounting for the working conditions (situational factors), which promote or inhibit their levels of autonomous motivation. In doing so, this challenges the assumption that job demands do not belong within the motivational process of the JD-R theory (cf. J. LePine et al., 2005). One conceptualisation of job demands relates to the idea of challenges, such as having a high workload, which can be perceived to promote the possibility of increased achievement and learning (Crawford et al., 2010). Therefore, motivational orientations in conjunction with employees' FTP, as motivational characteristics, are posited to extend the

limited research, thus our understanding, of a time perspective approach to job demands and motivational outcomes.

2.7. Summary

This chapter presented the key research problems addressed by the two studies in this thesis, which inform the conceptual framework; are supported by the theoretical framework; and which aim to answer the overarching research question. To what extent do orientations and the future time perspective explain the role of the preferred self, and extend our understanding of the relationship between job resources, job demands, and engagement? The conceptual issues surrounding our current understanding of engagement were examined to lay the foundation for explaining the way eudaimonic and hedonic orientations, and JD -R antecedents, lead to engagement via task perceptions and levels of autonomous motivation (Figure 2.1.). The key debates within the literature on eudaimonia and hedonia, and the arguments relating to the important role of employees' FTP were presented in support of the rationale for Study 1. This included assessing the expected relationship between eudaimonic and hedonic orientations and their associated FTP, which first addresses the gap in our understanding of the inherent time perspective differences in eudaimonic and hedonic processes. Second, the alignment of eudaimonic and hedonic orientations and employees' FTP underpins a core argument in this thesis, and its research question, that both offers one way to explain the role of the preferred self (cf. Kahn, 1990), in extending our understanding of engagement. The additional influencing effects of employees' FTP were also examined, in explaining the relationship between eudaimonic and hedonic orientations, and psychological meaningfulness, utility value, and autonomous motivation. These task perceptions, and autonomous motivation, are then posited to act as psychological mechanisms in the relationship between both motivational orientations and engagement, as set out in the conceptual framework (Figure 2.1.). Study 1 is presented in Chapter 3, and the results then follow in Chapter 4.

Study 2 builds on the first by examining the way employees' levels of job demands and resources act as situational factors to explain further their perceptions of, and engagement in, their daily tasks (Figure 2.1). One aim of Study 2 is to recognise the need to examine external contexts (JD-R antecedents) in conjunction with person-related factors (employees' motivational orientations & FTP), to explain the motivational processes leading to engagement. Hence, key arguments relating to JD-R, and their relationship with engagement

were also outlined in this chapter. The role of employees' FTP was presented as a new theoretical perspective in this relationship. In addition, the two JD-R antecedents are posited to explain the short-term variations inherent in employees' task perceptions, their levels of autonomous motivation, and consequently their daily engagement at work (Figure 2.1.). The moderating role of employees' FTP, and their association with eudaimonic and hedonic orientations, in these relationships will add further insight into the role of employees' time perspectives, and thus the concept of the preferred self, to explain how job resources are used, and job demands are perceived. Thus, offering new insight into our current understanding of engagement. Study 2 is presented in Chapter 5, and the results then follow in Chapter 6.

Chapter 3

Employees' Orientations and FTP as, Motivational Characteristics: The Role of the Preferred Self in understanding Engagement

This chapter presents Study 1 which aims to explain the role of the preferred self that leads to engagement (Kahn, 1990). There are two key issues that enable addressing this aim. First, the examination of eudaimonic and hedonic orientations as motivational person-related factors, which explain the reasons employees pursue, and engage in, different tasks. Correspondingly, the arguments pertaining to their conceptual issues are assessed further, alongside the implied differences in employees' time perspectives. Second, the importance of FTP theory to motivation; and the merit of adopting the less prevalent needs-satisfaction approach to engagement; are presented. Hence, central to this aim is the theorised relationships between the motivational orientations and employees' FTP, which informs one way to conceptualise the preferred self. The adoption of Kahn's (1990) theory of engagement allows for the employees' perspective, and thus their reasons for engaging in their tasks, to be examined. Furthermore, this shifts the attention away from the prevailing approach to engagement to support capturing how employees' express their 'preferred selves' (cf. Kahn, 1990, p.700) synonymous with the needs-satisfaction approach. A second aim of this study is to consolidate the importance of eudaimonia, as a motivational orientation, in organisational research. In sum, this study will provide a foundation for answering the first part of the overarching research question: To what extent do orientations and the future time perspective explain the preferred self, and extend our understanding of the relationship between job resources, job demands, and engagement?

3.1. Introduction & Study Rationale

There is limited research conceptualising eudaimonia and hedonia as orientations, thus traits, and person-related antecedents of engagement, alongside no known research that attempts to explain the concept of the preferred self. Since the initial attempts to define and conceptualise the philosophical constructs of eudaimonia and hedonia, there have been debates in psychological literature on how and where eudaimonia fits within organisational research (Kashdan et al., 2008; Waterman et al., 2008). The prevailing approach is to

operationalise eudaimonia and hedonia as wellbeing outcomes, whereby eudaimonic wellbeing relates to one's psychological wellbeing (Ryff, 1989), and hedonic wellbeing refers to one's subjective wellbeing (Ryff & Keyes, 1995). There also exists a consensus in this literature is that eudaimonic concepts are associated with long-term cognitive processes (need for growth), and hedonic concepts relate to short-term cognitive processes (seeking pleasure) (Huta & Waterman, 2014). As a construct, eudaimonia has led to the most conflict within the literature, with debates summarised in a review that questioned the utility of eudaimonia in an organisational context (cf. Kashdan et al., 2008). The conceptual issues identified in that review, to some extent, persist in the literature on eudaimonia and hedonia.

Our understanding of eudaimonia and hedonia's associated processes is hindered by the continuation of measuring both asymmetrically, that is, eudaimonia as positive functioning (trait) and hedonia as experiences (state) (Huta & Waterman, 2014). This requires a conceptual approach which can provide clarity to the issues raised in the literature (cf. Waterman et al., 2008), and address the issues raised concerning eudaimonia (cf. Kashdan et al., 2008). Further to this, and despite the recognition that eudaimonic and hedonic processes have inherent differences, little is known about how employees' time perspectives influence their pursuit of different tasks. From a theoretical perspective, the need for time related factors within organisational and motivational theory has been recognised (cf. Seijts, 1998). The FTP theory provides an understanding of two related concepts, where individuals have cognitive-motivational characteristic tendencies towards distant or immediate future outcomes (Andre et al., 2018; Lens et al., 2012); which underpin their motives in that present moment, that is, future and present focused FTPs, respectively. Hence, this theory and the construct of employees' FTP are expected to explain the motivational processes determining their engagement; and provide novel insight into the role of the preferred self (cf. Kahn, 1990).

The psychological mechanisms that explain the relationship between eudaimonic and hedonic orientations, as person-related factors, and engagement are also examined in this chapter. The adoption of the needs-satisfaction theory of engagement (Kahn, 1990) and the related psychological condition of psychological meaningfulness, will provide two anticipated contributions. First, it provides a validated definition of the meaningfulness of work, which addresses the ambiguity in the literature that has led to issues in the consistency and validity of research findings, which impede our understanding of the reasons work is perceived as meaningful (cf. Rosso et al., 2010). Second, the need to assess the multiple processes which contribute to the perceived meaningfulness of work (Rosso et al., 2010) are

addressed in this study first, by using a validated definition and measure of psychological meaningfulness (cf. May et al., 2004). Second, the assessment of both motivational orientations and employees' FTPs, as antecedents, will extend our understanding of the processes, which contribute to the reasons employees find their work meaningful.

In Study 1, two additional psychological mechanisms are anticipated to explain the relationships between employees' motivational characteristics and engagement, that is the perceived utility value of tasks and employees' levels of autonomous motivation. First, the role of FTP theory in motivation is examined, and its importance to both orientations is established. The development of the adopted framework is extended in this chapter, to emphasise the theoretical contributions of the FTP theory (Lens et al., 2012). The hypothesised relationships in Study 1 relate to the overarching research question, by addressing the following: the relationships between eudaimonic and hedonic orientations, and employees' FTP; task perceptions (psychological meaningfulness and utility value), and autonomous motivation, as mechanisms that explain the relationship between both motivational orientations and engagement. The challenges with identifying and testing appropriate measures for eudaimonic and hedonic orientations and their associated FTP, based on their importance to this study, are then examined. The full methodology for this study follows. The measurement considerations and methodology act as the prelude to the results chapter, that is, Chapter 4.

3.2. The Preferred Self: Orientations & FTP

3.2.1. The Motivational Power of the FTP

The application of the FTP allows the examination of how employees' present and future time perspectives influence their decision-making, and levels of motivation, in the present. When individuals account for both present and past experiences in their actions, their motivation-based goals can become more concrete. This is captured by taking a Time Perspective approach, which was originally defined as "the totality of the individual's views of his/her psychological future and psychological past existing at a given time" (Lewin, 1951, p.75). Based on the FTP theory, those who orient themselves temporally in the future, allow their past experiences to be present in the current moment (Lens et al., 2012). For example, individuals past experiences influence whether they believe they can meet a distant future

goal, and this influences their actions in the present. Previous research, examining the importance of the time perspective in understanding employee motivation, argued that time reinforces the way individuals make decisions (Andre et al., 2018; Seijts, 1998). Motivation theories assessing employees' behaviour have yet to recognise how their different time perspectives explain the relationship between the initiation, and implications, of their actions at work (Seijts, 1998). Employees' decisions are asserted, in the current research, to predict their goals and the actions they pursue. Taking the FTP approach, therefore, facilitates the assessment of the way decisions and evaluations are made in in the present, based on their present and future focused time perspectives (Zimbardo & Boyd, 1999).

It has been argued that many individuals integrate three different time perspectives, that is, the past, present, and future (Lens et al., 2012). Underpinning this, and central to this thesis, are employees' tendencies towards eudaimonic orientations and distant future goals, versus hedonic orientations and present or immediate future goals. These tendencies are supported by their characteristic time perspectives, as set out in the FTP theory. Individuals with stronger tendencies towards a future focused FTP are motivated by distant future events, and the actions they need to take in the present to reach their long-term goals (Lens, 1986; Seginer, 2009) such as growth. Hence, in the context of the current study, future focused FTPs align with eudaimonic orientations, and the pursuit, in the present, of longer-term objectives. Individuals with stronger tendencies towards a present FTP focus on short-term goals, and live their lives, temporally, in the near future, with the distant future given low value (Lens et al., 2012). Research supports the two related FTPs and that delaying gratification is a distinct construct, where the FTP acts as a form of self-regulation when setting goals (Bembenutty & Karabenick, 2004). Research adopting the FTP theory, indicated that the present time anticipation of future goals, with immediate future outcomes, will influence individuals' current levels of motivation (Lens et al., 2012). This is argued to explain employees' actions in the present and align with hedonic orientations, in the pursuit of instant gratification, that is, tasks that promote pleasure.

As motivational person-related factors, employees' FTP will influence how they perceive the implications of their actions, in congruence with eudaimonic and hedonic processes. Therefore, it was imperative to test the concepts within FTP theory in this study, to confirm the link between eudaimonic and hedonic orientations and their associated dimensions of the FTP. Research has argued that individuals will evaluate their current task-engagement on whether it is meaningful, or if it serves a purpose for future goals (Simons, Dewitte & Lens., 2004). This indicates there is a recognised need, in the literature, to

understand the link between the FTP and motivation. Furthermore, the anticipated association between both motivational orientations and employees' FTPs are posited to offer one way to conceptualise the preferred self (Figure 3.1.). Hence, these relationships are examined next to meet an aim of Study 1, and support part of the answer to the overarching research question.

3.2.2. Motivational Orientations and FTP

Eudaimonic and hedonic orientations relate to the initiation of actions, and how individuals anticipate the consequences of their decisions to pursue different outcomes. Although employees have tendencies towards both eudaimonic and hedonic orientations, they will differ in the extent to which a task motivates them based on each orientation (cf. Huta, 2016). The literature appears to contradict the assertion that employees have different levels of both orientations. Research suggests that individuals pursue eudaimonia or hedonia, but not both (Huta, 2013). This argument is based on the prevalence of research which focuses on their distinctiveness from one another (Keyes et al., 2002; Steger et al., 2008), when they are, in fact, distinct but related concepts (Huta & Waterman, 2014). A novel argument in this thesis is that based on eudaimonic and hedonic orientations, motivational characteristics whose processes are supported by their FTPs. For example, the concept of growth, featured in many studies as a central eudaimonic concept, is associated with long-term processes (Keyes et al., 2002; Vittersø & Søholt, 2011), while the concept of seeking pleasure is established as a hedonic and short-term process (Vittersø, 2013). Akin to orientations, the differences between present and future FTPs represent the extent to which an individual characteristically anticipates the distant or immediate future, in their present moment actions (Len et al., 2012). Hence, while both dimensions of the FTP are distinct from one another, akin to their orientations, individuals express different levels of each, when pursuing and engaging in an activity in the present. In sum, the theorised alignment between eudaimonic and hedonic orientations, and their respective FTPs provide one way to conceptualise the preferred self (cf. Kahn, 1990). These theorised relationships are depicted in Figure 3.1., and thus align with the first aim of the current study. The importance of the role of the preferred self, and its first known examination, is examined in Study 1 before being assessed in the subsequent relationships, as part of the conceptual model (Figure 3.2.).

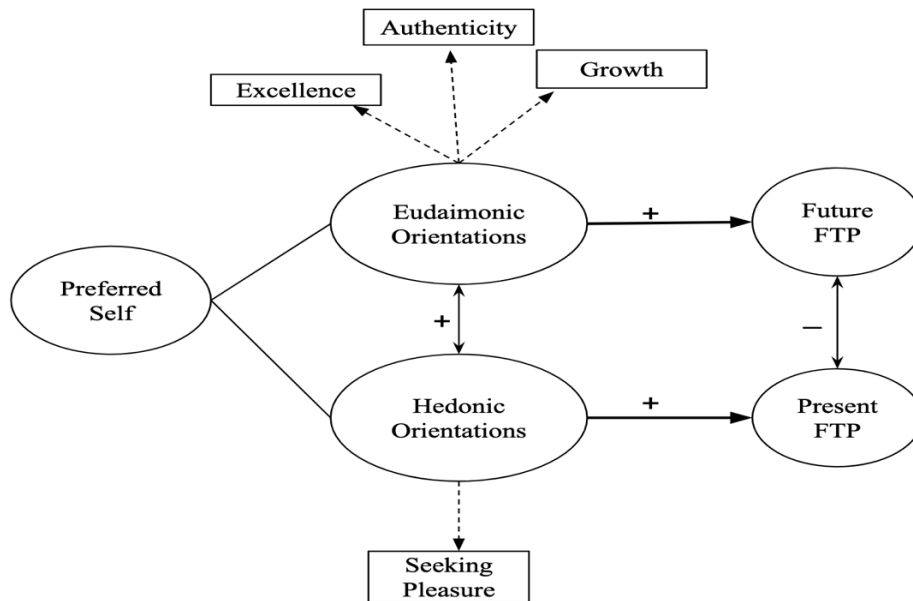


Figure 3.1. Conceptualisation of the preferred self – eudaimonic and hedonic orientations and their respective FTPs. *Note:* Dashed arrows indicate the dimensions of eudaimonic orientations (Bujacz et al., 2014), and hedonic orientations (Huta & Waterman, 2014).

While the literature on the alignment between the orientations perspective on eudaimonia and hedonia, and employees’ FTP is sparse, there is research that contains similar concepts. The habitual pursuit of growth and meaning (eudaimonia), and pleasure (hedonia) was previously assessed in a daily diary study (Kim et al., 2014). Kim and colleagues argued that whether meaning or pleasure is the desired outcome depends on time as a contextual factor. They employed two questionnaires that were completed at two time points, and their findings were supported, that is the changes to the weight given to meaning and pleasure were time dependent (Kim et al., 2014). Furthermore, meaning was attributed to more distant future decisions compared to pleasure in the immediate future, which suggests that meaning in the long-term is valued over pleasure in the present. A limitation of this research is the use of a student population (Kim et al., 2014), which impedes the ability to generalise these findings to an organisational context, and their findings are yet to be replicated. Nevertheless, their findings that meaning takes precedence over pleasure in the present, provides a pathway to the theorise about the differences between eudaimonic and hedonic processes.

Employees are expected to evaluate tasks based on their perceived meaning to employees, due to having stronger tendencies towards either a present or future focused FTP. Hence, it is expected that employees motivated by the need for growth, authenticity, and excellence (eudaimonic orientations) (cf. Bujacz et al., 2014; Figure 3.1.), will have stronger

tendencies towards a future FTP. Employees' perceptions of their work tasks are based on the way these tasks align with valued outcomes in the distant future. Conversely, when employees are motivated by the pursuit of pleasure (hedonic orientations), their characteristic present focused FTP will inform their actions in the present. Therefore, it is expected that eudaimonic and hedonic orientations and their associated processes align with their inherent time perspective differences. Taken together, the theorised association between eudaimonic orientations and future focused FTPs; and hedonic orientations and present focused FTPs (Figure 3.1.), provides the foundation, in this thesis, for explaining the preferred self (cf. Kahn, 1990).

Hypothesis 3.1a: Employees' eudaimonic orientations are positively associated with having a future focused FTP.

Hypothesis 3.1b: Employees' hedonic orientations are positively associated with having a present focused FTP.

3.3. Hypotheses Development

3.3.1. Motivational orientations as antecedents of Engagement via Task Perceptions, and Autonomous Motivation

1. *Psychological Meaningfulness*

Eudaimonic and hedonic orientations are expected to predict the degree to which a task will be perceived as psychologically meaningful. Hence, moving away from the prevailing approach of wellbeing outcomes, they act as trait antecedents of psychological mechanisms that explain engagement (Figure 3.2.). An alternative perspective on psychological meaningfulness in the literature, implies that "people need to feel as if they matter, and their contributions have meaning" (Kahn, 2010, p.24). However, it is argued that the motivational processes underpinning eudaimonic and hedonic orientations, will inform the psychological meaningfulness of a task. Employees who are eudaimonically orientated perceive a task as psychologically meaningful when it promotes the development of the self (growth), increased self-knowledge (authenticity), and achieving high standards (excellence)

(cf. Huta & Ryan, 2010). Employees' hedonic orientations are argued to underpin the decisions to pursue tasks, which are perceived to promote pleasure (Huta, 2015), as a valued return of investment for employees (Kahn, 1990). Previous research concluded that hedonism relates to investing in activities that promote pleasure (Huta et al., 2012), and explains the choices made in the pursuit of pleasure (Huta, 2015).

As antecedents of psychological meaningfulness, both motivational orientations are underpinned by the association between motivation and meaning (Rosso et al., 2010). Employees are argued habitually to pursue psychological meaningfulness in their work, not only for external reasons but based on their inherent needs and values, that is, the value attributed to pleasure. A eudaimonic concept that aligns with the way eudaimonic orientations are defined is authenticity (Bujacz et al., 2014), and is supported as a form of self-motivation (cf. Gecas, 1991). In a review of the literature, authenticity was highlighted as a key mechanism for understanding the meaningfulness of work (Rosso et al., 2010). The relationship between authenticity and the meaningfulness of work is also supported by SDT theorists (Deci & Ryan, 1985). Furthermore, previous research has argued that self-development is an individuals' ability to express their authenticity in tasks, which is supported in its alignment with the promotion of intrinsic motivation (cf. Csikszentmihalyi, 1990). With SDT as part of the framework in this thesis, it is anticipated that positioning eudaimonic and hedonic orientations as motivational antecedents will extend our understanding of the reasons employees find their work psychologically meaningful (Figure 3.2.).

The focus in previous research on individual psychological processes has yet to address adequately the complex relationships between the meaningfulness of work, and the factors that contribute to the way it is perceived (Rosso et al., 2010). This issue is addressed by examining eudaimonic and hedonic orientations, and their related long and short-term processes. Hence, two psychological processes are assessed in Study 1 to explain the psychological meaningfulness of work, from the perspective of employees. Previous research on the pursuit of meaning (Kim et al., 2014) does not distinguish between seeking meaning or meaningfulness in one's work. The difference between them, and the synonymous use of both terms in research (cf. Rosso et al., 2010), hinders our understanding of employees' perceptions of psychological meaningfulness. It is theorised that from an individual perspective, eudaimonic and hedonic orientations will provide insight into factors explaining those perceptions.

Psychological meaningfulness has a second role in Study 1, and acts as one of the psychological mechanisms, which explains the relationship between both motivational orientations and engagement (Figure 3.2.). Consensus in the literature is that psychological meaningfulness is a strong mediator in the relationship between engagement and its antecedents (Fletcher, 2016; Olivier & Rothman, 2007; Rich et al., 2010). Central to the needs-satisfaction approach to engagement is that employees will be engaged, if the psychological condition of meaningfulness is fulfilled by their work tasks (Kahn, 1990). There is strong support for the relationship between psychological meaningfulness and engagement in an organisational setting, based on this psychological condition being associated with intrinsic motivation (May et al., 2004). Research examining the role of psychological meaningfulness in the relationship between perceived opportunities for development and engagement, found support for their hypothesised relationships (Fletcher, 2016). Two online surveys were conducted one month apart, and there was a positive relationship between psychological meaningfulness and both perceived opportunities for development, and engagement (Fletcher, 2016). These findings support psychological meaningfulness as an antecedent of engagement, while also indicating a link between personal development, and both psychological meaningfulness and engagement. Hence, these findings suggest that employees that engage with advancing their own development at work, akin to the growth dimension of eudaimonic orientations (cf. Bujacz et al., 2014), find work more meaningful leading to engagement.

Research has yet to examine the way eudaimonic and hedonic orientations act as motivational antecedents of engagement, despite the propositions of the needs-satisfaction approach to engagement (Kahn, 1990), its motivational properties, and the conceptual alignment of this approach with eudaimonia (cf. Steger et al., 2008). Therefore, the proximal motivational processes, i.e., eudaimonic and hedonic orientations, are accounted for in Study 1, to explain a task's perceived psychological meaningfulness, and engagement (Figure 3.2.). It was proposed in previous research that when a task aligns with employees' values and beliefs, it influences the levels of perceived psychological meaningfulness (May et al., 2004). In turn, this congruence between their values and the perceived psychological meaningfulness of a task will lead to changes in their levels of engagement. Furthermore, in the development of the Kahn's (1990) theory of engagement, it was inferred that if employees find their work both challenging and meaningful, then their needs for psychological meaningfulness will be satisfied. Employees are argued to be motivated by tasks that fulfil the need for growth (eudaimonic orientations) or their value for gaining

pleasure from their work (hedonic orientations), which promotes the perceived psychological meaningfulness of, and engagement in, those tasks.

Hypothesis 3.2a: The positive relationship between eudaimonic orientations and engagement will be mediated by increased psychological meaningfulness.

Hypothesis 3.2b: The positive relationship between hedonic orientations and engagement will be mediated by increased psychological meaningfulness.

2. *Utility Value*

As a second psychological mechanism, the value attributed to tasks is congruent with extending our understanding of eudaimonic and hedonic orientations, as antecedents, and establishing the importance of eudaimonia as a motivational process. Utility value, as a cognitive component of the FTP theory, underpins the ability to anticipate the future outcomes of behaviour, and the perceived usefulness of current tasks that lead to those outcomes (De Volder & Lens, 1982; Lens et al., 2012). Research has recognised that the perceived utility value of present time actions acts as a form of internal regulation (Simons, et al., 2004), and that the concept of being future orientated relates to the value attributed to future outcomes (Trommsdorff, 1983). Despite the limited focus on utility value in the literature, there are two proposed perspectives on the relationship between utility and internal regulation, which support the hypothesised relationships in Study 1. First, when a task is internally regulated, thus stems from the self, but the ability to align present tasks with the distant future is low, that equates to low utility. Second, when current tasks act as motivation for achieving distant future goals, that is tasks that are internally regulated and have high utility (Vansteenkiste, 2004).

In the current context, the utility value of a task is argued to reflect the decisions employees make when engaging in challenging work, and attribute high utility value to those tasks based on their motivational orientations. There is support for the perceived value of completing schoolwork in the education literature for future outcomes such as grades (Creten, Lens & Simmons, 2001). Yet, there is minimal progression in our understanding of the way this translates to an organisational setting.

There are identifiable divergences in the reasons for pursuing tasks with utility value, when adopting eudaimonic and hedonic orientations, as person-related factors. The essence of this perspective on eudaimonia is based on the pursuit of challenges (Huta, 2015), and complexity (Vittersø, et al., 2010). Employees are argued to be eudaimonically motivated when a task is perceived to align with their need for challenging work (Huta & Waterman, 2014). Hence, the operationalisation of the perceived utility value of a task as the levels of challenge a current tasks present. For example, tasks that are perceived as challenging are internally regulated by employees' eudaimonic orientations and are theorised to have higher utility. Conversely, it is argued that when a task has low levels of challenge, this facilitates a shift in employees' focus back to tasks motivated by their values for pleasure (Huta & Waterman, 2014). Employees' hedonic orientations associated short-term processes impede the ability to align current tasks with distant future goals. Thus, challenging tasks are theorised to be perceived as useful when the current task promotes lower levels of challenge and requires less sustained effort. Hence, eudaimonic and hedonic orientations are hypothesised to have positive relationships with perceived utility value of tasks (Figure 3.2.).

The perceived utility value of tasks is also expected to explain the relationship between the two motivational orientations and engagement. Employees evaluation of a task's utility value is posited to influence the extent to which they invest their preferred selves, thus engage, in their work. Research has found that employees can thrive on job challenges due to their motivational properties, including the need to increase effort in a task (Kahn & Fellows, 2013). In meeting those challenges, this promotes meaning for employees, and consequently engagement in their work. Research suggests that there are differences between the types of persistence in tasks, where task-involvement, based on self-determined behaviour, leads to higher levels of interest (Ryan, Koestner & Deci, 1991), and thus engagement. Aligning with the employee perspective of the needs-satisfaction theory of engagement (Kahn, 1990), it is argued that employees' perceptions of the utility value of their tasks will act as a psychological mechanism in explaining the positive relationships between eudaimonic and hedonic orientations and engagement (Figure 3.2.). In essence, examining these relationships will extend our understanding of the way employees progress from the initiation of their actions to the persistence of those actions.

Hypothesis 3.2c: The positive relationship between eudaimonic orientations and engagement will be mediated by the increased utility value of tasks.

Hypothesis 3.2d: The positive relationship between hedonic orientations and engagement will be mediated by the increased utility value of tasks.

3. *Autonomous Motivation*

The psychological concept of autonomous motivation is central to SDT. It relates to how individuals' sense of self is integrated with the way they identify with a task. This identification leads to perceived autonomous action, and persistence (Deci & Ryan, 2008). The supporting mechanism of autonomous motivation, in the self-determined actions of employees, emphasises the importance of individuals' autonomy over their actions. Hence, autonomous motivation is proposed to facilitate the relationship between eudaimonic and hedonic orientations and their self-determined engagement in their tasks. When employees believe they have autonomy over their actions at work (Deci & Ryan, 1985), their actions, based on their orientations, become self-determined. Therefore, the concept of the PLOC from SDT supports this relationship, as it refers to whether individuals feel they have control over the outcome of their actions (Deci & Ryan, 2008). In the case of eudaimonic and hedonic orientations, their PLOC is internal and is anticipated to explain for their levels of autonomous motivation.

Autonomous behaviour stems from individuals expressing themselves freely, in contrast to actions required to meet external demands, that is, controlled motivation (Gagné & Deci, 2005). When levels of autonomous motivation are high, this enhances employees' experiences in their working life (Vansteenkiste, Ryan & Deci, 2008). The divergences between eudaimonic and hedonic processes, and levels of autonomous motivation, are theorised to be underpinned by individuals' orientations. Central to SDT is the concept of internalization, defined as "people taking in values, attitudes.... such that the external regulation of a behavior is transformed into an internal regulation and thus no longer requires the presence of an external contingency" (Gagné & Deci, 2005, p. 334). An individuals' value for their need for growth or authenticity (eudaimonic orientations), and pleasure (hedonic orientations) underpins the internal regulation of their actions, when engaging in tasks that align with those values (Figure 3.2.). This form of internal regulation leads to more autonomous behaviour (Vansteenkiste, et al, 2008), and consequently explains employees' perceptions of, and engagement in, a task.

Greater tendencies towards eudaimonic orientations are expected to lead to tasks being evaluated based on their intrinsic value, and the levels of internalised identified regulation. The latter is based on behaviour that is volitional and “congruent with their personal goals and identities” (Gagné & Deci, 2005, p334). When a task’s value is internalised, via identified regulation, and consequently becomes intrinsic, from a eudaimonic orientations perspective it relies on the perception that the task has value in its promotion of eudaimonic characteristics, that is growth, excellence, and authenticity (cf. Bujacz et al., 2014). In contrast, when a task is intrinsically motivating, based on hedonic orientations, it relies on the perception that a task will promote pleasure in the immediate future. This is argued to relate to the relationship between intrinsic motivation, based on “people doing an activity because they find it interesting and derive...satisfaction from the activity itself” (Gagné & Deci, 2005, p. 331), and the goal of engaging in tasks that align with their values (Husman & Lens, 1999). Eudaimonic and hedonic orientations are therefore hypothesised to lead to different perceptions of their levels of autonomous motivation (Figure 3.2.). For example, employees who value eudaimonic characteristics such as growth, and those that place higher value on hedonic characteristics (that is pleasure), will illustrate differences in the way a task’s value is internalised. In essence, the hypothesised differences in autonomous motivation, based on employees’ motivational orientations, also offers a way to assess the two distinct but related dimensions of autonomous motivation (cf. Gagné & Deci, 2005) (Figure 3.2.).

Autonomous motivation is also expected to align with engagement, when employees have a choice in the actions that are initiated, that is, they are autonomously motivated. This is evident when employees exercise self-motivation through self-determined actions that align with eudaimonic and hedonic processes. For example, when work demands align with their eudaimonic need for growth or excellence (Trépanier, et al., 2013), this enhances the perception of autonomy over work, and leads to higher levels of perseverance in employees’ actions. The adoption of SDT as part of the theoretical framework in this thesis supports the positive relationship between autonomous motivation and engagement. Research that assessed the role of both domain-specific and situational motivation in police officers, from an SDT perspective, hypothesised that work motivation, when self-determined, would have an impact on employees’ levels of engagement (Gillet, Huart, Colombat, & Fouquereau, 2013). Adopting the same measurement of autonomous motivation as the current study (Section 3.4.4), they found it had a positive relationship with engagement. The expected association between employees’ motivational orientations and autonomously motivated

actions, is supported further by aligning SDT with the needs-satisfaction theory of engagement (Gagné & Deci, 2005; Kahn, 1990). It is theorised that employees' eudaimonic and hedonic orientations and their related processes, explain the expression of their preferred selves (Figure 3.1.) and align with the internalised value of a task (autonomous motivation), to promote engagement (Figure 3.2.).

Hypothesis 3.2e: The positive relationship between eudaimonic orientations and engagement is mediated by increased levels of identified regulation.

Hypothesis 3.2f: The positive relationship between hedonic orientations and engagement is mediated by increased levels of intrinsic motivation.

3.3.2. Study 1: Conceptual Framework

The conceptual framework for Study 1 provides an overview of expected relationships (Figure 3.2.), based on the theoretical arguments presented in this chapter. This involved the conceptualisation of eudaimonic and hedonic orientations as person-related factors and antecedents; the merit of adopting FTP as a theory; the theorised relationships between both motivational orientations, as person-related factors, and employees' FTP as one way to conceptualise the preferred self; and task perceptions and autonomous motivation as psychological mechanisms that explain the relationship between motivational orientations and engagement (Figure 3.2.). Employees' FTP plays a second role in the current study, which is examined in the next section.

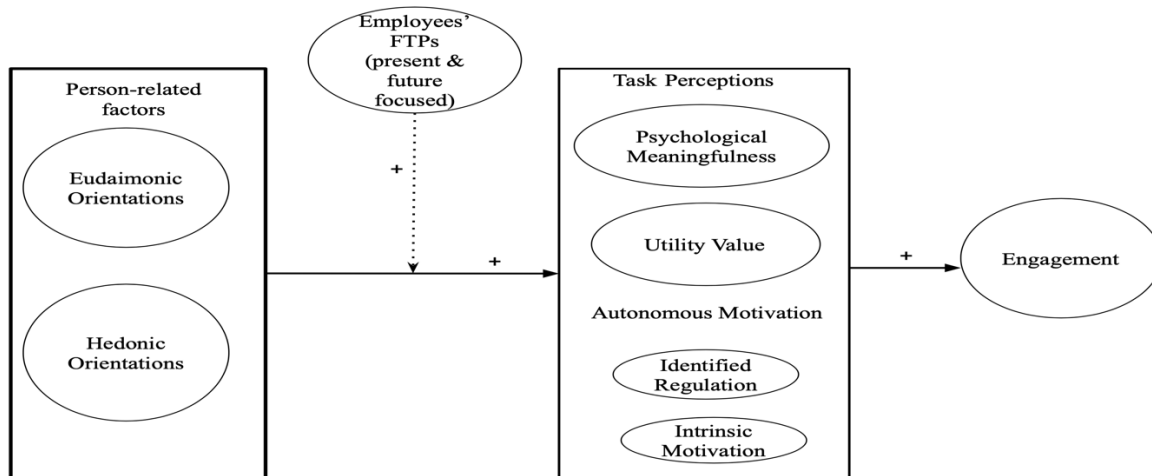


Figure 3.2.: Eudaimonic and hedonic orientations and FTPs as motivational processes, which explain their levels of engagement via their task perceptions and levels of autonomous motivation.

3.3.3. The Moderating Role of Employees' FTP

Motivation theorists have acknowledged the potential role of the FTP in relation to goal setting (Lens et al., 2012), and its relationship with identified regulation (de Bilde et al., 2011). The application of the FTP as a motivational theory enables the examination of how eudaimonic and hedonic orientations, and their associated FTPs interact to explain further the perceived psychological meaningfulness and utility value of tasks, and autonomous motivation (Figure 3.2.). Additionally, this interaction represents an explanation of how employees' express their preferred selves as underpinned by its conceptualisation in this thesis (Figure 3.1.). Furthermore, it supports the examination of this concept in answering the research question. Social-cognitivist, Bandura argued that self-motivation in individuals is dependent on addressing goals which can be attained in the present, such as proximate goals, that are built upon to achieve long-term goals (Bandura, 1982). Therefore, the assertion that differences in employees' FTPs influence perceptions of goals in the present, has been previously linked to motivation stemming from the self. Despite this, uptake of a (future) time perspective approach in research on work-related motivation has been sparse (Andre, et al., 2018). It is anticipated that employees' FTP will influence the strength of the relationships between their orientations (eudaimonic and hedonic), their task perceptions (psychological meaningfulness and utility value), and their levels of autonomous motivation; and each relationship is addressed, in turn, next.

Employees' FTP is expected to strengthen the relationship between their orientations (eudaimonic and hedonic) and a task's perceived level of psychological meaningfulness (Figure 3.2.). Research on the meaningfulness of work primarily developed from a qualitative approach (Rosso et al., 2010). In the quantitative literature, there is support for the meaningfulness of work explaining indirectly the relationship between opportunities for growth and engagement (Fletcher, 2016). This relationship was contingent upon perceived managerial support and did not capture the nature of growth as an inherent need nor whether employee's uptake of those opportunities was intrinsically valued by them. Our understanding of the perceived meaningfulness of tasks, based on how employees anticipate the future in their present actions, can help address this issue. For instance, the adoption of an FTP assists in uncovering whether a task holds personal meaning for immediate or distant future goals. It is argued that the short-term process of pursuing pleasure (hedonic orientations), based on immediate future outcomes (present focused FTP), has implications for the perceived psychological meaningfulness of tasks. This assertion applies to employees who are hedonically motivated, and "live for the moment in preparation for the future" (Seijts, 1998, p. 156). In Study 1, the premise is that employees' present levels of motivation are determined by their immediate or distant future perspectives, which influence the positive relationship between their orientations and psychological meaningfulness.

One of the few studies to assess the construct of meaningfulness and time argued that individuals past experiences and their perceptions of the future, would influence the levels of meaningfulness in a task (Bailey & Madden, 2015). This study concluded that the role of time is essential in how employees perceive the meaningfulness of their work. This aligns with the current study's proposition, that the FTP is ideally suited to explain how employees' FTPs influence the relationship between motivational orientations, and differences in a task's perceived levels of psychological meaningfulness. Hence, it is hypothesised that employees' characteristic tendencies towards higher levels of future or present FTPs will strengthen the positive relationships between their respective eudaimonic and hedonic orientations, and the perceived psychological meaningfulness of a task.

Hypothesis 3.3a: Employees' FTPs moderate the positive relationship between eudaimonic orientations and psychological meaningfulness; such that this relationship is greater for those with higher rather than lower levels of a future focused FTP.

Hypothesis 3.3b: Employees' FTPs moderate the positive relationship between hedonic orientations and psychological meaningfulness; such that this relationship is greater for those with higher rather than lower levels of a present focused FTP.

The relationship between eudaimonic and hedonic orientations and utility value is also expected to be influenced by employees' FTP (Figure 3.2.). A task's perceived utility value and its direct relationship with employees' motivational orientations, were discussed in the previous section (Section 3.3.1.). The utility value of a task is embedded in the propositions of the FTP theory (Len et al., 2012). This theory suggests that the value attributed to an activity in the present, is reliant on the way the future is anticipated. The limited application and understanding of the concept of utility value (cf. Andre et al., 2018) is addressed, in the current study, by adopting the present and future focused cognitive-motivational dimensions of FTP theory. In addressing limitations in previous research, it is expected that employees with eudaimonic orientations are more likely to perceive a challenging task as having utility value if it provides implications in the present for a desired distant future objective. Conversely, the relationship between hedonic orientations and utility value will be influenced by stronger tendencies towards a present focused FTP, such that less challenging tasks provide present or immediate future gains based on the actions initiated in the present. The differences in employees' perceptions of utility value of a task are hypothesised to be influenced by whether present or future focused FTP are promoted by their work tasks. Hence, employees' FTPs will strengthen the positive relationship between eudaimonic and hedonic orientations and utility value.

Hypothesis 3.3c: Employees' FTPs moderate the positive relationship between eudaimonic orientations and utility value; such that this relationship is greater for those with higher rather than lower levels of a future focused FTP.

Hypothesis 3.3d: Employees' FTPs moderate the positive relationship between hedonic orientations and utility value; such that this relationship is greater for those with higher rather than lower levels of a present focused FTP.

Preceding arguments on the relationship between eudaimonic and hedonic orientations and two dimensions of autonomous motivation, that is, intrinsic motivation and

identified regulation, are extended in this section. Employees' FTPs are expected to influence these relationships (Figure 3.2.), based on the premise that when employees are intrinsically motivated by a task, and it aligns with their values via internalization (Gagné & Deci, 2005), they are more likely to perceive their actions as self-determined. This involves assessing the way employees' perceptions of their levels of autonomous motivation differ, based on their perspective on the future implications of their actions. Previous research found that when assessing the intrinsic or extrinsic motivation underpinning a future goal, the role of autonomy impacts individuals' motivation (Simons, et al., 2004). There are further arguments that the relationship between having a future orientation and the achievement of a valued future outcome, infers an extrinsic locus of causality (cf. Ames, 1992). However, the integration of the FTP theory and SDT, in Study 1, will provide clarification on the way employees' autonomous motivation, such that their levels of intrinsic motivation and identified regulation, are influenced by their FTPs.

The propositions of the FTP theory on individual's tendencies towards present and future focused FTPs, is hypothesised to enhance employees' levels of autonomous motivation, when their tasks align with their FTP. For example, employees who are characteristically future focused in their FTP will have positive perceptions of their autonomous motivation in the present, when a task contributes to a distant future outcome, such as continued growth. The future orientated nature of motivation (Seijts, 1998) indicates that the way employees anticipate the future and incorporate it into their present (Lens et al., 2012), will influence their autonomously motivated actions at work. In addition, when employees are characteristically motivated by their present focused FTPs, they make autonomous decisions to engage in tasks with immediate future outcomes. It is hypothesised that employees' FTP will strengthen the positive relationships between eudaimonic and hedonic orientations and autonomous motivation, based on differences in identified regulation and intrinsic motivation, respectively.

Hypothesis 3.3e: Employees' FTPs moderate the positive relationship between eudaimonic orientations and identified regulation, such that this relationship is greater for those with higher rather than lower levels of a future focused FTP.

Hypothesis 3.3f: Employees' FTPs moderate the positive relationship between hedonic orientations and intrinsic motivation, such that this relationship is greater for those with higher rather than lower levels of a present focused FTP.

Arguments for the hypothesised relationships between eudaimonic and hedonic orientations, their task perceptions (psychological meaningfulness and utility value), and levels of autonomous motivation, and their mediated relationships with engagement (Figure 3.2.), have been presented. The moderating role of employees' FTP in these relationships, and the way this extends our understanding of the motivational processes underpinning engagement, was also examined. Taken together, this leads to three inherent moderated mediation relationships within the conceptual framework of this study (Figure 3.2.).

Hypothesis 3.4a: Employees' FTPs moderate the positive relationships between eudaimonic and hedonic orientations and engagement, via increased psychological meaningfulness. The indirect relationships are stronger for those with higher rather than lower levels of their characteristic present or future focused FTPs.

Hypothesis 3.4b: Employees' FTPs moderate the positive relationships between eudaimonic and hedonic orientations and engagement, via increased utility value. The indirect relationships are stronger for those with higher rather than lower levels of their characteristic present or future focused FTPs.

Hypothesis 3.4c: Employees' FTPs moderate the positive relationships between eudaimonic and hedonic orientations and engagement, via increased identified regulation and intrinsic motivation. These indirect relationships are stronger for those with higher rather than lower levels of their characteristic present or future focused FTPs.

3.4. Methodology

3.4.1. Measurement Considerations: Motivational Orientations & FTP

1. *Eudaimonic and Hedonic Orientations: As Trait Level Antecedents*

An aim of Study 1 was to provide the first known conceptualisation, thus explanation, of the preferred self, and thus extend our understanding of engagement. Hence, it was imperative to examine the appropriate measures for both eudaimonic and hedonic orientations, and employees' FTPs. The methodological issues which have hindered our theoretical understanding of eudaimonia, were examined when choosing an appropriate measure. In challenging the critique of eudaimonia (Kashdan et al., 2008), it was argued that how it is measured depends on two issues: the persistent use of the Scales of Psychological Well-Being (Ryff, 1989) measure; and how researchers conceptualise eudaimonia (Keyes & Annas, 2009). The first issue relates to the construct validity of this measure. Despite this scale being the most widely used measure in eudaimonia research, there remain problems that are acknowledged but not overcome, in the literature. First, studies have indicated that the scale's six dimensions load onto a single factor (Gallagher, Lopez & Preacher, 2009; Ryff & Keyes, 1995), and second, other research has found mixed results. In the first rigorous test of this measure, three dimensions loaded onto both eudaimonia and hedonia: self-acceptance, environmental mastery, and positive relations with others (Keyes et al., 2002). These results were partially replicated in a later study, which found that positive relations with others was a stronger indicator of social well-being than eudaimonic well-being (Gallagher et al., 2009). These inconsistent findings regarding the Scales of Psychological Well-Being (Ryff, 1989), indicate there are inherent construct validity issues with the prevailing measure of eudaimonia.

A dimension in Ryff's (1989) measure that overlaps conceptually with the way eudaimonic orientations are defined, is the personal growth subscale. This subscale is comprised of seven items, which has been found to have good test-retest reliability (Compton, Smith, Cornish, & Qualls, 1996), and adequate internal consistency (Gallagher et al., 2009). The examination of this subscale raised issues at the measurement level, where many of the items lack face validity and adopt ambiguous wording. An example includes "There is truth in the saying that you cannot teach an old dog new tricks" (Ryff, 1989).

There are limited studies that treat eudaimonia and hedonia both as Independent Variables (IVs), and as orientations (e.g., Peterson, Park & Seligman, 2005). Because of this, the Orientations to Happiness Scale (OHS) was assessed due to the apparent conceptual similarities. There were two issues with the subscales of the OHS: eudaimonia is conceptualised as a life of meaning rather than an orientation; and there are questionable findings for the subscale measuring pleasure. The first issue, although it supports previous research conceptualising eudaimonia as meaning (N. Park, M. Park, & Peterson, 2010), this creates conceptual issues, as the meaningfulness of work tasks are an outcome in the conceptual model (Figure 3.2.). Additionally, the concept of meaning itself is argued to be conceptually part of eudaimonia, so it cannot be used as an antecedent of a similar outcome (Kashdan et al., 2008). On the second issue, a critique of the pleasure subscale suggests that this measure was weakly related to the pleasure orientation (Vittersø & Søholt, 2011). This implies that the pleasure orientation subscale does not, as intended, measure pleasure as an orientation. In attempting to replicate the study (that is Peterson et al., 2005), research incorporated additional outcomes, and found that measuring pleasure as an orientation via the OHS, had a weak relationship with positive affect (Schueller & Seligman, 2010). These assertions and the inferences of limited face validity suggest that, despite the intentions of this measure, it fails to capture both eudaimonia and hedonia as orientations.

The measure used in this thesis, to assess eudaimonic and hedonic orientations, is the Hedonic and Eudaimonic Motives for engaging in Activities (HEMA) scale (Huta & Ryan, 2010). In its development, the two subscales of the HEMA were assessed as trait-level IVs that are not mutually exclusive (Huta & Ryan, 2010). When the construct validity of the HEMA scale was compared with the OHS (Peterson et al., 2005), there was both convergent and discriminant validity for the HEMA scale (Huta & Ryan, 2010). As a measure, the HEMA scale enables the simultaneous assessment of eudaimonia and hedonia, both as orientations and as antecedents.

2. Measuring Employees' FTP

There is limited motivation research using the FTP theory, and more specifically, FTP as a motivational construct (Kooij, et al., 2018). An examination of the Time Perspective measures was therefore required to assess accurately this construct. The most used Time Perspective measures were examined, and compared, for this purpose. The first measure assessed, the Considerations for Future Consequences (CFC) scale, presented problems. It

only considers a future focused FTP (Stratham, et al., 1994). Doing so fails to capture individuals' FTP, by not accounting for the role of the present and the past, which has been identified as an empirical issue (Andre et al., 2018). The validation of the CFC scale received criticism, due to individuals' anticipation of the consequences of their actions for the future representing a narrow conceptualisation of the FTP. In addition, the items that were supported aligned with consequences in the immediate and not the distant future (Petrocelli, 2003). Therefore, this measure is not assessing a future focused FTP, thus the distant future, but focuses solely on the consequences for behaviour in the immediate future. This would restrict the ability to assess employees' FTP, as a cognitive-motivational characteristic, in this thesis.

The second Time Perspective measure, the Temporal Focus Scale (TFS), assesses the level of attention individuals give to the past, present, and future (Shipp, Edwards & Lambert 2009). Each time frame is measured using four items per subscale. In comparison with assessing employees' FTP, the distinction between objective and subjective time is relevant, and TFS measure is based on the latter. Research has argued that, from an objective perspective, time relates to the actual time passing, while subjective time refers to individuals' perceptions, in the present moment. This corresponds with the effects of both past experiences and the anticipation of the future, in the present (George & Jones, 2000). The premise underpinning the TFS, is the argument that individual's will allocate their attention to one time frame, that is, the past, the present or the future (Shipp et al., 2009). This premise neglects the potential for positive or negative perceptions about the past or future, having an impact on temporal focus in the present. For example, research has argued for the need to assess both positive and negative past and future perceptions, to capture accurately individuals' FTP (Lens et al., 2012). Finally, by their own admission, the researchers who developed the TFS measure asserted that temporal focus only addresses one dimension of individuals' Time Perspective (Shipp et al., 2009). Therefore, due to the limited nature of this scale, it was not chosen for assessing employees' FTP.

The most frequently adopted measure of FTP in the literature, and the measure adopted in this thesis, is the ZTPI (Zimbardo & Boyd, 1999). There are advantages and limitations in adopting the ZTPI to measure employees' FTP. In its development, 20 years of research on the concept of Time Perspectives was examined, and it has been tested in multiple countries and languages (Apostolidas & Fieulaine, 2004; Milfont, Andrade, Belo, & Pessoa, 2008). This indicates that the ZTPI has evidence of wide cross-cultural and contextual support. It is a multi-scale measure that addresses the multidimensional nature of

an individual's FTP, thus overcoming the issues with the previous examined measures. Two limitations arose when examining the ZTPI: first, the full scale is extensive - 56 items; and second, there were consistent findings in the literature that some of the subscales had levels of reliability lower than the accepted threshold, $\alpha = .70$ (Kline, 2005). Therefore, research has validated a shorter version of the ZTPI, the ZTPI-S. Despite the persisting issues with reliability for some subscales, research indicates the shorter version is a psychometrically strong measure, and acts as a good proxy for the full measure (Zhang, Howell & Stolarski, 2013). Good test-retest scores are found when the full and short versions of the measure are compared, along with near identical amounts of variance explained (Gosling, Rentfrow & Swann, 2003). All studies testing the full ZTPI-S measure were compared, regarding the number of items per scale, and their reliability (Appendix 2; Table 1). A notable finding from these comparisons is that, in most cases, at least one subscale failed to reach the .70 threshold for reliability. This suggests there continues to be consistent reliability issues with some of the dimensions within the ZTPI-S, thus indicating the likelihood that this is unlikely to be resolved in the current research. The version of the ZTPI-S adopted in this thesis, was based on both the present-hedonistic and the future subscales having adequate reliability (Orkibi, 2015), and high levels of face validity for the items in each subscale (Appendix 2; Section 3.4.4.).

3.4.2. Research Design and Participants

The research design was a correlational cross-sectional survey study, which was designed to measure participants' eudaimonic and hedonic orientations (IVs), their FTPs (moderator), and their perceptions of psychological meaningfulness and utility value (mediators). It also assessed employees' levels of identified regulation and intrinsic motivation (mediators), and engagement (DV).

Participants were recruited from core industries in the UK, through LinkedIn and business contacts. In total, there were 289 responses to the online survey. However, 74 responses were eliminated from further analysis due to either consenting and not taking part, or partial completions, for example, non-participation past the demographic questions. Therefore, the final sample size for this study was 215. Based on the cross-sectional research design, the conventional recommended sample size of 200 was deemed appropriate for the subsequent analysis (cf. Chapter 4). It is recognised in the literature that setting minimum

sample size of 200 (MacCallum, Browne & Sugawara, 1996), and ensuring the measures are reliable, provides a good approach above the number of observations for each variable (cf. Jackson, 2001; Jackson, 2003).

Demographic information was requested prior to the central study questions, to obtain sample characteristics. Participants were asked to indicate the job sector in which they worked, to ascertain whether different sectors influenced the IVs in this study. The largest group came from Finance, constituting 18% (n= 37) of the total sample. This was followed by Consultancy, 11.7% (n=24), and Non-Profit Organisations at 10.7% (n=22). There were notable disparities pertaining to gender (61% female) and the mean age fell within the late 30's (M= 39.66, SD = 11.82); furthermore, a majority worked full-time (70.2%). Although the job status of most participants was at the employee (general) level (61.9%), there was notable participation from employees that hold senior management or CEO positions (30.2%). Half of the sample identified as White Irish (51.6%), with a third of the sample located in Dublin Ireland (34%), followed by London, UK (26%). Finally, half of the participants had been in their current organisation for more than five years (51.2%). This was preferable given the assessment of eudaimonic orientations and a future focused FTP and their association with long-term processes.

3.4.3. Procedure

Study 1 received ethical approval from the Birkbeck's Ethics Committee prior to data collection. The recruitment process involved an advertisement that detailed the study, optional prize draw participation, eligibility for the study, and an emphasis on the voluntary nature of participation (Appendix 1). Anonymous links to the study from the Qualtrics platform were provided, where potential participants could access a detailed information sheet. They were asked to read this sheet in full. It outlined the purpose of the study, what participation involved, and the how the anonymity and confidentiality of their data was ensured (Appendix 1). Potential participants were then asked to confirm consent to participation. They were unable to progress to the start of the survey until they answered this question. They were presented with the following statement "I have read the Information sheet fully, and I wish to participate in this study". Those that declined their consent were brought straight to an end of survey screen which thanked them for their interest in the study.

Participants that provided their consent to participation progressed to the start of the survey, which asked them a series of demographic questions. In the central part of the survey,

participants answered questions in the following order: HEMA; R-MAWS; the Job Engagement scale; Psychological Meaningfulness; Job challenge scale; and the ZTPI-S (Appendix 2.3.). The survey took a maximum of 10 minutes for participants to complete, i.e., to answer both the demographic questions and respond to the items on each of the forementioned measures. Finally, upon completion, participants were thanked for their participation, and contact details for the researcher were presented again, should they wish to ask any further questions or withdraw from the study.

3.4.4. Measures

Participants answered demographic questions at the start of the study to obtain sample characteristics. These questions related to their gender, age in years, and their ethnicity (Appendix 2.3)¹. ¹Participants were also asked to indicate their type of work (e.g., full-time), their job status (e.g., employee, senior manager), their location (e.g., UK, Ireland) and how long they had worked in their organisation (e.g., years and months). Finally, participants were presented with prominent sector types, and the option to identify the sector most relevant to their organisation (Appendix 2.3.).

Eudaimonic and Hedonic Orientations: HEMA scale (Huta & Ryan, 2010)

Eudaimonic and hedonic orientations were measured using the HEMA scales, which consists of a eudaimonic motives subscale and a hedonic motives subscale. Participants were asked "To what degree do you typically approach your activities with each of the following intentions, whether or not you actually achieve your aim?". This was measured on a 7-point Likert scale ranging from "Not at all" to "All of the time", with eudaimonic motives consisting of four items and hedonic motives with five. Examples from the eudaimonic motives subscale include "Seeking to develop a skill, learn, or gain insight into something?" and "Seeking to do what you believe in?". Examples from the hedonic motives' subscale include "Seeking pleasure?" and "Seeking enjoyment?" (Appendix 2). There was good internal consistency for eudaimonic motives ($\alpha = .79$), and hedonic motives ($\alpha = .81$). Both subscales were, therefore, consistent with the original measure (Huta & Ryan, 2010).

¹ ¹There were additional measures in the online survey in Qualtrics for Study 1, which were not used in the thesis. A description of the survey is provided in this appendix and aligns with the measures presented in Section 3.4.4.

Employees' FTP: ZTPI-S (Orkibi, 2015).

The ZTPI-S (Orkibi, 2015) was used to assess employees' FTP that is, their present and future FTPs. Participants were asked, "To what extent are the following statements characteristic of you?". This was measured on a 5-point Likert scale ranging from "Very Uncharacteristic" to "Very Characteristic". Each subscale consisted of four items. Examples from the Future subscale included: "I keep working at difficult, uninteresting tasks if they help me get ahead" and "When I want to achieve something, I set goals and consider specific means for reaching those goals". Examples from the Present-Hedonistic subscale included: "I take risks to put excitement in my life" and "I believe getting together with one's friends to party is one of life's important pleasures" (Appendix 2). Reliability analysis indicated the following: Past-Positive ($\alpha = .81$); Past-Negative ($\alpha = .87$); Present-Hedonistic ($\alpha = .73$); Present-Fatalistic ($\alpha = .68$); Future ($\alpha = .66$). The results are largely consistent with the findings of previous research on the reliability of these subscales (Appendix 2). The full ZTPI-S measure was just short of the accepted threshold for internal consistency ($\alpha = .68$).

Utility Value: The Job Challenge scale (Cohen-Meiter, Carmeli & Waldman, 2009)

When measuring employees' perceptions of the utility value of a task, the Job Challenge Scale was used, in line with how this concept is operationalised in this thesis. Participants were asked: "To what extent do the following statements apply to your current work tasks?". The scale consisted of 5 items and responses were measured on a 5-point Likert scale from "Strongly disagree" to "Strongly agree". Examples of items include: "My work gives me new challenges" and "My role demands that I do different things at work and use various abilities and talents" (Appendix 2). This measure demonstrated good internal consistency ($\alpha = .84$).

Psychological Meaningfulness: Psychological Meaningfulness scale (May et al., 2004).

A 4-item version of the Psychological Meaningfulness scale was used to measure the psychological meaningfulness of tasks. Participants were asked "To what extent would the following statements apply to you?" and responses were given on a 5-point scale, ranging from "Strongly disagree" to "Strongly agree". Examples of items included: "The work I do on this job is highly meaningful to me" and "My job activities are significant to me" (Appendix 2). This shorter version of the Psychological Meaningfulness scale retained the high level of internal consistency ($\alpha = .94$).

Autonomous Motivation: R-MAWS (Gagné, Forest, Vansteenkiste, et al., 2012).

In the assessment of employees' autonomous motivation, that is, identified regulation and intrinsic motivation, the Revised-Motivation at Work Scale (R-MAWS) measure was adopted. Participants were asked, "Please indicate the extent to which each statement best describes what motivates you at work". Both subscales were measured on a 5-point Likert scale, ranging from "Strongly disagree" to "Strongly agree". Both intrinsic motivation ($\alpha = .81$) and identified regulation subscales ($\alpha = .73$), consisted of three items. An example item from the intrinsic motivation subscale includes "Because what I do in my work is exciting", and an example item from the identified regulation subscale includes "Because putting efforts in this job aligns with my personal values" (Appendix 2). The whole measure had good internal consistency ($\alpha = .82$), alongside the intrinsic motivation subscale ($\alpha = .81$), and the identified regulation subscale ($\alpha = .73$).

Engagement: Job Engagement scale (Rich et al., 2010).

Engagement was measured using the Job Engagement scale (Rich et al., 2010). Participants were asked "Please indicate how true these statements are for you on a normal working day", with responses rated on a 5-point scale from "Strongly disagree" to "Strongly agree". This scale has three subscales each consisting of six items. An example from the physical engagement subscale included "I exert my full energy on my job", from the emotional engagement subscale "I am interested in my job", and cognitive engagement "At work, my mind is focused on my job" (Appendix 2). The full scale demonstrated high levels of internal consistency ($\alpha = .95$), as did the physical engagement ($\alpha = .91$), emotional engagement ($\alpha = .92$), and cognitive engagement ($\alpha = .93$) subscales.

3.5. Summary

This chapter focused on Study 1, and the theoretical arguments supporting the hypothesised relationships which seek to provide part of the answer to the overarching research question in this thesis. To achieve this, the chapter examined the relationship between eudaimonic and hedonic orientations and employees' FTP, as one way to conceptualise the yet to be understood concept of the preferred self (cf. Kahn, 1990). This novel way of theorising about the preferred self was depicted in Figure 3.1., before presenting the empirical rationale for confirming the association between both motivational orientations,

and their respective FTPs. Furthermore, it is anticipated that this study will illustrate the important role of eudaimonia, both as a motivational process and proximal antecedent of engagement. The mediated relationships between eudaimonic and hedonic orientations and engagement, and the inherent direct relationships, were also presented in this chapter. This involved the assessment of the three psychological mechanisms: psychological meaningfulness; utility value; and the two dimensions of autonomous motivation. These relationships are also hypothesised to be strengthened by employees' FTP, thus extending our understanding of the antecedents of engagement.

Due to the novel adoption of the FTP theory, in addressing the first known assessment of the inherent time perspective differences in eudaimonic and hedonic processes, early sections of this chapter addressed the decades old concept of Time Perspectives (Section 3.2.1.). As a motivation theory, the FTP has slowly gained importance for our understanding of motivation, which has led to an increased interest in taking a Time Perspective in organisational research. The fundamental propositions of the FTP theory were discussed and situated within the literature. This theory's appropriateness for supporting the hypothesised relationships was presented, in addition to SDT propositions on self-determined actions and autonomous motivation. Both SDT and the FTP theories act as the framework for Study 1. This study's adoption of the needs-satisfaction theory of engagement (Kahn, 1990), and the proposed conceptualisation of the related concept of the preferred self, results in a new evaluation of the relationship between person-related motivational processes, and engagement.

An extensive examination of the appropriate measures for eudaimonic and hedonic orientations, and employees' FTP was conducted to provide a stronger basis for testing their associated relationships (Appendix 2), and their role in explaining the preferred selves (cf. Kahn, 1990). This addressed further the need to overcome conceptual issues concerning the use of eudaimonia, specifically, in organisational research. It was also necessary to use a methodologically appropriate measure of FTP, due to the limited application in the literature, and the FTP theory's central role in this thesis. The final section presented the full methodology for Study 1. This included the well-established measures of all other constructs and the Job Engagement Scale, which is adopted by research that seeks to extend our understanding of engagement based on the needs-satisfaction approach (cf. Fletcher, 2016; Fletcher, et al., 2018; Rich et al., 2010). Finally, a shorter version of the Psychological Meaningfulness Scale (May et al., 2004) was adopted in Study 1, due to face validity issues with Items 2 and 3 compared to Items 1 and 6, respectively.

Chapter 4 will present the analysis and results of Study 1. First, it will extend the measure validation and the initial reliability findings outlined in this chapter (Section 3.4.4). This includes further examination of the internal consistency issues concerning the ZTPI-S (Orkibi, 2015). Second, Chapter 4 presents the analysis of both the measurement models to test the conceptual model, and the path analysis models employed to test the hypothesised relationships.

Chapter 4

Employees' Orientations, their FTP, & the Psychological Mechanisms explaining Engagement. A Path Analysis.

The purpose of this chapter is to present the results of Study 1. The rationale and empirical evidence for the hypothesised relationships were examined in the previous chapter (Chapter 3). Eudaimonic and hedonic orientations are expected to relate positively to the psychological meaningfulness and utility value of tasks, and levels of identified regulation and intrinsic motivation (autonomous motivation), respectively. Consequently, these relationships are anticipated to explain employees' levels of engagement in their work tasks. Employees' FTPs are theorised to strengthen the mediated relationships between their motivational orientations, the way they perceive their tasks, and their autonomous motivation. The aim of Study 1 is to examine the person-related, thus proximal, motivational processes underpinning engagement, which will provide the foundation for answering the research question, in this thesis. To achieve this, the findings of this study will address the association between both motivational orientations and employees' FTP in explaining the preferred self (cf. Kahn, 1990); the inherent time perspective differences in eudaimonic and hedonic processes; and consolidate the importance of eudaimonia and the FTP, in organisational research. The ambiguity relating to the meaningfulness of work (Rosso et al., 2010) is addressed, and the concept of the preferred self, explained further by adopting the needs-satisfaction theory of engagement (Kahn, 1990).

The chapter begins by examining the measurement analysis methods that will facilitate the assessment of the hypothesised relationships. This includes the reliability of the measures, the measurement models via CFA, and the handling of missing values. The hypothesised relationships are then tested by adopting a path analysis approach. This chapter concludes, first, with the conclusions that stem from the findings of this study; and second, by examining the theoretical and practical implications of the results. Finally, the limitations of the study are addressed, in conjunction with recommendations for future research.

4.1. Measurement Analysis

4.1.1. Reliability

Reliability analysis was conducted in R (v4.2; R Core Team, 2022), which provides a thorough application for this type of analysis (Shaffer, Young, Guess, et al., 2008). All measures, apart from the ZTPI-S measure of employees' FTP, had acceptable levels of reliability ($\alpha = .74 \rightarrow .95$), when all items were included in the analysis (Appendix 3A). Two of the ZTPI-S subscales fell short of the minimum .70 threshold: present fatalistic, ($\alpha = .68$); and future, ($\alpha = .66$). However, this is consistent with previous research that has validated this measure (cf. Milfont et al., 2008; Perry, McKay, Worrell, et al. & Musil., 2015) (Appendix 2; Table 1). Employees' FTP (present and future focused) is expected to moderate the direct relationships between eudaimonic and hedonic orientations, psychological meaningfulness, and utility value, identified regulation and intrinsic motivation (autonomous motivation) (Section 4.5). Both the hedonistic and fatalistic subscales underpinning a present focused FTP, were assessed. However, the outcome of the reliability analysis demonstrated that, when combined, there were problems with internal consistency, such as $\alpha = .61$. This indicates that the two present subscales, present hedonistic and present fatalistic, should be considered as separate measures of employees' present focused FTPs, in the main analysis (Section 4.5). This allows for a more reliable evaluation of the role of this form of FTP, in the hypothesised relationships.

4.1.2. Missing Values Analysis & Model Fit Indices

The factor structure of each measure was assessed using the lavaan package in R (Rosseel, 2012). This allowed for the measurement models to be tested, and to reduce items in the Job Engagement Scale (Rich et al., 2010), for use in Study 2. The methods adopted for examining model fit are applied in the measurement and subsequent path analysis models (Section 4.4. & Section 4.5.). The processes used in the evaluation of missing data, and the chosen fit indices, are examined in this section.

Missing values analysis was conducted in SPSS to assess the extent of missing cases, and the patterns of missingness, in the data from the final sample ($N=215$). In five of the seven measures, there were between one to four missing cases. These included: the HEMA

scale; R-MAWS; ZTPI-S; and the Psychological Meaningfulness scale. R-MAWS, which assessed the two dimensions of autonomous motivation, had four missing cases, followed by the ZTPI-S with three. The Missing Patterns analysis highlighted eight participants who did not respond to one item, and one participant who did not answer three items, across the five measures. In a further examination, Little's test was used to assess if any missing values were missing cases at random (MCAR) (Little, 1988). The assumption of this test is that missingness between data that is observed, and unobserved data is independent (Li, 2013). No variables were found to include 5% or more missing cases. Therefore, the MCAR test was Re-run by specifying a lower percentage based on the univariate statistics, at 1%. This test indicated that there were no significant differences in missing cases between the R-MAWS and ZTPI-S scales ($X^2 = 24.68$, $df = 34$, $p = .894$). Finally, after the evaluation of the estimated marginal (EM) means, it was concluded that the missing values were MCAR, due to a small number of items that were not answered by participants. Hence, the next stage was to account for these missing cases within the main analysis, when testing the hypothesised model (Section 4.5.).

The chosen method for handling the remaining missing data in this study, is full Information maximum likelihood (FIML), rather than the popular method of multiple imputation (MI) (Allison, 2012). FIML is an estimation technique that directly assesses the probability of different parameter estimates, based on the available observed data. As a missing cases technique for SEM analysis (cf. Enders & Bandalos, 2001), FIML is appropriate for determining unbiased parameter estimates in data that has MCAR and produces accurate Standard Errors (S.E.) (Newman, 2014). Both methods for handling missing data (FIML and MI) assume that missing values are missing at random (MAR). However, using a maximum likelihood (ML) estimator has advantages, which include overcoming the limitations of using MI. First, when MI is applied using linear regression imputation, this creates biases in the way parameters are estimated due to insufficient available variance. The use of an imputation equation also leads to problems with standard errors and the variability in the sampling processes. These biases occur due to incompatibility between the analysis and imputation models, for example, non-linearities (Allison, 2012). FIML was adopted for the analysis as it provides the same results when used in any given data set, such as the parameter estimates, test statistics, and standard errors. This is important in Study 1, first because the analysis of the measurement models involves the assessment of both the complete and modified versions of all the measures; and second, the efficiency of using the ML estimator has implications for the replicability of the analysis and the results.

Finally, unlike MI, there is no conflict within analysis and imputation models when using ML. By using a single model, FIML accounts for all variables within the data set, for example, including those with interactions or non-linearities (Allison, 2012), and the small number of missing cases.

In all the subsequent measurement and path analysis models (Section 4.4. & Section 4.5), the fit indices used were: the model chi-square (X^2) (Kline, 2005); the standardised root mean square residual (SRMR; Bentler & Hu, 1998; Byrne, 1998); the comparative fit index (CFI; Bentler, 1990); the tucker lewis index (TLI; Tucker & Lewis, 1973); and the root mean square error of estimation (RMSEA; Steiger, 1990). The guidelines for acceptable fit in measurement models indicate that CFI and TLI should be $> .95$, and RMSEA and SRMR $< .05$ (Brown, 2006). There are limitations to using the Chi-Square as a measure of the goodness-of-model fit. This includes its sensitivity to sample size, which impacts the statistical power of this fit index (Kenny & McCoach, 2003). To overcome this, the relative/normed chi-square is used (i.e., X^2/df). The RMSEA was adopted as a fit index. It allows the examination of the parsimony of the models being assessed. As an alternative to the root mean residual (RMR), the SRMR was chosen, as the measures in Study 1 had varying ranges in their response items, which cannot be interpreted using the RMR (Kline, 2005). The sample size was also moderately small ($N = 215$). The CFI is therefore a suitable fit index (Tabachnick & Fidell, 2007). It enables comparisons in the measurement and path analysis models, in the subsequent analysis.

4.2. Measurement models & scale development

The measurement models are divided into four categories, based on the role of the variables within the full path analysis model: the IVs; mediating variables; the moderating variable; and the DV. Multivariate normality and linearity assumptions were tested by examining histograms, P-P plots, and Mahalanobis distance in SPSS. These assumptions were assessed, and met, for all subsequent measurement models using the same methods.

4.2.1. Independent Variables: Eudaimonic and Hedonic Orientations

The first measure examined was the HEMA scale (Huta & Ryan, 2010), which is used to test eudaimonic and hedonic orientations. It was hypothesised as a two-factor model, in the

measurement model. Items 8 and 9 were removed after conducting model comparisons using CFA. First, there was a poor model fit with all nine items ($\chi^2 = 133.78$, $df = 26$, $p < .001$, CFI = .87, TLI = .82., RMSEA = .14, SRMR = .11). Second, after inspecting the way each item loaded onto their respective latent variables, Item 9 had the lowest beta value ($\beta = .13$, $p = .064$). This infers that it was not a strong indicator of hedonic orientations in comparison to Items 5-8. Finally, when the inter-item correlations were assessed, in the re-running of the reliability analysis, Items 6 and 8 were highly correlated ($r = .81$). This is viewed in the literature as an inter-item correlation that is too high, for example, when $>.80$ “it becomes impossible to determine the unique contribution to a factor of the variables that are highly correlated” (Field, 2009, p.648). Both the CFA and reliability analysis were conducted again: first, with Item 6 removed and Item 8 retained; second, with Item 6 retained and Item 8 removed. When Item 8 was removed, the model fit was poor, and the internal consistency of the measure was reduced ($\alpha = .76$). There was a good model fit when Item 6 was retained. Thus, Item 8 was removed from the measure of eudaimonic and hedonic orientations. A final reliability analysis, with Items 8 and 9 removed, demonstrated that good internal consistency was retained ($\alpha = .83$).

The goodness-of-fit indices were assessed for the whole measure (one-factor) and the hypothesised two-factor model. The RMSEA and SRMR for the two-factor model indicated that this was the best factor structure for the HEMA scales (Table 4.1.). The fit indices of this model indicated a good fit between the observed data and the model.

Table 4.1.: Goodness-of-fit Indices of models for HEMA scale (eudaimonic and hedonic orientations) (N=215)

Model	χ^2	df	$\Delta\chi^2$	Δdf	SRMR	RMSEA	CFI	TLI
Single Factor	225.20***	20			.14	.22	.73	.62
Two Factor	24.88*	13	200.32	7	.04	.07	.98	.97

Note: *** $p < .001$, * $p = .024$. Items 8 & 9 removed.

The items of both the eudaimonic and hedonic orientation subscales loaded significantly onto their respective factors (Table 4.2.). This result indicated that eudaimonic and hedonic orientations were distinct subscales, and therefore appropriate for testing the

hypotheses. As expected, there was a small positive relationship between the residuals of the observed data and model-implied covariance matrices ($\beta = .46, p < .001$).

Table 4.2.: Standardised Loadings and Standard Errors for two-factor CFA Model of Eudaimonic and Hedonic Orientations (HEMA scale)

Item descriptions	Eudaimonic Motives		Hedonic Motives	
	β	S.E.	β	S.E.
Seeking to pursue excellence	.55	.05		
Seeking to use the best in yourself	.52	.04		
Seeking to develop a skill, learn, or gain insight	.55	.06		
Seeking to do what you believe in	.55	.06		
Seeking enjoyment			.94	.06
Seeking pleasure			.98	.06
Seeking fun			.82	.06

Note: SRMR = .04; RMSEA = .07. $\chi^2(13) = 24.88, p = .024$. Two-factor covariance between eudaimonic and hedonic motives .46. β = Standardised Loadings, S.E. = Standard Errors.

4.2.2. Psychological Mechanisms (Mediators): Psychological Meaningfulness, Utility Value & Autonomous Motivation

The measures of psychological meaningfulness and utility value, which represent two mediators in Study 1, were assessed in one measurement model. Given that the Psychological Meaningfulness scale (May et al., 2004) had four items, and the Job Challenge scale (Cohen-Meiter et al., 2009) measuring utility value had five items, there were insufficient degrees of freedom to assess them separately. A two-factor model was hypothesised, as each measure was testing two distinct constructs, and for comparison purposes the first measurement model contained a one-factor solution. This model produced a poor fitting model with all items loaded onto one factor ($\chi^2 = 205.67, df = 14, p < .001, CFI = .78, TLI = .67, RMSEA = .25, SRMR = .09$) (Table 4.3). The hypothesised two-factor model provided support for the two-factor structure, yet the fit indices were not ideal. An item-correlation analysis was conducted (Appendix 3B), to assess if the poor fit was related to problems with confounding, for example, to test for any conceptual overlap between the items within the two measures. Based on this analysis, there was evidence of a high correlation between Item 1 and Item 2 from the Psychological Meaningfulness scale ($r = .84, p < .001$). The CFA was re-run: first,

with Item 1 removed; and second, with Item 1 retained and Item 2 removed, from the psychological meaningfulness scale. There was no evidence of high correlations between the five items from the Job Challenge scale (Appendix 3B). However, the item with the lowest factor loading, Item 1 ($\beta = .48, p = .001$), was removed as it was $\leq .05$ (Awang, 2014). In the final reliability analyses, with Item 1 removed from both scales, both measures retained good internal consistency: Psychological Meaningfulness scale ($\alpha = .89$); and Job Challenge scale ($\alpha = .83$). The two-factor measurement model was the best fitting model, based on the observed data (Table 4.3).

Table 4.3: Goodness-of-fit Indices of models for Psychological Meaningfulness scale and Job Challenge scale (Utility value) (N=215)

Model	X^2	df	ΔX^2	Δdf^2	SRMR	RMSEA	CFI	TLI
Single Factor	205.67***	.14			.09	.25	.78	.67
Two Factor	30.12***	13	175.55	1	.03	.08	.98	.97

Note:*** $p < .001$ Two-Factor: Item 1 JC removed; Item 1 PM removed.

All three items from the Psychological Meaningfulness scale loaded significantly onto one factor, with higher standardised coefficients for all items (Table 4.4.). Similar results were found for the Job Challenge scale items, with two items having a high standardised coefficient. There was moderate covariance between the residuals, which infers some differences between the observed covariance matrix and the model-implied covariance matrix (Table 4.4.).

Table 4.4: Standardised Loadings and Standard Errors for two-factor CFA Model of Psychological Meaningfulness scale & Job Challenge scale (Utility value)

Item descriptions	Psychological Meaningfulness		Utility Value	
	β	S.E.	β	S.E.
My job activities are significant to me	.78	.05		
The work I do...is meaningful to me	.84	.05		
I feel the work I do...is valuable	.69	.05		
I have new interesting thing to do...			.91	.06
My work gives me new challenges			.77	.05
My work is quite simple and routine (*)			.54	.07
My role demands I do different things and use various abilities			.60	.05

Note: SRMR = .03; RMSEA = .08. $X^2(13) = 30.12, p < .01$. Two-factor covariance between psychological meaningfulness and utility value .67. * = reverse coded item. ‘...’ = on/in my job. β = Standardised Loadings, S.E. = Standard Errors.

The next measure examined was the R-MAWS (Gagné, et al., 2012), which assessed both dimensions of autonomous motivation. It was hypothesised as a two-factor model: intrinsic motivation and identified regulation. The goodness-of-fit indices were assessed for the whole measure, with all six items combined, and it indicated a less than ideal fit (Table 4.5.). The hypothesised two-factor model, however, demonstrated a better fit between the observed data and the model. The RMSEA (.08) and SRMR (.04) showed that it was the best factor structure for the R-MAW measure (Table 4.5.). These results demonstrate that the two factors of autonomous motivation, intrinsic motivation and identified regulation, can be treated as related but distinct from one another.

Table 4.5.: Goodness-of-fit Indices of models for Autonomous Motivation (R-MAWS) (Intrinsic motivation and identified regulation) (N=215)

Model	X^2	<i>df</i>	ΔX^2	Δdf	SRMR	RMSEA	CFI	TLI
Single Factor	78.41***	9			.08	.19	.84	.73
Two Factor	17.84*	8	60.57	1	.04	.08	.98	.96

Note: * $p = .022$, *** $p < .001$

The three items per subscale loaded significantly onto their respective factors, with intrinsic motivation indicating high standardised coefficients for all three items (Table 4.6). Comparable to the previous measurement model, there was modest covariance between the

residuals. This indicates that there are some differences between the observed covariance matrix and the model-implied covariance matrix (Table 4.6.).

Table 4.6.: Standardised Loadings and Standard Errors for two-factor CFA Model of Autonomous Motivation (R-MAWS), that is intrinsic motivation and identified regulation

Item descriptions	Intrinsic Motivation		Identified Regulation	
	β	S.E.	β	S.E.
I personally consider it important to put efforts in this job			.62	.06
Putting efforts in...aligns with my personal values			.59	.06
Putting efforts in...has personal significance to me			.75	.07
Because I have fun doing my job	.70	.07		
Because what I do in my work is exciting	.89	.07		
Because the work I do is interesting	.68	.06		

Note: SRMR = .03; RMSEA = .08. $X^2(8) = 17.84, p = .022$. Covariance between intrinsic motivation and identified regulation = .66. β = Standardised Loadings, S.E. = Standard Errors.

4.2.3. Moderator: Employees' FTP (present and future focused)

In the assessment of employees' FTP, a three-factor measurement model was hypothesised, to test and operationalise present focused and future focused FTPs. The hypothesised model was compared to a five-factor model comprising all five subscales from the ZTPI-S (Orkibi, 2015). The goodness-of-fit-indices were within the accepted range, that is, SRMR and RMSEA. However, there was a high level of df, which suggests poor predictive fit for the five-factor model. In addition, the values of both the CFI and TLI fit indices implied that this model falls short of the accepted levels, i.e., $\geq .95$ (Schreiber, Nora, Stage, et al., 2006) (Table 4.7). This could be due to the lower internal consistency values for the Future subscale ($\alpha = .66$), and the Present Fatalistic subscale ($\alpha = .68$) (Appendix 3A). In alignment with the hypothesised relationships (Section 4.4.), a three-factor measurement model, comprising the two present subscales and the future subscale, was compared with the five-factor model. Akin to the larger model, the CFI and TLI indices were slightly below the accepted levels. Therefore, an item-correlation analysis with the three subscales was conducted (Appendix 3B). There was no evidence of confounding between the items in the

three subscales. Therefore, the factor loadings for each item were then examined, and the item with the lowest factor loading, Item 12, was removed from the Present Hedonistic subscale ($\beta = .31, p = .001$). Reliability analysis was conducted with Item 12 removed from the Present Hedonistic scale, and acceptable internal consistency was retained ($\alpha = .75$). Item 12 had a factor loading $\leq .05$, which the literature suggested is an accepted cut-off point in CFA (Awang, 2014). This resulted in a three-factor model that had acceptable goodness-of-fit indices, indicating a good fit between the observed data and the model (Table 4.7.).

Table 4.7.: Goodness-of-fit Indices of models for ZTPI-S scales (Present-hedonistic, present-fatalistic, and future FTP) (N=215)

Model	χ^2	df	$\Delta\chi^2$	Δdf	SRMR	RMSEA	CFI	TLI
Five Factor	260.60***	160			.07	.05	.93	.91
Three Factor	57.38*	41	203.22	119	.04	.03	.97	.96

Note: * $p = .046$, *** $p < .001$.

All items loaded significantly onto their respective factors, with the covariance between the residuals for the present and future factors indicating a close fit between the observed covariance matrix and the model-implied covariance matrix. The standardised coefficients on the present and future factors showed that each had one item with a small, standardised loadings (Table 4.8.). With these items removed, the fit indices for the measurement model were poor. Hence, they were retained in the final model.

Table 4.8.: Standardised Loadings and Standard Errors for three-factor CFA Model of ZTPIS (FTP), that is present-hedonistic, present-fatalistic, and future FTP

Items descriptions	Present Hedonistic		Present Fatalistic		Future	
	β	S.E.	β	S.E.	β	S.E.
Partying with one's friends is one of life's important pleasures	.44	.07				
Taking risks avoids boredom	1.00	.08				
Taking risks adds excitement to my life	.85	.08				
Whatever will be...it doesn't matter what I do			.57	.08		
You can't plan for the future			.74	.08		
My life plan is controlled by forces...			.56	.08		
Not worrying about the future due to lack of control			.55	.08		
Setting goals with a means to achieve them					.40	.08
Meeting deadlines comes before play					.65	.08
Resisting temptation to get work done					.77	.08
Keep working at difficult uninteresting tasks to get ahead					.53	.08

Note: SRMR = .04; RMSEA = .03. $X^2(41) = 57.38, p = .046$. *Item 12 removed from Present Hedonistic subscale. Three-factor covariance: Present Hedonistic (PH) and Present Fatalistic (PF) .08; PH and future .11; & PF and future -.17. β = Standardised Loadings, S.E. = Standard Errors.

4.2.4. DV: Engagement

Finally, the Job Engagement scale was assessed, which measures the three dimensions of engagement, that is, cognitive, emotional, and physical engagement, based on the needs-satisfaction theory of engagement (Kahn, 1990; Rich et al., 2010). The original measure consisted of eighteen items, and the full scale was used in this analysis. It was hypothesised that testing a three-factor measurement model, first, would allow for the assessment of a three-factor model that would facilitate any reduction in items, for use of this measure in Study 2 (Chapters 5 & 6).

With all six items per subscale retained, the three-factor solution via CFA demonstrated reasonable fit indices. The RMSEA was just outside the .08 threshold (cf. Brown, 2006), and the SRMR was acceptable (Table 4.9). An iterative process was used to determine which items were underpinning the high RMSEA value. This served to identify the best fitting model of this measure of engagement. The lowest loading factors were removed one by one (Awang, 2014), and the CFAs re-run, until a three-factor solution with good fit was produced, between the model data and the observed data. On close inspection of the inter-item correlations (Appendix 3B), there was a high correlation between Items 17 and 18.

After re-running both the reliability analysis and the CFA models, Item 17 was retained due to its marginally higher level of internal consistency ($\alpha = .93$). The following items were removed: physical engagement Items 1 and 5; emotional engagement Items 7 and 8; and cognitive engagement Items 14, 16, and 18. A final reliability analysis, with the seven items removed, demonstrated that the 11-item measure retained excellent internal consistency ($\alpha = .93$). This was also the case when the three dimensions were assessed separately: physical engagement ($\alpha = .91$); emotional engagement ($\alpha = .91$); and cognitive engagement ($\alpha = .89$). The RMSEA and SRMR for the reduced three-factor model indicated that this was the best factor structure for a shortened version of the Job Engagement scale (Table 4.9.). The resulting 11-item version of this scale is consistent with other findings in the literature, which have validated and used a 12-item version (Alfes, Shantz, Truss, & Soane, 2012). The SRMR showed a lower figure than the full three-factor model, and the RMSEA fell within the acceptable range (Table 4.9.).

A one-factor CFA model was then assessed to align with the hypothesised relationships in this study, and the initial model demonstrated poor fit indices ($X^2 = 1151.50$, $df = 135$, $p < .001$, $CFI = .71$, $TLI = .69.$, $RMSEA = .19$, $SRMR = .10$) (Table 4.9.). This model demonstrates that there was minimal conceptual overlap between the three dimensions in the scale. Based on the measurement developed of the reduced three-factor CFA model, this one-factor model was re-run, with items from their respective subscales were allowed to co-vary. The reduced one-factor CFA module indicated a good fit between the observed data and the model; and was the best fitting model for engagement (Table 4.9).

Table 4.9.: Goodness-of-fit Indices of models for the Job Engagement scale (N=215) – cognitive, emotional, and physical engagement

Model	X^2	df	ΔX^2	Δdf	SRMR	RMSEA	CFI	TLI
Three Factor (Full)	428.40***	132	723.10		.05	.10	.92	.90
Three Factor (Reduced)	80.72***	41	347.68	91	.03	.07	.98	.97
One Factor (Reduced)	40.41	32	40.30	9	.02	.04	.98	.98

Note: *** $p < .001$, Three-factor & One-factor (Reduced): Items 1, 5, 7, 8, 14, 16, 18 removed.

In the three-factor (reduced) model all three engagement dimensions loaded significantly onto their respective factors. This suggests that the physical, emotional, and cognitive dimensions measured different aspects of engagement (Appendix 5; Table 1). The 11 items loaded significantly onto the same factor in the one-factor (reduced) model (Table 4.10). Furthermore, the observed covariance coefficients suggest they should be allowed to covary, in the subsequent structural model.

Table 4.10.: Standardised Loadings and Standard Errors for one-factor (Reduced) CFA Model of Engagement (Job Engagement scale)

Item descriptions	Engagement	
	β	S.E.
Exert my full effort	.57	.05
Devote a lot of energy	.52	.05
Try hard to perform well	.46	.05
Exert a lot of energy	.59	.06
Interested in my job	.59	.06
Proud of my job	.53	.06
Positive about my job	.60	.07
Excited about my job	.63	.07
At work, my mind is focused	.77	.05
At work, I pay a lot of attention	.81	.05
At work, I concentrate on my job	.58	.04

Note: SRMR = .02; RMSEA = .04. $X^2(32) = 40.30, p = .146$, β = Standardised Loadings, *S.E.* = Standard Errors.

4.2.5. Convergent and discriminant validity of the study's measures

Following the measurement models, the validity of each measure based on the CFA models were examined using correlational analysis in SPSS. This involved first assessing whether any measures exhibited convergent validity, that is, if there was any potential conceptual overlap between the measures. Second, the measures that were expected to be conceptually distinct, were assessed for discriminant validity.

There was evidence of moderate convergent validity between the Psychological Meaningfulness scale (May et al., 2004) with the two subscales of the R-MAWs measure (Gagné et al., 2012; autonomous motivation), i.e., identified regulation ($r = .57, p < .01$), and intrinsic motivation ($r = .63, p < .01$). This was also the case between the Psychological

Meaningfulness scale and the Job Challenge scale (i.e., utility value), ($r = .58, p < .01$). The relationship between the Job Engagement scale and the Psychological Meaningfulness scale ($r = .73, p < .01$), indicates a stronger level of convergent validity. This relationship was conceptually expected given that psychological meaningfulness is one of the conditions of Kahn's (1990) needs-satisfaction theory of engagement (Table 4.11). The Present Hedonistic subscale from the ZTPI-S measure of employees' FTP has conceptual overtones with hedonism that is theorised to underpin hedonic orientations assessed using the hedonic motives subscale from the HEMA scale. Therefore, it was important to assess any conceptual overlap and there was minimal evidence of convergent validity ($r = .34, p < .01$) (Table 4.11).

In the assessment of discriminant validity, eudaimonic and hedonic orientations from the HEMA scale (Huta & Ryan, 2010) and identified regulation and intrinsic motivation from the R-MAWS scale (Gagné et al., 2012) were assessed as measures expected to be conceptually distinct from one another, for example, as two distinct measures of employee motivation. However, there was some evidence for their discriminant validity, e.g., the relationships between eudaimonic orientations and identified regulation ($r = .41, p < .01$) and intrinsic motivation ($r = .47, p < .01$). Additionally, the relationships between hedonic orientations and identified regulation ($r = .22, p < .01$), and intrinsic motivation ($r = .46, p < .01$). These small to moderate relationships indicated that there some issues pertaining to discriminant validity for the latter relationship. Finally, the subscales for the ZTPI-S were expected to demonstrate discriminant validity, as they measure present and future focused FTPs. There was a small non-significant relationship between Present Hedonistic and Future subscales ($r = .12, p = .003$), demonstrating discriminant validity. This was also the case between Present Fatalistic and Future subscales ($r = .05, p = .046$) (Table 4.11). Interestingly, the measure of Job Challenge, as the operationalisation of utility value, demonstrated discriminant validity with all dimensions of the ZTPI, i.e., present hedonistic ($r = .12, p = .073$), present fatalistic ($r = .18, p < .01$) and future FTPs ($r = .12, p = .082$). In sum, the correlation coefficients for all preceding relationships suggest minimal convergent validity and imply that more moderate findings still infer discriminant validity (that is, $\leq .8$; cf. Awang, 2014).

Finally, differences between the mean scores, standard deviations (SD), and the correlations between the full measures were examined in Appendix 3A. This is followed by the inter-item correlations for each measure in Appendix 3B.

Table 4.11: Means, standard deviations, and correlations between the modified measures.

Variable	Mean	SD	α	1	2	3	4	5	6	7	8	9	10
1. Eudaimonic Orientations (IV)	4.24	.61	.79	1									
2. Hedonic Orientations (IV)	3.22	.97	.89	.39**	1								
3. Engagement (DV)	4.10	.68	.93	.56**	.25**	1							
4. Psychological Meaningfulness	3.97	.81	.89	.48**	.23**	.72**	1						
5. Identified Regulation	4.44	.75	.76	.41**	.22**	.56**	.57**	1					
6. Intrinsic Motivation	3.77	.84	.79	.47**	.46**	.64**	.63**	.53**	1				
7. Utility Value	3.92	.82	.77	.30**	.15*	.58**	.58**	.40**	.59**	1			
8. Present Hedonistic FTP	3.40	.90	.75	.17*	.34**	.08	.07	.11	.13	.12	1		
9. Present Fatalistic FTP	3.92	.74	.68	.10	-.02	.16*	.18**	.14*	.14*	.18**	-.01	1	
10. Future FTP	3.76	.72	.66	.26**	.07	.34**	.16*	.08	.22**	.12	.12	.05	1

Note: **p<.01, *p<.05. Identified regulation (5) and intrinsic motivation (6) are subdimensions of autonomous motivation.

4.3. Preliminary analysis

Preliminary analysis was conducted to assess if participants' industries had a relationship with the predictors, that is, eudaimonic and hedonic orientations. For instance, to ascertain whether they would act as confounding variables in the main analysis. A one-way analysis of variance (ANOVA) was used to assess this relationship and focused on the three largest job sectors within the sample, that is, Finance, Consulting, and Non-Profit Organisations. Results of this analysis conducted in SPSS, showed there was no significant differences between the three job sectors based on eudaimonic orientations $F(2, 70) = 2.871, p = .063$. and hedonic orientations, $F(2, 70) = 1.982, p = .146$.

Due to the higher participation of females in this study (61%), an independent samples t-test was conducted between gender and mean eudaimonic orientations scores, which indicated there was no significant differences for males ($M = 4.29, SD = .72$), or females ($M=4.25, SD = .540$) $t(210) = -.43, p = .669$. Similar results were obtained for gender and hedonic orientations, there was no significant differences for males ($M = 3.23, SD = .98$) or females ($M=3.20, SD = .98$) $t(209) = .19, p = .849$. Almost half of participants were within their 30's (i.e., 43%) with a mean age of 39.66 and $SD = 11.82$. Therefore, correlational analysis was conducted to assess if age had a relationship with participants mean eudaimonic orientations ($r = .061, p = .354$) scores, and their hedonic orientations scores ($r = .97, p=.756$). This was not supported.

To ascertain if there were any notable relationships between the demographic variables that informed the sample characteristics (Section 3.4.2.) and the IVs, additional preliminary analysis was conducted. A One-way ANOVA indicated there was no significant differences in eudaimonic orientations scores based on type of work, $F(3, 212) = .904, p = .440$ or for hedonic orientations $F(3, 210) = .311, p = .818$. These results were repeated for participants job status (e.g., full-time) for eudaimonic orientations $F(3, 211) = 2.196, p = .090$ and hedonic orientations $F(3, 210) = .538, p = .657$. Furthermore, a One-way ANOVA indicated there was no significant differences in eudaimonic orientations based on location (e.g., Ireland and UK) $F(5, 213) = .777, p = .568$ or for hedonic orientations $F(5, 212) = 1.034, p = .399$. The final One-Way ANOVA indicated no significant differences for ethnicity and eudaimonic orientations $F(8, 214) = 1.411, p = .194$ or hedonic orientations $F(8, 213) = .584, p = .790$. This analysis indicated it was unnecessary to control for job sectors or the other demographic variables in the main analysis.

Based on a correlation analysis there was no relationship between tenure and eudaimonic orientations ($r. = -.081, p = .236$), and hedonic orientations ($r. = -.066, p = .339$). Participants age and tenure were not part of the hypothesised relationships. However, an additional correlation analysis was conducted to examine their relationships with the other constructs in the hypothesised relationships (Appendix 3C). All relationships were non-significant apart from between age and utility value ($r. = .137, p = .045$), the strength of the relationship did not warrant controlling for age in the subsequent analysis.

4.4. Main analysis

To test the hypothesised relationships, path analysis was conducted in R (v4.2.; R Core Team, 2022) using the lavaan package (Rosseel, 2012). There were a small number of MCAR cases for some of the measures (Section 4.2.2). The robust ML (MLR) was used as an estimator when fitting each step in the path models, which provides robust standard errors (i.e., Huber-White) and fit indices. This estimator can accommodate both complete and incomplete datasets (Rosseel, 2012), thereby accounting for the missing cases in some of the measures.

In testing the full path model, each theorised relationship was specified using path analysis (Figure 4.1.). This included the assessment of the direct relationships in the model (inherent in the hypotheses): the three mediating variables were regressed onto the independent variables, that is, eudaimonic and hedonic orientations. Additionally, all the variables predicting the DV in the model were regressed onto engagement (DV), enabling the assessment of the direct and indirect effects. The moderating effect of employees' FTP, in the relationships between eudaimonic and hedonic orientations and psychological meaningfulness, utility value, and autonomous motivation, was examined. First, this involved regressing eudaimonic orientations onto a future focused FTP, and hedonic orientations onto a present focused FTP, to align with their anticipated associations that first account for the inherent time perspective differences in eudaimonic and hedonic processes. Second, due to the expectation that there will be different relationships between employees' FTP and eudaimonic and hedonic orientations (Hypothesis 3.1a & 3.1b). Second, the hypothesised association between eudaimonic and hedonic orientations, and their respective FTP is theorised as one way to conceptualise the concept of the preferred self (cf. Kahn, 1990). To assess the hypothesised moderation effects, when creating the interaction terms, both the IVs

(orientations) and moderators (present and future focused FTPs) were grand means centered before taking a multiplicative approach. Eudaimonic orientations were multiplied by employees' future focused FTP to provide the first interaction term, and hedonic orientations were multiplied by employees' present focused FTP to create the second interaction term. Both interactions underpin the operationalisation of the preferred self and were then regressed onto the three mediating variables, that is, psychological meaningfulness, utility value, and both identified regulation and intrinsic motivation (autonomous motivation).

The fit indices for this model indicated a reasonable fit between the observed data and the model data ($\chi^2 = 81.61$, $df = 19$, $p < .001$, CFI = .94, TLI = .85, RMSEA = .12, SRMR = .06). There was support for the direct relationships between eudaimonic orientations ($\beta = .29$, $p = .021$) and its associated future focused FTP (Hypothesis 3.1a) (Table 4.12). Eudaimonic orientations was the strongest predictor of the perceived psychological meaningfulness (Hypothesis 3.2a) and utility value of tasks (Hypothesis 3.2c) and identified regulation (Hypothesis 3.2e) (Figure 4.1.; Table 4.12) In contrast, hedonic orientations had no relationship with psychological meaningfulness, utility value, and intrinsic motivation (Figure 4.1.; Table 4.12). The inherent direct relationships between employees' FTP with psychological meaningfulness, utility value, and intrinsic motivation, were significant ($\beta = .10$, $p = .044$). Finally, there was a strong positive relationship between eudaimonic orientations and engagement, and a small negative relationship between hedonic orientations and engagement ($\beta = -.30$, $p = .039$) (Figure 4.1.; Table 4.12).

An initial examination of the full path model indicated that there was support for the direct relationship between hedonic orientations and its associated present FTP ($\beta = .26$, $p = .017$) (Hypothesis 3.1b). However, the interaction between hedonic orientations*present focused FTP did not moderate the direct relationships between hedonic orientations and any of the following: psychological meaningfulness ($\beta = -.03$, $p = .471$) (Hypothesis 3.3b); utility value ($\beta = .04$, $p = .428$) (Hypothesis 3.3d); and intrinsic motivation ($\beta = -.03$, $p = .471$) (Hypothesis 3.3f). There were also no direct relationships between hedonic orientations and psychological meaningfulness ($\beta = .12$, $p = .046$), utility value ($\beta = .05$, $p = .455$); and identified regulation, and intrinsic motivation ($\beta = .05$, $p = .455$) (Figure 4.1.; Table 4.12.). When the interaction term (hedonic orientations*present focused FTP), and these non-significant relationships were removed, the fit indices for the model indicated a good fit between the observed data and the model data ($\chi^2 = 19.64$, $df = 12$, $p = .087$, CFI = .99, TLI = .98, RMSEA = .06, SRMR = .02).

Table 4.12.: Standardised coefficients for the direct relationships (only) in the hypothesised model

IV	β	S.E.	CI 2.5%	CI 97.5%
FTP (DV)				
Eudaimonic orientations	.29*	.12	.06	.52
Hedonic orientations	.26*	.11	.05	.47
Psychological meaningfulness	.05	.04	-.02	.13
Utility value	.05	.04	-.02	.13
Identified regulation	.05	.04	-.02	.13
Intrinsic motivation	.05	.04	-.02	.13
Psychological Meaningfulness (DV)				
Eudaimonic orientations	.44***	.06	.31	.56
Hedonic orientations	.12	.06	.00	.24
FTP	.05	.04	-.02	.13
Utility Value (DV)				
Eudaimonic orientations	.32***	.08	.16	.46
Hedonic orientations	.05	.06	-.07	.17
FTP	.05	.04	-.02	.13
Identified Regulation (DV)				
Eudaimonic orientations	.44***	.06	.31	.56
Hedonic orientations	.05	.06	-.07	.17
FTP	.05	.04	-.02	.13
Intrinsic Motivation (DV)				
Hedonic orientations	.12	.06	.00	.24
FTP	.05	.04	-.02	.13
Engagement (DV)				
Eudaimonic orientations	.87***	.15	-.01	.72
Hedonic orientations	-.30*	.13	-.56	-.04
FTP	.15	.08	-.01	.32
Psychological meaningfulness	1.04***	.18	.69	1.40
Utility value	.39*	.18	.05	.73
Identified regulation	.36*	.19	-.01	.72
Intrinsic motivation	.16	.22	-.28	.59

Note: * $p < .05$ *** $p < .001$. β = Standardised loadings. S.E. = Standard Errors. CI = Confidence Intervals.

In terms of mediation, the direct relationships between eudaimonic orientations with the three mediators, and the three mediators with engagement were, mostly, significant (Figure 4.1.). To address the concept of a ‘joint test of significance’, where both paths a and b are significant in a mediation model (Fritz & MacKinnon, 2007), bootstrapping was used to

assess if the indirect effects were larger than zero, and because it produces confidence intervals. This resampling approach to mediation mitigates the criticisms of the earlier and predominant approach to mediation analysis (cf. Baron & Kenny, 1986). This approach emphasised the need for the direct relationship between the IV and DV (path c) to be significant pre-mediation analysis (Baron & Kenny, 1986). Criticisms of this approach include the assertion that changes to the significance levels for the direct relationship, after adding the mediator, are often small, with the beta coefficient remaining largely unchanged (Field, 2018). It is also argued that mediation analysis is based on whether a third variable explains the relationship between the IV and the DV; thus, the indirect effects are more useful in determining if the mediator explains that relationship. The current thinking on testing indirect effects and mediation moves away from the previously dominant approach (cf. Baron & Kenny, 1986), and argues that bootstrapping is the most reliable method for obtaining unbiased confidence intervals (MacKinnon, Lockwood & Williams, 2004). In sum, it has been suggested that relying on the assertion that the direct relationship between the IV and DV must be significant before testing for indirect effects, reduces the ability to observe mediation (MacKinnon et al., 2004). Instead, it is argued that the strength and significance of the indirect effect is a more reliable way to detect mediation (MacKinnon, et al., 2004; Zhao, Lynch & Chen, 2010).

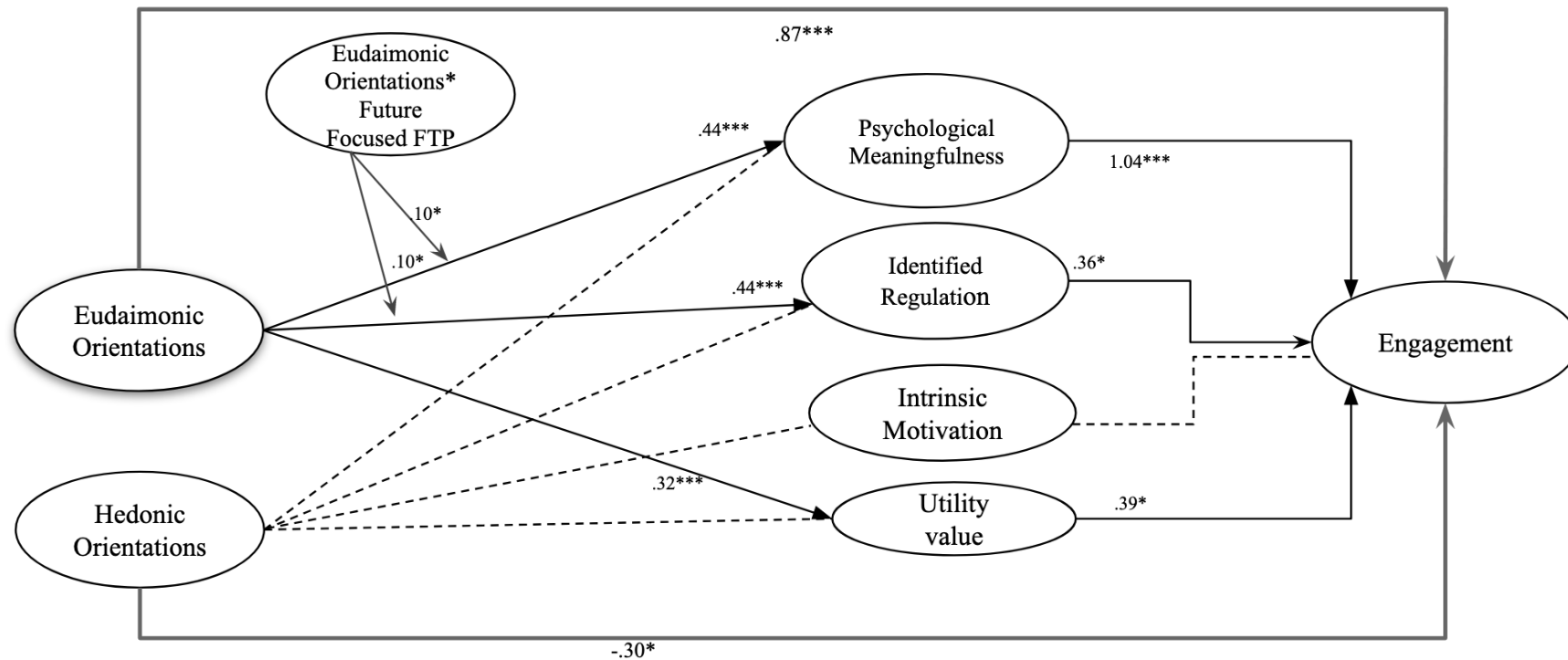


Figure 4.1.: Full path analysis model: direct and moderated relationships ($X^2= 19.64$, $df = 12$, $p = .087$, $CFI = .99$, $TLI = .98$, $RMSEA = .06$, $SRMR = .02$). Note: $*p<.05$ $***p<.001$. Dashed lines depict non-significant direct relationships.

In line with the preceding arguments on detecting mediation, the indirect effects and their bootstrapped confidence intervals were examined in the path analysis model (Zhao, et al., 2010). There was a positive significant indirect effect for psychological meaningfulness, and for identified regulation, in the relationship between eudaimonic orientations and engagement (Table 4.13). Both results align with the expected directions of those relationships (Hypotheses 3.2a & 3.2e). Employees' perceptions of the utility value of a task, did not mediate the relationship between eudaimonic orientations and engagement (Hypothesis 3.2c) (Table 4.13). Finally, there was a preliminary suggestion that more than half the variance in engagement (DV) (64%), was explained by the path analysis model.

Table 4.13.: Standardised coefficients for the indirect effects explaining the relationship between eudaimonic orientations and engagement.

IV	β	S.E.	BCI 2.5%	BCI 97.5%
<u>Mediator: Psychological Meaningfulness</u>				
Eudaimonic orientations	.42***	.11	.21	.64
<u>Mediator: Utility Value</u>				
Eudaimonic orientations	.12	.06	-.01	.24
<u>Mediator: Identified Regulation</u>				
Eudaimonic orientations	.18*	.08	.10	.34

Note: DV = Engagement, * $p = .042$ *** $p < .001$. β = Standardised loadings, S.E. = standard errors, BCI = bootstrapped CI

There was partial evidence for the moderating effect of employees' FTP (Hypotheses 3.3a-f), based on the interaction with eudaimonic orientations and its supported association with a future FTP. There were significant effects for psychological meaningfulness ($\beta = .07$, $p = .038$) (Hypothesis 3.3a), identified regulation ($\beta = .08$, $p = .038$) (Hypothesis 3.3e), and intrinsic motivation ($\beta = .08$, $p = .038$). However, this was not the case for the relationship between eudaimonic orientations and utility value ($\beta = .07$, $p = .141$) (Hypothesis 3.3c).

To examine the significant interaction effects, the conventional simple slopes parameters were added to the model, to assess if the values of the moderator at one SD above and below the mean, were significantly different from one another. At one SD above the mean the effect of eudaimonic orientations*future focused FTP was stronger ($\beta = .49$, $p < .001$, 95%CI [.33, .64]) than the moderating effects at one SD below the mean ($\beta = .34$,

$p < .001$, 95%CI [.22, .47]). These results indicate that the slopes were significantly different from zero, and the slope of the moderator was significant at one SD above the mean.

The interactions package in R (Long, 2019) was used to visualise the moderation effects of the interaction between eudaimonic orientations and a future focused FTP, in the relationships between eudaimonic orientations, psychological meaningfulness, and identified regulation. Each relationship was examined in two steps, first the mediation variable was added as the DV and predicted by eudaimonic orientations, FTP, and the interaction term, in a moderated regression. Second, the significant interactions were modelled using the probe interaction function, which produces the results of simple slopes analysis based on the Johnson-Neyman technique (Johnson & Neyman, 1936). This technique offers a way to probe interaction effects between two continuous variables, and the simple slope plots produced mitigate against the need to select specific values of the moderator (Bauer & Curran, 2005; Finsaas & Goldstein, 2021). Research has indicated that the Johnson-Neyman technique provides insight into the full range of the slopes of the predictor and outcome relationship (Finsaas & Goldstein, 2021), and identifies which simple slopes relate to significant moderator values (cf. Spiller, Fitzsimons, Lynch & McClelland, 2013). The range of observed values of the future focused FTP was -4.29 to 3.04, and there were significant changes in slopes for eudaimonic orientations in all analysis.

The specific effects for the slopes of eudaimonic orientations at each level of the future focused FTP, on the relationship between eudaimonic orientations and psychological meaningfulness, were examined first. The slopes for eudaimonic orientations at different levels of the moderator indicated that, at +1SD above the mean the effects were stronger ($\beta = .63$, $t(210) = 6.18$, $p < .001$) then at -1SD ($\beta = .34$, $t(210) = 4.12$, $p < .001$) (Figure 4.2.). When employees have higher levels of a future focused FTP, this strengthens the effect of their eudaimonic orientations on the perceived psychological meaningfulness of a task (Figure 4.2.). Hence, eudaimonic orientations and the value attributed to distant future outcomes in the present (future focused FTPs), explain further the reasons employees find their work psychologically meaningful.

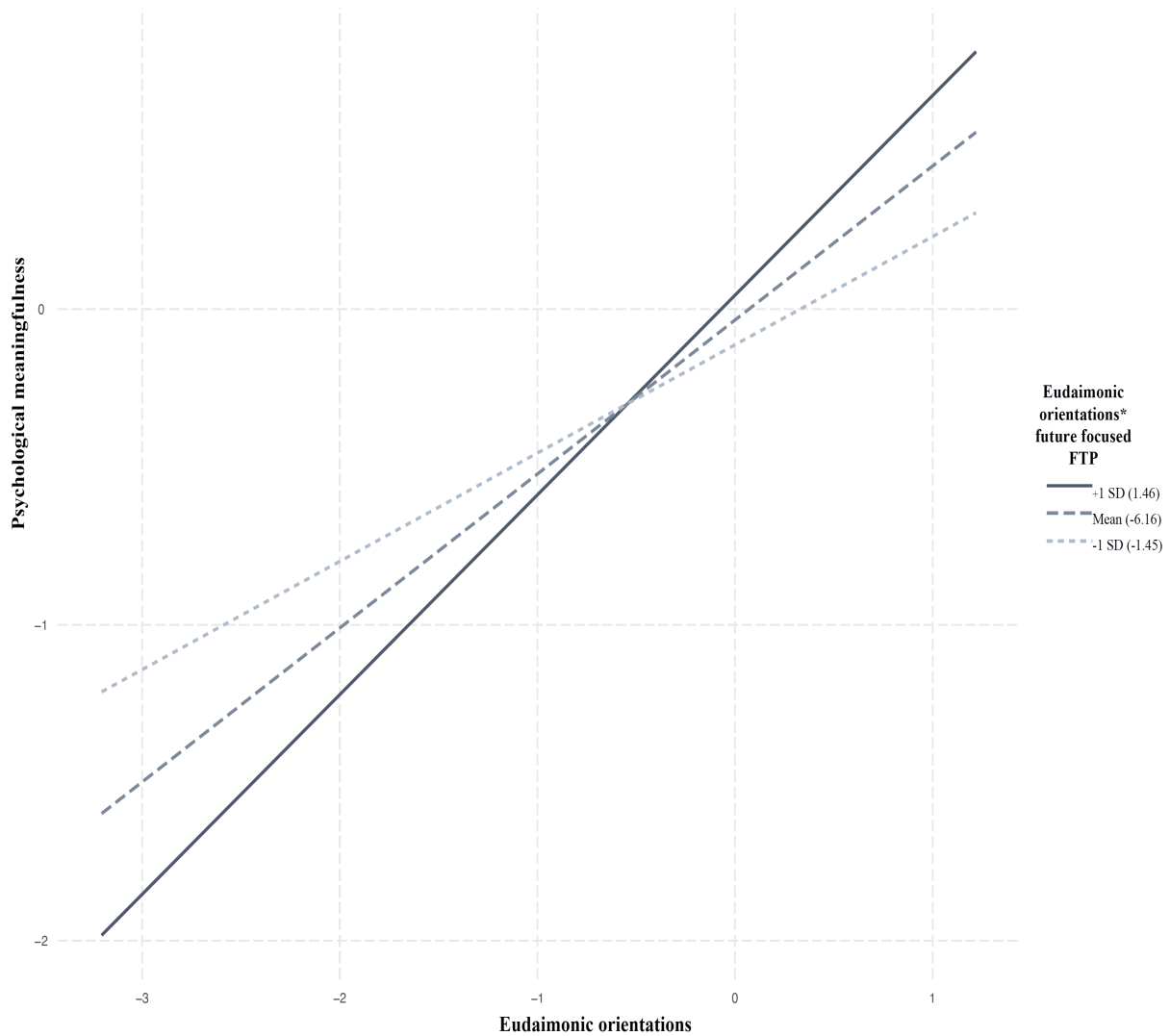


Figure 4.2.: Simple slopes plot for the interaction effect of eudaimonic orientations*future focused FTP on the relationship between eudaimonic orientations and psychological meaningfulness

When the significant interaction between eudaimonic orientations and a future focused FTP was examined for the relationship between eudaimonic orientations and identified regulation, the slopes for eudaimonic orientations when the future focused FTP was +1SD above the mean ($\beta = .56, t(210) = 5.85, p < .001$) were stronger than -1SD below the mean ($\beta = .36, t(210) = 4.56, p < .001$). This indicates that when higher levels of a future focused FTP are evident in employees, this strengthens the positive relationship with identified regulation. For instance, employees are more likely to pursue tasks with personal value to them (identified regulation), when they were eudaimonically motivated by distant future outcomes, in the present.

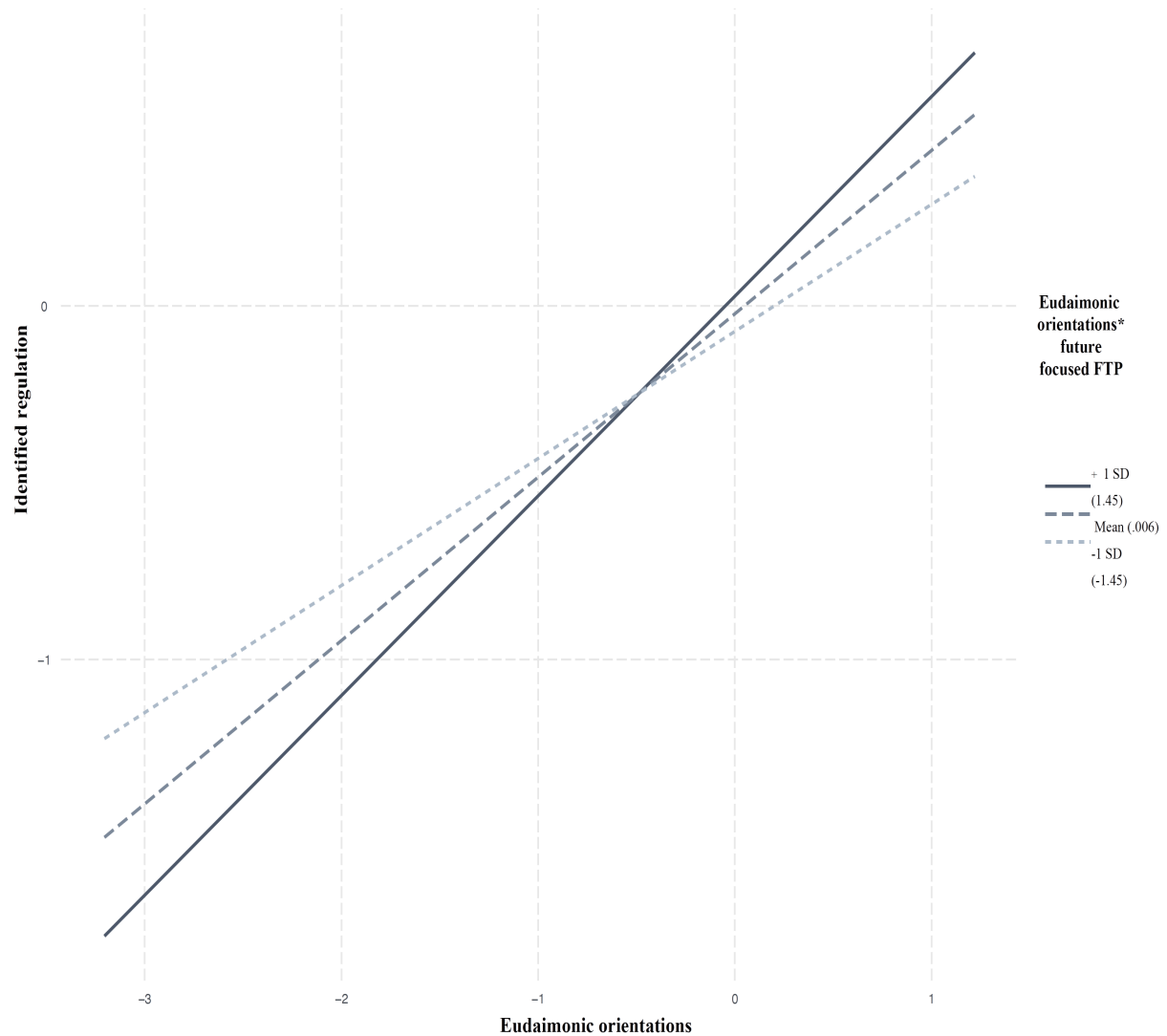


Figure 4.3.: Simple slope plot for the interaction effect of eudaimonic orientations*future focused FTP on the relationship between eudaimonic orientations and identified regulation (autonomous motivation).

Finally, conditional indirect effects were specified to align with the inherent moderated mediation hypotheses in the model (Hypothesis 3.4a-c). Due to the non-significant interaction effects, presented earlier, for hedonic orientations and employees' present focused FTP, conditional indirect effects were tested using only the first interaction term (eudaimonic Orientations *future focused FTP). There was also no mediation between eudaimonic orientations and engagement via intrinsic motivation, hence, this relationship was not considered for conditional indirect effects (Table 4.13.). Before testing for the moderated mediation effects, both variables in this interaction were standardised, due to the small standard deviations for FTP (Table 4.11).

There was no evidence to support conditional indirect effects, for employees' FTP as a moderator of the mediated relationships between eudaimonic orientations, psychological

meaningfulness, identified regulation, and engagement. In both mediated relationships, results indicated that when the moderator was 1SD below the mean, there was small effect which marginally missed significance ($p = .06$) with confidence intervals that crossed zero (Table 4.14). When the moderator was at +1SD above the mean, and when it was at mean, the small effects narrowly missed significance ($p = .05$). The bootstrapped confidence intervals were both small and positive (Table 4.14). These findings indicated that Hypotheses 3.4a-c were not supported. However, there were positive direct relationships between eudaimonic orientations, and both psychological meaningfulness and identified regulation (Figure 4.1.).

Table 4.14.: Conditional indirect effects of employees' future focused FTP in the relationships between eudaimonic orientations, psychological meaningfulness ⁽¹⁾, and identified regulation ⁽²⁾

Defined parameters	β	S.E.	BCI	
			2.5%	97.5%
Eudaimonic Orientations*future focused FTP¹				
FTP = - 1	.03	.02	-.02	.06
FTP = 0	.04	.02	.00	.08
FTP = 1	.05	.03	.00	.11
Eudaimonic Orientations*future focused FTP²				
FTP = - 1	.01	.02	-.02	.06
FTP = 0	.04	.02	.00	.07
FTP = 1	.05	.02	.00	.09

Note: BCI = Bootstrapped Confidence Intervals, β = Standardised Loadings, S.E. = Standard Errors.

4.5. Discussion & Conclusions

One aim of Study 1 was to assess the theorised conceptualisation of the preferred self, by examining the positive associations between eudaimonic orientations and future focused FTPs; and hedonic orientations and present focused FTPs. A second aim of this study was to assess the inherent time perspective differences in eudaimonic and hedonic processes and examine both motivational orientations, as person-related antecedents of employees' task perceptions, and autonomous motivation, leading to engagement. Both aims of the study were supported, for the most part, by the results presented in this chapter. The concept of the preferred self, as conceptualised in this thesis, provided insights into the perceived

psychological meaningfulness of tasks, and the way employees identified with the personal value of their tasks (identified regulation). Furthermore, the conceptualisation of eudaimonia as an orientation overcame the debates in previous literature (e.g., Kashdan et al., 2008), and the findings in this study validated the role of eudaimonic orientations, as a proximal antecedent rather than a wellbeing outcome (cf. Ryff & Keyes, 1995). Finally, the adoption of the needs-satisfaction theory of engagement (Kahn, 1990) facilitated extending our understanding of the role of preferred self, the person-related factors, and the psychological mechanisms, which underpin the reasons employees are engaged at work. In essence, the results of this study provided an answer to the first part of the overarching research question: To what extent do orientations and the future time perspective explain the preferred self, and extend our understanding of the relationship between job resources, job demands, and engagement? The implications of the findings alongside the role of the theoretical framework in this thesis, are examined next in relation to the hypothesised relationships.

4.5.1. Motivational Orientations and FTPs: As Processes and Antecedents

To date, there has been a limited theoretical examination of the role of the FTP in motivation (Andre et al., 2018; Seijts, 1998). The first set of hypothesised relationships focused on confirming the association between eudaimonic orientations and higher levels of a future focused FTP (Hypothesis 3.1a), and hedonic orientations relationship with higher levels of a present focused FTP (Hypothesis 3.1b), which supported the conceptualisation of the preferred self. These relationships laid the foundation for the second role of the FTP, as a moderator, in the path analysis model (Figure 4.1.). Eudaimonic orientations were underpinned by employees' pursuit of tasks that align with long-term processes, such as growth and authenticity (cf. Bujacz et al., 2014). These eudaimonic processes were strengthened by their future focused FTP. In comparison, the positive association between hedonic orientations and a present focused FTP, while supported, their interaction did not provide insight into employees' pursuit of tasks that correspond with their motivation for pleasure (cf. Huta & Waterman, 2014). Nevertheless, the support for the relationships between eudaimonic and hedonic orientations, and their associated FTPs, addresses a key issue within the literature on eudaimonia and hedonia. Research examining eudaimonia and hedonia predominantly relate eudaimonic concepts to long-term processes, and hedonia to short-term processes (Ryff & Keyes, 1995; Waterman, 2008). However, the inherent time perspective differences between these processes have not been directly assessed in the

literature. The results of this study, therefore, provide novel insight into the role of the FTP in eudaimonic and hedonic processes; and explain further the reasons employees align themselves with tasks that promote these values.

In addition, the support for the positive relationships between eudaimonic and hedonic orientations and their associated FTPs, and the interaction between eudaimonic orientations and future focused FTPs, contributes to the engagement literature. First, by supporting one way to conceptualise the preferred self, and second its adoption in organisational research, respectively. For example, these findings infer those employees expressed their preferred selves in their work, based on their characteristic pursuit of, and engagement in, tasks that promote distant (eudaimonic orientations) future outcomes. Furthermore, accounting for employees' FTP extends the current literature on the way taking a time perspective contributes to our understanding of employee motivation, which is the motivating properties of pursuing growth (eudaimonic) and pleasure (hedonic) at work (cf. Kim et al., 2014). Hence, the support for the first set of hypotheses offers a pathway to conceptualise the yet to be empirically defined concept of the preferred self (cf. Kahn, 1990), and extend our understanding of person-related factors underpinning engagement.

The finding that eudaimonic orientations was the most consistent antecedent of their perceptions of the psychological meaningfulness (Hypothesis 3.2a) and utility value (Hypothesis 3.2c), and increased levels of identified regulation (Hypothesis 3.2e), challenges earlier arguments in the literature on the use of eudaimonia in organisational research. For example, a review of research on eudaimonia argued that the lack of a unified definition, hinders the usefulness of eudaimonia as a construct in an organisational context (Kashdan, et al., 2008). The conceptualisation of eudaimonia as an orientation, and a motivational antecedent, provided a way to overcome these issues (cf. Huta & Waterman, 2014). Correspondingly, the findings of Study 1 consolidate eudaimonia as a motivational construct, and challenge the prevailing view of eudaimonia, in the literature, as solely a wellbeing outcome. In contrast, the more accepted concept of hedonism via hedonic orientations did not act as an antecedent, beyond having a negative relationship with engagement and being positively associated with a present focused FTP. This indicates that employees in pursuit of these hedonic motivational processes did not find their current tasks to be psychologically meaningful or have utility value, for future outcomes. Employees with hedonic orientations were also less likely to be intrinsically motivated by their tasks. The contrasting results for eudaimonic and hedonic orientations indicate that employees' long-term perspectives are important for understanding how they perceive their work tasks, and the reasons they will be

autonomously motivated at work. Taken together, the findings in Study 1 consolidate the importance of eudaimonia, as a motivational antecedent and person-related factor, above the empirically accepted concept of hedonism. The prominence of eudaimonic orientations as a direct antecedent of the three psychological mechanisms, are examined next.

The positive relationship between eudaimonic orientations and psychological meaningfulness indicated that, when employees are motivated by their need for growth or authenticity, they view their work as meaningful. Thus, they perceive a return of investment from engaging in those tasks. This finding aligns with the qualitative literature which suggests that authenticity is central to the meaningfulness of work (Rosso et al., 2010). Correspondingly, the positive relationship is also congruent with previous findings that engaging with meaningful work promotes authenticity (Britt et al., 2001). Eudaimonic orientations were also found to be motivated by challenging tasks, whereby they had a positive relationship with the perceived utility value of current tasks. Previous research has found similar results in an educational setting, which examined the perceived usefulness of schoolwork for students, and found it positively impacted their performance (Creten, Lens & Simons, 2001). The results in Study 1 indicate that the utility value attributed to a task, can be explained by employees' inherent need for growth (eudaimonic orientations) acting as motivation for pursuing challenging tasks in the present, which are valuable for distant future outcomes. There was also support for the application of SDT to eudaimonic concepts, and employees' need for self-determined (thus autonomous) actions, resulting in eudaimonic orientations as a positive antecedent of identified regulation. Furthermore, this positive relationship aligns with the argument, that the conceptual issues with eudaimonia can be addressed by theoretical associations (Waterman, 2008), which contradicts the view that using SDT to theorise about eudaimonia is problematic (cf. Kashdan et al., 2008).

The significant direct relationships between eudaimonic orientations, and task perceptions (e.g., psychological meaningfulness), and increased identified regulation, support the integration of SDT with the FTP theory. The results provide insight into the motivating properties of conceptualising eudaimonia as an orientation, which are strengthened by the partial support for the moderating effects of their associated FTP. There were mixed results when employees' FTP was assessed as a moderator (Hypotheses 3.3a-f). There was no support for the moderating effect of the interaction between hedonic orientations and a present focused FTP, that is, employees' being characteristically motivated by what they can achieve in the present, towards valued immediate future gains (cf. Lens et al., 2012). The lack of support for this form of FTP may explain further the reasons its associated hedonic

orientations did not act as a significant IV in this study. In contrast, employees' future focused FTPs strengthened the relationships between eudaimonic orientations, their task perceptions, and levels of identified regulation. In essence, the findings of the moderation analysis implied that employees who are eudaimonically motivated are more likely to perceive a task as psychologically meaningful; as having utility value; and personally valued (identified regulation), when the task has a long-term objective in line with their future focused FTPs.

4.5.2. Motivational Orientations and Engagement: The Role of Psychological Mechanisms

Employees' perceptions of the psychological meaningfulness and utility value of tasks, and their levels of autonomous motivation, were hypothesised to mediate the relationships between their eudaimonic and hedonic orientations, and engagement. The results for these relationships were mixed. First, the relationship between eudaimonic orientations and engagement was strong and positive, indicating that this person-related, and proximal, antecedent acted as motivation to engage in their tasks. This relationship was mediated by the perceived psychological meaningfulness of their tasks (Hypothesis 3.2a), and the personal value employees attributed to a task via identified regulation (Hypothesis 3.2e), as a form of autonomous motivation. In line with previous research, psychological meaningfulness was the strongest predictor of engagement, and the strongest mediator in the path analysis model (Figure 4.1.) (May et al., 2004; Olivier & Rothman, 2007). These findings are also congruent with the propositions of the needs-satisfaction theory of engagement adopted in this study (Kahn, 1990). The finding that identified regulation explained further the relationship between eudaimonic orientations and engagement, aligns with the way autonomous motivation is conceptualised (Deci & Ryan, 2008). Employees' eudaimonic orientations underpin the way they identify with their tasks, express their preferred selves, leading to increased levels of engagement. In contrast, hedonic orientations had a negative relationship with engagement, which was not mediated by their task perceptions or levels of autonomous motivation. This finding suggests that employees value for the pursuit of pleasure (hedonic orientations) reduced their engagement in their tasks. Hence, they were not cognitively, emotionally, and physically invested in their current tasks (cf. Kahn, 1990), consequently, their tasks did not align with their need to obtain pleasure from their work (that is, the ability to express their preferred selves). It may also be the case that the tasks in which they were engaged in were not enjoyable (cf. McMahan & Estes,

2011), and that employees' work tasks did not align with their expectation of experiencing short-term pleasure (Vittersø, 2013). Comparable with the implied direct relationships discussed in the previous section, eudaimonic orientations was the consistent antecedent of engagement, and in the mediated relationships.

There was support for the direct relationships between the mediators and engagement, which provided the means to understand further the positive relationship between eudaimonic orientations and engagement. The utility value of a task, which stems from the FTP theory (Lens et al., 2012), was posited to support our theoretical understanding of the way challenging tasks can lead to persistence in employees' actions, that is, engagement. Therefore, the positive relationship between utility value and engagement indicates that, when a task is challenging and thus is perceived as useful for future outcomes, employees increase their engagement in that task. These findings contrast both with the literature which argued that demanding work leads to reduced engagement (Schaufeli & Bakker, 2004), and the literature that emphasises the negative impact of job demands on employees' productivity (Bakker & Demerouti, 2007). It was expected that autonomous motivation would have a positive association with fulfilling the psychological needs proposed by SDT (Kasser, 2002). Employees who attributed personal value to the tasks they were pursuing (identified regulation), had higher levels of engagement. This finding aligns with previous research which found a positive relationship between value congruence and engagement (Rich et al., 2010). However, the non-significant relationship between intrinsic motivation and engagement was unexpected. This result was further emphasised in the non-significant indirect effects of intrinsic motivation, in the relationship between hedonic orientations and engagement.

The finding that intrinsic motivation did not predict engagement contradicts previous research that emphasises the importance of intrinsic motivation (Deci & Ryan, 2000). The construct of autonomous motivation, central to SDT, is frequently applied to understanding the relationship between engagement and its antecedents (cf. Emery, Heath & Mills, 2016; Meyer & Gagné, 2008). Yet, in the current study, the support for identified regulation as an antecedent of engagement, above that of intrinsic motivation, suggests that while employees' tasks aligned with their personal values, they were not fully integrated with their sense of self, thus self-determined (cf. Gagné & Deci, 2005). This may be explained by the lack of support first for hedonic orientations as an antecedent of the three psychological mechanisms; and second, hedonic orientations were therefore not part of the mediation analysis. Hence,

both findings meant that it was not feasible to assess the interaction between hedonic orientations and a present focused FTP, as a moderator.

4.5.3. Study 1: Strengths, Limitations, and Recommendations for Future Research

The strengths of Study 1 are now examined in line with the aims of this study, which included assessing the inherent time perspective differences between eudaimonic and hedonic processes, which are inferred but not tested in the literature. As examined comprehensively in previous chapters (that is Chapters 2 & 3), eudaimonic concepts align with long-term processes, and hedonic concepts align with short-term processes. The support for the relationship between eudaimonic and hedonic orientations and their associated FTPs, provides both insight and a way forward, for understanding the reasons employees initiate and pursue different tasks. In practical terms, employees' express their preferred selves in their work roles, first when their needs for growth and authenticity, are fulfilled by their work tasks. Second, when their need for instant gratification thus pursuit of pleasure can be achieved in the immediate future, are met by their tasks in the present. This support for one way of conceptualising the preferred self from Kahn's (1990) theory also offers insight on our current understanding of engagement, which extends to Study 2 (Chapter 5). For example, when employees are eudaimonically orientated and have higher tendencies towards a future focused FTP, this promotes their levels of engagement. The support for the moderating effect of future focused FTPs, and their interaction with eudaimonic orientations, provided additional implications for the importance of considering the employees' long-term perspective, in the tasks they pursue, and the psychological mechanisms that support their engagement. The application of the FTP theory (Lens et al., 2012), supported by the results in this study, demonstrates the value of taking a time perspective approach to extend our understanding of the proximal motivational processes underpinning engagement.

The findings for the hypotheses provide incremental support for extending our knowledge on eudaimonic and hedonic orientations, in the way they pursue and sustain actions at work. The current study expands on previous research findings, which have focused on autonomous orientations in the pursuit of goals (Miquelon & Vallerand, 2006), by accounting for eudaimonic orientations as a form of self-motivation underpinning employees' self-determined actions. Additionally, the influencing role of the future focused FTPs on the pursuit of psychologically meaningful tasks and increased identified regulation, leads to a more comprehensive approach on the dynamic nature of the meaningfulness of work (Rosso

et al., 2010). Most of the research assessing this construct has focused on its strength as a mediating variable (Fletcher, 2016; Olivier & Rothman, 2007), using single psychological processes as antecedents. The results in the current study, found that multiple person-related factors contribute to the reason employees find their work psychologically meaningful, that is, eudaimonic orientations as an antecedent, and future focused FTPs as an influential cognitive-motivational characteristic.

Finally, the adoption of Kahn's (1990) needs-satisfaction theory of engagement, offers a perspective on the reasons employees invest themselves and therefore engage in their tasks. Akin to the current study, research to date adopting this perspective has examined the propositions of this theory using a cross-sectional design (May et al., 2004; Olivier & Rothman, 2007; Rich et al., 2010). The findings in Study 1 supported eudaimonic orientations, psychological meaningfulness, and utility value of tasks as stable antecedents of engagement. However, there were limitations of the design of this study which does not address fully the merits of adopting the needs-satisfaction approach to engagement. The cross-sectional design may explain the mixed support for some of the hypothesised relationships. The nature of this design meant that the short-term nature of employees' perceptions and engagement could not be captured. Employees' tasks are likely to differ throughout the day, and across the working week. Therefore, it is conceivable that their perceptions and levels of motivation at task level will also be subject to short-term variation. The literature assessing daily levels of engagement and its antecedents (Bakker & Bal, 2010), has recognised the individual level variations in engagement, based on the prevailing approach (cf. Shuck, 2011).

Future research that adopts a longitudinal design based on the needs-satisfaction theory of engagement, could provide insight into the short-term nature of the way employees' perceptions differ, and extend the role of the preferred self to explain their levels of engagement. The same approach could be recommended for unearthing the reasons intrinsic motivation did not predict engagement, in the current study. Hence, the inclusion of an antecedent that also varies momentarily, may capture the reasons employees are intrinsically motivated by their work. These recommendations are anticipated to be addressed, to some extent, by Study 2 presented in the next chapter (Chapter 5). For example, situational antecedents are needed to account for any variations in employees' perceptions of their work, and their levels of autonomous motivation. While there was support in Study 1 for the static relationships between these concepts and eudaimonic orientations, the addition of two JD-R

antecedents in Study 2 is expected to provide the means to examine the anticipated variations in employees' evaluations of their tasks, leading to engagement.

Future research is also needed to understand temporal antecedents, which will extend our understanding of the role of the preferred self in engagement, including the situational context of employees daily working conditions. One way to achieve this, is to examine external factors that inhibit or promote employees' levels of motivation which affects their daily engagement in their work. This is addressed in Study 2, in conjunction with the person-related factors examined in Study 1. Finally, the lack of research adopting the needs-satisfaction theory of engagement (Kahn, 1990), from a longitudinal perspective, requires attention to capitalise on the supportive findings in Study 1. It is posited that the conceptualisation of the preferred self through the support for the alignment of employees' motivational orientations and FTP, could offer a way forward in our understanding of the way they sustain their engagement over time.

The next chapter will present Study 2, which presents the literature and hypotheses alongside the methodology. The adoption of a daily diary design also builds on elements of this chapter's results, with emphasis on the notable reduction of the Job Engagement scale, and the incremental reduction of the other measures, from the scale development analysis. An aim of Study 2, in conjunction with the results from the study in this chapter, is to complete the answer to the overarching research question in this thesis, that is, the extension of our understanding of the relationship between JD-R and engagement.

Chapter 5

The Preferred Self and JD-R: Explaining Task Perceptions and Engagement across the working week

This chapter presents Study 2 which collectively examines person-related factors (motivational orientations and employees' FTP) and situational factors (job control and workload; JD-R antecedents) to extend our understanding of engagement. Building on Study 1, the conceptualisation of the preferred self is supported by adopting the FTP to understand further the relationship between JD-R and engagement. Hence, Study 2 is anticipated to enable answering the overarching research question: To what extent do orientations and the future time perspective explain the expression of the preferred self, and extend our understanding of the relationship between job resources, job demands, and engagement? It is asserted that assessing job control and workload, in conjunction with eudaimonic and hedonic orientations, will explain further employees' perceptions of their tasks, and subsequently their engagement at work. The arguments examined in this chapter include, 1) the novel adoption of the FTP theory (Lens et al., 2012), in addressing the gaps in the JD-R and SDT perspectives on engagement; 2) the short-term variation in the psychological meaningfulness, utility value, and autonomous motivation, leading to engagement; and 3) the role of the preferred self in the relationship between antecedents and engagement.

5.1. Introduction & Study Rationale

JD-R theory has received wide application within the engagement literature, whereby job resources are established antecedents of engagement (Bakker & Schaufeli, 2017). Hence, the JD-R perspective is prevalent within our current understanding of engagement. There is consensus in the JD-R literature that job resources act as a buffer against the negative implications of high levels of job demands (Bakker & Demerouti, 2017), which sustains employees' levels of engagement. This argument lends itself to the health impairment process of JD-R (Bakker et al., 2003), which maintains the assumption that job demands lead to negative outcomes (Schaufeli & Taris, 2014). Furthermore, job resources are argued to support intrinsic (growth) and extrinsic (goal attainment) motivational processes (Hakanen et al., 2006). This assumption of the JD-R theory is dependent on employees having the (appropriate) resources available to counteract the demands of their work. Furthermore,

research has started to challenge the assumption that job demands do not promote engagement. In essence, job resources as antecedents of engagement are supported by the motivational process of JD-R theory, yet uncertainty remains in relation to the role of job demands in engagement.

The argument that employees' orientations and their associated FTP offer one way to explain the preferred self, which was supported in Study 1; and informs the relationships in Study 2. There are identifiable conceptual links between motivational orientations and the situational factors (JD-R antecedents) in the current study. Job resources relate to factors that are not controlled by the individual, it is argued that person-related, thus proximal, factors can provide further clarity on the role of job resources in promoting motivation, leading to engagement. This is evidenced in a recent study that examined, and found support for, the role of cognitive processes used by employees to overcome working conditions that impede their engagement (Demerouti et al., 2019). An important factor associated with eudaimonic orientations is the sense of control, which is central to this process (Huta, 2015). The enduring nature of eudaimonic and hedonic orientations, and their associated motivational processes, are not impacted by external factors when extrinsic resources such as job control are low. However, there is support in the literature for job resources such as autonomy via job control, as task-level resources (Demerouti & Bakker, 2011), that can be linked to whether a task is worth investing the required skills and effort. This raises a question around the levels of job control afforded to employees by their work, and whether the allocation of their job resources in the present moment can be attributed to their preferred selves.

To date, there is limited understanding, and application, of the way employees' time perspectives influence their use of available resources, and how this impacts their perceptions of job demands. A review of research on the JD-R theory indicated that demands such as workload can be rewarding, and that there is a need to assess individual-level perceptions over time (Demerouti & Bakker, 2011). The FTP is anticipated to extend our understanding of the interaction between employees' perceptions of their workload and the way they use resources in present time tasks, when working towards immediate or distant future outcomes. Employees' FTP (present and future focused) in conjunction with their orientations (eudaimonic and hedonic) are expected to facilitate employees maintaining the level of effort and pace required, to meet their perceived workload demand (cf. Bakker et al., 2004). There has been a modest progression on how job demands can promote engagement, and the need to address the lack of specificity in JD-R theory (Schaufeli & Taris, 2014), to explain the processes underpinning engagement. This is addressed by adopting the needs-satisfaction

theory of engagement and the alignment of both motivational orientations and employees' FTP to explain the preferred self (Kahn, 1990). The collective examination of these person-related factors, and job control and workload (JD-R), will provide a new approach to the buffering hypotheses within the JD-R theory, and its associated motivation process. The premise of these arguments is that while job resources are linked to extrinsic motivation factors, employees' perspective on the future (present/future) can promote motivation when job resources are either constrained or limited.

This chapter presents the conceptual framework for Study 2, followed by the arguments underpinning the hypothesised relationships. The merits of adopting a daily diary design, to complete the answer to the overarching research question, is then examined and followed by the methodology for this study. The results of Study 2 are presented in the next chapter (that is, Chapter 6).

5.2. Conceptual Framework & Hypotheses Development

5.2.1. A Two-theory Approach: The FTP theory and SDT

The adoption of the FTP theory is expected to provide novel insights into the role of the time perspective in the relationships between job control and workload, employees' task perceptions, and subsequently their engagement. In the JD-R literature, SDT has been used to explain why resources lead to engagement at work (Bakker & Demerouti, 2017), where job control is linked to the psychological need for autonomy and social support to the need for relatedness (Hakanen, et al. 2006). The focus in Study 2 is on the way employees' use their job resources, alongside their person-related factors (employees' motivational orientations and FTP), to explain their levels of engagement. Hence, social support as a resource, while frequently adopted in the JD-R literature (Demerouti & Bakker, 2017), was not conceptually aligned with the hypothesised relationships in this study. For example, perceived social support requires consideration of relationships employees have with others at work, and the interest of Study 2 was person-related and situational factors relating the individual employees. It is argued that a combination of the FTP theory (Lens et al., 2012) and SDT (cf. Gagné & Deci, 2005) will strengthen our understanding of the relationship between employees' pursuit of, and in the value attributed to, two momentary processes (psychological meaningfulness and utility value), leading to engagement. Furthermore, this

framework will assist in understanding the role of JD-R antecedents, in the assessment of the motivational processes, while challenging assumptions from the health impairment process. In sum, the adoption of a needs-based theory (SDT) and a theory accounting for employees' characteristics time perspectives (FTP), will capture proximal person-related factors lacking in JD-R theory. Thus, the two-theory approach is theorised to provide clarity on psychological process underpinning the relationship between JD-R and engagement (cf. Schaufeli & Taris, 2014) required to answer the research question.

SDT and the FTP theory are two distinct motivation theories which each add unique insight to our understanding the processes that shape engagement. Previous research has acknowledged that although the FTP is not addressed directly within the framework of SDT, different forms of motivation are thought to have different relationships with the future (Simons et al., 2004). Of interest in Study 2 is the relationship between growth (eudaimonic orientations) and the satisfaction of the need for autonomy (via job control), which leads to self-determined actions underpinning engagement. The aim, therefore, to assess person-related (employees' motivational orientations and FTP) and situational factors (such as job control) requires a theoretical framework that complements the deficiencies in each theory, to achieve this aim.

The FTP theory differs from SDT in the way autonomous motivation factors, that is, intrinsic motivation and identified regulation, relate to growth (eudaimonic orientations). In the development of SDT, it was argued that when a task is not intrinsically motivating, it can still have value (Ryan & Deci, 2000), due to individuals inherent need for growth. Consequently, SDT views growth as an intrinsic goal, and that the pursuit of growth based eudaimonic orientations results in goals that are both satisfying and valuable (Ryan & Deci, 2000). The FTP theory contradicts these assumptions, suggesting that eudaimonic pursuits, such as challenging tasks, align more with identified regulation, and not intrinsic motivation (Lens et al., 2012). This assertion in FTP theory aligns the way employees' FTP is anticipated to influence their levels of job control, supported by the intrinsic and extrinsic motivational properties associated with job resources (cf. Hakanen, et al., 2006). In essence, the adoption of these two theories is expected to be appropriate, both for capturing the dynamics of the relationships in Study 2, and in addressing the different perspectives between SDT and FTP theory, when assessing the hypothesised relationships.

The conceptual framework for Study 2 (Figure 5.1.) presents an overview of the expected relationships leading to the hypothesised model. The subsequent sub-sections examine the rationale for these relationships, with the aim to collectively assess the person-

related (employees' motivational orientations and FTP) and situational factors (JD-R antecedents); that explain engagement via the psychological mechanisms of psychological meaningfulness, utility value, and autonomous motivation.

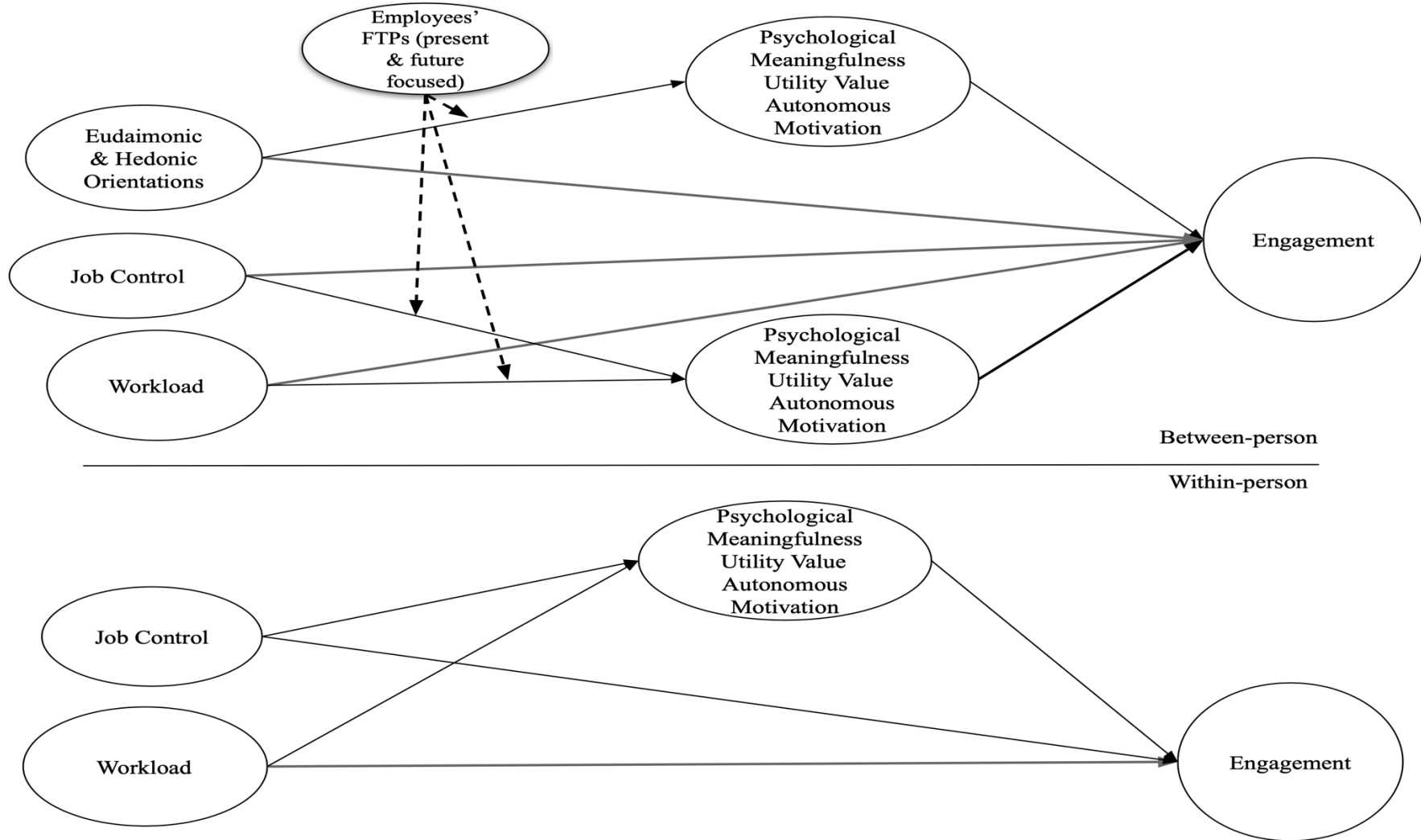


Figure 5.1.: The collective examination of employees' levels of JD-R and their motivational orientations, as antecedents of the perceived meaningfulness and utility value of tasks, and levels of autonomous motivation, which are moderated by employees' FTP (present and future focused) leading to engagement.

5.2.2. The role of JD-R and Motivational Orientations in Engagement: Expanding our understanding of momentary Task Perceptions, and levels of Autonomous Motivation

Study 2 examines the way employees' perceptions of the psychological meaningfulness and utility value of their tasks, and levels of autonomous motivation, explain the relationship between person-related factors (employees' motivational orientations and FTP), situational factors (JD-R antecedents), and engagement (Figure 5.1.). This examination facilitates assessing further the concept of the preferred self, and challenging assumptions of the JD-R theory, to extend our current understanding of engagement. Building on Study 1, the role of the preferred self (employees' motivational orientations and FTP), as proximal antecedents, are collectively examined in this study alongside job control and workload, in extending our understanding of engagement and its motivational antecedents. The relationships between orientations (eudaimonic and hedonic) and engagement via the psychological mechanisms of task perceptions, and autonomous motivation, are expected to be both replicated and extended from the findings of Study 1 (Chapter 4). Hence, they are included in the conceptual framework (Figure 5.1.), which also supports the examination of the role of the preferred self in Study 2. The two JD-R antecedents act as situational factors that predict employees' general (between-person) and momentary (within-person) task perceptions (psychological meaningfulness and utility value), and their levels of autonomous motivation, leading to engagement (Figure 5.1.). These relationships alongside the person-related antecedent of motivational orientations, are examined in this section.

The relationships between eudaimonic and hedonic orientations and engagement (Figure 5.1.) gained partial support in the Study 1. Their enduring nature, however, only captures their general static levels of engagement, and the psychological mechanisms that explain engagement. Assessing the JD-R antecedents at the between-person level will provide additional insight into the way employees perceive their tasks, and at the within-person level will capture their momentary task perceptions. The motivational processes associated with eudaimonic (long-term), and hedonic (short-term) orientations are included in the hypothesised relationships that follow, based on the following: the literature presented in Chapter 2 and 3; the results of Study 1 (Chapter 4); and the arguments in the introduction to this chapter.

Over the last decade research has moved towards assessing within-level variations in the JD-R literature, which provides recognition that both job demands, and job resources are subject to short-term variations (cf. Bakker & Demerouti, 2017; Simbula, 2010). Research

supports the positive relationship between job control and engagement (Bakker & Demerouti, 2017), and how it acts as a day level antecedent of engagement (Kühnel, et al., 2012). The latter daily diary study found that higher day-levels of job control explained the relationship between time pressure and engagement, which aligns with the propositions of JD-R theory (Kühnel, et al., 2012). Kühnel and colleagues position job control as a mediator rather than an antecedent of engagement, and their findings maintain the prevailing assumption, that job demands (time pressure) are antecedents of burnout rather than engagement (cf. Demerouti & Bakker, 2017). The current study (Study 2) examines the motivational properties of job control as an antecedent of engagement and challenges our current understanding of the relationship between job demands and engagement. Additionally, there is a recognised need in the JD-R literature for further assessment of momentary levels of JD-R antecedents, and the extension of our understanding of the relationship between job demands and engagement (Demerouti & Bakker, 2017).

The adoption of the needs-satisfaction theory of engagement supports the assessment of changes in engagement levels, which are due to variations in individuals' investment of cognitive, emotional, and physical energy (Kahn, 1990). This places the emphasis on the individual, and views engagement as a construct subject to momentary variation. It is expected that employees need for autonomy via job control, and their perceptions of their workload, will provide insight into employees' engagement with their tasks. Arguments in the literature indicate that demands also consist of cognitive, emotional, and physical dimensions (cf. Fernet, Trépanier, Austin et al., 2015), which align with the dimensions of engagement in Kahn's (1990) theory. The inherent dynamism in the needs-satisfaction approach to engagement is capitalised on in Study 2, and thus will assist answer the overarching research question, in this thesis.

1. Psychological Meaningfulness

The associated person-related processes of eudaimonic and hedonic orientations, and the situational factors of job control and workload, are anticipated to present a clearer explanation of the multiple antecedents of the psychological meaningfulness of work. The trait level of perceived psychological meaningfulness has received strong support as a mediator in the literature (cf. May et al., 2004; Olivier & Rothman, 2007). It also has confirmed support for its positive relationship with eudaimonic orientations and its mediating effects (Chapter 4). Hence, eudaimonic and hedonic orientations are also anticipated to

predict psychological meaningfulness, in the current study. However, the psychological meaningfulness of a task is argued to change, based on momentary evaluations of that task. Study 2 accounts for the role of JD-R antecedents, as additional motivational processes, which predict the psychological meaningfulness of daily work tasks (Figure 5.1.). Underpinning this assertion, in the development of the JD-R theory, experienced meaningfulness of work was advocated as important to the relationship between job resources and motivation (Hackman & Oldham, 1980). However, there exists a lack of understanding of the relationship between temporality and the meaningfulness of work (Bailey & Madden, 2015). The progress on this issue has been impeded by the terms ‘meaning’ and ‘meaningfulness’ being adopted synonymously (Rosso et al., 2010), in the meaningfulness of work literature. Psychological meaningfulness in Study 2 is operationalised as both a static and temporal process, in alignment with the needs-satisfaction theory of engagement (Kahn, 1990). There was strong support in Study 1 for the relationship between the perceived psychological meaningfulness of a task and engagement (Chapter 4), which supports the body of evidence that it is a static psychological condition that promotes engagement. It is anticipated that understanding the momentary nature of the perceived psychological meaningfulness of a task, will explain further both general and momentary levels of engagement.

Based on the established relationship between job resources and motivation (cf. Bakker & Demerouti, 2017), job control is assessed as a motivational antecedent, which further explains psychological meaningfulness (Figure 5.1.). This anticipated relationship builds on the findings Study 1, that found eudaimonic orientations, underpinned by seeking challenges and the need for growth (Huta, 2015), was a motivational antecedent of the psychological meaningfulness of tasks. This finding suggests that based on person-related factors (employees’ motivational orientations), challenging work can be perceived as meaningful, thus we can expect that high levels of job control (e.g., decision making) will also predict meaningfulness (Figure 5.1.). At a broad level, there is empirical support for the positive association between job resources, at trait level, and motivation (Bakker & Demerouti, 2017). Job control is argued to involve employees’ ability to make decisions over how, and when, they complete their work tasks (Bakker et al., 2004; Chiang, Birtch & Kwan, 2010). It is expected that the level of job control afforded to employees will change across the working week, and therefore explain incremental variations in the perceived psychological meaningfulness of a task. Research adopting a daily diary approach to capture the dynamic motivational processes of JD-R supports the argument that employees’ responses to external

factors such as job resources, are subject to variation (Simbula, 2010). Employees' general and momentary levels of job control during their daily tasks, will support work being more psychologically meaningful, as they can allocate more time to tasks perceived to be psychologically worth their investment. Therefore, it is theorised that employees' levels of job control, in addition to their eudaimonic and hedonic orientations, will extend our understanding of a task's psychological meaningfulness (Figure 5.1.).

Employees' general levels of workload are also expected to predict their perceived meaningfulness of a task. At the core of psychological meaningfulness is the decision on whether a task provides a return of investment (May et al., 2004), that is, whether a task will provide a meaningful outcome to the employee. It is anticipated when job demands are perceived as attainable, employees' will view their work as psychologically meaningful. Research examining the relationship between stressful work and meaning has suggested that there are benefits related to the ability to meet these demands (Britt, et al, 2001). This positive relationship was supported by later research, in which the experience of meaningful work promotes employees' levels of motivation (May et al., 2004). In contrast, it has been asserted in the literature that job demands deplete employees' levels of energy, due to the increased levels of effort needed to meet those demands (Fernet, Guay & Senecal, 2004). However, the motivational properties of meeting these demands, and the subsequent reward for those efforts, are congruent with a perceived return of investment, that is, psychological meaningfulness. Employees' levels of workload and tasks are assumed to vary across the working week, leading to momentary changes in their perceptions of the psychological meaningfulness of their tasks. When employees believe they can meet the demands of their current workload, it is argued that this will promote meaning in their daily efforts at work. It is hypothesised that employees' general and daily levels of workload will provide further explanation of a task's perceived psychological meaningfulness. Taken together, eudaimonic and hedonic orientations, job control, and workload, will collectively explain the perceived psychological meaningfulness of tasks, leading to engagement (Figure 5.1.).

Hypothesis 5.1a: The positive relationships between eudaimonic and hedonic orientations, and engagement, will be mediated by increased psychological meaningfulness.

Hypothesis 5.1b: The positive relationships between both general and momentary levels of job control and engagement, will be mediated by increased psychological meaningfulness.

Hypothesis 5.1c: The positive relationships between both general and momentary levels of workload and engagement, will be mediated by increased psychological meaningfulness.

2. *Utility Value*

Utility value is operationalised as the level of perceived challenge of a task, thus the tasks perceived usefulness for the future, originating from the FTP theory (Lens et al., 2012; Volder & Lens, 1982). Based on previous arguments aligning with Study 1 (Chapter 3 & 4), it is anticipated in the current study, there will be positive relationship between eudaimonic and hedonic orientations, and engagement that are mediated by utility value (Figure 5.1.). For example, the positive associations between eudaimonic orientations, a task's utility value, and engagement were supported in Study 1 (Chapter 4). However, this only provides a partial answer to the importance of a task's utility value, as it does not capture the situational factors that affect the perceived usefulness of a task for future outcomes. Work tasks are likely to vary across the working week, and the perceived utility value of daily tasks will differ based on the level of challenge they present for employees. To extend our understanding of the existence of a more transient relationship between utility value and engagement, further evaluation of the literature is needed.

The levels of job control afforded to employees are anticipated to positively relate to the way they perceive the utility value of their tasks. Job control is a recognised motivational antecedent of engagement from the JD-R perspective (Bakker & Demerouti, 2017), which promotes motivation and goal attainment (Hakanen et al., 2006). For employees whose general levels of job control are high, they are expected to be motivated by tasks with a valued immediate or distance future outcome. Research has recognised that resources, stemming from the self, relate to having effective control of one's environment (Hobfoll, Johnson, Ennis, & Jackson, 2003). It is anticipated further that momentary levels of increased control over one's work and decision-making in a task (job control; Van der Doef & Maes, 1999), will enable employees to engage in tasks with perceived utility value for the future. Hence, the motivational properties of job control, both general and momentary, can explain the reasons employees persist in inherently less enjoyable work tasks, for example when tasks are perceived to be challenging.

As an additional situational factor, workload is anticipated to act as an antecedent of utility value, leading to engagement (Figure 5.1.). The job demands literature links challenge

demands to the health impairment process in JD-R theory (Widmer, Semmer, Kälin, et al., 2012). However, a review of the JD-R literature has advocated assessing job demands under the motivation processes of this theory (cf. Bakker & Demerouti, 2017). The motivational properties of challenge demands are argued to relate to employees' positive perceptions of a task's utility value. Research suggests that when challenge is perceived as a stressor, it promotes higher levels of motivation when that challenge is overcome (J. LePine, et al., 2005). Furthermore, there is support in the literature for challenge related demands contributing to one's characteristic need for personal growth (Podsakoff, et al., 2007). Hence, employees' general levels of workload, as a recognised challenge demand (cf. Bakker et al., 2004), are argued to be supported by their eudaimonic orientations, in extending our understanding of the perceived utility value of tasks.

The way employees evaluate their workload is also anticipated to be subject to momentary variation over consecutive workdays. Employees' experience differing levels of workload across the working week, and these differences are expected to influence their short-term perceptions of a task's utility value. Previous research has recognised that job demands, even when challenging, can promote both positive thought processes and emotions (Tadić, et al., 2015). It is conceivable that, when tasks align with personally valued immediate or distant future outcomes, employees' levels of workload can act as a motivational process, which promotes the positive direction of their task-related actions. In line with this argument, research acknowledges that employees understanding of whether they perceive a demand as a challenge, is contingent on perceptions that are subjective (Tadić et al., 2015). Hence, it is expected that when employees perceive their levels of workload attainable and therefore motivating, they will evaluate their daily work tasks based on their utility value, which will promote engagement.

It is acknowledged that challenge and a sense of significance are important to feeling fully engaged at work (Bakker, 2011). The way challenge demands influence work engagement via self-determined actions (Bakker & Sanz-Vergel, 2013) has been previously assessed. Job demands perceived as a challenge were found to have a positive relationship with engagement. This supports the idea that employees, motivated by their workload, and by the utility value of a task, will have higher levels of engagement. The findings in the previous study (Bakker & Sanz-Vergel, 2013) align with the perception that challenge demands are worth the investment to develop and learn (Cavanaugh, et al., 2000), and will promote growth. These findings are contrary to the assumptions of JD-R theory, in that job resources are required for demands to lead to engagement. Further to this, only in the last decade has

research began to examine outcomes of the FTP (cf. Zacher & Frese, 2009), such as utility value, in a work context. This is despite employees' perspectives on the future time being integral in predicting both the goals they pursue and work-related performance (Seijts, 1998). A meta-analysis on engagement suggested that challenge demands and engagement have a positive relationship (Crawford, et al., 2010). This research stems from our current understanding of engagement as a positive work-related state of mind (cf. Schaufeli et al., 2002). Taking an employee-centred approach, that is, the adoption of Kahn's (1990) needs-satisfaction theory of engagement, the relationship between utility value and engagement is examined, in addressing the importance of the preferred self; and extending our understanding of how job demands promote engagement. Taken together, it is hypothesised that eudaimonic and hedonic orientations, and both general and momentary levels of job control and workload (JD-R), will provide further explanations of a task's perceived utility value, leading to engagement (Figure 5.1.).

Hypothesis 5.1d: The positive relationships between eudaimonic and hedonic orientations, and engagement will be mediated by the increased utility value of a task.

Hypothesis 5.1e: The positive relationships between both general and momentary levels of job control, and engagement will be mediated by the increased utility value of a task.

Hypothesis 5.1f: The positive relationships between both general and momentary levels of workload, and engagement will be mediated by the increased utility value of a task.

3. *Autonomous Motivation*

The relationships between eudaimonic and hedonic orientations and the two dimensions of autonomous motivation, and engagement were mixed in Study 1 (Chapter 4). The lack of a relationship between hedonic orientations and either identified regulation and intrinsic motivation (autonomous motivation); and unexpectedly between intrinsic motivation and engagement means that, in Study 2 both dimensions of autonomous motivation are examined as one factor to explain the relationship between both motivational orientations and engagement (Figure 5.1.). In conjunction with these person-related factors, job control and workload (JD-R) as situational factors will provide additional insight on

autonomous motivation. Job resources have been positively associated with the achievement of employees' goals and personal values (Fernet, Trépanier, Austin, et al., 2015). When employees experience greater levels of job control, this is expected to promote autonomous motivation, due to increased autonomy over decision-making (cf. Chiang et al., 2010). The impact of different levels of available job resources is examined as part of Study 2. A cross-sectional study found that job resources, such as how skills are used, had a positive relationship with autonomous motivation (De Cooman, Stynen, Van den Broeck, et al., 2013). It is anticipated in the current study that employees' general levels of job control will be positively associated with autonomous motivation; and due to task variation across the working week, their momentary levels of job control will provide insight on incremental changes in autonomous motivation (Figure 5.1).

There are also indications that meeting challenges in tasks promotes motivation (Widmer et al., 2012), leading to a stronger sense of self-determination over actions. The positive relationship between eudaimonic orientations and identified regulation in Study 1, are extended in the current study, whereby their levels of workload are anticipated to act as a second situational antecedent of autonomous motivation. Research suggests that employees will experience the demands of their jobs differently, that is, employees are not equally affected by the same job demands (Seemer, 2003; Trépanier, et al., 2013). Previous JD-R research had not placed motivation as an outcome, in the relationships they examined (Bakker et al., 2004). A cross-sectional study found that autonomous motivation moderated the relationship between job demands and levels of psychological distress (Trépanier, et al., 2013). Their results indicated that when employees are autonomously motivated, they experience less distress when faced with job demands, such as role overload and conflict. In addition, contrary to the propositions of JD-R theory, the perceptions of those job demands are suggested to promote motivation (Trépanier, et al., 2013). Research taking a longitudinal approach found that controlled motivation predicted higher levels of exhaustion compared to autonomous motivation, over time (Fernet, Austin & Vallerand, 2012). It is posited that if employees are energised, thus motivated, by meeting their momentary job demands, they will be autonomously motivated by their work tasks, even when tasks are mundane (De Cooman, et al., 2013). As employees' perceived levels of autonomous motivation provides direction to their actions (cf. Gagné & Deci, 2005), their levels of workload across the working week may further explain their autonomous motivation. Hence, it is hypothesised that short-term variations in employees' appraisals of their workload will be positively associated with autonomous motivation (Figure 5.1.).

The construct of autonomous motivation is also expected to explain the relationship between JD-R antecedents and engagement (Figure 5.1.). Engagement research, based on the prevailing approach (cf. Schaufeli, et al., 2002), implies that daily engagement levels are enhanced, when there are more challenges encountered at work (Tadić, et al., 2015). This relationship has been linked to the indirect effects of higher levels of autonomous motivation (Bakker & Bal, 2010; Crawford et al., 2010), and underpins both the theoretical framework, and the theorised relationships in Study 2. It is asserted that employees' self-determined actions, via proximal person-related factors, influence the maintenance of autonomous actions (Deci & Ryan, 1985). One of the central propositions of SDT is that individuals value their need for autonomy (Gagné & Deci, 2005), which aligns with the way job control is operationalised, and the adoption of Kahn's (1990) theory of engagement (Kahn, 1990). Therefore, when employees' actions are self-determined, underpinned by their levels of autonomous motivation, this will lead to incremental variations in their levels of engagement. Eudaimonic and hedonic orientations are entwined with an internal PLOC, underpinning the concept of an "autonomy orientation" (cf. Deci & Ryan, 2008). Both motivational orientations act as antecedents in Study 2, which also accounts for employees' external PLOC. For example, job control and workload act as situational factors, that predict both general and momentary perceptions of autonomous motivation, which promote engagement. The notion that challenging work relates to higher levels of engagement is posited to underpin the expected relationship between workload and engagement via autonomous motivation (Figure 5.1.). The adoption of the needs-satisfaction theory of engagement (Kahn, 1990) supports further, the extension of our understanding of the relationship between job demands and engagement, by proposing that being engaged is dependent on the individual. It is hypothesised that autonomous motivation will explain the relationships between eudaimonic and hedonic orientations, general and momentary levels of job control and workload, and engagement (Figure 5.1.).

Hypothesis 5.1g: The positive relationships between eudaimonic and hedonic orientations, and engagement, will be mediated by increased levels of autonomous motivation.

Hypothesis 5.1h: The positive relationships between both general and momentary levels of job control, and engagement, will be mediated by increased levels of autonomous motivation.

Hypothesis 5.1i: The positive relationships between both general and momentary levels of workload, and engagement, will be mediated by increased levels of autonomous motivation.

5.2.3. The influencing Role of Employees' FTP: The Appraisal of Demands and use of Resources

The role of employees' FTP (present and future focused) extends from the previous study and is anticipated to influence the between-level relationships between job control, workload, their task perceptions (psychological meaningfulness and utility value), and levels of autonomous motivation (Figure 5.1.). The FTP theory supports the assessment of these moderating effects between employees (Lens et al., 2012), and their interaction with employees' motivational orientations will promote the positive effects of both JD-R antecedents. Their positive relationships were established in the previous study (Chapter 4). In Study 2, eudaimonic (future) and hedonic orientations (present) are expected to interact with their respective FTPs to extend our understanding of job control and workload as additional motivational processes, leading to engagement. The adoption of this time perspective, and the application of its associated theory, can provide insights into the way different FTPs influence employees' appraisals of their job demands and the use of their job resources.

The need to extend our understanding of the nature of the meaningfulness of work has been recognised in the literature (cf. Rosso et al., 2010). Research which takes a different perspective to the anticipation of the future, than that of the FTP theory, has examined the concept of 'Future Work Selves' (FWS) in the feedback processes at work (Anseel, Strauss & Lievens, 2017). The concept of FWS is defined as "representations of the self in the future that encapsulate individually significant hopes and aspirations in relation to work" (Strauss, Griffin & Parker, 2012, p.581). This concept indicates that employees' perceptions of themselves in the future relate to what their work can provide for them, in the present. This aligns with the idea of work offering a perceived return of investment, that is, psychological meaningfulness. The role of employees' self-motives, and their activation when seeking and responding to feedback, was assessed in addition to their FWS (Anseel et al., 2017). One similarity, from the self-motive perspective, which aligns with eudaimonic orientations, was the concept of self-improvement. This was based on growth "as a fundamental characteristic of human nature...with people generally having a strong drive to seek to improve their traits, abilities and skills" (Anseel et al. 2017, p.9). It is recognised in the JD-R literature, that job

resources promote the need for growth and development (cf. Hakanen, et al., 2006). It is anticipated that the interaction between eudaimonic and hedonic orientations and their respective FTPs (present and future focused) will extend our understanding of the way job resources, as a motivational process, explain the perceived psychological meaningfulness of tasks (Figure 5.1.).

Research has begun to highlight the context of time, both in the pursuit of pleasure, and the meaningfulness of work. The focus in research has shifted from individual differences to the examination of the dynamic interplay between pleasure in the immediate future, and meaning in the long-term (Kim et al., 2014). They found that a task perceived as highly meaningful, takes precedence over being pleasurable, and that employees' evaluation of a task's psychological meaningfulness is not dependent upon whether it promotes pleasure (Kim et al., 2014). From a JD-R perspective, employees' levels of workload are a demand that can be reduced by the presence of resources. However, it is posited that even when employees' general levels of job control are low, their anticipation of the future, and its implications for their actions in the present, can facilitate engaging in tasks that are challenging and promote meaning. It is hypothesised that employees' FTP will strengthen the relationships between, their general levels of job control and workload, as antecedents of the psychological meaningfulness of a task. Owing to the findings in the Study 1 (Chapter 4), the moderation effects are expected to be more prominent for the interaction between eudaimonic orientations, and those who score highly on having future focused FTP.

Hypothesis 5.2a: Employees' FTPs moderate the positive relationship between general levels of job control and psychological meaningfulness; such that this relationship is greater for those with higher rather than lower levels of a future focused FTP.

Hypothesis 5.2b: Employees' FTPs moderate the positive relationship between general levels of workload and psychological meaningfulness; such that this relationship is greater for those with higher rather than lower levels of a future focused FTP.

This study extends the findings in both the literature, and Study 1, in relation to JD-R as antecedents of the perceived utility value of tasks. Its operationalisation as the levels of challenge a job presents, aligns with the assumptions in the JD-R literature. The expected relationship between job control, workload, and utility value were examined in the preceding

section of this chapter. Employees' general levels of job control and workload are expected to be influenced by the enduring nature of employees' FTPs, in conjunction with their associated orientations, (that is, the preferred self). These relationships are expected to explain further the role utility value as a psychological mechanism, which explains the relationship between JD-R antecedents and engagement (Figure 5.1.). The perceived utility value of tasks is expected to explain the way actions in the present are influenced by individuals' cognitive-motivational characteristics, that is, employees' present and future focused FTPs. Employees' general levels of job control determine their autonomy over how they approach, and when they undertake, their tasks (cf. Van der Doef & Maes, 1999). The assumption of JD-R theory that resources hold value in meeting the demands placed on employees by their work, aligns with the positive views of COR theory (cf. Hobfoll et al., 2003). Based on this assumption, employees use their resources to mitigate the effects of negative or stress-related outcomes (cf. Salanova, Schaufeli, Xanthopoulou & Bakker, 2008). Previous research has assessed variations in employees' perceptions of work, and the implications of tasks being viewed as either a challenge or a hindrance. A study examining these relationships found that variations in perceptions of work as either a challenge (46%), or hindrance (43%), were explained by individual differences in those perceptions (Tadić et al., 2015). It is anticipated that differences in perceptions of one's work will be evident in eudaimonic processes, which are argued to be challenging, and lead to investment in the present, for distant future gains (Huta, 2013). Hence, employees' expression of their preferred selves is expected to strengthen, and provide insight, into the motivational properties of job control, and its relationship with utility value.

There is no known research on the relationship between job demands and the FTP, as theorised by the FTP theory (cf. Lens et al., 2012). However, employees' levels of workload can provide direction, in the present moment, in how they make decisions; and the way they allocate their skills, when evaluating their work tasks. These evaluations are anticipated to be influenced by whether employees are motivated, in the present, by immediate or distant future outcomes. For example, when faced with the need to increase their efforts in a task and maintain the expected pace of working (that is workload; Bakker et al., 2004), their present actions can be influenced by the perceived usefulness (thus, utility value) of a task, for meeting future goals (Lens, et al., 2012). It was recognised in previous research, that perceived workload consists of the situational context of the job, and employees' perceptions of that context (M. Tomic & E. Tomic, 2011). When employees are motivated by person-related processes (eudaimonic and hedonic orientations), they are expected to also view their

workload as additional motivation when their tasks have perceived utility value for future valued outcomes (Figure 5.1.). It is hypothesised that situational factors, such as general levels of workload, will be perceived positively if the present tasks perceived usefulness aligns with their FTP. Summarising, it is expected that when general levels of job control are high, and workload is positively appraised, their relationship with utility value is strengthened by higher levels of a future focused FTP. The emphasis on this form of FTP, in these hypothesised relationships, is based on the findings and discussions pertaining to Study 1 (Chapter 4).

Hypothesis 5.2c: Employees' FTPs moderate the positive relationship between general levels of job control and utility value; such that this relationship is greater for those with higher rather than lower levels of a future focused FTP.

Hypothesis 5.2d: Employees' FTPs moderate the positive relationship between general levels of workload and utility value; such that this relationship is greater for those with higher rather than lower levels of a future focused FTP.

The expected differences in the processes pursued, based on eudaimonic and hedonic orientations and employees' FTPs, are supported by the theoretical framework, that is, SDT (cf. Deci & Ryan, 2002) and the FTP theory (Lens et al., 2012). From the SDT perspective, the levels of investment required by a task will have higher values attributed to them, if the task is autonomously motivating (Deci & Ryan, 2002). Taking the FTP position, if a task has intrinsic value in the present moment, it can provide motivation to invest in that task again in the future. Therefore, employees' levels of autonomous motivation relate to the value attributed to future goals, based on present actions being perceived as having utility for achieving long-term goals (de Bilde, et al., 2011). This assertion also aligns the concept of autonomous motivation with goals that have value for the distant future (future focused FTPs). Hence, SDT and the FTP theory underpin the hypothesised relationships between general levels of job control and workload (JD-R antecedents), and autonomous motivation, being strengthened by the interaction between employees' motivational orientations and their characteristic FTPs.

The concept of intrinsic motivation relates to an individual's volitional actions (Ryan & Deci, 2000). From an SDT perspective, when employees have a choice in their tasks, and

work in an organisation that affords a level of autonomy, the result is increased levels of autonomous motivation (Gagné & Deci, 2005). This implies that when employees' general levels of job control, in the present, act as forms of autonomy, they will be more autonomously motivated by their work tasks. A dimension of autonomous motivation is whether a task is perceived as important for personal goals (that is integrated regulation) (Gagné & Deci, 2005). Based on the FTP theory, it is thought that a task can be assessed based on actions required in the present, that promotes motivation to achieve future based goals (Lens et al., 2012). It is anticipated that having higher general levels of job control, in conjunction with employees' characteristic FTPs, will influence the way resources are used, and promote greater levels of autonomous motivation, leading to engagement (Figure 5.1.). It is also expected that different perceptions of workload can determine the direction of the autonomously motivated actions, in the present. For example, employees will evaluate whether the expenditure of effort aligns with their FTP, and a valued future outcome. Therefore, it is hypothesised that employees' general levels of job control and workload, act as additional motivational antecedents, which explain autonomous motivation when tasks align with their FTP. Further to this, the strong positive relationship between eudaimonic orientations and a future focused FTP, in the previous study (Chapter 4), suggests that higher levels of this FTP will have a stronger influence than lower levels of a future focused FTP.

Hypothesis 5.2e: Employees' FTPs moderate the positive relationship between general levels of job control and autonomous motivation; such that this relationship is greater for those with higher rather than lower levels of a future focused FTP.

Hypothesis 5.2f: Employees' FTPs moderate the positive relationship between general levels of workload and autonomous motivation; such that this relationship is greater for those with higher rather than lower levels of a future focused FTP.

The arguments for the hypothesised relationships between eudaimonic and hedonic orientations, general levels of job control and workload, and their mediated relationships with engagement, were presented earlier in this section. Employees' FTP was also hypothesised to moderate these mediated relationships, at the between-person level. Correspondingly, it was theorised based on previous findings in this thesis, that future focused FTPs, specifically,

may take precedence over a more present FTP. Therefore, there are inherent moderated mediations in the hypothesised relationships (Figure 5.1.).

Hypothesis 5.3a: Employees' FTPs moderate the positive relationships between their general levels of job control, workload, and engagement, via increased psychological meaningfulness. These indirect relationships are stronger for those with higher rather than lower levels of their characteristic present or future focused FTPs.

Hypothesis 5.3b: Employees' FTPs moderate the positive relationships between their general levels of job control, workload, and engagement, via increased utility value. These indirect relationships are stronger for those with higher rather than lower levels of their characteristic present or future focused FTPs.

Hypothesis 5.3c: Employees' FTPs moderate the positive relationships between their general levels of job control, workload, and engagement, via increased autonomous motivation. These indirect relationships are stronger for those with higher rather than lower levels of their characteristic present or future focused FTPs.

5.3. Methodology

5.3.1. Research Design

This study took a structured web-based daily diary approach. In deciding the most appropriate format for administering the daily diaries, the following issues were considered. From a context perspective, early research adopting a daily diary research design used a pencil-and-paper format to collect participants' responses. This involved administering booklets with instructions on the days and times each diary was to be completed (Ohly, Sonnentag, Niessen, et al., 2010). The limitations of this approach included problems with participant compliance, and the limited ability to track the timing of their responses (Stone, Shiffman, Schwartz, et al., 2002). 'Bulk' responses were also possible if participants missed the allocated time slot or day, leading to retrospective bias. An advantage of using online diaries is that responses and timing can be easily tracked. This approach facilitates the provision of a specific window to respond, which reduces retrospective bias in the results and

reduces the implications of non-compliance by participants (cf. Ohly et al., 2010). The survey platform Qualtrics was used to administer the daily diaries. Within this web-based approach, the issue of participant attrition due to non-responses remains, for example due to participants being away from their computers (Ohly & Fritz, 2010). The specific response window, the once daily email invitations to participate, and the compatibility of the daily diaries with multiple devices, were used first to mitigate potential participant attrition; and second, to facilitate participants responding within the allocated time each day. The appropriateness of adopting a daily diary design to answer the overarching research question, and meet the aims of Study 2, is examined in the next section.

5.3.2. Meeting the Overarching Aim of this thesis via a Daily Diary Design

The current study addresses two types of constructs in the research question, which requires using a diary study research design (Ohly, et al., 2010). The first is the between-person level which seeks to assess stable motivational processes (eudaimonic and hedonic orientations & FTP), and typical levels of situational factors (job control and workload). These predict their cross-sectional relationship with additional motivational processes, that is, psychological meaningfulness, utility value, and autonomous motivation. The second level in answering the research question pertains to the examination of relationships, between state constructs and repeatedly experienced actions, for example, levels of engagement. These relationships include the indirect effects of the repeated observations of task perceptions and autonomous motivation, in the direct relationships between employee's levels of JD-R, their motivational orientations (eudaimonic and hedonic), and levels of engagement. From a methodological perspective, diary research allows for daily data to be collected, which enables the assessment of momentary variation within key factors, for example, over five consecutive working days.

Using a diary research design has implications for assessing the nature of the relationships in this study. A limitation in the literature assessing concepts like the perceived psychological meaningfulness of a task (May et al., 2004; Olivier & Rothman, 2007), is that adopting a cross-sectional design, by default, will not capture any short-term variations in these perceptions. Diary designs, however, provide a mechanism for assessing the way dynamic variables fluctuate over short timeframes, and of the role of context in time-invariant variables, such as eudaimonic and hedonic orientations and employees' FTP. The

between-person effects of eudaimonic and hedonic orientations, and their relationship with both their task perceptions (e.g., psychological meaningfulness), and autonomous motivation, are extended by measuring these perceptions over consecutive working days. The assessment of repeated observations of employees' perception of a task's utility value, for example, could at the individual level provide insight into whether a task has utility value for short or immediate future gains. In addition, the influence of employees' FTP on their task perceptions (psychological meaningfulness and utility value), and autonomous motivation, are encompassed by the collective examination of relationships with stable characteristics (eudaimonic and hedonic orientations), and momentary antecedents (job control and workload). Thus, the assessment of these relationships is supported by adopting a daily diary research design.

A focus in Study 2 is encapsulating, from the perspective of employees, the alignment of their preferred selves with their task engagement, through the relationships between their eudaimonic and hedonic orientations, and associated FTPs. Diary studies enable both the assessment of the theorised relationships at the intra-individual level, and the collection of data across multiple consecutive working days. Therefore, they can be used to assess accurately the dynamics of short timeframes, at both levels of analysis (Ohly et al., 2010). The hypothesised relationships (Section 5.2.), are addressed in the current study by capturing employees' perceptions of their levels of job control and workload, their task perceptions (psychological meaningfulness and utility value), and levels of autonomous motivation, at both levels of analysis. Finally, the adoption of a daily diary design assists in extending our understanding of what motivates the initiation and sustainment of employees' daily actions, and thus what promotes or sustains daily engagement levels at work.

5.3.3. Sample Size

Two issues arose when assessing the appropriate sample size for Study 2: generalisability, and statistical power. Generalisability may require large sample sizes, and an increased number of days for data collection. When approaching the sampling in a diary design, it is often referred to as two-stage cluster sampling. The first stage is the participants, and the second is their daily responses at the intra-individual level (Mok, 1995). Therefore, it was imperative to address and compare, the number of participants required vs the number of days data is collected. Decisions on both were led by the overarching research question in this thesis, and the hypothesised relationships. Previous research has argued that if the

objective of the research is to track changes in variables over time, then a smaller sample with more data collection days is sufficient (Fuller, Stanton, Fisher, et al., 2003). Diary study research assessing person-level predictors have used a sample size of 149, with participants responding for at least three of the five days (Ohly et al., 2010). Two of the main predictors in Study 2 are person-level variables, that is, eudaimonic and hedonic orientations, and as a moderator, employees' FTP. The objective of the Study 2 was to assess repeated observations of focal variables over time, which meant that participants were asked to complete diaries once a day, for five consecutive working days (Section 5.3.5.).

The target sample size for Study 2 was 100 participants, from diverse set of organisations across the UK, for participation in the study across one working week. In accounting for the multilevel analytical approach to test the hypothesised relationships (cf. Chapter 6), the number of anticipated observations, and the group (cluster) level size, influenced further the decisions on sample size. First, if the emphasis is on having more participants (person-level) than higher numbers of daily responses, this is likely to have a positive effect in relation to statistical power (Scherbaum & Ferreter, 2009). However, it is recognised that achieving higher sample sizes at Level 2, that is participant level, is difficult with clustered data (cf. Hox, van de Schoot & Matthijses, 2012). Akin to Study 2, previous research examining daily levels of job demands as antecedents of engagement, over five consecutive days, had a sample size of 52 participants, leading to 439 observations (Tadić et al., 2015), which is deemed adequate for a diary design (Scherbaum & Ferreter, 2009). Second, early research on the required sample size in multilevel SEM studies indicates that 100 clusters (at between-person level) are ideal for the accuracy of estimating cluster-level variance and standard errors (cf. Hox & Maas, 2002). Since then, general guidance for multilevel analytical approaches is sample sizes greater than 50 are acceptable (Hox, Maas & Brinkhuis, 2010), and research often uses >100 clusters when testing multilevel mediation SEM models (cf. McNeish, 2017).

The final sample size in Study 2 for participants who completed all five days of the daily diary was 91, which is higher than previous daily diary studies testing similar constructs (cf. Bakker & Bal, 2010). While this is less than the target sample size of 100, it is deemed to have sufficient power to test the hypothesised relationships with a total of 455 observations (91 X 5). Finally, the potential implications of the smaller sample compared to the target sample size are addressed, by the estimation methods and the use of robust chi-square and standard errors (Hox et al., 2010), in the next chapter (Chapter 6).

5.3.4. Participants

The participants for Study 2 were recruited through Prolific (prolific.ac). This platform facilitates the integration of Qualtrics surveys for collecting daily diary data. Prolific also enables customised pre-screening of participants, based on specified eligibility criteria for the study (Peer, Brandimarte, Samat, & Acquisti, 2017). The following customised pre-screening was applied: employment status (full-time) and working hours (35+ hours) per week; tenure; nationality (UK and Ireland); and working in any organisation in the UK. The first day of Study 2 was made available to 110 potential participants. This accounted for both the target sample size of 100, and the anticipated participant attrition associated with daily diary designs.

From the sample pool of 110 potential participants, on Day 1 a total of 102 UK based employees completed the daily diary. Those who had completed less than three days were dropped from the final sample. This was to facilitate the assessment of repeated observations of key variables over multiple consecutive working days. Therefore, the final sample (N=91) for analysis consisted of UK based employees who completed three or more diary entries over the working week, and there was an attrition rate of twenty-one participants over the five days of this study (N = 79).

To obtain sample characteristics and facilitate descriptive analysis in SPSS, demographic information was collected on Day 1 (Appendix 4E). Just over half of the sample were female (N= 50, 54.9%) compared to male (N= 41; 45.1%). The mean age was 35 years (SD= 8.80), with a majority of the sample aged between 25 and 49 (89.1%). The whole sample consisted of employees who worked either full-time (92.3%) or full-time flexible (7.7%). Most of the sample had a work status of 'general employee' (65.9%), but the second largest group held a 'supervisor/line-manager' role (19.8%). A majority of the sample had worked in their organisations for two years or more (70.3%). The three largest organisations consisted of employees working in sales or retail (18.7%), finance (17.6%) and education (15.4%).

5.3.5. Procedure

Study 2 received ethical approval from Birkbeck's Ethics Committee prior to data collection. A brief description of the study was made available on Prolific to all potential participants, who fitted the specified criteria (Appendix 4b). To facilitate tracking of

individual participants' anonymous responses each day, they were asked to provide, after consenting to participation, their unique Prolific ID at the start of each diary entry. This meant that only those specified participants were invited to continue their participation the following day, using Prolific's 'Whitelist' system. The use of Prolific ID's also facilitates linking each participant's responses over the five consecutive days, for the purpose of the analysis, and if desired, participant withdrawal.

Based on the recommendations in the literature (Sonnetag, 2003), participants were informed that they will be completing short surveys, over one working week (Appendix 4c). It was highlighted that the first day of participation would involve an initial longer survey, to include the once off measurement of the time-invariant variables, which were eudaimonic and hedonic orientations, their FTP, and demographic information. Participants were required thereafter to respond to the remaining measures once daily only (that is each afternoon), instead of completing the diaries several times a day, to mitigate retrospective bias in the responses (cf. Ohly et al., 2010).

To enhance participant compliance, participants need to feel they are collaborating with the researcher, for example that everyone is aiming to reach the same goal. In addition to being offered a summation of the anonymised results post-participation, they were provided with an incentive, to increase the rates of response compliance. As participation involved five daily diary entries (approx. one hour in total of their time), participants were paid the (current) UK minimum wage when they completed all five days. Participants who completed one or more days but not all five days received the equivalent of one fifth of the minimum wage, per day. This payment method was in line with other studies on Prolific, was facilitated by participants prolific IDs to negate any direct contact between the researcher and participants. This form of reward system also acknowledged the time and effort participants made, during this study. Participants were asked to provide their unique Prolific email address, and not their personal email address, at the end of each dairy entry to opt into an additional prize draw (Appendix 4c) for those who completed all five days. Each diary entry led to an additional entry into the prize draw. This approach has been successful in previous diary research (Fuller, et al., 2003; Sonnetag, Binnewies & Motza, 2008).

The process of participation was as follows: on the first day, participants were asked to click on an anonymised Qualtrics link, where they were asked to read the information sheet, and to consent to participation (Appendix 4A). If they did not consent to taking part, they were brought to the end of survey screen. Those that provided consent, were asked to give their Prolific ID, and answer demographic questions. This was followed by items

measuring eudaimonic and hedonic orientations (HEMA scale), and their FTP (ZTPI-S). The measures, including those adapted in the analysis for Study 1, then followed: R-MAWS; the Job Engagement scale; Psychological Meaningfulness; the Job challenge scale (utility value); the general workload scale; and the Job Control Questionnaire (JCQ) (Appendix 4C). For the remaining four days, they were only required to complete these six scales.

At the start of each subsequent diary entry, participants were presented with a reminder of the purpose of the study, and what participation involved, for example, the length of the shorter surveys (Appendix 4D). They were also asked to re-confirm their consent to taking part (Appendix 4c). This procedure was repeated between Days 2 to 5. Finally, upon completion each day, participants were thanked for their participation, and contact details for the researcher were presented again, should they wish to ask any questions or withdraw from the study.

5.3.6. Measures

On Day 1, participants were asked demographic questions to obtain sample characteristics. These questions pertained to their gender, age in years, their work type (e.g., full vs part-time), and their job status. Finally, the organisation type participants worked in was addressed by the question “What organization do you work for?” (Appendix 4E).

All the measures below were adapted in the scale development of Study 1 (Chapters 3 & 4), except for the measure of autonomous motivation. The measures for job control, and workload have been added, based on the hypothesised relationships presented in this chapter. The internal consistency of all measures in this study are examined in the next chapter (Chapter 6).

Eudaimonic and Hedonic Orientations: HEMA scale (Huta & Ryan, 2010) (Day 1)

Eudaimonic and hedonic orientations were measured using the adapted HEMA scale from Study 1. This measure consisted of four items from the eudaimonic motives subscale and three items from the hedonic motives' subscale (Appendix 4C). Participants were asked to respond on a 7-point Likert scale, ranging from “Not at all” to “All of the time” for each item (Appendix 4a).

Job Control: Job Content Questionnaire (JCQ; Brisson, Blanchette, Guimont, Dion, et al., 1998) (Days 1-5)

The French version of JCQ was used (Brisson, Blanchette, Guimont, Dion, et al., 1998) to measure job control, and consisted of three items. This version of the JCQ (Karasek, 1985) was chosen due to the conceptual overlap of other measures with concepts such as job complexity (Fernet, Guay & Senécal, 2004). Participants were asked “How true are these statements in relation to the work you are doing today?”, with responses rated on a 5-point Likert scale from “Strongly disagree” to “Strongly agree”. There was high internal consistency ($\alpha = .80$) found in research using these items to measure job control (Fernet, et al., 2004). The items are “I have a lot to say about what happens on my job”; “In my job, I have very little freedom to decide how I work”; and “My job allows me to make a lot of decisions on my own” (Appendix 4C).

Workload: sub scale of the JCQ (Bakker et al., 2004) (Days 1-5)

Workload was measured using a three-item general workload scale, based on the Job Content Questionnaire (Karasek, 1985), and developed by Bakker et al. (2004). Participants were asked to respond on a 5-point Likert scale, ranging from “Never” to “Always”, and answer the following question: “Reflecting on your current workload, how accurate are these statements in relation to your work today”. Previous research adopting this measure of workload found it had acceptable internal consistency ($\alpha = .74$) (Bakker, Demerouti, de Boer, & Schaufeli, 2003). An example item included "Today, my work requires working very fast"(Appendix 4C).

Employees' FTP: ZTPI-S (Orkibi, 2015) (Day 1).

In assessing employees' FTP, the adapted ZTPI-S (Orkibi, 2015) from Study 1 with eleven items, was used. The items from three subscales were measured on a 5-point Likert scale ranging from "Very Uncharacteristic" to "Very Characteristic" (Appendix 4C).

Task Perceptions & Autonomous Motivation (Days 1 to 5)

The variables informing the measurement of the psychological meaningfulness and utility value of tasks, and autonomous motivation (as mediators), are addressed here. The measures which follow were easily adapted following the scale development in Study 1 (Chapter 4) and used on all five consecutive working days throughout the current study.

Utility Value: The Job Challenge scale (Cohen-Meiter et al., 2009) (Days 1-5)

The four-item version of the Job Challenge Scale was used to measure the perceived utility value of a task. Participants were asked an amended question: "How do you feel about the work that you are doing today? Please rate on the following scale the extent to which each statement applies to you". The responses were measured on a 5-point Likert scale from "Strongly disagree" to "Strongly agree". (Appendix 4C).

Psychological Meaningfulness: Psychological meaningfulness scale (May et al., 2004) (Days 1-5)

A 3-item version of the Psychological Meaningfulness scale was used to measure the perceived psychological meaningfulness of tasks. Participants were asked an amended question "To what extent would the following statements apply to your work today?" Responses were given on a 5-point scale ranging from "Strongly disagree" to "Strongly agree". (Appendix 4C).

Autonomous Motivation: R-MAWS (Gagné et al., 2012) (Days 1-5)

To assess autonomous motivation, the instructions for the R-MAWS measure were adapted for the purpose of Study 2. Participants were asked: "Please indicate the extent to which each statement best describes what motivates you at work today". Both subscales were measured on a 5-point Likert scale, ranging from "Strongly disagree" to "Strongly agree", and each subscale consist of three items. (Appendix 4C).

Engagement: Job Engagement Scale (Rich et al., 2010) (Days 1-5)

Engagement was measured using a shortened adapted version of the Job Engagement scale from Study 1 (11-items; Chapter 4). Participants were asked: "Please indicate how true these statements are for you today at work", with responses rated on a 5-point scale from "Strongly disagree" to "Strongly agree". (Appendix 4C).

5.4. Summary

This chapter presented Study 2 which seeks to complete the answer to the overarching research question in this thesis, by collectively examining person-related (both motivational orientations and employees' FTP) and situational factors (JD-R) as antecedents of

engagement. The support of the framework of SDT and the FTP theory, and the hypothesised relationships was further examined. This included the assessment of the points of convergence and divergence between the two theories, and how they add insight to the theoretical relationships being examined. Both theories agree that tasks, even when not intrinsically motivating, can still have value for the employee. The assertion that growth is an intrinsic goal that satisfies needs (SDT), was contrasted with the FTP theory's proposition that, eudaimonic pursuits of growth align with individuals' values, that is, identified regulation. The conceptual framework depicting the hypothesised relationships was presented, prior to the review of the literature leading to the hypotheses (Figure 5.1.).

The current study builds on the findings from Study 1 (Chapter 4). To achieve this, eudaimonic and hedonic orientations continue act as stable motivational characteristics, and job control and workload act as situational factors, thus additional antecedents, assessed at both levels of analysis. For example, both general and momentary levels of job control and workload are antecedents of the psychological meaningfulness, utility value, and autonomous motivation (Figure 5.1.). The moderating effects of employees' FTP, and their interactions with their associated orientations, are expected to provide additional insight into the role of preferred self in the relationships between JD-R antecedents, task perceptions, and autonomous motivation. There are few applications of FTP theory and the role of employees' time perspectives, in assessing the relationship between employee motivation and engagement Hence, central to this thesis is the proposition that the FTP theory can be applied to address this issue, and extend our understanding of employees' motivational processes underpinning their preferred selves, and their levels of JD-R.

The second role of psychological meaningfulness, utility value, and autonomous motivation is extended in Study 2, in recognition of the momentary nature of perceptions, and as psychological mechanisms that explain the relationship between JD-R and engagement. These hypothesised indirect effects were examined in this chapter (Section 5.2.1). The adoption of Kahn's (1990) needs-satisfaction theory, and the contextualisation of the preferred self (eudaimonic and hedonic orientations and their respective FTPs), enables the assessment of the motivational processes which inhibit or promote engagement. The role of JD-R antecedents as situational factors that promote engagement, in conjunction with their orientations and FTP, is captured by taking a needs-satisfaction approach (that is, Kahn, 1990). Our theoretical understanding of the relationship between employees' perceptions of challenging work and engagement, is enhanced by using the concept of utility value from the FTP theory (cf. Lens et al., 2012). It moves away from the focus on the dichotomy between

whether a task is perceived as a challenge or a hindrance (Tadić et al., 2015), to whether it is valued and thus aligns with employees' preferred selves (Kahn, 1990).

The second half of the chapter focused on research design decisions and the methodology for Study 2. The merits of a diary research design, and its appropriateness for testing the hypotheses, were presented. This presentation was followed by the methodological details for Study 2.

Chapter 6 will present the results of testing the hypothesised relationships (Figure 5.1.) using single and multilevel CFA and multilevel path analysis. This is followed by a discussion of the findings, and their implications both for the overarching research question, and their theoretical implications. Chapter 6 concludes with an examination of the limitations, and overall conclusions, from Study 2.

Chapter 6

Situational and Person-related Factors that explain Employees' Perception of, and Engagement in, their Work. A Multilevel Analysis.

The purpose of this chapter is to present the results of Study 2. The aim of this Study is to extend our understanding of the relationship between JD-R antecedents and engagement, alongside our understanding of the role of the preferred self. The foundation for the latter, is enabled by the support for the relationship between eudaimonic orientations and future focused FTPs, in Study 1 (Chapter 4). In Study 2, the role of employees' FTPs are extended within the analysis presented in this chapter, in assessing first their moderating effects on the relationship between two JD-R antecedents and the three psychological mechanisms. Second, by examining the way the interaction between both motivational orientations and employees' FTP promotes the positive effects of job control and workload, as motivational antecedents. Employees' perceptions of their tasks, and their levels of autonomous motivation, is also anticipated to provide insight into the relationships between time invariant antecedents (eudaimonic and hedonic orientations), the repeated observations of motivational antecedents (job control and workload), and engagement.

This chapter begins by presenting the measurement analysis, and analytical approach for testing the hypothesised relationships. This includes the reliability of the measures, and an initial examination of their inter-class correlations (ICC), for the purposes of multilevel reliability. The hypothesised relationships were tested by adopting a multilevel approach, including the examination of the measurement models through both single (time invariant IVs), and multilevel (repeated observation measures), CFA. Following this analysis, multilevel path analysis is used to test the hypothesised relationships, and to complete the answer to the overarching research question of this thesis: To what extent do orientations and the future time perspective explain the role of the preferred self, and extend our understanding of the relationship between job resources, job demands, and engagement? This chapter concludes with a discussion on the findings, and their theoretical and practical implications. The limitations of Study 2 are also discussed alongside recommendations for future research.

6.1. Measurement Analysis & Analytical Approach

A multilevel analytical approach was adopted to assess simultaneously the time invariant and repeated observations variables, within the hypothesised relationships. The repeated observations of key variables such as job control and workload were measured over five working days. Hence, they are not independent and will correlate at the within-person level of analysis (Hox & Maas, 2002). The adoption of path analysis models will eliminate standard error bias (Kenny, Korchmaros & Bolger, 2003), and allow for differences in the time invariant antecedents (eudaimonic and hedonic orientations and employees' FTPs), to be compared with the repeated observations of all other variables.

Due to the time invariant nature of two of the predictors (eudaimonic and hedonic orientations) and the moderator (employees' present and future focused FTPs), these variables are assessed as between-person only variables. The remaining variables in this study, job control and workload, the mediating variables (e.g., psychological meaningfulness), and the DV (engagement), are measured at both within and between-person levels of analysis. Therefore, this requires assessing, first, the reliability of the measures; second, the cases of missingness and the use of fit indices; and finally, whether the data collected supports the multilevel analytical approach.

6.1.1. Reliability Analysis

Due to the nested nature of the data, it is recommended that the reliability of the items for all constructs are examined before any subsequent analysis (Heck & Thomas, 2009). Reliability analysis was conducted in R (v4.2; R Core Team, 2022) using the psych package (Revelle, 2020) first, to assess the internal consistency of the between-person (only) measures. This included the HEMA scale (Huta & Ryan, 2010) and the ZTPI-S (Orkibi, 2015) measured on Day 1. Second, reliability analysis was applied to the repeated observation measures being assessed at both levels of analysis, that is, the daily measures (JCQ scale; the Job Challenge scale; Psychological meaningfulness scale; R-MAWS; Job Engagement scale). The two between-person (only) measures had good internal consistency, apart from one of the subscales for the HEMA scale. Based on the theorised two-factor structure (Huta & Ryan, 2010), the two subscales were examined, that is eudaimonic motives and hedonic motives (cf. Appendix 4C). The eudaimonic motives subscale fell short of the

minimum .70 threshold ($\alpha = .66$). When the inter-item correlations were evaluated, Item 3 had small positive relationships with the other items in that subscale ($r = .03-.18$). This indicates that Item 3 does not measure eudaimonic orientations as strongly as the other items in the subscale. The inter-item statistics indicated that removing Item 3 would lead to a good level of internal consistency (Table 6.1.). Based on this analysis, Item 3 was dropped when measuring eudaimonic orientations in the subsequent analysis (Sections 6.2 & 6.4).

Table 6.1.: Cronbach alphas (α) for Day 1 variables & number of items

Time-invariant measures	α	Number of Items	Number of Observations
Hedonic and eudaimonic orientations for Activities (HEMA) scale (Huta & Ryan, 2010)	.75	7	91
Eudaimonic orientations sub-scale (HEMA)	.79	3	91
Hedonic orientations sub-scale (HEMA)	.73	3	91
Zimbardo's Time Perspective Inventory - short version (ZTPI-S; Orkibi, 2015)	.84	11	91
Present-hedonistic sub-scale (ZTPI-S)	.81	3	91
Present-fatalistic sub-scale (ZTPI-S)	.87	4	91
Future sub-scale (ZTPI-S)	.82	4	91

The reliability analysis for the repeated observation measures had an internal consistency ranging from the minimum to high levels ($\alpha = .70 - .97$). The four-item Job Challenge Scale (Cohen-Meiter et al., 2009), measuring the utility value of tasks, had acceptable reliability levels ($\alpha = .74$). However, when the inter-item correlations were examined Item 3 had small positive relationships with the other items ($r = .23-.30$). This suggests that this item is not a strong indicator of levels of job challenge, and thus the perceived utility value of tasks. There were moderate ($r = .43$) to strong ($r = .69$) inter-correlations between all other items in this measure, that is, Items 1, 2, and 4. Reliability analysis was re-run with Item 3 removed and strong internal consistency was retained for the Job Challenge scale (Table 6.2.) (Cohen-Meiter, et al., 2009).

The three-item measure of Job Control (JCQ, Brisson et al., 2008) had an accepted level of internal consistency ($\alpha = .73$; Table 6.2.). In examining the inter-item correlation matrix, Item 2 had a small relationship with the other items ($>.35$), and the scale retained

good reliability with Item 2 removed (Table 6.2). The second IV measured over five days - that is workload (JCQ, Bakker et al., 2004), and the mediator psychological meaningfulness (May et al., 2004), were both three item measures which had good internal consistency (Table 6.2). A final mediator in this study, autonomous motivation, had strong internal consistency with all 6 items (Table 6.2.). Hence, there was strong internal consistency for autonomous motivation as a one factor structure. As a two-factor measure, there was strong internal consistency, both for the first three items representing identified regulation ($\alpha = .84$), and Items 4-6 which represented intrinsic motivation ($\alpha = .87$).

The examination of the reliability of the DV measure (Job Engagement Scale, Rich et al., 2010), which was adapted in Study 1 (that is, 18 items reduced to 11 items; Chapter 4), previously demonstrated a strong internal consistency ($\alpha = .93$). In the literature, engagement is conceptualised as a three-factor multidimensional construct (cf. Bailey et al., 2017; Kahn, 1990), and the Job Engagement Scale captures employees' all three dimensions of engagement (Rich et al., 2010). Each dimensions had strong internal consistency: physical engagement ($\alpha = .88$), emotional engagement ($\alpha = .89$), and cognitive engagement ($\alpha = .90$). In the current study, engagement was assessed as a one-factor construct, in alignment with the hypothesised relationships, and a strong internal consistency as an 11 items measure (Table 6.2.).

Table 6.2.: Cronbach alphas (α), number of items, and number of observations for repeated observation measures

Measures	α	Number of Items	Number of Observations
Job Control sub-scale (JCQ; Brisson et al., 1998)	.82	2	439
Workload sub-scale (JCQ; Bakker et al., 2004)	.85	3	432
Psychological Meaningfulness Scale (May et al., 2004)	.88	3	440
Job Challenge Scale (Cohen-Meiter et al., 2009)	.80	3	435
Revised-Motivation at Work Scale (R-MAWS; Gagné et al., 2012)	.92	6	433
Job Engagement Scale (Rich et al., 2010)	.96	11	432

In acknowledgement of the nested data, the appropriate multilevel reliability statistics were addressed due to expected variance at both levels of analysis. The need for level specific reliability analysis is indicated in the literature, which suggests that ICCs should be

examined for repeated observation variables (cf. Geldhof, Preacher & Zyphur, 2014). ICCs enable the breakdown of variance at both the within- and between-levels (Petrou, Demerouti, Peeters, et al., 2012); and the assessment of how reliable the agreement and correlation levels are between the two measurements in a longitudinal research design (Koo & Li, 2016). An ICC value closer to 1 than zero indicates higher levels of between-person variance, which signifies the need to adopt a multilevel analytical approach (Dyer, Hanges & Hall., 2005). When an ICC is lower than .05, this would lead to a questionable rationale for proceeding with a multilevel approach in the analysis for Study 2 (cf. Dyer, et al., 2005). Therefore, this initial assessment of the ICCs, not only enables the assessment of the appropriateness of multilevel analysis, but also ensures the accuracy of parameter estimates in the subsequently tested models (Muthén & Satorra, 1995; Sections 6.2. & 6.4.).

A two-way mixed-effects model with the mean (k) of measurements and absolute agreement (Koo & Li, 2016; McGraw & Wong, 1996) was chosen, to assess the ICC values of the repeated observation measures (for example, job control and workload). This decision was made based on the ‘type’ of measurement in this study, which included the assessment of participants over multiple days, that is, ICC (2, k ; $k=5$). In addition, as the same participants were assessed on six different measures over five days, the need to generalise to the population was not required by this analysis. The effect size of each measure was also assessed through examining the ICC1, which refers to whether group membership influences the participants responses on each measure (cf. Koo & Li, 2016). There were two measures (the HEMA scale and ZTPI-S) that only vary at the individual level (between-person); therefore, ICC analysis was not required for these two measures.

A series of two-way mixed effect models (cf. Koo & Li, 2016) were conducted using the nlme package in R (v3.1-152; Pinheiro et al., 2022), and each repeated observation measure was examined to identify the ICC1 values. For each measure, the variable of interest was the DV that was predicted by a random intercept, e.g., job control (DV) and PID as the grouping variable. The ICC values were calculated based on the random intercept being divided by the alpha level of the intercept and the alpha of the residuals. The examination of the ICC1 coefficients indicated that all values were above 10%, which constituted a large effect size (Murphy & Myors, 1998). The ICC1 values for the IVs (job control and workload) were strong at .54 (Table 6.3.). Their values show that not accounting for the multilevel nature of the data would lead to biased results, due to the high level of between-person variance. The ICC1 values for autonomous motivation (.76) and engagement (.73) were relatively high and closer to 1 compared to other measures (Table 6.3.). There are no

comparable studies that have used the same measures of engagement (Job Engagement Scale; Rich et al., 2010) and autonomous motivation (RMAWS; Gagné, et al, 2012), in a daily diary design. However, these values are in line with supported guidelines within reliability research. For example, ICC values $>.50$ are considered to equate to moderate reliability, and values above $.75$ equate to good reliability (cf. Koo & Li, 2016).

A latent means centering approach was adopted (Section 6.3.) in the assessment of the measures with repeated observations including the examination of their intra-rater reliability. For example, the responses on each measure were expected to vary across five consecutive days, with each measure containing multiple items and hence, each measure received five ratings. The measures involved in this analysis included the IVs and mediators (Job control (JCQ); Workload (JCQ); Job Challenge scale (utility value); Psychological Meaningfulness scale; R-MAWS (autonomous motivation); and engagement (DV; Rich et al., 2010). This type of data typically underpins the multilevel analysis approach, which necessitates using relevant interrater agreement indices in addition to ICCs to support multilevel reliability (LeBreton & Senter, 2008). The R_{WG} measure was used to test the reliability of the repeated observation measures, using the variant specifically designed for multiple item measures, that is, $R_{WG(j)}$ (James, Demaree & Wolf, 1984). This analysis was conducted using the multilevel package in R (Bliese, 2016). Each measure was assessed by specifying: the item column numbers; and the number of random variance relative to the number of responses. The grouping variable was participants' PID. The results indicated sufficient consistency for participants amongst the repeated observation variables (Table 6.3.) (cf. Wood & Michaelides, 2016). All ICC2 values had good ($<.75$) to excellent reliability ($<.90$) (Koo & Li, 2016). In sum, all ICC1 values were greater than $.05$ (cf. Dyer et al., 2005), and the ICC2 values supported adopting a multilevel approach in the relevant measurement models (Section 6.2.), and in the path analysis (Section 6.4.).

Table 6.3.: Inter-Class Correlations (ICC1 & ICC2), $R^{*WG(j)}$, Confidence Intervals and F ratio, for the repeated measures IVs, mediators, and DV

Measures	$R^{*WG(j)}$	ICC 1	ICC 2	95% Confidence Interval for mean		F
				Lower	Upper	
Job Control subscale	.74	.54	.97	.67	.75	23.25***
Workload sub-scale	.42	.54	.97	.50	.60	18.68***
Job Challenge scale	.49	.44	.97	.33	.43	11.98***
Psychological Meaningfulness Scale	.66	.67	.98	.62	.70	2.73*
R-MAWS	.59	.76	.91	.67	.74	10.93***
Job Engagement scale	.62	.73	.99	.93	.95	16.63***

Note: * $p = .028$, *** $p < .001$

The number of participants who completed the daily measures varied over the five days, which indicates that there were some days where a measure had not been fully completed. For example, the Workload sub-scale (JCQ; Bakker et al., 2004) was completed by the whole sample between Days 1 and 3 only, that is 432 out of 455 potential observations. The patterns of missingness in the data are examined in the next sub-section (6.1.2).

6.1.2. Missing Values & (level specific) fit indices

The daily diary design of Study 2 requires assessing the patterns of missing data, to evaluate if this will impact on the study's findings (Binnewies, Sonnentag & Motza, 2007). It is acknowledged that estimation methods within multilevel analysis are well equipped to handle missing data in longitudinal research (Heck, 2009). However, it is also the case that most daily diary designs must contend with either non-compliance or participant attrition (Ohly et al., 2010). Missing values analysis (MVA) was conducted, at item-level, in SPSS to assess the patterns of missingness in the data, for the variables measured on all five days. In the six measures, the percentage of missing cases ranged from 13.2% (Psychological Meaningfulness scale & JCQ (Job Control)), to 20.9% (JCQ (Workload) & Job Engagement

scale). There were no missing cases on Days 1 and 2. The MVA was re-run to examine the specific days in which there were missing cases above 10%. This analysis showed that Days 3 and 4 had 5% or less missing cases, which is within an acceptable range (Li, 2013). On Day 5, there were three measures that had 13.2% missing cases (Workload; Job Challenge scale; and the Job Engagement scale). Finally, there were two measures with 12.1% of missing cases (Psychological Meaningfulness scale & JCQ (Job Control)), where eleven participants had not completed these measures on Day 5.

The EM means were evaluated using Little's (1998) MCAR test to assess patterns of missingness in all measures across the five days. There was a significant difference between the six measures assessed on all five days ($X^2 = 56.27$, $df = 12$, $p < .001$). This result can be attributed to the percentage of missing cases being slightly above 10% on Day 5 (the Psychological Meaningfulness scale, and the JCQ measure of job control). The number of participants who completed fully the six measures on Day 5 were examined under Univariate Statistics in SPSS. The result was consistent with the sample size of those who completed all five days of the diary study ($N = 79$). This supports the explanation that, rather than systematic missingness, the small percentage of missing cases ($\leq 13.2\%$) in over 400 observations were due, in part, to participant attrition.

The findings from the MCAR analysis indicate that the data is unbalanced (Loeys, Josephy & Dewitte, 2018), which can be addressed through the decisions around the fit indices employed in the subsequent analysis. The unbalanced data for two of the five days (that is, Day 4 and 5) and the non-independence of daily diary data, required adopting robust fit indices in the measurement models. In single-level SEM, the maximum-likelihood estimation is normally used, but this is based on observations being both independent and having equal levels of distribution (Rappaport, Amstadter & Neale, 2019). In accounting for the participant attrition, the adoption of a Multilevel path analysis will overcome the need for equal distribution of variables at both levels of analysis (Rappaport et al., 2019). The small percentage of missing cases are also accounted for by using the robust maximum likelihood (MLR) estimator, in both the measurement models (Section 6.2.) and in the path analysis (Section 6.4.).

A review of the literature adopting multilevel SEM analysis found that level specific fit indices are often absent, and that the reviewed studies are reliant on fit indices such as the RMSEA (Rappaport, et al., 2019). Other researchers had previously called for more emphasis to be placed on fit indices that are level specific (Ryu & West, 2009) to enable accuracy in model specification, at both levels of analysis. In both the measurement models and the

subsequent multilevel path analysis, estimation methods that produce robust standard errors are employed to examine levels specific fit (cf. Hsu, Kwok, Lin, & Acosta, 2015). For example, the between and within level SRMR fit indices (Bentler & Hu, 1998) are used to assesses the covariance matrices in each model. The following single-level fit indices were also employed, for the purpose of assessing overall model fit, Model chi-square (X^2 : Kline, 2005); the CFI (Bentler, 1990); RMSEA (Steiger, 1990). Due to the known sensitivities of model chi-square, the relative/normed chi-square is adopted (X^2/df ; Kenny & McCoach, 2003), and where applicable the Akaike Information Criterion (AIC) fit index was examined when making model comparisons.

6.2. Measurement Models

To examine the theorised measurement models, a single level (between-person) CFA approach was conducted for the time invariant measures (the HEMA scale and the ZTPI-S scale). Latent state-trait theory indicates that, when a variable is assessed multiple times, it will contain two levels, that is, the measurement occasion and the latent construct (Schermelleh-Engel, Keith, Moosbrugger, & Hodapp, 2004). Hence, a two-level CFA (MCFA) approach was adopted to examine the measures of the six variables tested across all five days (repeated observations), e.g., psychological meaningfulness. The MCFA approach for these measures enables any measurement error at the within-person level to be corrected (Heck & Thomas, 2009). This approach also serves as a preliminary examination of the variation across the grouping variable (between-person), and the level of variability across observations (within-person), which will provide an accurate estimate of the parameters (Pornprasertmanit, Lee & Preacher, 2012). The analytical approach for the measurement models was as follows: the first set of models examined the time-invariant IVs (eudaimonic and hedonic orientations; HEMA scale), and the between-person (only) moderator (employees' FTP; ZTPI-S). The single-level CFA models allow for the identification of the percentage of variance explained at the between-person level, and confirmation of the theorised factor structure.

The second set of measurement models adopted a stepwise procedural approach to build the MCFA models, in line with previous research (Hox, Moerbeek & van de Schoot, 2010) for the repeated observation measures. For each measure examined at both levels, a 'Maximum model' approach was adopted where the between-level of analysis is saturated, and the hypothesised factor structure specified at the within-person level only. This provides

the estimation of the within-level covariance matrix, by employing a saturated model at the between-level of analysis (Wu, Lin, Nian, & Hsiao, 2017). The within and between levels of analysis are then examined; first, the model-specific factors were assessed at the within-level with a general one-factor between model; and second, dependent upon theory, either a two or three-factor model was assessed at both within and between-levels. This three-step approach is informed by the need to account for accurate estimations of model fit at the two levels of analysis. An example of this is the adoption of a saturated between-person level in the ‘Maximum model’ at Step 1 (Ryu & West, 2009), and then the subsequent comparisons of model fit against the hypothesised level fit at both levels (Yuan & Bentler, 2007) (Steps 2 and 3).

The measurement models presented next are divided into two sections. In the first section, the time invariant measures are assessed, that is the HEMA scale (Huta & Ryan, 2010), and the ZTPI-S (Orkibi, 2015). In the second section, the measures of the IVs, the mediators, and the dependent variable are assessed, in that order, as repeated observations across all five days. For all measurement models, the assumptions of multivariate normality and linearity were examined in SPSS using histograms, P-P plots, and Mahalanobis distance. Both assumptions were met for all measures in the measurement models. Finally, the lavaan package in R (Rosseel, 2012) and the robust MLR estimator were used when testing both the single level CFA models, and the MCFA models, which follow. In the MCFA models in this section, and in the multilevel path analysis models (Section 6.4.), the grouping variable was PID. The ANOVA function from lavaan (Rosseel, 2012) was used, when relevant, for model comparisons.

6.2.1 Time-invariant Measures

1. *IV: Eudaimonic and Hedonic Orientations*

Eudaimonic and hedonic orientations were assessed as time-invariant IVs using the HEMA scale (Huta & Ryan, 2010). It was theorised that both motivational orientations would be distinct but related constructs that do not vary over time, that is, they are between-person only variables. A two-factor CFA model was hypothesised, with the two sub scales of the HEMA measure representing eudaimonic and hedonic orientations. To facilitate the assessment of a measurement model that provides the best fit and offers a comparison model, a one-factor CFA was conducted with all items, and provided an inadequate fit ($X^2 = 295.05$,

$df = 9, p < .001, CFI = .65, TLI = .42, RMSEA = .30, SRMR = .15$). A two-factor CFA model was then tested, where the three items representing eudaimonic orientations, and the three items representing hedonic orientations, were loaded onto their respective factors. The first two-factor CFA model provided a reasonable but not ideal fit ($X^2 = 36.97, df = 8, p < .001, CFI = .96, TLI = .93, RMSEA = .10, SRMR = .06$). When the goodness-of-fit indices were examined, the RMSEA (.10), which assesses the standardised residual correlations, indicated there were existing residual covariances that were unspecified in the current model. The items in the eudaimonic orientations sub-scale sought to measure the different aspects of this orientation such as growth, authenticity, and excellence (Bujacz et al., 2014; Appendix 4C). Therefore, the residual covariances of the two items representing growth in the eudaimonic sub-scale (Items 1 and 2), were allowed to covary in the second two-factor CFA model. This model provided the best fitting model ($X^2 = 19.23, df = 7, p = .008, CFI = .98, TLI = .97, RMSEA = .07, SRMR = .04$).

There was a notable improvement in model fit when a one-factor model was compared to a two-factor model. The scaled chi-square difference tests showed that the two-factor CFA model had a lower AIC, and this CFA model was significantly different from the one-factor model (Table 6.4).

Table 6.4.: Goodness-of-fit indices of models for HEMA scale (N=91)

Model	X^2	df	ΔX^2	Δdf	SRMR	RMSEA	CFI	TLI
Single Factor	295.05***	9			.15	.30	.65	.42
Two Factor	19.23**	7	275.82	2	.04	.07	.98	.97

Note: *** $p < .001$ ** $p = .008$

The standardised loadings for both eudaimonic and hedonic orientations loaded significantly onto their respective factors (Appendix 5; Table 2). There was a positive relationship between the residuals of the observed data and model-implied covariance matrices ($\beta = .51, p < .001$). This finding supports eudaimonic and hedonic orientations as distinct but related time invariant constructs (Huta & Ryan, 2010).

2. Moderator: Employees' Future and Present focused FTPs

Employees' FTPs are hypothesised to vary at the between-person level only, and act as a moderator, which will influence the hypothesised relationships, at Level 2. The hypothesised two-factor CFA model involved loading all items from the future FTP subscale onto one factor (Orkibi, 2015), and the two present sub-scales (hedonistic and fatalistic) were loaded onto the second factor, representing the present focused FTP. The items from the present sub-scales (hedonistic and fatalistic) and items from the future subscale residuals were allowed to covary within their respective factors. A two-factor CFA model with all present focused FTP items provided a reasonable but not ideal fitting model ($X^2 = 265.39$, $df = 40$, $p < .001$, CFI = .92, TLI = .89., RMSEA = .11, SRMR = .05). When the factor loadings and parameter estimates were examined, Item 1 from the present-hedonistic sub-scale did not load significantly onto the present focused FTP factor. In addition, when inter-item correlations were assessed, Item 1 had a high correlation with Item 2 ($r = .91$). This suggested issues with confounding between these two items. Reliability analysis employed in the psych package in R (Revelle, 2020) showed that the reliability of this sub-scale, with Item 1 removed, improved its internal consistency ($\alpha = .89$). Therefore, the two-factor CFA model was re-run in lavaan with Item 1 removed, and this provided a good fitting model ($X^2 = 125.88$, $df = 29$, $p < .001$, CFI = .96, TLI = .94., RMSEA = .09, SRMR = .03).

The two-factor model was compared to a one-factor CFA model where all items, except for Item 1, were loaded onto a general FTP factor. This model showed incremental differences in the fit indices ($X^2 = 117.29$, $df = 23$, $p < .001$, CFI = .97, TLI = .94, RMSEA = .10, SRMR = .04). The two-factor CFA model resulted in the best fit between the observed data and the model (Table 6.6) when compared using the chi-square statistics test. This result also supported the expected two-factor structure for employees' FTP, i.e., both present and future focused FTPs.

Table 6.5.: Goodness-of-fit indices of models for ZTPI-S scale: present and future focused FTP (N=91)

Model	X^2	df	ΔX^2	Δdf	SRMR	RMSEA	CFI	TLI
Single Factor	117.29***	23			.04	.10	.97	.94
Two Factor	125.89***	29	12.62	6	.03	.09	.96	.94

Note: *** $p < .001$

The items from the present-hedonistic and present-fatalistic sub-scales, and the items from the future sub-scale, loaded significantly onto their respective factors (that is, present and future focused FTP) (Appendix 5; Table 3). There was a moderate positive covariance between the residuals for the present and future factors ($\beta = .69, p < .001$). These findings indicate that present and future focused FTPs are distinct, but related, time perspective factors.

6.2.2. Measurement Models for Repeated Observations

The measurement models for variables measured on all five days required CFA methods, which account for the repeated observations, and support the simultaneous assessment of both levels of analysis. The stepwise two-level MCFA approach was detailed earlier in this section (Section 6.2.) (Hox et al., 2010).

1. IVs: Job Control and Workload

The measurement models for job control and workload were hypothesised as two-factors, whereby both are distinct concepts which will vary within observations (within-person), and across individuals (between-person). A “maximum model” approach was adopted first (cf. Hox & Maas, 2002). To create the saturated between-person level model. For example, all items for job control, and workload, were specified by including all possible covariances at Level 2 in the model. At the within-person level, the job control items, and workload items were loaded onto their respective factors. The two-factor within and saturated between MCFA model provided a reasonable fitting model at the within-person level ($X^2 = 32.31, df = 11, p < .001, CFI = .97, TLI = .93, RMSEA = .07, SRMR (within) = .03, SRMR$

(between) = .22) (Table 6.6). All items loaded significantly onto their respective factors, and job control and workload had no relationship ($\beta = .14, p = .096$). Their lack of a relationship supports both variables being distinct from one another.

The second two-factor MCFA model aimed to assess both job control and workload factors at the within-person level, and a general JD-R factor at the between-person level in the model. The addition of this general factor as a between-person factor, required all items from both the job control measure and workload measure to be loaded onto one factor at Level 2. The two-factor within and one factor between MCFA model provided a poor fitting model ($X^2 = 1099.12, df = 9, p < .001, CFI = .75, TLI = .45, RMSEA = .17, SRMR = .07$ (within), $SRMR = .25$ (between)) (Table 6.6). The items representing job control were not significant at the within-person level but loaded significantly onto the general JD-R factor at the between-person level. The three items representing workload were significant at the within-person level, but only Items 2 and 3 were significant at the between-person level.

At the within-person level, the covariance matrix showed that job control and workload are distinct predictors ($\beta = -.05, p = .645$). Finally, a two-factor MCFA within and between-level model was conducted, first to examine the theorised factor structure, and second to explain the level of variance at both levels of analysis. This provided a good fitting model ($X^2 = 17.39, df = 7, p = .015, CFI = .98, TLI = .95, RMSEA = .06, SRMR = .03$ (within), $SRMR = .05$ (between)).

Table 6.6.: MCFA models for two-factor Job Control and Workload

<i>Model</i>	X^2	df	ΔX^2	Δdf	<i>RMSEA</i>	<i>CFI</i>	<i>TLI</i>	<i>SRMR</i>
Maximum model	31.32***	11			.07	.97	.93	.03 (W) .22 (B)
Two-factor within & One-factor between model	112.93***	9	-144.25	2	.17	.75	.46	.07 (W) .25 (B)
Two-factor within & between model †	17.39*	7	95.54	2	.06	.98	.95	.03 (W) .05 (B)

Note: *** $p < .001$ * $p = .015$ W = within-person, B= between-person. † = supported MCFA model

The assessment of job control and workload, at both levels of analysis (Table 6.7), showed that all items loaded significantly onto their respective factors. The `lavInspect` function in `lavaan` (Rosseel, 2012) provided the ICC1 values at item-level for both IVs. There was moderate reliability for job control with values greater than .68 (Koo & Li, 2016), and sufficient reliability for workload with ICC1 values greater than .45 (Dyer et al., 2005). The mean ICC1 value for the model was .55, which indicates 45% of the variance was not explained at the between-person level, which supports the multilevel approach to the measurement model (Petrou et al., 2012).

The two items measuring job control were stronger indicators at the between-level of analysis: Item 1 explained 56% of the variance ($R^2 = .745$); and the error variance was non-significant ($\beta = .26, p = .995$). At within-person level, there were lower levels of variation within the observations such that Item 3 was a stronger indicator than Item 1 (Table 6.7), and the error variance was non-significant ($\beta = .24, p = .125$). Examination of the explained variance for job control showed that Items 1 and 3 explained 26% of the variance.

At the within-person level, Item 3 was the strongest indicator explaining 31% of the variance in perceived levels of workload ($R^2 = .55$). At the between-person level, all three items were significant indicators of perceived levels of workload (Table 6.7). The error variances showed that there was less unexplained variance at Level 2, and Item 3 was small and non-significant ($\beta = .003, p = .961$).

The two-factor within and between model was deemed to be a good fitting and parsimonious model of job control and workload (Table 6.7). The results indicated that workload showed higher levels of variance across observations (within-person) than job control. However, they remained distinct constructs at the between-person level ($\beta = .49, p = .969$) and at the within-person level ($\beta = .13, p = .136$).

Table 6.7.: Standardised Loadings and Standard Errors for two-factor MCFA Model of Job Control (JCQ; Brisson et al., 1988) and Workload (JCQ; Bakker et al., 2004).

Item descriptions †	Job Control		Workload	
	β	S.E.	β	S.E.
<i>Within</i>				
I have a lot to say about what happens on my job	.38	.16		
My job allows me to make a lot of decisions on my own	.41	.18		
Today, I have too much work to do			.78	.07
Today, my work requires working very hard			.71	.08
Today, I have to work very fast			.82	.08
<i>Between</i>				
I have a lot to say about what happens on my job	.87	.10		
My job allows me to make a lot of decisions on my own	.58	.10		
Today, I have too much work to do			.91	.10
Today, my work requires working very hard			.92	.10
Today, I have to work very fast			.99	.08

Note: † = Item loadings for Two-factor within and between models. β = Standardised Loadings, *S.E.* = Standard Errors.

2. Mediators (Between- & Within-person)

1. Psychological Meaningfulness and Utility Value

The psychological meaningfulness and utility value of tasks act as mediators in Study 2 which are also theorised to differ at both levels of analysis. The MCFA two factor within and saturated between model provided a reasonable but not ideal model fit ($\chi^2 = 126.16$, $df = 19$, $p < .001$, CFI = .82, TLI = .72, RMSEA = .13, SRMR = .04 (within). SRMR = .50 (between)) (Table 6.8). This finding indicated that all items loaded significantly at the within-person level, and it was necessary to continue to a MCFA two-factor within and one between level model (Hox et al., 2012).

The next MCFA model assessed the two factors at the within-person level, and a general factor for psychological meaningfulness and the utility value of a task at the between-person level. This general factor comprised all items from the psychological meaningfulness scale and the Job Challenge scale (that is, utility value; Cohen-Meiter et al., 2009). The two-factor MCFA within, and one factor between-level model, provided a reasonable fit at Level

1 ($X^2 = 44.74$, $df = 17$, $p < .001$, CFI = .96, TLI = .93, RMSEA = .06, SRMR = .04 (within), SRMR .11 (between) (Table 6.8). The items on both factors (psychological meaningfulness and utility value) loaded significantly at both levels of analysis. The covariance between psychological meaningfulness and utility value (at the within-person level) showed they are two distinct factors ($\beta = .41$, $p < .001$).

The final model examined the hypothesised two-factor within and between-person MCFA model, and the items for psychological meaningfulness and utility value were loaded onto their respective factors, at both levels of analysis. However, there was a small non-significant residual variance for Item 1 on the psychological meaningfulness scale at the between-person level ($\beta = -.02$, $p = .390$). The model was re-run with the residual covariance of Item 1 set to zero, and this provided the best fitting model ($X^2 = 21.23$, $df = 17$, $p = .216$, CFI = .99, TLI = .99, RMSEA = .03, SRMR = .02 (within), SRMR = .05 (between)).

Table 6.8.: MCFA models for two-factor the Psychological Meaningfulness scale, and the Job Challenge scale (Utility Value)

<i>Model</i>	X^2	df	ΔX^2	Δdf	RMSEA	CFI	TLI	SRMR
Maximum model	126.16***	19			.13	.82	.72	.04 (W) .50 (B)
Two-factor within & One-factor between model	44.74***	17	81.42	2	.06	.96	.93	.04 (W) .11 (B)
Two-factor within & between model†	21.23	17	23.50	0	.03	.99	.99	.02 (W) .05 (B)

Note: *** $p < .001$ W= within-person, B = between-person. † = supported MCFA model

The items for psychological meaningfulness and utility value continued to load significantly onto their respective factors, at both levels of analysis, in the final MCFA model (Table 6.9). The lavInspect function in R indicated that ICC1 values for the psychological meaningfulness scale, and the job challenge scale (utility value), all fell within the accepted values of $> .12$ (LeBreton & Senter, 2008; Woehr, Loignon, Schmidt, et al., 2015). The three items representing psychological meaningfulness ranged from .52 to .59, and the mean value was .56. Therefore, 44% of the variance was unexplained at the between-person level. Utility value (Job Challenge scale) had four items, with ICC1 values ranging from .32 to .41. The

mean value indicated that 64% of the variance in utility value was not explained at the between-person level. Therefore, the ICC1 values support adopting a multilevel approach in the path analysis due to unexplained variance in the model.

The factor loadings for both measures showed that Item 1 was the strongest indicator at the within-person level (Table 6.9.). The error variances for Item 1 from the Psychological Meaningfulness scale indicated that only 50% of the variance was explained at this level of analysis. In contrast, Item 1 from the Job Challenge scale explained under 40% of the variance in the repeated observations for the perceived utility value of tasks. When comparing the factor loadings for both measures, items on the Job Challenge Scale (i.e., utility value) were higher at the within-person level for Items 1 and 2, than those at the between-person level. In contrast, the factor loadings for psychological meaningfulness were higher at the between-person level than at the within-person level (Table 6.9.). Item 2 on both measures (Psychological Meaningfulness scale and the Job Challenge Scale) was the strongest indicator at the between-person level (Table 6.9.). For Item 2 on the Psychological Meaningfulness scale ($\beta = .02, p = .458$), and the Job Challenge Scale ($\beta = .04, p = .345$), error variances showed that only a small amount of the variance was unexplained at the between-person level of the model. The covariance between the two factors indicated they were related but distinct factors at the within-person ($\beta = .49, p < .001$), and at the between-person ($\beta = .77, p < .001$) levels.

Table 6.9.: Standardised Loadings and Standard Errors for two-factor MCFA Model for the Psychological Meaningfulness scale, and the Job Challenge Scale (Utility Value).

Item descriptions †	Psychological Meaningfulness		Utility Value	
	β	S.E.	β	S.E.
<i>Within</i>				
My job activities are significant to me	.63	.07		
The work I do on this job is meaningful to me	.61	.06		
I feel the work I do on my job is valuable	.42	.09		
I have new interesting thing to do in my job			.82	.07
My work gives me new challenges			.76	.07
My work is quite simple and routine (*)			.45	.08
<i>Between</i>				
My job activities are significant to me	.90	.10		
The work I do on this job is meaningful to me	.95	.10		
I feel the work I do on my job is valuable	.80	.13		
I have new interesting thing to do in my job			.72	.09
My work gives me new challenges			.74	.10
My work is quite simple and routine (*)			.65	.11

Note: * Reverse coded item, † = Item loadings for two-factor within and between model. β = Standardised Loadings, S.E. = Standard Errors.

2. Autonomous Motivation

The third mediating variable was autonomous motivation and measured at both levels of analysis. A “Maximum model” approach was adopted with all items loaded on the autonomous motivation factor at the within-person level, and a saturated between-level model. This analysis provided a reasonable fitted model at the within-person level ($\chi^2 = 102.99$, $df = 15$, $p < .001$, CFI = .92, TLI = .84, RMSEA = .13, SRMR = .02 (within), SRMR = .47 (between)) (Table 6.10.), providing preliminary support for the explained variance at the within-person level.

As this model was hypothesised as a one-factor model, this necessitated only two steps in comparison to the other MCFA models (Section 6.2.). The final MCFA model assessed a one-factor within- and one-factor between-person model. The three items for identified regulation and the three items for intrinsic motivation were loaded onto one factor at both levels of analysis. This model provided a good fitting model ($\chi^2 = 18.32$, $df = 11$, $p = .074$, CFI = .99, TLI = .98, RMSEA = .04, SRMR = .02 (within), SRMR = .02 (between)) (Table 6.10.).

Table 6.10.: MCFA models for two-factor Autonomous Motivation (R-MAWS) – identified regulation and intrinsic motivation

	X^2	df	ΔX^2	Δdf	$RMSEA$	CFI	TLI	SRMR
Model								
Maximum model	102.99***	15			.13	.92	.84	.02 (W) .47 (B)
One-factor within & between model†	18.32	11	84.67	4	.04	.99	.98	.02 (W) .02 (B)

Note: *** $p < .001$, W = within-person, B = between-person

All items loaded significantly onto the autonomous motivation factor at the within and between-person levels of analysis (Table 6.11). The `lavInspect` function in `lavaan` (Rosseel, 2012) indicated that the ICC1 values for the six items of the R-MAWS scale (Gagné et al., 2012) ranged from .59 to .71, and the mean value indicated that 67% of the variance was explained at the between-person level. These results show that more than 30% of unexplained variance remains at the within-person level.

The factor loadings were examined to assess the rationale for adopting a multilevel analysis. Item 3 was strongest indicator of identified regulation, and Item 5 was the strongest indicator for intrinsic motivation, across observations (within-person) (Table 6.11). The error variance for Item 3 showed that 43% of the variance was unexplained at within-person level, and for Item 5 there was 70% unexplained variance. Across participants, (that is, between-person), Item 3 was the strongest indicator of identified regulation, and Item 6 was the strongest indicator of intrinsic motivation (Table 6.11.). Examination of the error variances for Item 3 showed that there was 43% unexplained variance at this level, and for Item 6 there a small non-significant residual variance ($\beta = .04, p = .669$).

Table 6.11.: Standardised Loadings and Standard Errors for one-factor CFA Model of Autonomous Motivation (R-MAWS)

Item descriptions †	Identified Regulation		Intrinsic Motivation	
	β	S.E.	β	S.E.
<i>Within</i>				
I personally consider it important to put efforts in this job	.39	.09		
Putting efforts in...aligns with my personal values	.37	.09		
Putting efforts in... has personal significance to me	.41	.09		
Because I have fun doing my job			.66	.07
Because what I do in my work is exciting			.83	.07
Because the work I do is interesting			.70	.08
<i>Between</i>				
I personally consider it important to put efforts in this job	.87	.15		
Putting efforts in...aligns with my personal values	.81	.16		
Putting efforts in... has personal significance to me	1.10	.16		
Because I have fun doing my job			1.14	.13
Because what I do in my work is exciting			1.33	.11
Because the work I do is interesting			1.40	.13

Note: † = Item loadings for Two-factor within and between model. β = Standardised Loadings, S.E. = Standard Errors.

3. DV: Engagement

The DV in Study 2 was engagement, which was operationalised as a single factor variable, and comprised of three dimensions, that is, emotional, cognitive, and physical engagement (Kahn, 1990). The first MCFA model, again, started with taking “Maximum model” approach, all items were loaded onto an engagement factor at the within-person level, and a saturated between-person model. This model provided a less than ideal fit ($X^2 = 455.82$, $df = 85$, $p < .001$, CFI = .83, TLI = .78, RMSEA = .10, SRMR = .26 (within), SRMR = .75 (between)). However, all items loaded significantly onto the engagement factor at the within-person level of analysis.

The next MCFA model comprised of a one-factor within and between level model of engagement. this model provided the best fitting model for the engagement measure ($X^2 = 111.16$, $df = 69$, $p < .001$, CFI = .98, TLI = .97, RMSEA = .05, SRMR = .05 (within), SRMR = .03 (between)) (Table 6.12).

Table 6.12.: MCFA models for one-factor Engagement (Job Engagement scale)

	X ²	df	ΔX ²	Δdf	RMSEA	CFI	TLI	SRMR
Model								
Maximum model (one-factor)	455.82***	85			.10	.83	.78	.26 (W) .75 (B)
One-factor within & between model †	111.16***	69	539.55	16	.05	.98	.97	.05 (W) .03 (B)

Note: *** $p < .001$ W = Within-person B = Between-person. † = supported MCFA model

All items loaded significantly onto the engagement factor at both levels of analysis, that is, the items representing physical, emotional, and cognitive engagement (Kahn, 1990; Table 6.13). The model showed there was variability in levels of engagement within observations (within-person), and across individual participants (between-person). The ‘lavInspect’ function of lavaan (Rosseel, 2012) showed that the ICC1 values for the whole (11 Item) measure ranged from .54 to .72. The mean values at the between-person level for the physical engagement subscale indicated that it explained 57% of variation, emotional engagement explained 69%, and cognitive engagement explained 56%. Finally, the average ICC1 value for the eleven-item version of the Job Engagement scale (cf. Rich et al., 2010) showed that, at the between-person level, 62% of the variation in engagement was explained leaving a notable level of variance unexplained.

At the within-person level, Item 4 was the strongest indicator of physical engagement, and the error variance indicated only 45% was unexplained at this level of analysis. In terms of emotional engagement, Item 5 was the strongest indicator, and the error variance showed that 42% had not been explained at the within-person level. In the third subscale, that is, cognitive engagement, Item 9 was the strongest predictor), and the error variances indicated that 39% was still unexplained (Table 6.13.). At the between-person level, Item 1 was the strongest indicator of physical engagement, and the error variance showed that most of the variance was explained at this level of analysis ($\beta = .09, p = .012$). Akin to the within-person level of analysis, Item 5 was the strongest indicator of emotional engagement across participants, and the error variance showed that 40% of variance was unexplained at the between-person level. Finally, Item 10 was the strongest indicator of cognitive engagement,

and the error variance showed that most of the variance had been explained at the between-person level ($\beta = .01, p = .693$) (Table 6.13).

Table 6.13.: Standardised Loadings and Standard Errors for one-factor MCFA Model of Engagement (Job Engagement scale)

Item descriptions †	Engagement (within)		Engagement (between)	
	β	S.E.	β	S.E.
<i>Physical</i>				
Exert my full effort	.57	.08	1.16	.13
Devote a lot of energy	.56	.09	1.06	.14
Try hard to perform well	.40	.07	1.11	.14
Exert a lot of energy	.58	.07	1.10	.13
<i>Emotional</i>				
Interested in my job	.79	.09	1.11	.12
Proud of my job	.53	.08	1.10	.13
Positive about my job	.70	.08	1.10	.13
Excited about my job	.57	.07	1.10	.12
<i>Cognitive</i>				
At work, my mind is focused	.89	.08	1.07	.11
At work, I pay a lot of attention	.79	.08	1.11	.11
At work, I concentrate on my job	.78	.08	1.10	.12

Note: † = Item loadings for ne-factor within and between model. β = standardised loadings, *S.E.* = standard errors.

In summary, the results of the MCFA analysis for all repeated observation measures indicated that there was unexplained variance at the within-person level, which supports adopting multilevel path analysis in the subsequent analysis (Section 6.4).

6.3. Person-level Measures: A Latent Means Centering Approach & Measure Validity

The anticipated differences in the repeated observation variables were examined using a daily diary study design in Study 2, which included the psychological meaningfulness and utility value of tasks; autonomous motivation; and engagement. The hypothesised relationships involving these variables necessitate a centering approach that assesses both within and between-person effects. In the analytical considerations, the differences between

person-centring and grand-mean centring were examined and compared, with a latent means centering approach.

A person-centering approach is argued to be the best way to interpret any within-person effects, because it removes between-person effects, and grand-mean centering is appropriate when the focus is on day-specific relationships, and not unique within-person effects. However, the latter centering approach, typically adopted in multi-level analysis, has been linked to the potential for biased coefficient estimates (Asparouhov & Muthén, 2006; Lüdtke, Marsh, Robitzsch et al., 2008). The hypothesised relationships, in Study 2, are not testing day-specific relationships, but the assessment of the separation of within-person effects from between-person effects. In comparison to the group mean centered approach, a latent means centering approach to the variables provide a stronger basis to account for any measurement error (Asparouhov & Muthén, 2019). This is due to the group average (between-person level) of variables also being treated as a latent variable in multilevel path analysis models (Lüdtke, et al., 2008). Therefore, taking a latent means centering approach was deemed appropriate for testing the hypothesised relationships involving the repeated observation variables (Preacher, Zhang & Zyphur, 2016).

The prevailing mediation analytical approach, by Baron and Kenny (1986), does not enable the determination of the distinction between within-person and between-person effects of the mediators (Zhang, Zyphur & Preacher, 2009). The assessment of the within-person mediated relationships in the hypothesised model requires a clean separation of between and within effects, to provide unbiased parameter estimates. The use of a latent means centering approach supports this distinction when assessing mediation in multilevel path analysis models (Asparouhov & Muthén, 2019). The use of latent means centering is facilitated by the lavaan package in R (Rosseel, 2012), as a supported mainstream approach adopted in MSEM analysis (Muthén, 1994). Finally, as the hypothesised relationships include a time invariant moderator (employees' present and future focused FTPs) and IVS (eudaimonic and hedonic orientations), a grand mean centering approach was suitable for these variables, when creating the interaction terms in the moderation analysis (Section 6.4.).

6.3.1. Time Invariant and Repeated Observations Measures: Convergent and Discriminant Validity

The convergent and discriminant validity of the between-person only measures (HEMA & ZTPI-S), and four of the repeated observation measures (e.g., Job Engagement

scale), were examined previously in Study 1 (Chapter 4). However, the addition of job control and workload, as IVs in Study 2, warranted assessing the potential conceptual overlap and distinction between both measures, and the other measures adopted to test the hypothesised relationships.

Eudaimonic and hedonic orientations are expected to align with employees' present and future focused FTPs in explaining the role of the preferred self. Hence, their relationship is examined here for the purpose of convergent and discriminant validity. This necessitated assessing the two subscales from the measure of orientations (HEMA scale; Huta & Ryan, 2010), and the subscales measuring present and future FTP (ZTPI-S; Orkibi, 2015). There were small positive relationships between the eudaimonic and hedonic orientations, and Future and Present FTP subscales (Table 6.14.). These relationships indicated the following: there was evidence of discriminant validity; and no evidence of convergent validity. Eudaimonic and hedonic orientations had positive significant relationships with the three mediators: psychological meaningfulness; utility value; and autonomous motivation; and the DV, engagement (Table 6.14). These findings indicate there was minimal evidence of convergent validity, and that there was support for divergent validity between measures. When the two types of validity were assessed for job control and workload, both had positive relationships with the three mediating variables (Table 6.14). The relationship between the JCQ measure of job control and the Job Engagement scale ($r = .42, p = .01$), indicated minimal levels of convergent validity, i.e., conceptual overlap. The JCQ measure (Brisson et al., 1998) for job control showed limited evidence for convergent validity with either the Psychological Meaningfulness scale or the Job Challenge measure (utility value) (Table 6.14). There was a moderate positive relationship between the JCQ (job control) and the Job Engagement scale ($r = .44, p = .01$), across observations. This still falls below .80 and indicates evidence of discriminant validity. The JCQ subscale for workload (Bakker et al., 2004) had moderate positive relationships with the mediation variables, and the Job Engagement scale (DV), across observations (Table 6.14). However, the correlation coefficient is still well below .80 (Awang, 2014), which supports both measures as assessing two distinct concepts, i.e., discriminant validity. Job control and workload (JD-R antecedents; IVs) were measured at both levels of analysis, in Study 2. Therefore, their measures were also examined at the within-person level, for their associations with the other repeated observation measures assessed over five consecutive days (Table 6.14).

Table 6.14: Means, standard deviations, and correlations between measures at both levels of analysis

	Mean	S.D	1	2	3	4	5	6	7	8	9	10
1. Eudaimonic Orientations	3.81	.81	1									
2. Hedonic Orientations	3.24	.94	.08	1								
3. Future FTP	3.62	.84	.39**	.35**	1							
4. Present FTP	2.50	.81	.31**	.16**	.05	1						
5. Job Control	3.46	.85	.43**	.49**	.35**	.19**	1	.03	.44**	.05	.02	.68**
6. Workload	3.28	1.06	.22**	.35**	.13**	.10*	.15**	1	.04	.04	.03	.03
7. Psychological Meaningfulness	3.82	.95	.38**	.45**	.33**	.20**	.35**	.68**	1	.10*	.10*	.64**
8. Utility Value	3.47	.71	.30**	.57**	.20**	.05	.16**	.57**	.56**	1	.33**	.11*
9. Autonomous Motivation	5.02	1.22	.58**	.55**	.49**	.21**	.44**	.67**	.36**	.87**	1	.25**
10. Job Engagement	5.08	1.19	.53**	.55**	.49**	.18**	.42**	.59**	.47**	.83**	.66**	1

Note: N Observations = 433-455, N Employees = 79-91, *SD* = Standard Deviation, * $p = .05$, ** $p < .01$. Correlations at the between-person level below the '1', and correlations with latent centered (repeated observation) measures to the right of the 1

6.4. Preliminary analysis

Preliminary analysis was used to assess if any of the key demographic variables had statistical covariance with the IVs prior to the main analysis. A correlation analysis was conducted in SPSS between the two continuous demographic variables, i.e., age and tenure (years in organisation), with all the mean scores of the four IVs. Most participants fell within the 25-49 age range (89%) with a mean age of 33 years and had two more years of tenure (70%). There was a small positive relationship between age and eudaimonic orientations ($r = .140, p < .01$), job control ($r = .144, p < .01$), and workload ($r = .130, p < .01$). Age had a negative non-significant relationship with hedonic orientations ($r = -.065, p = .172$). Participants tenure had no relationship with eudaimonic orientations ($r = .060, p = .550$), hedonic orientations ($r = .018, p = .858$), job control ($r = -.003, p = .975$) or workload ($r = .041, p = .685$). Hence, there was minimal support for the need to control for age in the main analysis.

Due to a slightly higher level of females (54.2%) within the sample, and Independent Samples t-test was run with the mean scores of all four IVs. The results indicated that there was no difference for males ($M = 3.73, SD = .74$), and females ($M = 3.87, SD = .86$) for eudaimonic orientations $t(453) = -.181, p = .072$. Similar results were found for gender and hedonic orientations. There was no significant differences for males ($M = 3.19, SD = .92$) or females ($M = 3.27, SD = .95$) $t(453) = -.88, p = .381$. The analysis also found no significant differences for males ($M = 9.84, SD = 1.53$), and females ($M = 9.71, SD = 1.64$) for job control $t(453) = .911, p = .363$; and for males ($M = 9.76, SD = 3.27$), and females ($M = 9.90, SD = 3.10$) for workload $t(453) = -.455, p = .657$.

6.5. Main analysis

The adoption of multi-level path analysis enables assessing data with a hierarchal structure and mitigates bias in the standard errors (Kenny, et al., 2003). While there is no formal hierarchal structure in the data for Study 2, such as individuals within teams, research has noted that “observations may be dependent, for instance, because they share some common feature, come from some common source, are affected by social interaction, or are arranged spatially or sequentially in time” (Kenny & Judd, 1996, p. 138). All participants completed the time invariant measures on Day 1, and all other measures once per day over

five consecutive days. Hence, the hypothesised relationships in Study 2 required a statistical approach for assessing variables that were measured repeatedly (N= 455) that are nested within individuals (N= 91), and hence, the assumption of independence is not applicable (Raudenbush & Bryk, 2002). Therefore, the multilevel path analysis approach, supported by previous analysis (Section 6.2.) enables the distinction between both the between and the within-person effects to be assessed, in the repeated observation variables (Bell, Fairbrother & Jones, 2018).

6.5.1. Building the Multilevel Path Model & testing the Hypothesised Relationships

1. Main Analytical Approach: Specification of the Hypothesised Model

Supported by the analytical approach adopted in previous research using multilevel path analysis (Armutlulu & Noyan, 2011; Pekaar, Bakker, van der Linden, et al., 2018), a sequential approach was taken in building the model that would test the hypothesised relationships. The methods for examining the different relationships in Study 2 are outlined next.

In testing the hypothesised model, all the direct relationships implied in the hypothesised relationship were specified first. The time invariant IVs (eudaimonic and hedonic orientations) were added as predictors of engagement at the between-person level, and the repeated observation IVs (job control and workload) were added as predictors of engagement, at both levels of analysis. In assessing the direct relationships between the IVs and the mediating variables, job control and workload, were added as predictors of psychological meaningfulness, utility value, and autonomous motivation, at both levels in the model. Eudaimonic and hedonic orientations were added as predictors of the three mediators, and the time invariant moderator employees' present and future focused FTPs, at the between-person level.

Akin to the approach taken in Study 1 (Chapter 4), the appropriate methods for assessing the mediated relationships were considered, with the key difference being that the multilevel nature of many of the hypothesised relationships. The adoption of the latent means centering approach, for the repeated observation variables, was supported by using the lavaan package in R. Based on Preacher and colleagues (2010) method to test multilevel mediation, the indirect effects of each mediator, in the direct relationships in the hypothesised model, were examined using bootstrapping to assess if these effects were larger than zero (Preacher,

Zyphur & Zhang, 2010). This approach is acknowledged as the new standard in mediation analysis, which is argued to produce more robust confidence intervals when assessing indirect effects (cf. MacKinnon et al., 2004; Zhao et al., 2010).

The final stage of the model specification involved the assessment of the hypothesised moderating effects of employees' present and future focused FTPs, and their interactions with their associated motivational orientations. First, employees' FTPs were expected to strengthen the relationships between job control, workload, and the three mediators. Hence, both present and future focused FTPs was regressed onto each IV and mediating variable in the model. Second, in promoting the direct effects of the IVs (job control and workload), at the between-person level, on the three mediators (psychological meaningfulness, utility value, and autonomous motivation), their interaction effects of eudaimonic and hedonic orientations and their respective FTPs were tested. To test these interaction effects, both orientations and the FTP variables were grand mean centered before creating the interaction terms. The interaction terms were created by multiplying eudaimonic orientations*future focused FTP, and multiplying hedonic orientations*present FTP, in line with the theorised relationships, and both interaction terms were included within the full model. After specifying the full model, the outcome of testing hypothesised relationships is examined next.

2. Testing the Hypothesised Model: Direct Relationships between the Independent Variables and the Three Mediating Variables and Dependent Variable

The first model with only the IVs and DV specified provided a reasonable model fit ($X^2 = 452.10$, $df = 248$, $p < .001$, $CFI = .94$, $TLI = .93$, $RMSEA = .05$, $SRMR = .06$ (within), $SRMR = .15$ (between)). At the within-person level, job control ($\beta = .43$, $p < .001$), and workload ($\beta = .36$, $p < .001$), had positive relationships with engagement. When the relationships were examined at the between-person level, job control remained a strong predictor of engagement ($\beta = 1.13$, $p = .01$). However, there was a non-significant relationship between workload and engagement ($\beta = .23$, $p = .540$). In addition, eudaimonic orientations had a positive relationship with engagement ($\beta = .20$, $p = .01$), but there was no relationship between hedonic orientations and engagement ($\beta = .002$, $p = .963$).

When the mediating variables were added to the model with direct relationships in Model 2, there was incremental changes between the IVs and DV. The relationships at the within-person level showed that job control, and workload remained predictors of

engagement. The next relationships examined were the direct relationships between the IVs and the three mediators. Job control had a significant positive relationship with psychological meaningfulness, as did workload. There were also positive significant relationships between job control ($\beta = .18, p = .021$), workload, and utility value. Finally, while there was a positive relationship between job control and autonomous motivation, workload was not a significant predictor ($\beta = .07, p = .410$) (Table 6.15).

At the between-person level in the model, eudaimonic orientations ($\beta = .18, p = .002$), job control, and workload, had positive relationships with engagement. There was also a positive significant relationship between job control, and psychological meaningfulness. However, workload ($\beta = .14, p = .406$), eudaimonic orientations ($\beta = .05, p = .371$), and hedonic orientations ($\beta = -.02, p = .599$), were not related to psychological meaningfulness. Both job control, and workload ($\beta = .36, p = .020$), were positively related to utility value (Table 6.15).

When the relationships between the IVs and autonomous motivation were examined, both job control, and eudaimonic orientations, were significant positive antecedents. However, workload ($\beta = .10, p = .573$), and hedonic orientations ($\beta = .04, p = .092$), had positive non-significant relationships with autonomous motivation. Finally, eudaimonic orientations had a strong positive relationship with a future focused FTP, and hedonic orientations had a positive relationship with a present FTP ($\beta = .52, p = .011$) (Table 6.15). As hedonic orientations were not a significant predictor of the mediating variables (e.g., utility value) or the DV (engagement), it was dropped as an IV in the next model.

Table 6.15.: Standardised coefficients for the inherent direct relationships in the hypothesised model (Model 2)

Variables & levels	β	S.E.	CI 2.5%	CI 97.5%
<i>Within-level</i>				
Psychological meaningfulness (DV)				
Job control	.21**	.07	.07	.35
Workload	.22**	.08	.06	.39
Utility Value (DV)				
Job control	.18*	.08	.03	.33
Workload	.60***	.10	.39	.81
Autonomous motivation (DV)				
Job control	.27**	.07	.13	.41
Workload	.07	.08	-.09	.22
Engagement (DV)				
Job control	.14*	.07	.00	.27
Workload	.33***	.08	.18	.49
<i>Between-person level</i>				
Psychological meaningfulness (DV)				
Job control	1.02***	.18	.68	1.37
Workload	.14	.16	-.19	.46
Eudaimonic orientations	.05	.06	-.06	.16
Hedonic orientations	-.02	.05	-.12	.07
FTP	.02	.02	-.03	.06
Utility Value (DV)				
Job control	.64***	.16	.33	.95
Workload	.36*	.15	.06	.65
Eudaimonic orientations	.03	.06	-.08	.14
Hedonic orientations	-.01	.05	-.01	.08
FTP	.00	.02	-.05	.04
Autonomous motivation (DV)				
Job control	1.06***	.19	.69	1.43
Workload	.10	.17	-.25	.45
Eudaimonic orientations	.20**	.06	.07	.32
Hedonic orientations	.04	.05	-.06	.14
FTP	.04	.02	-.01	.09
Engagement (DV)				
Job control	.62***	.17	.29	.95
Workload	.46**	.17	.13	.79
Eudaimonic orientations	.18*	.06	.07	.29
Hedonic orientations	-.02	.05	-.11	.07
FTP	.04	.02	-.07	.09
Employees' future focused FTP (DV)				
Eudaimonic orientations	.65**	.23	.21	1.09
Employees' present FTP (DV)				
Hedonic orientations	.52*	.20	.12	.91

Note: * $p < .05$ ** $p = .01$ *** $p < .001$. β = Standardised loadings. S.E. = Standard Errors. CI = Confidence Intervals.

The model was re-run with the non-significant relationships removed to capture the existing direct relationships within the observed data. This provided a reasonably fitted model ($X^2 = 1413.57$, $df = 797$, $p < .001$, $CFI = .91$, $TLI = .90$, $RMSEA = .05$, $SRMR = .07$ (within), $SRMR = .13$ (between)). At the within-person level, job control had a positive relationship with autonomous motivation ($\beta = .24$, $p < .001$). Workload had positive relationships with psychological meaningfulness ($\beta = .22$, $p = .035$), utility value ($\beta = .61$, $p < .001$), and engagement ($\beta = .40$, $p < .001$). This model provided a clearer picture of the inherent direct relationships in the hypotheses, at the within-person level.

At the between-person level, job control had significant positive relationships with each of the following: psychological meaningfulness ($\beta = 2.04$, $p < .001$); utility value ($\beta = .89$, $p < .001$); and autonomous motivation ($\beta = 2.06$, $p < .001$). Workload had positive relationships with utility value ($\beta = .30$, $p = .038$), and engagement ($\beta = .60$, $p = .01$). Finally, there was a stronger positive relationship between eudaimonic orientations and a future focused FTP ($\beta = .84$, $p < .001$).

3. The Addition of Mediation and Moderation: The Multilevel Path Model

Employees' present and future focused FTPs were hypothesised to influence the between-person relationships between job control, workload, and the three mediating variables in the hypothesised model (psychological meaningfulness, utility value, and autonomous motivation). Those three variables were also hypothesised to mediate the relationships between the IVs (eudaimonic orientations, job control, and workload), and engagement (DV), at both levels of analysis (Figure 6.1.). The hypothesised mediated relationships are presented next, in conjunction with the moderating effect of the future focused FTP and its interaction with eudaimonic orientations, on these relationships.

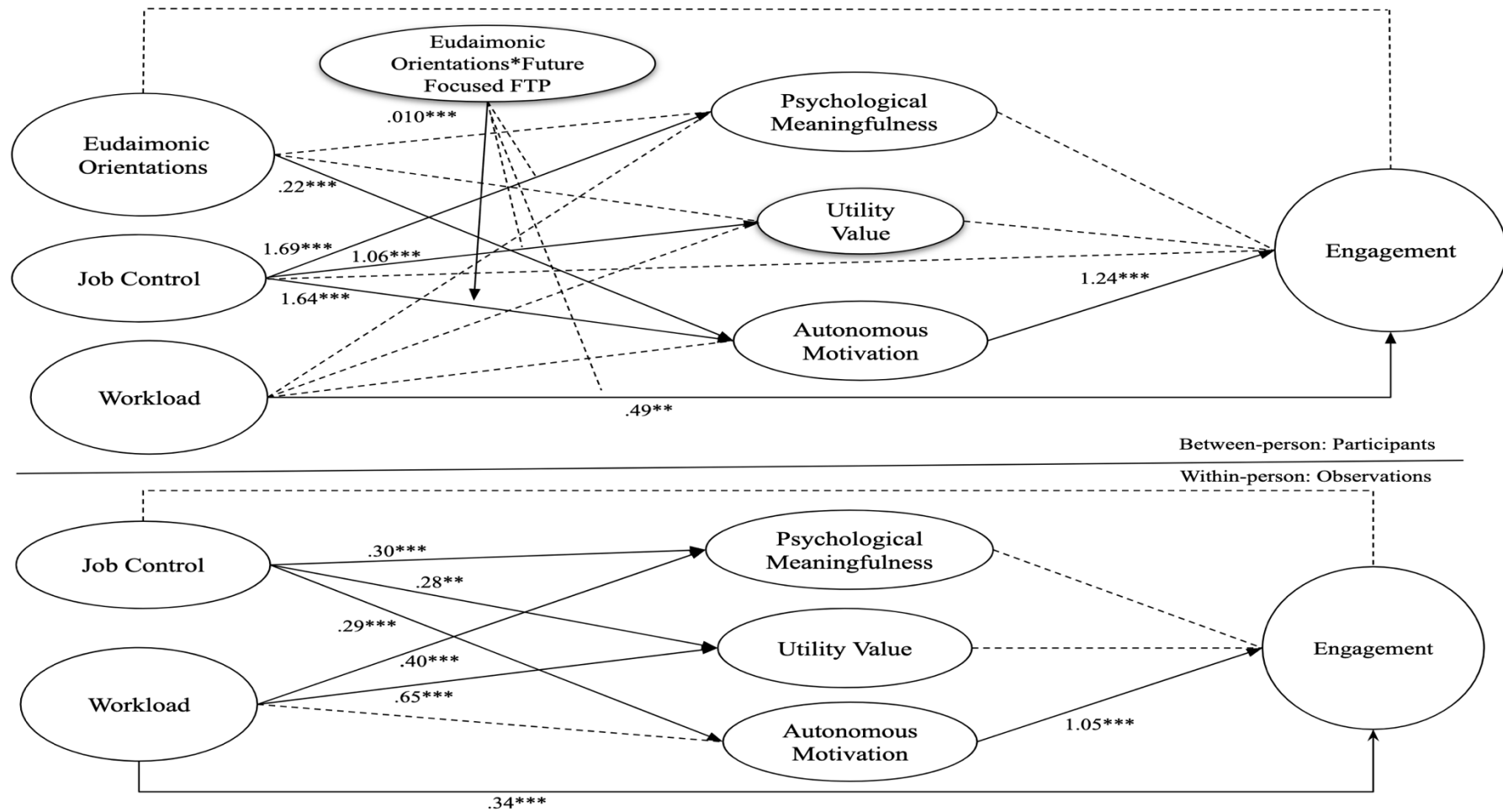


Figure 6.1.: Multilevel path model of person-related (orientations) and situational factors (job control and workload), as antecedents of engagement. ($X^2 = 1557.79$, $df = 822$, $p < .001$, $CFI = .91$, $TLI = .90$, $RMSEA = .05$, $SRMR = .07$ (within), $SRMR = .18$ (between)). Note: ** $p = .01$, *** $p < .001$. Dashed lines depict non-significant relationships.

The indirect effects and conditional indirect effects were added to the model containing the significant direct relationships, to test those hypothesised relationships. This model produced an adequately fitted model ($X^2 = 1557.79$, $df = 822$, $p < .001$, $CFI = .91$, $TLI = .90$, $RMSEA = .05$, $SRMR = .07$ (within), $SRMR = .18$ (between)). At the within-person level, job control had positive relationships with psychological meaningfulness ($\beta = .30$, $p = .004$) (Hypothesis 5.1b), utility value ($\beta = .28$, $p = .01$) (Hypothesis 5.1e), and autonomous motivation (Hypothesis 5.1h). Workload had positive relationships with psychological meaningfulness (Hypothesis 5.1c), utility value (Hypothesis 5.1f), and engagement (Figure 6.1.). These relationships indicated that half of the hypothesised relationships between job control, workload, and the three mediators were supported. There was one exception, despite support for a positive relationship with engagement, workload did not predict their levels of autonomous motivation, across the working week. The direct relationship between the three mediators and engagement was only evident for autonomous motivation (Figure 6.1.). This indicates that neither psychological meaningfulness ($\beta = .12$, $p = .351$) nor utility value ($\beta = .18$, $p = .069$) had a direct relationship with engagement at the within-person level. Hence, autonomous motivation was the only variable examined in the mediated relationships. The indirect mediating pathways were examined next. There was a positive indirect effect between workload and engagement via autonomous motivation, and the direct positive effect between workload and engagement, suggests that the indirect effect represents a partial mediation, at Level 1 (Table 6.16).

The positive direct and indirect relationships at the between-person level were examined next. Eudaimonic orientations and general levels of workload were not significant predictors of the three mediators, however, workload was a significant predictor of engagement ($\beta = .49$, $p = .004$). The implied positive relationship between eudaimonic orientations and a future focused FTP in the subsequent moderated relationships, that follow, was supported ($\beta = .88$, $p < .001$). The results indicated mixed support for the hypothesised relationships involving the job control and workload (IVs), at the between-person level. Employees' general levels of job control had significant relationships with psychological meaningfulness (Hypothesis 5.1b), utility value (Hypothesis 5.1e), autonomous motivation (Hypothesis 5.1h) (Figure 6.1.), and a non-significant negative relationship with engagement ($\beta = -.11$, $p = .830$) (Table 6.16). Employees' levels of autonomous motivation were the only mediating variable to predict their levels of engagement (Figure 6.1.). The specified parameters were examined in the final step, and there was support for mediation between job

control and engagement. There was a positive indirect effect between job control and engagement via autonomous motivation (Hypothesis 5.1h), despite the negative direct effect between job control and engagement being non-significant. Hence, employees' levels of autonomous motivation fully explained this relationship (Table 6.16.).

Table 6.16: Standardised coefficients for the indirect effects autonomous motivation, and direct effects of job control, on engagement

IV	β	S.E.	BCI 2.5%	BCI 97.5%
<u>Mediator Autonomous motivation (within)</u>				
Job control (Indirect)	.37***	.07	.24	.51
Job control (Direct)	.29***	.04	.22	.36
<u>Mediator Autonomous motivation (between)</u>				
Job control (Indirect)	2.01**	.70	.64	3.39
Job control (Direct)	-.11	.50	-1.09	.88

Note: *** $p < .001$, ** $p = .01$, BCI = bootstrap confidence intervals

In assessing the moderation hypotheses, employees' FTPs, and their motivational orientations, were hypothesised to moderate the relationships between their levels of job control, workload, and the three mediating variables, at the between-person level. The lack of support for hedonic orientations as a predictor (Table 6.15.) meant it was not meaningful to include the interaction between hedonic orientations and a present focused FTP, in the moderation analysis. Eudaimonic orientations and a future focused FTP had a strong positive direct relationship ($\beta = .65$, $p < .001$), and eudaimonic orientations had positive relationships with the mediating variables, and engagement (Table 6.15). The relationships between workload and the three mediators; and job control, psychological meaningfulness, and utility value, were non-significant. The interaction between eudaimonic orientations and a future focused FTP did not moderate these relationships (Figure 6.1.). However, the relationship between job control and autonomous motivation was moderated by the interaction between eudaimonic orientations and a future focused FTP ($\beta = .01$, $p < .001$) (Hypothesis 5.2e).

To examine further the significant interaction effects, the simple slopes parameters were added to the model, to assess if the values of the moderator at one SD above and below the mean, were significantly different from one another. At one SD above the mean the effect of eudaimonic orientations*future focused FTP was stronger ($\beta = 1.696$, $p < .001$, 95%CI =

1.11, 2.10) than the moderating effects at one SD below the mean ($\beta = 1.690, p < .001, 95\%CI = 1.29, 2.09$). These results indicate that the slopes were significantly different from zero, and at one SD above the mean, the moderator was significant. The three-way interaction effects between job control (IV), and the interaction between eudaimonic orientations and a future focused FTP, on autonomous motivation (DV), were examined in a moderated regression using the jtools package (Long, 2022). This interaction was then plotted using the interaction probe function from the interaction package in R (Long, 2019). The observed range of values for future focused FTP were 5.00-20.00.

The specific effects for the slopes of job control at each level of the future focused FTP (and its interaction with eudaimonic orientations), on the relationship between job control and autonomous motivation, were examined. The slopes for job control at different levels of the specified interaction indicated that at +1SD above the mean of eudaimonic orientations: that the slope for job control at +1SD ($\beta = 1.03, t = 4.22, p < .001$) and at -1SD ($\beta = 1.09, t = 2.57, p < .001$) were incrementally different and significant. This indicated that when employees' eudaimonic orientations were low, job control remained a negative predictor of autonomous motivation, which was influenced by higher levels of future focused FTP. The slopes for job control at different levels of the specified interaction indicated that at -1SD below the mean of eudaimonic orientations: that the slope for job control with future focused FTP at +1SD ($\beta = .16, t = .37, p = .71$) was not significant, and at -1SD ($\beta = 2.11, t = 8.00, p < .001$) was significant. These findings indicate that the relationship between job control and autonomous motivation is weaker when employees are less future focused in their FTP and score lower on eudaimonic orientations (Figure 6.2).

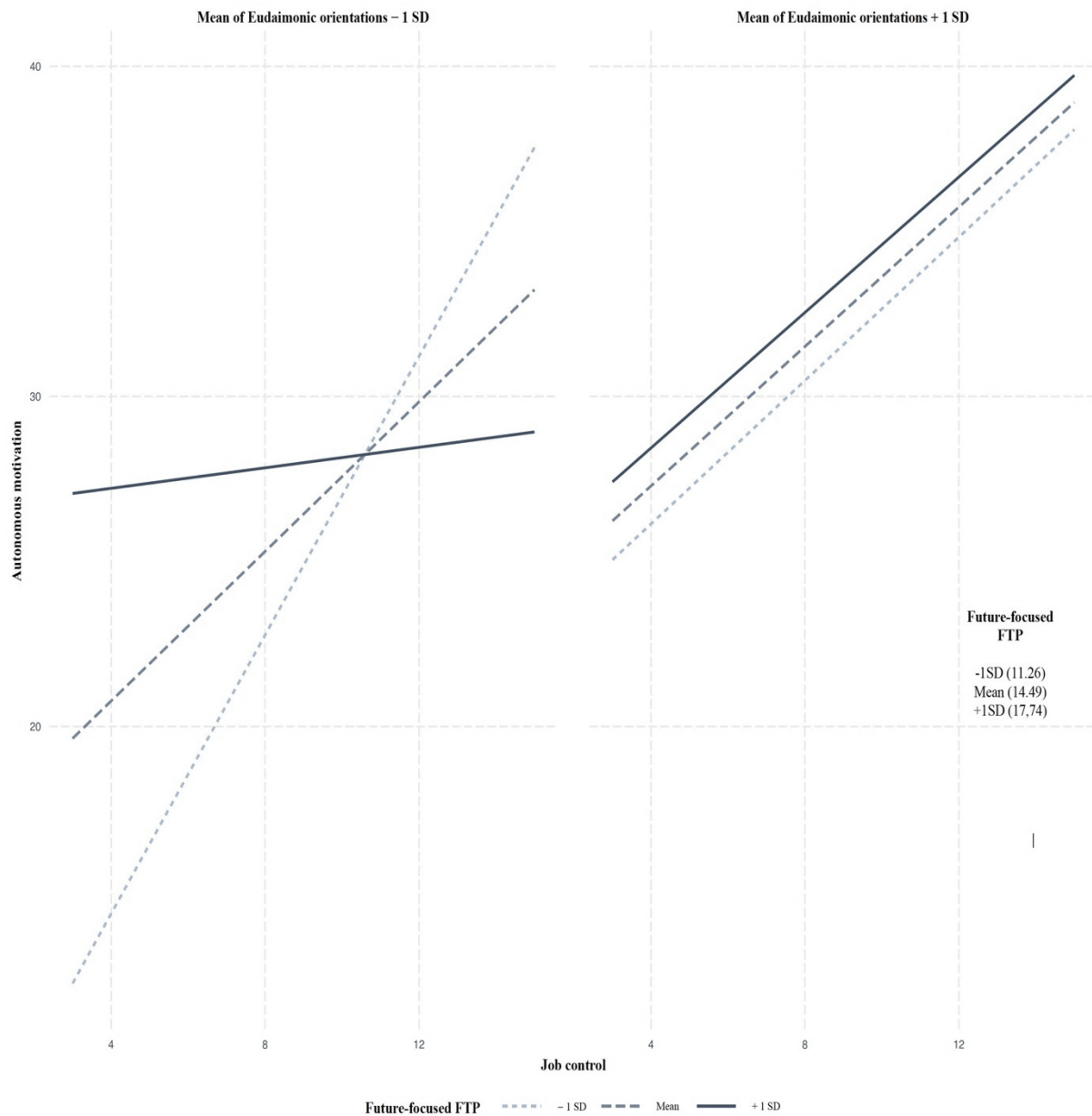


Figure 6.2.: Simple slope plot for the three-way interaction between job control, eudaimonic orientations and future focused FTP on autonomous motivation

Finally, conditional indirect effects were specified to align with the inherent moderated mediation hypotheses in the theorised model (Hypothesis 5.3a-c). Due to the non-significant relationships, presented earlier, conditional indirect effects were only tested using the interaction term discussed in the preceding arguments on the moderated relationships (eudaimonic orientations*future focused FTP). The moderated mediation pathways were specified in the model for the supported mediated relationship between job control, autonomous motivation, and engagement. There was no evidence to support conditional indirect effects. At all levels of the moderator, the effects were marginally different from one

another, significant, and had bootstrapped confidence intervals that did not cross zero (Table 6.16). The moderated mediation index was non-significant ($\beta = .003, p > .05$).

Table 6.17: Employees' future focused FTP conditional indirect effects

Defined parameters	β	S.E.	BCI 95%	
			2.50%	97.50%
Eudaimonic Orientations*Future focused FTP				
FTP = - 1	2.01**	.70	.64	3.34
FTP = 0	2.01**	.70	.64	3.39
FTP = 1	2.01**	.70	.63	3.34

Note: ** $p = .01$, BCI = bootstrapped confidence intervals

6.6. Discussion & Conclusions

One aim of Study 2 was to collectively examine person-related factors (orientations and employees' FTPs) and situational factors (job control and workload), as motivational antecedents of engagement. In meeting this aim, the role of the preferred self was extended in this study to understand further the relationship between JD-R antecedents and engagement. A second aim was to examine the momentary nature of employees' perceptions of their tasks, and their levels of autonomous motivation. The influencing role of employees' present and future focused FTPs, and their interactions with their respective orientations also served to challenge the assumptions of JD-R theory, that job demands always lead to negative outcomes for employees (cf. Bakker & Demerouti, 2017). For example, it was anticipated the influence of employees' preferred selves would underpin the way they use their resources and promote positive appraisals of their job demands.

The results in Study 2 re-confirmed the positive associations between eudaimonic and hedonic orientations, and their respective FTPs, as one way to conceptualise the preferred self. The interaction between eudaimonic orientations and a future focused FTP promoted the effects of job control on increased levels of autonomous motivation. There was also stronger support for the relationship between JD-R antecedents, momentary levels of task perceptions, and autonomous motivation, compared to the limited support at the between-person level (Table 6.15). The consistent support for workload as an antecedent of engagement in this study challenge the assumptions of JD-R theory. The implications of all findings are examined next in relation to the hypothesised relationships.

6.6.1. Person-related & Situational Factors: Antecedents of Employees' Task Perceptions and levels of Autonomous Motivation

The current study assessed employees' momentary levels of job control and workload, concurrently with the orientations, as motivational antecedents of their task perceptions and autonomous motivation. Their direct relationships with psychological meaningfulness are examined first. There was support for the positive relationships between both general and momentary levels of job control, workload, and the perceived psychological meaningfulness of tasks (Hypothesis 5.1.b & 5.1c). This indicates that employees perceive their work to be psychologically meaningful, when they have higher levels of job control, and when they are motivated rather than strained by greater levels of workload. There is limited research assessing JD-R variables as antecedents of Kahn's (1990) psychological conditions for engagement, which includes psychological meaningfulness (cf. Fletcher, 2016). Therefore, these findings provide insight into employees' perceptions of the psychological meaningfulness of their tasks, while also addressing the need for multiple processes to explain the meaningfulness of work (cf. Rosso et al., 2010). Furthermore, the positive relationships, at momentary level, add to the literature on JD-R, by extending our understanding of JD-R antecedents, from a multilevel approach. The JD-R literature has primarily adopted Schaufeli and Colleagues' conceptualisation of engagement, and in more recent thinking, the need to examine further JD-R antecedents at multiple levels of analysis was acknowledged (cf. Bakker & Demerouti, 2017). The findings in the current study indicate that both job control and workload, as situational factors, provide insight into employee's momentary perceptions of the psychological meaningfulness of their work.

The anticipated positive relationships between eudaimonic and hedonic orientations and psychological meaningfulness, were not supported. This contradicts the findings from Study 1, where eudaimonic orientations was a strong positive antecedent of this construct. Authenticity is argued to be central to the meaningfulness of work (Rosso, et al., 2010), and that self-development, as a form of growth, enhances the experience of work being perceived as meaningful (Britt et al., 2001). Both authenticity and growth are inherent needs that underpin eudaimonic orientations (cf. Bujacz, et al., 2014). Hence, the non-significant relationship between eudaimonic orientations and psychological meaningfulness was unexpected. It is perceivable that the support for job control and workload as situational factors, provided stronger rationale than eudaimonic orientations as a person-related factor, in explaining the psychological meaningfulness of work. Hence, this finding strengthens the

rationale for collectively examining both situational and person-related factors, as antecedents in the current study. The lack of support for hedonic orientations as a positive predictor of psychological meaningfulness, implies that the tasks at the start of the working week (Day 1 of this study; Chapter 5) did not promote pleasure; and thus, were not perceived to provide a return of investment (cf. May et al., 2004). Taken together, when employees had higher levels of job control and workload, they perceived their work as more psychologically meaningful, across the working week.

There was inconsistent support for the relationships between the motivational antecedents in this study, and the perceived utility value of tasks. Both general and momentary levels of job control were consistent positive antecedents of utility value (Hypothesis 5.1e), as was the case with momentary levels of workload (Hypothesis 5.1f). These results showed that the anticipated utility value of their tasks, thus, their perceived usefulness was determined by higher levels of job control, and to a lesser extent incremental changes in employees' perceived workload. This implies that whether employees will perceive their tasks in the present, as useful for future outcomes (De Volder & Lens, 1982), is dependent on their autonomy of their tasks and the demands they face, in the present. The positive relationship between workload and utility value, as the levels of challenges current tasks present, aligns with previous theoretical assertions, that job demands relate to increased efforts being required to meet demands (Fernet, et al., 2015). Additionally, previous research supports an increase in motivation when challenges at work are met (Widmer et al., 2012), further aligning with workload as a motivational antecedent of utility value. The results at the individual level were unexpected. Eudaimonic and hedonic orientations and general levels of workload did not predict the perceived utility value of tasks. For example, eudaimonic orientations as a strong antecedent of utility value (cf. Chapter 4) was expected to be replicated in the current study. However, the addition of JD-R antecedents, and the support for the relationship between JD-R and utility value, at the within-person level, suggest that akin to psychological meaningfulness, it was working conditions (JD-R) that determined the perceived utility value of tasks, in Study 2.

There was partial support for JD-R as antecedents of their levels of autonomous motivation. The positive relationship between general and momentary levels of job control and autonomous motivation, indicated that the ability to exert a level of autonomy over the way one completes their work (via job control) promoted employees finding their work autonomously motivating. On a conceptual level, this supports the idea when employees are afforded a level of job control over their work, this will impact whether a task is pursued due

to personal interest (intrinsic motivation) or personal importance (identified regulation) (Gagné & Deci, 2005). This result aligns with previous findings which indicate that employees' levels of job resources will enable the achievement of goals (Bakker & Demerouti, 2007). Furthermore, the support for this relationship is congruent with SDT and the need for autonomy; and the motivational process of the JD-R theory (Demerouti & Bakker, 2017). In contrast, employees' appraisals of their current (general), and momentary levels of workload, did not promote autonomously motivated actions. This finding aligns with the arguments relating to hindrance demands, which impede employees' ability to act with autonomy over their work (cf. Tadić et al., 2015). It also contradicts the expected buffering effect of employees' levels of resources (such as job control) mitigating the effect of their workload (as a demand) (Bakker & Demerouti, 2017; Xanthopoulou et al., 2007). For example, the findings in Study 2 supported the positive relationship between job control and autonomous motivation, yet employees' levels of job control did not mitigate the effects of their workload.

The positive relationship between' eudaimonic orientations and autonomous motivation was the only significant relationship, between the person-related factors and the three mediators (Hypothesis 5.1g) (Figure 6.1.). Hedonic orientations did not have a relationship with autonomous motivation nor the psychological meaningfulness and utility value of tasks. This finding implies that the eudaimonic pursuit of growth or excellence (Bujacz et al., 2014) by employees was a stronger motivator, and thus predictor, of their levels of autonomous motivation. The inclusion of hedonic orientations, in Study 2, was based the literature examined in previous chapters (that is Chapters 2 and 3). The findings in relation to hedonic orientations aligned with Study 1, an exception being that they had a negative relationship with engagement, in the current study. The results for the direct relationships in Study 2, indicate that employees' levels of job control, and workload, provided a greater explanation of the way they perceive and evaluate their tasks. It also highlighted the importance of person-related factors (eudaimonic orientations) and situational factors (job control), in extending our understanding of autonomous motivation.

As part of the overarching research question, in this thesis, one aim was to examine the role of the preferred self, and how it extends our understanding of the relationship between JD-R and engagement. Employees' present and future focused FTPs were anticipated to align with their eudaimonic and hedonic orientations, to support the conceptualisation of their preferred selves. The positive relationships between eudaimonic and hedonic orientations, and their respective FTPs, that is future, and present FTPs, were

reconfirmed in this study (Table 6.15.) (cf. Chapter 4). Given that hedonic orientations did not act as antecedent in the direct relationships, its interaction with present FTPs was not assessed as a moderator. The interaction between eudaimonic orientations and a future focused FTP, to understand how the preferred self is expressed, was anticipated to influence the way employees' use their resources (via job control) and promote positive appraisals of their general levels of workload, leading to different task perceptions and autonomous motivation. However, only job control had a relationship with one of the mediating variables, that is, autonomous motivation. These moderating effects were assessed at the between-person level only (Figure 6.1.). As a cognitive-motivational characteristic, their future focused FTPs was theorised to influence the way employees evaluate their present tasks, and the implications of their actions distant future valued outcomes (Lens et al., 2012).

In assessing the moderating effects, the interaction between eudaimonic orientations and a future focused FTP, had a significant effect on the relationship between job control and general levels of autonomous motivation (Hypothesis 5.2e; Figure 6.1.). The overall findings found that there were significant differences in the slopes of job control, which suggest that when eudaimonic orientations were higher, employees' levels of a future focused FTP strengthened the relationship between job control and autonomous motivation. Conversely, when employees had low levels of eudaimonic orientations, the effects of job control on autonomous motivation were weakened by lower levels of a future focused FTP. Previous research found that when assessing the intrinsic or extrinsic motivation underpinning a future goal, the role of autonomy impacts individuals' motivation (Simons, et al., 2004), and that the relationship between having a future orientation and achieving valued future outcomes, aligns with an extrinsic locus of causality (cf. Ames, 1992). Job control as an extrinsic motivating factor would be expected to apply to an external cause for their actions at work. However, research supports the alignment between employees' internal locus of causality and having a choice over the way work is approached (cf. Patall, Cooper & Robinson, 2008). This may explain the reasons person-related factors, that is the interaction between eudaimonic orientation and a future focused FTP, affected the relationship between job control and autonomous motivation. These results indicate that, the way employees' express their preferred selves provided insight into the way their levels of job control promote autonomous motivation. This also implies that employees' preferred self is based on long-term motivational processes that stem from the individual, and add insights beyond their working conditions, to explain their autonomous motivation at work.

6.6.2. Motivational Factors that explain Engagement via Psychological Mechanisms

Psychological meaningfulness, utility value and autonomous motivation were hypothesised to mediate the relationships between the IVs (eudaimonic and hedonic orientations, job control, and workload), and engagement (DV). The direct relationships between the mediators and engagement were only evident, between general and momentary levels of autonomous motivation and engagement (Figure 6.1.). While job control did not predict engagement, workload was a consistent antecedent, between individuals and across the working week. This finding contrasts with previous understandings of the relationship between JD-R antecedents and engagement, whereby job demands are not typically assessed as antecedents of engagement (Demerouti & Bakker, 2017; Xanthopoulou, Bakker, Dollard et al., 2007). The indirect effect of autonomous motivation explained fully, the relationship between job control and engagement. This finding implies that employee's levels of job control promote their autonomous actions, and consequently their engagement in their work. In essence, this relationship is congruent with SDT, in that autonomy is one of the key psychological needs within that theory and underpins the way job control is operationally defined in this study. Furthermore, it supports the alignment between a needs-based theory of motivation (SDT) and a needs-satisfaction theory of engagement (cf. Kahn, 1990), in this thesis.

There were unexpected findings in the mediated relationships involving the perceived psychological meaningfulness of tasks. While job control (general and momentary levels) and workload (momentary levels) were supported as antecedents, it had no relationship with engagement; and did not mediate the positive relationship between workload and engagement (Figure 6.1.). Key propositions within the needs-satisfaction theory of engagement (cf. Kahn, 1990), include the need to fulfil psychological meaningfulness, which leads to engagement. This psychological condition is consistently found to be a strong mediator in the relationship between engagement and its antecedents (cf. Fletcher, 2016; May et al., 2004; Olivier & Rothman, 2007). The relationship between eudaimonic orientations and engagement was explained by psychological meaningfulness in Study 1 (cf. Chapter 4). Hence, it was expected this would be replicated in the current study, however, employees' situational factors (JD-R antecedents) contributed to our understanding of the psychological meaningfulness of tasks, and not their person-related factors. Nevertheless, it was autonomous motivation that explained the relationship between job resources and engagement.

Finally, due to the lack of support for mediation at the between-person level, this restricted the assessment of the inherent moderated mediation in the hypothesised model. When the mediated relationship between job control and engagement via autonomous motivation was examined further, there was no support for the conditional indirect effects of the interaction between eudaimonic orientations and having a future focused FTP (employees' preferred selves). This may be due to the lack of a direct relationship between eudaimonic orientations and engagement, in the hypothesised model.

6.6.3. What did the addition of JD-R as Situational IVs achieve?

The strengths of the second study are examined here. The results of Study 2 aimed to provide the means to complete the answer the overarching research question in this thesis: To what extent do orientations and the future time perspective explain the role of the preferred self, and extend our understanding of the relationship between job resources, job demands, and engagement? Eudaimonic orientations maintained a strong positive relationship with a future focused FTP, which aligns with the way employees' preferred self is conceptualised in this thesis. While there was a direct relationship between eudaimonic orientations and engagement, this relationship did not persist with the addition of the mediating variables (Table 6.15; Section 6.4.1.). Eudaimonic orientations did offer insight on general levels of autonomous motivation, and its positive interaction with a future focused FTP, influenced the mediated relationship between job control and engagement (Figure 6.1.). In contrast, hedonic orientations did not add further insight into the preferred self, or the relationship between JD-R and engagement.

The impact of employees' levels of job control offered mixed results. In understanding the complex nature of the reasons employees find work meaningful (cf. Rosso et al., 2010). Job control predicted the psychological meaningfulness of tasks at the individual level. The relationship between general levels of job control and autonomous motivation was strengthened by the further understanding of the effects of job control, based on the interaction between eudaimonic orientations and a future focused FTP. These findings indicate that adopting a time perspective offered new insight into the role of job resources and employees' levels of motivation. The ability to make decisions over the way they do their work (Van der Doef & Maes, 1999), via their levels of job control, also explained the reasons employees were autonomously motivated across the working week, and at the individual level. In summary, both motivational (job control) and long-term processes (eudaimonic

orientations and FTP) are involved in understanding how employees will sustain their levels of engagement, irrespective of the levels of job resources afforded to them by their work. Hence, if employees' eudaimonic needs for growth, authenticity, and excellence (cf. Bujacz et al., 2014) are met by their work tasks (cf. Kahn, 1990), alongside their characteristic tendencies to persist in challenging work for long-term gains, this mitigates the level of job control afforded to them. The results of examining the role of employees' FTP, and their person-related factors via their eudaimonic orientations, supported further the application of the FTP theory in this thesis.

Employees' levels of workload extended our understanding of the reasons they will perceive their work as psychologically meaningful and as having utility value for the future, across the working week. The level of persistence in employees' actions, thus engagement, was also more aligned with the perceived demands placed on them rather than their resources. Therefore, momentary levels of workload contributed to the assessment of whether tasks provided worthy return of investment (psychological meaningfulness); and were found to motivate employees to invest the required effort for engaging with challenging tasks. Correspondingly, momentary levels of utility value indicate the following: that the levels of challenge in daily tasks act as a mechanism for understanding the perceptions of the usefulness of current tasks, for achieving an immediate or distant future valued outcome.

An additional strength of the current study, from a methodological perspective, was the support for the internal consistency of the measure for employees' FTP (ZTPI-S; Orkibi, 2015). Research has struggled to reconcile the need to adopt theories that explain time-related, thus a Time Perspective, constructs due to conceptual (cf. Kooij et al., 2018), but also measurement issues. There is evidence of cross-cultural support and application of the full ZTPI measure across different contexts (Milfont et al., 2008; Apostolidas & Fieulaine, 2004). However, a prevailing limitation is the internal consistency of some subscales, in failing to reach the minimum accepted level. In Study 2, all subscales of the 11-item version of the ZTPI-S had strong internal consistency (Appendix 4C), which contradicts the findings in research that used this measure of the FTP (cf. Košťál, Lukavská & Lukavsky, 2015; Milfont et al., 2015). Based on the previous rigorous examination of all versions of the ZPTI-S (Appendix 2; Table 1), the present-fatalistic subscale had the highest level of internal inconsistency. However, the 4-item version of this subscale, adopted in the current study, had strong internal consistency well above the accepted threshold (Section 6.1.1). Only one previous study (Carelli, B. Wiberg & M. Wiberg, 2011) has found a similar level of internal consistency for the present-hedonistic subscale. However, that study required 15 items for

that subscale to reach the accepted level of reliability. In contrast, the 3-item version of the present-hedonistic subscale employed in Study 2 provides stronger internal consistency for all subscales from the ZTPI-S. This finding indicates that a reliable way to measure employees' FTP can be achieved and applied, in organizational research.

6.6.4. Study Limitations & Future Research

Part of the findings of Study 2 discussed in the preceding subsections could be considered, both as a basis for future research, and as limitations of the current study. The lack of support for a direct relationship between job control and engagement contradicts previous findings in the literature. For example, research has found a positive relationship between job control and daily levels of engagement (Xanthopoulou, et al., 2009). Furthermore, it also contradicts the assumptions of JD-R theory and our current understanding of engagement, that is, job resources as established antecedents of engagement (cf. Bakker & Demerouti, 2017). A key difference between previous research, and Study 2, is that it adopts the prevailing approach to conceptualising engagement, which focuses on employees' levels of engagement underpinned by the dimensions of vigour, dedication, and absorption (Schaufeli, 2017; Schaufeli, et al., 2002). In contrast, Kahn's (1990) needs-satisfaction theory of engagement places the emphasis on understanding the reasons employees invest themselves, thus engage, or withdraw from their work. A question for future research, which was partially answered in the current study via indirect effects, is what other psychological mechanisms may explain further the way job resources impact the reasons employee's levels of engagement.

The support for autonomous motivation as a psychological mechanism that explained fully the relationship between job control and engagement, infers that applying SDT to understanding the link between job resources and the needs-satisfaction approach to engagement, provides further insights to answer the way job resources translate into engagement. Previous research has examined other resources such as social support and skill variety (cf. Demerouti & Bakker, 2011), that can be mapped onto the need for relatedness and competence, respectively. While there is empirical support using the prevailing approach, the assessment of the way employees use their available resources that determine their levels of engagement (i.e., Kahn, 1990) could be extended by including multiple job resources antecedents. Furthermore, the alignment between the psychological needs of SDT, and the needs-satisfaction theory of engagement, provides a theoretical base for understanding these

relationships. This first empirical alignment of SDT and Kahn's (1990) theory of engagement provides the foundation for future research.

Employees' FTP as a cognitive-motivational characteristic was assessed on the first day of Study 2, and employees will have a degree of both present and future focused FTPs (Lens et al., 2012), but typically show a preference for one of these perspectives. For example, an employee might be characteristically future focused, and still engage in pursuing short-term and more immediate (present focused) valued outcomes. In examining further, the insight gained from taking this time perspective approach, future research could assess employees' FTP over a longer timeframe than a five-day daily diary study. This would facilitate a greater understanding of the influence of employees' characteristic present and future focused FTPs, on their decision making (via resources) and their evaluations of their daily tasks (via demands). Specifically, due to the support for the positive association between hedonic orientations and a present focused FTP, the exact working conditions for when this form of preferred self may be evident, is worth consideration. It is also conceivable that measuring JD-R antecedents over a longer timeframe, or at weekly intervals, could have provided more insight into the role of the preferred self in the relationship between JD-R and engagement.

The final chapter in this thesis (Chapter 7) will bring together the following: first, the central arguments presented in this thesis; and second, the implications of the results of both Study 1 and Study 2 for this thesis, and their wider theoretical contributions. The conclusions drawn from both studies in Chapter 7 will also reflect on practical implications and key limitations within the thesis before examining further avenues for future research.

Chapter 7

General Discussion

The purpose of this final chapter is to discuss the arguments which are central to this thesis. This includes examining whether the findings from the two studies supported the aim to extend our understanding of the way employees' express their preferred selves, and consequently extend our current understanding of engagement. Hence, this chapter revisits the research problems addressed by Study 1 and Study 2, that underpin answering the overarching research question: To what extent do orientations and the future time perspective explain the preferred self, and extend our understanding of the relationship between job resources, job demands, and engagement? In doing so, these discussions are organised by 1) reintroducing the purpose of both studies; 2) summarising the empirical findings from this thesis; 3) the theoretical considerations in relation to the research question; 4) and the wider theoretical contributions and practical implications. The chapter ends with reflections on the limitations in this thesis, the potential avenues for future research, and the conclusions pertaining to the research question.

7.1. Overview of thesis: the Two Studies

The purpose of Study 1 was to examine employees' motivational characteristics to extend our current understanding of engagement. To achieve this, eudaimonia and hedonia were operationalised as orientations, which underpin the habitual pursuit of different tasks. This was addressed two issues., First, the need to understand the inherent time perspective differences in eudaimonic and hedonic processes. Thus, the positive relationships between 1) eudaimonic orientations and a future FTP, and 2) hedonic orientations and a present FTP were examined. Second their theorised relationships acted as one way to explain the role of the previously un-examined concept of the preferred self (cf. Kahn, 1990). The FTP concept of utility value (cf. Lens et al., 2012) was also introduced in Study 1, as a psychological mechanism, to explain the relationship between motivational orientations and engagement. A refined literature review provided the rationale for the hypothesised relationships, and the methodology for this study - presented in Chapter 3. The results of the analysis that tested the hypothesised relationships (Chapter 4) are summarised in Table 7.1. Correspondingly, the research question was partly answered in Study 1 in this thesis.

Study 2 extended the first study in the following three ways: first, it collectively examined situational factors via job control and workload, and person-related factors eudaimonic and hedonic orientations, as motivational antecedents; and second the importance of employees' FTP, and its relationships with both motivational orientations, to explain the role of the preferred self in the JD-R and engagement relationship. Thirdly, the daily diary design enabled the assessment of employees' inherent short-term task perceptions (e.g., psychological meaningfulness), and levels of both autonomous motivation and engagement. The purpose of Study 2, therefore, was to examine the addition of situational factors alongside the motivational characteristics that underpin employees' preferred selves. In doing so, it was anticipated to extend our understanding of the relationship between job demands and engagement. This required challenging the assumptions of JD-R theory, and the need for clarity on the psychological processes (cf. Schaufeli & Taris, 2014). Finally, the adoption of the FTP theory within the framework of this thesis aimed to provide insights into the role of FTP, in boosting the positive effects of job resources, and challenging the assumptions pertaining to job demands (cf. Bakker & Demerouti, 2017). Furthermore, the integration of this theory with SDT (cf. Gagné & Deci, 2005) was anticipated to challenge the dominance of JD-R theory in engagement research. Psychological mechanisms from both theories, utility value (FTP) and autonomous motivation (SDT) informed the relationships between motivational orientations, JD-R antecedents, and engagement. The rationale for the hypothesised relationships, and the methodology in Study 2 were presented in Chapter 5; and the results in Chapter 6. The theoretical considerations for answering the research question based on these findings are discussed in subsequent sections.

7.2. Extending our understanding of Motivational Processes & Engagement: Empirical findings from Two Studies

7.2.1. *Motivational Processes: Orientations, JD-R, and the FTP*

The results of the two studies (see Table 7.1) aligned, for the most part, with the aim of this thesis to understand the motivational factors, contexts, and psychological pathways, which lead to engagement. In both studies, the positive relationships between eudaimonic orientations and a future focused FTP, and hedonic orientations and a present focused FTP, were confirmed. Eudaimonic orientations were a consistent IV in Study 1. As a proximal

antecedent, they explained employees' perceptions of the psychological meaningfulness and utility value of tasks, their levels of autonomous motivation, and engagement. In contrast, hedonic orientations were the only a direct between-person antecedent of engagement in Study 2. It did not, as theorised, predict employees' task perceptions such as psychological meaningfulness, and autonomous motivation in either study. Eudaimonic orientations as a person related motivational IV for each mediator, are now assessed in turn, and contrasted with the addition of JD-R antecedents, in the second study.

The positive relationship between eudaimonic orientations and the psychological meaningfulness of work in Study 1, was not replicated in Study 2. General levels of job control were the strongest predictor of psychological meaningfulness between individuals, while momentary levels of workload predicted psychological meaningfulness, across the working week. Taken together, these findings show that when employees are eudaimonically motivated, have higher levels of job control, and believe they can meet the demands of their workload, they will perceive their work as psychologically meaningful.

There was also a positive relationship between eudaimonic orientations and the utility value of a task, in Study 1. However, it was the JD-R antecedents, in Study 2, that extended our understanding of the perceived utility value of current tasks. Job control was the strongest antecedent at the individual (between-person) level. Across the working week, employees' momentary levels of workload were a stronger antecedent than job control of the perceived utility value of tasks. Thus, the predictive power of JD-R, as motivational antecedents, provided a partial answer to, and support for the assertions in, the overarching research question in this thesis. While the relationship between eudaimonic orientations and the perceived utility value of tasks in the first study was not replicated, employees' future focused FTPs had notable implications for their levels of autonomous motivation.

Employees' eudaimonic orientations (Study 1) and general levels of job control (Study 2) were the strongest predictors of their levels of autonomous motivation. Eudaimonic orientations had a positive relationship with identified regulation in Study 1, and autonomous motivation in Study 2. This relationship was strengthened by employees' future focused FTP in Study 1, and the relationship between job control and autonomous motivation was influenced by the interaction between eudaimonic orientations and higher levels of a future focused FTP, in Study 2 (Table 7.1.). Overall, the moderating effects of eudaimonic orientations (Huta & Ryan, 2010), and its interaction with a future focused FTP (Lens et al., 2012), in this thesis, explained further employees' task perceptions and levels of autonomous motivation. First, the positive relationships between the eudaimonic orientations and two

mediators (psychological meaningfulness and identified regulation) were strengthened (Study 1). Second, the relationship between job control and autonomous motivation (Study 2) were positively influenced by the interaction between eudaimonic orientations and a future focused FTP. These findings indicate that there was merit to applying an FTP to extend our understanding of the relationship between person-related factors (orientations), situational factors (job control and workload), and employees' perceptions of their work, leading to engagement. Furthermore, it implies that employees' express their preferred selves based on their eudaimonic orientations and motivation, in the present, for achieving distant future outcomes.

7.2.2. Motivational Mechanisms: Explaining Engagement via Psychological Meaningfulness, Utility Value, and Autonomous Motivation

The mediated relationships, in both studies, offered further insight into the way employees' evaluations of their tasks, and their levels of autonomous motivation, explain the relationships between motivational orientations, JD-R antecedents, and engagement. These relationships produced mixed results in relation to the hypothesised relationships, in this thesis (Table 7.1.). In Study 1, the perceived psychological meaningfulness was the strongest mediator, thus, predictor of engagement, however, this relationship was not replicated. Both general and momentary levels of autonomous motivation acted as the only mediator in the relationships between eudaimonic orientations (Study 1), job control (Study 2), and engagement. The limited support for the direct relationship between task perceptions and engagement (Study 2), may be explained by workload being the only antecedent to have a relationship with both general and momentary levels of engagement. Additionally, momentary levels of this antecedent made a stronger contribution, compared to job control, to employees' tasks perceptions, and autonomous motivation.

In Study 1, eudaimonic orientations had a strong relationship with engagement, which was partially mediated by psychological meaningfulness, and whether employees' personal values aligned with their tasks (identified regulation; autonomous motivation) (Table 7.1.). The lack of support for a relationship between intrinsic motivation and engagement in Study 1 was unexpected. This may be explained by the assessment of the two dimensions of autonomous motivation separately within the hypotheses. The perceived utility value of tasks did not explain the relationship between motivational orientations and engagement in Study 1, nor the relationships between JD-R antecedents and engagement in Study 2. There were

mixed findings in relation to autonomous motivation as a mediator, in this thesis. In Study 1, identified regulation was the weakest of the three mediators in relation to engagement (Table 7.1). Contrastingly, employees' general and momentary levels of autonomous motivation was the only mediating variable, which explained the relationship between job control and engagement. Thus, providing support for both dimensions of autonomous motivation, that is, identified regulation and intrinsic motivation, as psychological mechanisms, which explain engagement (Study 2). Taken together, these findings suggest that employees are more likely to persist in their daily actions when autonomously motivated, but that the personal importance of a task (identified regulation) (Gagné & Deci, 2005) could be the deciding factor in employee's sustainment of their levels of engagement.

Finally, there were additional notable results, between the two studies in this thesis. There was support for the positive relationship between hedonic orientations and a present focused FTP, which established the role of the FTP in hedonic processes. While employees' hedonic orientations had a negative relationship with engagement in Study 1, there was no relationship in Study 2. The inherent conditional indirect effects of eudaimonic and hedonic orientations and their associated FTPs, in the relationships between the IVs and the mediating variables, were not supported in either of the two studies in this thesis (Table 7.1). Building on the empirical findings, the theoretical considerations underpinning both studies, in relation to the overarching research question, are examined next.

Table 7.1.: Summary of the key findings from Study 1 and Study 2

Study 1		
Hypothesis		Outcome
<i>H3.1a & 3.1b</i>	Eudaimonic orientations are positively associated with a future focused FTP, and hedonic orientations are positively associated with a present focused FTP.	Supported
<i>H3.2a & 3.2b</i>	The relationship between eudaimonic and hedonic orientations and engagement, is mediated by psychological meaningfulness.	Mediation supported – psychological meaningfulness mediated the relationship between eudaimonic orientations and engagement. Unsupported – no mediation between hedonic orientations and engagement. Eudaimonic orientations positively related to psychological meaningfulness and engagement. Hedonic orientations negatively related to engagement.
<i>H3.2c & 3.2d</i>	The relationship between eudaimonic and hedonic orientations and engagement, is mediated by utility value.	Mediation unsupported - utility value did not mediate the relationships between eudaimonic and hedonic orientations, and engagement. Direct relationships: Eudaimonic orientations were positively related to utility value, and engagement
<i>H3.2e & 3.2f</i>	The relationship between eudaimonic and engagement is mediated by identified regulation; and the relationship between hedonic orientations and engagement is mediated by intrinsic motivation.	Supported - identified regulation mediated the relationship between eudaimonic orientations and engagement. Eudaimonic orientations and identified regulation were both positively related to engagement. 2 nd Mediation unsupported – intrinsic motivation did not mediate the relationship between hedonic orientations and engagement. No support for direct relationship.
<i>H3.3a & 3.3b</i>	The positive relationship between eudaimonic orientations and psychological meaningfulness is moderated by higher levels of a future focused FTP; The positive relationship between hedonic orientations and psychological meaningfulness is moderated by higher levels of a present focused FTP.	Moderation supported for a future focused FTP, on the relationship between eudaimonic orientations and psychological meaningfulness. Unsupported for a present focused FTP, hedonic orientations, and psychological meaningfulness.

<i>H3.3c & 3.3d</i>	The positive relationship between eudaimonic orientations and utility value is moderated by higher levels of a future focused FTP; the positive relationship between hedonic orientations and utility value is moderated by higher levels of a present focused FTP.	Unsupported
<i>H3.3e & 3.3f</i>	The positive relationship between eudaimonic orientations and identified regulation is moderated by higher levels of a future focused FTP; the positive relationship between hedonic orientations and intrinsic motivation is moderated by higher levels of a present focused FTP.	Moderation supported for higher levels of a future focused FTP on the relationship between eudaimonic orientations and identified regulation. Unsupported for a present focused FTP, hedonic orientations, and intrinsic motivation.
<i>H3.4a</i>	Employees' FTPs moderate the mediated relationship between eudaimonic and hedonic orientations, and engagement via increased psychological meaningfulness. The indirect relationship is stronger for higher levels of their characteristic present or future focused FTPs.	Unsupported
<i>H3.4b</i>	Employees' FTPs moderate the mediated relationship between eudaimonic and hedonic orientations, and engagement via increased utility value. The indirect relationship is stronger for higher levels of their characteristic present or future focused FTPs.	Unsupported
<i>H3.4c</i>	Employees' FTPs moderate the mediated relationship between eudaimonic and hedonic orientations, and engagement via increased identified regulation and intrinsic motivation, respectively. The indirect relationship is stronger for higher levels of their characteristic present or future focused FTPs.	Unsupported

Study 2

Hypothesis		Outcome
<i>H5.1a</i>	The positive relationships between both eudaimonic and hedonic orientations, and engagement will be mediated by increased psychological meaningfulness.	Unsupported
<i>H5.1b & 5.1c</i>	The positive relationships between both general and momentary levels of job control and workload, and engagement will be mediated by increased psychological meaningfulness.	Unsupported – psychological meaningfulness did not mediate the relationships between job control, workload, and engagement. Job control was positively related to psychological meaningfulness, and both levels of workload were positively related to engagement; momentary workload was positively related to psychological meaningfulness
<i>H5.1d</i>	The positive relationships between both eudaimonic and hedonic orientations and engagement will be mediated by increased utility value.	Unsupported
<i>H5.1e & 5.1f</i>	The positive relationships between both general and momentary levels of job control and workload, and engagement will be mediated by increased utility value.	Unsupported – utility value did not mediate the relationships between job control, workload, and engagement. Both levels of job control were positively related to utility value, and momentary levels of workload were positively related to utility value.
<i>H5.1g</i>	The positive relationships between both eudaimonic and hedonic orientations and engagement will be mediated by increased autonomous motivation.	Unsupported
<i>H5.1h & 5.1i</i>	The positive relationships between both general and momentary levels of job control and workload, and engagement will be mediated by increased autonomous motivation.	Mediation supported - autonomous motivation mediated the relationship between job control and engagement. Unsupported mediation autonomous motivation did not explain the relationship between workload and engagement

<i>H5.2a & 5.2b</i>	The positive relationship between general levels of job control and psychological meaningfulness is moderated by higher levels of a future focused FTP; The positive relationship between general levels of workload and psychological meaningfulness is moderated by higher levels of a future focused FTP.	Moderation unsupported for a future focused FTP on relationship between job control, workload, and psychological meaningfulness. Eudaimonic orientations were positively related to a future focused FTP (interaction term).
<i>H5.2c & 5.2d</i>	The positive relationship between general levels of job control and utility value is moderated by higher levels of a future focused FTP; The positive relationship between general levels of workload and utility value is moderated by higher levels of a future focused FTP.	Moderation unsupported for higher levels of future focused FTP on relationship between job control, workload, and utility value. Eudaimonic orientations positively related to a future focused FTP (interaction term).
<i>H5.2e & 5.2f</i>	The positive relationship between general levels of job control and autonomous motivation is moderated by higher levels of a future focused FTP; The positive relationship between general levels of workload and autonomous motivation is moderated by higher levels of a future focused FTP.	Moderation supported for higher levels of future focused FTP on the relationship between job control and autonomous motivation. Unsupported for the relationship between workload and autonomous motivation. Eudaimonic orientations positively related to a future focused FTP (interaction term).
<i>H5.3a</i>	Employees' FTPs moderate the mediated relationship between general levels of job control, workload, and engagement via increased psychological meaningfulness. The indirect relationship is stronger for higher levels of their characteristic present or future focused FTPs.	Unsupported
<i>H5.3b</i>	Employees' FTPs moderate the mediated relationship between general levels of job control, workload, and engagement via increased utility value. The indirect relationship is stronger for higher levels of their characteristic present or future focused FTPs.	Unsupported
<i>H5.3c</i>	Employees' FTPs moderate the mediated relationship between general levels of job control, workload, and engagement via increased autonomous motivation. The indirect relationship is stronger for higher levels of their characteristic present or future focused FTPs.	Unsupported

7.3. Theoretical considerations in this thesis: answering the research question

The overarching research question in this thesis: to what extent do orientations and the future time perspective explain the preferred self, and extend our understanding of the relationship between job resources, job demands, and engagement? First, this involves examining motivational orientations and their associated FTPs, i.e., the preferred self; and second, assessing the addition of two JD-R antecedents of engagement. Central to this thesis were the key research and theoretical considerations, identified in Chapter 2, and extended in Chapters 3 (Study 1) and 5 (Study 2). There are three key areas underpinning the current research are as follows: 1) the adoption of the needs-satisfaction theory of engagement and the conceptualisation of employees' preferred selves; 2) the conceptualisation of eudaimonia and hedonia as orientations & the importance of a (future) time perspective approach; 3) and finally, the addition of the JD-R antecedents to support understanding employees' momentary task perceptions, levels of autonomous motivation, and engagement.

7.3.1. Consideration of the Preferred Self in Engagement Research

Kahn's (1990) needs-satisfaction theory of engagement lay the foundation for engagement research (cf. Saks, 2006), yet its limited application is due, in part, to an inability to define and operationalise the concept of the 'preferred self' (cf. Kahn, 1990, p. 700). The adoption of his theory of engagement, in this thesis, aligned with the examination of cognitive-motivational characteristics (motivation orientations and FTP), as antecedents of this construct. This examination, therefore, provided the means to theorise and assess one way to conceptualise the empirically unexamined, and less understood, concept of the 'preferred self' (Kahn, 1990) Central to answering the overarching research question, was the alignment between eudaimonic and hedonic orientations and their associated FTPs, as provide a way to conceptualise the preferred self. The positive relationships between eudaimonic orientations and a future focused FTP, and hedonic orientations and a present focused FTP, in both studies, supported this conceptualisation. There was also partial support for how employees' express their preferred self via the relationship between eudaimonic orientations and a future focused FTP (Table 7.1). The theorised relationships underpinning employees' preferred selves were supported further by adopting SDT and Kahn's (1990) theory of engagement, in extending our understanding of a needs-based approach to

engagement. For example, the role of SDT in eudaimonic literature (cf. Chapter 2), and its concept of autonomous motivation as a psychological mechanism, in both studies.

Engagement research, including the JD-R literature, has predominantly focused on the conceptualisation of engagement as a positive psychological construct (Schaufeli, et al., 2002). This results in findings that provide insights that align with organisational outcomes (cf. Bakker & Demerouti, 2017), and hence, do not capture the way employees' express their preferred selves in their work roles (cf. Kahn, 1990, 1992). From a needs-satisfaction perspective, employees "have an instinctive drive to express who they are...and given half a chance at work, they will do so" (Kahn, 2010, p.30). Therefore, the adoption of the needs-satisfaction theory of engagement (Kahn, 1990, 1992) addresses this issue by enabling the collective examination of employees' person-related factors (motivational orientations and employees' FTP), and the situational factors (JD-R antecedents), which explain engagement (Table 7.1.). In sum, building on Study 1, the additional support for the alignment, and interaction, between eudaimonic orientations and having a future focused FTP in Study 2, indicated support for the theorised conceptualisation of the preferred self (cf. Kahn, 1990), thus providing the means to theorise about its role in the relationship between JD-R and engagement.

7.3.2. The Conceptualisation of Eudaimonia and Hedonia as Motivational Orientations & the Importance of the (future) Time Perspective

The conceptual issues within the research that has assessed eudaimonia and hedonia, and the importance of the FTP, are examined here. The debate within the organisational literature on the use of two philosophical constructs has led to a conceptual struggle (Huta & Ryan, 2010), and a reliance on viewing them both as wellbeing outcomes (Keyes et al., 2002; Ryff & Keyes, 1995). The conceptualisation of eudaimonia and hedonia as motivational orientations, within this thesis, facilitated addressing these conceptual issues, with an aim to consolidate the importance of eudaimonia. The significance of eudaimonic orientations as a motivational antecedent in Study 1 (Table 7.1.), challenges the basis of the theoretical debate pertaining more prominently to eudaimonia. This includes the questioning of the merit of its usefulness in organisational research (cf. Kashdan et al., 2008). The pivotal role of eudaimonic orientations in understanding the way employees perceive their tasks, and the promotion of autonomous motivation extends our understanding of motivation, and the long-term processes associated with these orientations. Thus, the findings in Study 1 consolidated

the importance of eudaimonia in organisational research, and as an antecedent rather than a wellbeing outcome (cf. Rhys & Keyes, 1995). In shifting the focus away from the latter (Section 7.2.), this addresses the need for a greater theoretical understanding of both philosophical constructs, and the role of eudaimonic orientations in explaining engagement. This was answered, in part, by the limited contribution of hedonic orientations as an antecedent, in both studies (Table 7.1.), thus establishing the importance of eudaimonia, in this thesis.

The literature has neglected the assessment of the recognised inherent time perspective differences underpinning eudaimonic (long-term) and hedonic (short-term) processes (c.f. Huta & Waterman, 2014). Correspondingly, a related research problem is the limited consideration of varying time perspectives in motivation theory (cf. Kooij et al., 2018), which consequently hinders further understanding of engagement. Hence, there were theoretical implications of accounting for employees' present and future focused FTPs, in addressing the research problems, in this thesis, and answering the overarching research question. It is recognised that motivation is a future-orientated construct (Seijts, 1998), and yet the motivation literature relies on assessing concepts without consideration of employees' characteristic time perspectives. Conceptual issues exist, akin to eudaimonia and hedonia, that have hindered the application of the FTP as a construct in organisational research. Key issues raised in both systematic reviews and meta-analyses include first, an identified conceptual struggle to define and operationalise FTP. Second, a notable conflict is the conceptual interchangeability of general and occupational FTP, when this time perspective has been applied in organisational research (cf. Andre et al., 2018; Henry et al., 2017). It is argued, in the current research, that this shifts the focus away from the intended use of FTP, in understanding the role of this time perspective in motivation literature. For example, the way an employees' cognitive-motivational time perspectives influence their levels of motivation, and the goals they pursue, (cf. Lens et al., 2012; Seijts, 1998). In addressing the conceptual issues pertaining to the FTP, this thesis provided the means to adopt a consistent definition, operationalisation, and measurement of this construct in both studies.

Within the pertinent literature, a limited understanding and application of employees' time perspectives, not only in motivation theory, hinders the facilitation of explaining how employees' express their preferred selves (cf. Kahn, 1990, p.700). The importance of employees' time perspectives as motivational antecedents has empirical merit (Kooij & Van de Voorde, 2011), and was theorised to consequently explain their levels of engagement. Hence, the adoption of the FTP theory (Lens et al., 2012), as part of the theoretical

framework. The habitual pursuit of long-term processes such as the need for growth (eudaimonic orientations), and short-term processes such seeking pleasure (hedonic orientations), are supported in the literature (Ryff & Keyes, 1995; Waterman, 2008). The support for the positive relationship between eudaimonic orientations and a future focused FTP, in both studies (Table 7.1.), also addressed another gap in the literature. Our understanding of eudaimonia's motivational processes were impeded previously by research focusing on eudaimonia under the ambiguous concept of psychological 'functioning' (Ryff & Keyes, 1995; Ryff, 1989). Therefore, the consistent support for the positive associations between eudaimonic orientations and a future focused FTP (Table 7.1.), extends previous assertions that eudaimonia is an orientation (Huta, 2015), which explains the reasons employees habitually pursue challenging tasks (Huta & Ryan, 2010). Hence, when tasks require effort, in the present, for distant future valued outcomes, employees with characteristically higher levels of eudaimonic orientations and a future focused FTP, will engage and persist with their tasks.

Finally, the interaction between eudaimonic orientations and their future focused FTP strengthened employees' perceptions of the psychological meaningfulness and utility value of their tasks (Study 1); and provided additional insight into the importance of the long-term perspective in the relationships between eudaimonic orientations, job control, and autonomous motivation (Section 7.2; Table 7.1.). In essence, the conceptualisation of eudaimonic orientations, and the adoption of the FTP, as a theorised explanation of the preferred self, had notable implications for answering the overarching research question.

7.3.3. JD-R and Engagement: The momentary Nature of Employees' Task Perceptions, and levels of Autonomous Motivation

Employees' levels of job control and workload (JD-R), as antecedents, were theorised to provide insight into momentary variations in employees' perceptions of their work, leading to engagement (Study 2). Concurrently, assessing these perceptions also addresses two key issues in JD-R theory. First, the need to address the lack of specificity of psychological processes (Schaufeli & Taris, 2014), and second, challenging the assumptions of the motivational properties of the job demands. JD-R theory epitomises the situational factors that either inhibit or promote employee motivation, which support our current understanding of engagement (Section 7.4.2.). It is conceivable that employees' levels of job control and workload would deviate between employees, and across the working week. Hence, the

incremental differences in employees' appraisals of their levels of workload, and their employment of their available levels of job control, were expected to explain their task perceptions, their levels of autonomous motivation. Consequently, these relationships were anticipated to extend our understanding of the role of job demands in engagement (Study 2).

The dual processes from the JD-R theory (cf. Bakker et al., 2004; Demerouti et al., 2001), are based on two assumptions, which underpin the prevailing understanding of engagement. In questioning these assumptions, employees' levels of job control were examined, alongside their motivational orientations and FTP, to assess the motivational process of the JD-R theory. The relationship between general levels of job control, psychological meaningfulness, and utility value, were strengthened by employees' having higher levels of a future focused FTP (Table 7.1.). Employees' levels of workload, as the strongest antecedent of engagement, at both general levels and momentary levels, challenges the health impairment assumption in JD-R theory (cf. Demerouti et al., 2001); Schaufeli & Taris, 2014). Correspondingly, these positive relationships indicated that job demands, when met, can lead to higher levels of engagement even in the absence of job resources to mitigate their effects (cf. Bakker & Demerouti, 2017). Thus, the inclusion of JD-R antecedents captured the momentary nature of task perceptions and engagement lacking in Study 1; and the findings in Study 2, supported the argument for job demands as an antecedent of engagement, thus addressing the second part of the research question; which relates to extending our understanding of the relationship between job resources, job demands, and engagement. The specific and wider theoretical implications of the findings, from both studies in this thesis, are examined in the next section.

7.4. The wider theoretical contributions

This thesis makes four important theoretical contributions, supported by the results of the two studies, which are divided into the following categories: 1) the employees' perspective on engagement and the meaningfulness of work; 2) the extension of our understanding of the JD-R perspective on engagement; 3) the conceptualisation of the person-related factors; 4) and the role of the theoretical framework, that is, the FTP theory and addressing needs-satisfaction via SDT.

7.4.1. Engagement and the Meaningfulness of work: The Employees' Perspective via Needs-satisfaction

The adoption of Kahn's needs-satisfaction theory of engagement had theoretical implications not only for our understanding of engagement, but also the assessment of the motivational processes that underpin this psychological construct. In doing so, this theoretical perspective addresses two issues. First, it takes an individualised perspective, to extend our understanding of the way employees' express themselves in their work roles (that is their preferred selves), based on person-related factors (eudaimonic and hedonic orientations; and their FTPs). The focus on engagement from an employees' perspective and the conceptualisation of the preferred self (cf. Kahn, 1990) was supported in Study 1, and in part, in Study 2 (Table 7.1.). Second, it facilitated the assessment of engagement as a momentary variable, based on situational factors including the less studied role of employees' levels of workload as an antecedent. This assessment was supported in Study 2 (Table 7.1.). In addition, employees' task perceptions and autonomous motivation mediated the direct relationships between eudaimonic orientations and engagement in Study 1 (Table 7.1.). Adopting this theory of engagement shifts the focus away from the reliance in the literature on the prevailing approach (cf. Schaufeli, et al., 2002). The focus in this thesis on employees proximal, thus person-related, factors (eudaimonic and hedonic orientations, and employees' FTP), and the distal situational factors of their working environments (job control and workload), provided insights into their pursuit and engagement in different tasks at work.

There are research issues pertaining to our understanding of the meaningfulness of work, and its importance as a psychological mechanism in the relationships between the motivational orientations, JD-R antecedents, and engagement. The conceptualisation of the psychological meaningfulness of work, as the psychological condition stemming from Kahn's (1990) theory of engagement, addressed the conceptual issues in the literature that use meaning and meaningfulness interchangeably (Rosso et al., 2010). The literature predominantly relies on assessing psychological meaningfulness from a static perspective, yet research has sought a better understanding of the complex relationships, between factors that contribute to work being perceived as meaningful, and the multiple processes which act as antecedents (Rosso et al., 2010). The importance of psychological meaningfulness was comparable to previous research (cf. Fletcher, 2016; Oliver & Rothman, 2007), in the results of Study 1, in providing the strongest explanation, above utility value and autonomous motivation, for explaining employee's engagement. Hence, by defining and operationalising

the meaningfulness of work through Kahn's (1990) condition of psychological meaningfulness, it facilitated the first known examination of eudaimonic orientations as an antecedent of engagement, which was supported (Study 1; Table 7.1.). For example, as an explanatory psychological mechanism in the relationships between person-related factors and engagement, as theorised by Kahn (1990).

In addition to eudaimonic and hedonic orientations, the previously unexamined role of JD-R (job control and workload), as antecedents of psychological meaningfulness, was assessed in Study 2. This addition provided a way to assess the impact of external contexts for our understanding the meaningfulness of work (Schnell, et al., 2013). Employees' momentary levels of workload, across the working week, explained their perceptions of the psychological meaningfulness of tasks, and their levels of job control explained this task perception at both levels of analysis (Table 7.1.). This reflects the transient nature of employees' tasks varying over consecutive workdays, which in turn, aligns with their perceptions of the psychological meaningfulness of their daily tasks. Hence, there were multiple motivational processes which contributed to our understanding of psychological meaningfulness: eudaimonic orientations, employees' future focused FTPs; general levels of job control; and momentary levels of workload (Section 7.2; Table 7.1).

7.4.2. Extending our Understanding of the JD-R Perspective on Engagement

The literature reviews in this thesis (Chapters 2 & 5), indicated that JD-R theory and job resources as antecedents, dominate within engagement research. Furthermore, there is an abundance of research in the JD-R literature on the health impairment process, with the focus on job demands as antecedents of negative outcomes such as burnout (Bakker & Demerouti, 2017; Schaufeli & Taris, 2014). In meeting one aim of this thesis, the focus in this section is the further theoretical contributions of extending our knowledge of the motivational process of JD-R antecedents, and challenging assumptions pertaining to job demands. It was acknowledged that eudaimonic and hedonic orientations would only provide part of the answer to the overarching research question, by providing one way to conceptualise, and thus, explain the role of, employees' preferred selves in engagement (cf. Kahn, 1990). Job control and workload as motivational situational antecedents provided additional insight that was mostly supported in the results of Study 2 (Section 7.2). When general levels of job control were high, this determined employees' perceptions of the psychological meaningfulness of work, and their momentary levels of job control predicted their levels of

autonomous motivation, across the working week (Table 7.1). Hence, the ability of employees to make decisions on how and when they work (Chiang, et al., 2010), acted as an important distal antecedent of two of the psychological mechanisms, and supported explaining psychological processes lacking in JD-R theory. This has implications for our understanding of the meaningfulness of work. Previous research has not adequately assessed the ability of situational factors (such as job control) to explain momentary variation in the perceptions of a task psychological meaningfulness. For example, whether a task in the present moment provides a perceived return of investment for the employee (cf. Kahn, 1990, 1992; May et al., 2004).

The construct with the strongest relational ties to the JD-R health impairment process in the literature, is the levels of workload placed on employees by their work (cf. Bakker & Demerouti, 2017). It was argued that employees would be motivated when they were able to overcome or meet the demands of their work. In Study 2, workload was a consistent antecedent of task perceptions (psychological meaningfulness and utility value) across the working week. Employees' levels of workload were also the only motivational antecedent that explained their general and momentary levels of engagement (Table 7.1.). These findings indicated that when employees are motivated by their work via meeting the demands of their workload, they have positive task evaluations, such as their psychological meaningfulness, and utility value for future outcomes. This, in turn, explains the reasons employees will sustain their engagement despite the demands placed on them at work.

Taken together, the role of job control and workload as antecedents of the three mediating factors that explained their relationship with engagement, provides support for addressing the lack of specificity of the JD-R theory (cf. Schaufeli & Taris, 2014). There were also notable direct relationships between JD-R and engagement, which provided comparable findings to previous research. The consistency of support for workload as an antecedent of engagement in Study 2, shifts the attention from job resources as primary antecedents in the current understanding of engagement (Bakker & Demerouti, 2017), to supporting its positive thus motivational effects (cf. Crawford et al., 2010; Schaufeli & Taris, 2014). Previous meta-analysis identified the pattern in JD-R literature to focus solely on job resources as antecedents of engagement (cf. Bakker & Demerouti, 2017), which bolsters the merits of the motivational process of JD-R theory but neglects the positive outcomes from its health impairment process. There were also person-related factors that had implications for engagement, and the mediating psychological mechanisms, which are examined next.

7.4.3. The Conceptualisation of Motivational Person-related Factors: Eudaimonic and Hedonic Orientations

Conceptualising eudaimonia and hedonia as orientations provides the ability to examine person-related motivational processes that explain engagement; by addressing fundamental issues within the literature. The conflicting conceptualisations and findings in previous research assessing eudaimonia and hedonia, present a few problems. In addition to two key issues previously addressed in this chapter (Section 7.3.2), that is, the appropriateness of including eudaimonia in organisational research (Kashdan et al., 2008); and the prevalence of examining them as distinct well-being outcomes. However, the issue of research deviating from the true meaning of eudaimonia and hedonia, which requires further discussion. Eudaimonic orientations are operationalised as motivational characteristics, and thus person-related antecedents, which includes the need for growth as a motivational process has been empirically supported as being solely eudaimonic (Keyes et al., 2002). As an orientation, it overcomes the conceptual struggle pertaining to research on eudaimonia and strengthens its place as a motivational antecedent, in understanding an employees' evaluations of their tasks; their levels of autonomous motivation; and their levels of engagement. Importantly, all three dimensions of eudaimonic orientations align with the philosophical origins of eudaimonia, that is growth, authenticity (increased self-knowledge), and excellence (maintenance of high standards) (cf. Bujacz et al., 2014; Huta & Waterman, 2014).

The theoretical framework in both studies, that is, SDT and FTP theory, supported further the conceptualisation of the more contested eudaimonia (than hedonia) (cf. Kashdan et al., 2005). Research assessing eudaimonic concepts widely adopts SDT, to understand psychological needs that underpin motivation (Gagné & Deci, 2005). A central proposition is employees' inherent need for growth, which is congruent with the conceptualisation of eudaimonia as an orientation. The debate on using SDT to theorise about, and understand, the role of eudaimonia in organisational research, which is that SDT adds complexity (cf. Kashdan et al., 2008), was challenged by the findings in this thesis. For example, the application of SDT enabled a greater understanding of eudaimonic orientations, as a motivational antecedent of engagement (Study 1).

The findings in Study 1 supported the importance of eudaimonia, in enhancing our theoretical understanding of the way it explains employees' perceptions of, and engagement in, their work. The values and needs underpinning eudaimonic orientations involve the

importance employees' place on their pursuit of growth, excellence, and authenticity in their work (Bujacz et al., 2014). Eudaimonic orientations explained the satisfaction of their need for work being psychologically meaningful (Table 7.1.). Previous research has indicated that the meaning attributed to work, can be understood based on individuals' beliefs and values (Ros, et al., 1999). Hence, the value of assessing person-related factors (orientations) supported our understanding of a key psychological condition of the needs-satisfaction theory of engagement (cf. Kahn, 1990). In addition, the strength of the relationship between eudaimonic orientations and engagement indicated that, as an orientation, eudaimonia offers insight into employees' engagement in their work (Table 7.1.). For example, employees that are motivated by the inherent needs of their eudaimonic orientations are engaged at work when their tasks align with these characteristic needs of their preferred self. This was further evident, first in the positive association between eudaimonic orientations and utility value, which aligns with the assertion that the perceived usefulness of a task for the distant future, influences both employees' levels of motivation, and their actions in the present moment (Lens et al., 2012). Second, in the positive relationship between eudaimonic orientations and increased levels of identified regulation from autonomous motivation. For example, the assertion that eudaimonic orientations and their associated motivational processes inform employees' sense of self, underpinning their perceived autonomy over their actions (Deci & Ryan, 2008).

The lack of support for hedonic orientations as an antecedent, and its associated short-term processes, of employees' task perceptions and autonomous motivation, illuminated the value of assessing the more enduring nature of eudaimonia, and the engagement in tasks that align with outcomes achieved in the long-term (Table 7.1.). Despite the assumption that seeking pleasure or instant gratification from one's work would act as short-term motivational process for employees, research would suggest the expectation that pleasure would be experienced from their tasks, was not present (cf. Vittersø, 2013). There was not only notable support for eudaimonic orientations as a motivational antecedent in Study 1 (Chapter 4; Table 7.1.), but it also contributed insight into the relationship between job control and autonomous motivation, in Study 2 (Chapter 6; Table 7.1.).

Taken together, the findings of both studies showed eudaimonia to be a stronger predictor than the less contested hedonia, which only related to engagement in Study 1. Therefore, the conceptualisation of eudaimonia as an orientation (Huta & Ryan, 2010), and an IV, provides a path forward to using eudaimonic orientations to extend our understanding of employee motivation, and informs part of the theorised conceptualisation of the preferred

self (cf. Kahn, 1990). In doing so, this conceptualisation overcomes issues raised by the debate and contradictory research findings in organisational research when adopting this (eudaimonia) philosophical construct. Furthermore, the consolidation of the importance of eudaimonia provides the basis for future research on the relationship between motivation and engagement, to build on the findings in this thesis.

7.4.4. FTP: The Role of the Time Perspective & addressing Needs-Satisfaction via SDT to explain Motivational Processes

1. *The Role of the Future Time Perspective*

The adoption of the FTP had a few implications for this thesis, and the literature. This perspective enabled the assessment of the way employees' FTP influences their motivation, their perceptions of their work, and employees' pursuit of different tasks. The findings in both studies illuminated the effect of future focused FTPs, and their interaction with eudaimonic orientations, on the psychological meaningfulness and utility value of tasks, and the reasons they are autonomously motivated (Chapter 4). Hence, these findings supported the proposition that orientations and FTPs provide the means for understanding how employees' express their preferred selves, in their work. To date, the literature had yet to capture adequately the way employees' characteristic tendencies towards being motivated by distant and immediate future outcomes, in the present, explains the meaningfulness and value attributed to their tasks (cf. Chapter 2). Individual differences in characteristic levels of a present or future focused FTP, have been argued to influence levels of motivation (Lens et al., 2012; Seijts, 1998). The novel adoption and application of the FTP as a theory, and the FTP construct, was also posited to extend our understanding of autonomous motivation, from SDT. The results from Study 1 indicated that higher levels of a future focused FTP emphasised the role of distant future outcomes in increased identified regulation, and in Study 2 autonomous motivation, in the present.

The direct relationships between employees' FTP and the three mediators (psychological meaningfulness, utility value, and autonomous motivation), and its moderating effects on their relationships with eudaimonic orientations (Study 1; Table 7.1.), adds new theoretical insights. This established the need to acknowledge that employees' motivational anticipation of the distant future underpins the way they evaluate a task's meaning and value. This has not previously been tested in the literature, which provides an

avenue for future research interested in understanding the reasons employees' find their work meaningful. The role of employees' FTP was extended in Study 2 - presented in Chapter 5. There were implications for our understanding of job resources, where the interaction between a future focused FTP and eudaimonic orientations (preferred self) boosted the positive effects of job control, leading to increased levels of autonomous motivation (Study 2; Table 7.1.). This implies that the long-term perspective on distant future outcomes underpins the way employees will use their job resources when engaging in present. Despite the acknowledgment that eudaimonia relates to long-term processes, and hedonia with short-term processes (cf. Huta & Waterman, 2014), this insight from the FTP had yet to be tested in research to explain the time perspective differences between their processes; and in extending our understanding of job resources. The strong support for the relationship between eudaimonic orientations and having a future FTP, and to a lesser extent, the relationship between hedonic orientations and having a present FTP (Table 7.1), provided support for addressing the shortcomings in the literature, discussed in the preceding section (Section 7.3).

The only other known research to date to consider the FTP in relation to eudaimonic and hedonic orientations, was published after the data collection and analysis in this thesis was completed. This recent research examined the differences between the two orientations in terms of their focus of concern, that is, a broad future (eudaimonic orientations) and a narrower focus of concern (hedonic orientations) (Pearce, Huta & Voloaca, 2020). Furthermore, they adopted a similar measurement of present and future perspectives (that is ZTPI), in relation to eudaimonic orientations with the future perspective, and hedonic orientations with a present hedonistic and fatalistic perspective (Pearce et al., 2020). There were however conceptual differences with the research in this thesis, and theoretical issues with this recent study. Pearce and colleagues recognised that eudaimonic and hedonic orientations represent motivational characteristics, which aligns with how they are conceptualised in this thesis, and limited previous literature (cf. Huta, 2015; Huta & Ryan, 2010). Yet the study by Pearce and colleagues relates eudaimonic orientations to collective values such as prosocial behaviour, and hedonic orientations to egotistical values (Pearce et al., 2020), rather than the motivational characteristics of the individual. A basis of their arguments was that there is too much focus on eudaimonia being about the self and not enough on external contexts (Pearce et al., 2020). However, this concern is addressed by the addition of job control and workload as situational constraints (Schnell, et al., 2013), and JD-R antecedents of autonomous motivation in Study 2. That relationships was moderated by eudaimonic orientations and employees' future focused FTP (Table 7.1.). As noted in the

preceding sections, this alignment between eudaimonic orientations and future focused FTP captured the concept of the preferred self, with implications for our current understanding of engagement (Study 1 & Study 2). The basis for the distinction of between eudaimonic and hedonic processes, in the Pearce et al. (2020) paper, was biological. The distinction was made using a theoretical model based on cognitive processing (Steger & Shin, 2012), and the results of neuroimaging research (e.g., Berridge & Kringelbach, 2011). This basis neglects to address fully the inherent time perspective differences in eudaimonic and hedonic process, supported by this thesis (Table 7.1.).

In the paper by Pearce and colleagues, despite the measurement similarities to this thesis, that is the ZTPI measure (cf. Zimbardo & Boyd, 1999), first, there was limited attention paid to defining the FTP as a construct. Second, the motivational properties of the FTP theory (Lens et al., 2012) is an issue is recognised in research attempting to understand its limited application in organisational research (cf., Andre et al., 2018; Henry et al., 2018). Hence, the way employees' cognitive-motivational characteristic time perspectives influence their current levels of, were not acknowledged (Pearce et al., 2020). In this regard, the conceptualisation of the FTP construct, and the employment of the FTP theory in conjunction with SDT, in this thesis, offers greater theoretically supported insights into the distinctions between the eudaimonic and hedonic processes, and consequently, our understanding of employees' expression of their preferred selves.

The one notable similarity between the findings in the recent study (Pearce et al., 2020), and in this thesis, is the support for the relationship between the eudaimonic orientation and having a future focused FTP. A limitation recognised by the researchers is the correlational nature of their analysis, which impedes their ability to make causal inferences (Pearce et al., 2020). In contrast, the two studies in this thesis adopted path analysis (Chapter 4) and multilevel path analysis (Chapter 6), when assessing the eudaimonic and hedonic orientations, and employees' FTPs; both as antecedents and their moderating effects. This analytical approach provides an improved pathway for understanding their causal relationships, then the correlations used in study by Pearce and colleagues (2020). Finally, while the recent study provides an indication that research is beginning to recognise the role of the FTP and its relationship with eudaimonic orientations, this remains scant in the literature (cf. Waterman, Schwarz & Conti, 2008), with the single exception of the recent study (Pearce et al., 2020). Hence, the adoption of the FTP approach in both studies expanded our knowledge of employees' characteristic motives for investing themselves, and sustaining their engagement, at work.

2. *Introducing Employees' Inherent Needs to Complement their FTPs*

The adoption of SDT and the FTP theory, as the theoretical framework, provided a novel and comprehensive approach, which contributed to extending our theoretical understanding of the motivational processes underpinning engagement. SDT enabled the assessment of the way employees' self-determined actions, based on their eudaimonic and hedonic orientations, explain their perceptions of their tasks, and their levels of engagement. The FTP theory facilitated the way employees' FTP influences their present moment motivation, and the assessment of their perceptions of the utility value of task, for the future. It was argued that both present and future focused FTP's motivate employees to engage in tasks based on immediate or distant future outcomes respectively, and thus explain their perceptions of their current tasks. This argument was largely supported by the results of both studies (Table 7.1). The prominence of employees' levels of autonomous motivation as an antecedent of engagement, and a mediator in the relationship between job resources and engagement, supported the inclusion of SDT in the theoretical framework. The findings also supported the first known empirical alignment of SDT as a needs-based theory of motivation, and the need satisfaction approach to, thus theory of, engagement (that is, Kahn, 1990). This conceptual alignment has recently been recognised owing to the integration of the processes underpinning this approach to engagement, and SDT being "primarily concerned with independent choice, and the degree to which behaviour is self-regulated, self-determined, and self-motivated" (Houle, Rich, Comeau et al., 2022, p. 5). In essence, the adopted framework of the FTP theory with SDT, and the findings in both studies, extended our theoretical understanding of the proximal motivational antecedents, and their associated processes, which sustain engagement. It also extended our understanding of the way variations in employees' perceptions of their tasks and autonomous motivation, acted as psychological mechanisms between those relationships.

7.5. Practical implications

The findings in this thesis signified the need to move beyond employees' working conditions (JD-R antecedents) to considering the person-related factors, thus their motivational-characteristics, which both sustain and explain their engagement at work. Drawing from the FTP theory (Lens et al., 2012) and SDT (cf. Gagné & Deci, 2005), as the

theoretical framework, provided the means to examine one-way employees' will express their preferred selves in their work roles. The adoption of Kahn's (1990) theory of engagement enabled providing a better understanding of the individual perspective of engagement, and employees' motivation to engage (cf. Huta & Ryan, 2010). For organisations, the knowledge that their employees employ different time perspectives supported by their motivational orientations, as cognitive-motivational characteristics, at work has practical implications. For example, these cognitive processes can result in the promotion of self-advantageous outcomes (cf. Demerouti, et al., 2019); and contribute to organisational outcomes. Based on the findings from both studies, the practical implications amass around the importance of the self, that is, the employees and are categorised as follows: 1) careers and decision-making processes; 2) motivational characteristics that promote investment when faced with job demands; and 3) the harnessing of employees' preferred selves in job design and selection methods.

1. Careers and the associated Decision-making Process

The results in this thesis, particularly Study 1, consolidated the importance of eudaimonia, and eudaimonic orientations as motivational antecedents. This can, when recognised in organisations, move towards utilising employees' orientations within the context of their career paths, and career related decision-making. For example, the motivational rationale for pursuing careers that promote personal and professional challenges (eudaimonia), over those that provide short-term instant gratification (hedonism). The role of SDT, a primarily eudaimonic theory (cf. Ryan et al., 2008), has been recognised when examining motivation which underpins career choice decision-making (Guay, 2005). This can extend to a focus on employees' eudaimonic orientations and their associated need for growth, excellence, and authenticity (Bujacz et al., 2014). This has two practical implications for organisations. First, a consideration of whether current employees have opportunities for growth, recognition for their work, and the ability to bring their whole selves to their current career in their job roles. Second, managers can gain perspective on why different tasks motivate their employees without the inherent need to enjoy each task. The latter is intertwined with the first implication. Study 1 demonstrated that employees' eudaimonic orientations had positive direct relationships with engagement (Table 7.1.). Hence, to maintain and retain employees along their career paths can be influenced by how organisations afford employees to align their preferred selves with their current job roles.

In practice, organisations can train managers on the importance, and understanding of, their subordinates eudaimonic needs. Previous research based on SDT, assessed the ability to train managers to become more needs supportive, and theorised this would promote greater autonomous motivation and engagement (Jungert, Gradito Dubord, et al., 2022). A systematic review indicates empirical evidence for needs support facilitating needs-satisfaction (cf. Slemp, Lee & Mossman, 2021). Jungert and colleagues training programme was based on the three psychological needs from SDT and managers improving their needs-supportive behaviour. This recent study found that this improved their employees' needs-satisfaction and engagement and concluded this led to positive outcomes for the organisation (Jungert, et al., 2022). Hence, a form of manager training, that is, needs-supportive focused, can translate to whether employees' characteristic needs and personal values are being met by their work roles. This involves moving away from the extrinsic rewards of employees' careers, and a focus on their basic psychological needs (cf. Slemp et al., 2021), to affording employees the ability to express their preferred selves (Kahn, 1990) via their eudaimonic orientations. For example, promoting opportunities for self-development (growth), optimally challenging work tasks (excellence), and the ability to improve self-knowledge (authenticity) (cf. Bujacz et al., 2014), within employees' careers.

The findings from Study 1 also strengthen the potential for manager training in recognising employees' long-term perspectives. This will then promote work being perceived as meaningful, and tasks becoming internally regulated (identified regulation) to support career decision-making processes (Study 1 direct relationships; Table 7.1.). The philosophical construct of eudaimonia as an orientation that explains the "why" of employees' behaviour (Huta & Waterman, 2014), also provided insight into the attribution of utility value to tasks i.e., their perceived usefulness for future outcomes; and an increase in identified regulation (Table 7.1.; Study 1). This can be extended to the support for the relationship between eudaimonic orientations and a future focused FTP in both studies (Table 7.1.). Research examining the role of the FTP for career-adaptability found that positive relationships (e.g., connectedness) positively impacted career decision making processes, and adaptability (Jia, Hou, et al., 2020). Other research has supported the link between FTP and increased career identity (c.f. Taber & Blankemeyer, 2015).

In sum, eudaimonia's more enduring nature over hedonia, alongside achieving distant future outcomes (future focused FTP), provides a pathway for organisations to understanding their predictive power when it comes to career-related decision-making. Both cognitive psychological processes can promote career exploration that improves adaptability (cf.

Savickas, 2013); and transitions within ones' career (cf. Lent & Brown, 2013). Finally, the findings in Study 2 also contribute practical implications in this area. From an organisational perspective, where employees are allowed greater decision making over their tasks (that is higher levels of job control), it is more likely they will perceive a greater return of investment for their efforts (Kahn, 1990; May et al., 2004). This can also translate to organisations that train their manager to be needs-supportive, e.g., employees' motivational characteristics.

2. *Motivational Characteristics and JD-R Antecedents*

The findings from Study 2 showed that organisations would benefit from examining the positive effects of job demands (cf. Crawford et al., 2014), when their employees' motivational-characteristic eudaimonic needs and future focused FTPs, are accommodated. Research recognises, from an SDT perspective, that the quality of motivation based on autonomous (self-determined) actions promotes valued outcomes (Vansteenkiste, Sierens, Soenens, et al., 2009). The concept of the quality of motivation, therefore, relates to when employees' experience an understanding of why they exert effort at work (cf. Deci & Ryan, 2009). The interaction between employees' eudaimonic orientations and a future focused FTP strengthened the impact of job control on autonomous motivation (Table 7.1.). Consequently, the recognition of motivational long-term processes and perspectives of employees, in the way they evaluate their work, could support more positive appraisals of, and the ability to meet, their workload. Research has found that motivation is a significant factor contributing to the relationship between workload and performance, and organisations need to account for employees' motivational factors (Dasgupta, 2013). This paper indicates that managers play a role in how intrinsically motivating a work task is, and earlier research argues this requires opportunities for growth (cf. Molander, 1996). Hence, employees require their person-related motivational characteristics to be met to sustain their autonomous motivation, in addition to the job resources provided by organisations. In practice, this requires minimising employees' needs frustration (cf. Deci & Ryan, 2000), where employees' motivational needs are met by their work roles, when job resources are absent.

In Study 2, workload was the most consistent predictor of higher levels of engagement challenged the assumption that job resources are required to reduce the impact of job demands (cf. Demerouti et al., 2001). This consistency could be further harnessed by organisations that promote and recognise the personal investment by their employees when their work tasks align with personally valued future gains. This notion is gaining recognition

within the performance appraisal literature (cf. Kamphorst & Swank, 2018). The importance of person-related and cognitive-motivational factors, (eudaimonic orientations and future focused FTPs) reinforced the recognition in recent JD-R literature (cf. Demerouti et al., 2019), that employees will use cognitive processes to sustain their engagement. Thus, the findings in this thesis indicate the need for organisations to shift attention towards accessing and harnessing more proximal person-related factors, which explain employees' perceptions of, and engagement in, their work.

3. *The Harnessing of Employees' Preferred Selves in Job (re) Design.*

The findings in this thesis indicate that the long-term processes associated with eudaimonic orientations have an identifiable role in the way employees express their preferred selves, in the tasks they pursue, and their engagement at work. Employees' needs are essentially aligned with their motivational characteristics, which organisations can benefit from, in designing jobs that meet those needs. Research is rapidly growing on proactive measures employees take in the (re)design of their work roles via job crafting (cf. Zhang & Parker, 2019). The needs-satisfaction theory of engagement (Kahn, 1990) and its alignment with inherent motivational needs of employees (SDT & eudaimonic orientations), had practical implications, by providing a greater understanding of what processes underpin the reasons employees will invest themselves in their work (Fredric et al., 2004).

Applying the principles of SDT, before the need for career interventions (cf. Paixão & Gamboa, 2017), organisations can accommodate needs-satisfaction within job design practices. The novel finding that job control predicted psychological meaningfulness, provides insight into the relationship between job resources and the meaningfulness of work. Furthermore, autonomous motivation explained the relationship between job control and engagement (Study 2; Table 7.1.). Hence, there are working conditions (via resources) that inform an alignment with self-exploration (cf. Flum & Blustein, 2001), which can promote meaningful and autonomous work. An objective from an organisational perspective can include designing job specifications which involve acquiring knowledge on the motivational profiles of existing employees. Doing so, is asserted to support both career indecision and exploration (cf. Paixão & Gamboa, 2017). Accounting for person-related factors, as proximal antecedents, in conjunction with situational factors (JD-R antecedents), in this thesis supported identifying the latter's role in promoting engagement. When SDT is applied on a job design context, via needs-satisfaction perspective, it promotes an autonomously

motivated workforce with a top-down approach, by starting at managerial levels (cf. Handré & Reeve, 2009).

Taken together, from a needs-satisfaction (SDT) and employee-centred perspective, engagement (cf. Kahn, 1990) within job design is achieved through consideration of employees' inherent needs; their levels of autonomous motivation afforded by their daily tasks; and working in environments that promote and sustain their motivation to sustain engagement. The outcome being the recruitment, and retainment, of employees that will have their motivational-characteristic needs met by, and be motivated to invest their preferred selves in, their work roles.

7.6 Methodological Implications

There were implications for the way eudaimonic and hedonic orientations, and employees' present and future focused FTP, were measured in this thesis. Previous well-being research has relied on assessing both eudaimonia and hedonia as outcomes using different measurement categories. The predominant view in the literature, which conceptualises eudaimonia as the ambiguous 'positive functioning', and hedonia as an experience (cf. Huta & Waterman, 2014), creates measurement issues: asymmetry in levels of measurement. These issues impede the ability of organisational research to accurately assess eudaimonia and hedonia as motivational antecedents, which extend our understanding of their role in the relationship between motivation and engagement. The measure that reflects their philosophical origins and recognises eudaimonia and hedonia as orientations (that is the HEMA scale), was developed by prominent researchers in the eudaimonic and hedonic literature (that is, Huta & Ryan, 2010). The adoption of the orientations approach to eudaimonia and hedonia, and of this measure, in both studies, facilitated the first known empirical examination of eudaimonic and hedonic processes, and their inherent time perspective differences, which were supported by the FTP theory. Taken together this led to an understanding of engagement based on the preferred self.

In recognising both motivational orientations as cognitive-motivational constructs, the findings in the two studies demonstrate that eudaimonic orientations explain the way employees' long-term processes shape the tasks they habitually pursue, and hedonic orientations underpin employees' characteristic short-term time perspectives. Hence, adopting eudaimonic and hedonic orientations as antecedents, and a measure that aligns with

this conceptualisation, provides theoretical insight into the way eudaimonia and hedonia underlie employees' working lives. Eudaimonic orientations also supported the aim to achieve a greater understanding of the role of the preferred self in engagement, with its association with the FTP as a construct. The methodological implications of adopting a shorter version of the ZTPI to assess present and future focused FTPs, and the measurement development of a shorter version of the Job Engagement scale (Rich et al., 2010), are intertwined with the subsequent considerations for future research.

7.7. Limitations & future research

Reflecting on the two studies conducted in this thesis (Chapters 3 -6), there were both study specific and general limitations, which fall within three areas: 1) methodological; 2) theoretical; and 3) measurement. Avenues for future research are therefore also examined in this section.

Study specific limitations included the research design in Study 1, which contributed to the inability to capture the momentary nature of employees' task perceptions, their levels of autonomous motivation, and their levels of engagement. These limitations were partially addressed by the daily diary design in Study 2. The lack of a relationship between intrinsic motivation and engagement in Study 1 (Table 7.1.), could be explained by the separate examination of the two dimensions of autonomous motivation. While the hypothesised relationships and rationale (Chapter 3) required making this distinction, it may have masked the role of intrinsic motivation on engagement, in this study's sample. However, autonomous motivation when assessed as one factor, provided a greater role in Study 2, by acting as a psychological mechanism that explained the relationship between job control and engagement (Table 7.1.). In future research the assessment of additional job resources, supported by SDT and its alignment with Kahn's (1990) theory of engagement, may provide further insight into the direct relationship between job resources and the satisfaction of psychological needs leading to engagement. For example, the examination of other job resources (than job control; Table 7.1.) that promote the perceived psychological meaningfulness of work, as a key psychological condition for engagement (cf. Kahn, 1990). Consequently, this would contribute to both to the need to understand multiple processes underpinning meaningfulness (Rosso et al., 2010), and a greater understanding of the motivational processes from JD-R theory (Schaufeli & Taris, 2014).

The sampling in both studies may have influenced the generalisability of their findings. The sample population were those working full-time in UK organisations in non-specified industries. Future research could assess if the results in this thesis, can be replicated in more targeted samples. For example, consideration of how employees' preferred selves and the associated needs can be met (cf. Section 7.5.) within the context of job (re)design, selection and assessment, and career intervention research. In addition, the use of Prolific as the means to recruit participants in Study 2 (Chapter 5), could also have implications for the generalisability of the findings. There is support in the literature for the quality of the data obtained using platforms such as Prolific (Peer, et al., 2017). However, the sample of participants who use this platform may not represent fully the wider working population. Future research could investigate the replication of the results of Study 2, and extend its findings, by accessing participants via the traditional route of participation with specific organisations. Additionally, while age did not act as a necessary covariant (cf. Chapters 4 & 6), there was some notable differences between Study 1 and Study 2. Half of participants recruited through convenience sampling in the former were on average in their 30's compared to the sample from prolific where there was a greater age range. Hence, in future research the role of age, given the focus on FTP over one's lifespan (cf. André et al., 2018) and career, should be considered within sampling methods.

There were unexpected results in this thesis. It was expected that hedonic orientations would underpin employees' engagement in tasks (Huta & Ryan, 2010), and explain their short-term need for tasks to promote pleasure. Furthermore, it was anticipated that as a motivational characteristic, they would explain the perceived psychological meaningfulness of work, and the engagement in tasks with more immediate outcomes. However, the results in this thesis (Table 7.1) showed that employees based the perceptions of their tasks, and their willingness to engage, on more long-term processes. It is conceivable that measuring hedonic orientations on the first day (only) in Study 2 did not capture the moments where this motivational characteristic was more prominently expressed than the more enduring characteristic tendencies towards eudaimonic orientations. On reflection, this could have been accounted for by collecting data on hedonic orientations more than once, to acknowledge individual differences in more short-term motivational processes. Future research could extend on the findings of a more recent study (Pearce et al., 2020) when looking at short-term motivational processes; focus on hedonic values other than pleasure; and capture the orientations of those with a need for more immediate outcomes from their work, over a longer timeframe than five working days (cf. Chapter 5).

There were some theoretical issues in Study 2 which can be viewed as limitations, including the non-inclusion of resources common within the JD-R literature. Research has supported social support and performance feedback as valuable resources (cf. Bakker & Demerouti, 2017; Xanthopoulou, Bakker, Dollard, et al., 2007), which could align with the psychological need for relatedness and competence, respectively. Future research could utilise both SDT and the needs-satisfaction theory of engagement to examine the different impact multiple job resources have on employees' decision to invest, and thus express their preferred selves in their work roles (cf. Kahn, 1990). For example, when examining the relationship between job (re) design, and manager training to be more needs-supportive (Section 7.5.) In addition, to extend further our understanding of the role of resources that underpin engagement, it has been argued that an employees' psychological availability could be viewed a resource underpinning their engagement (Shuck, 2011). Hence, when designing Study 2 in this thesis, the merits of assessing psychological availability in conjunction with psychological meaningfulness, could have contributed to the extension of our understanding of the role of job resources in employee engagement.

A potential limitation in Study 1 was the lower internal consistency for the future subscale of the ZTPI-S (Orkibi, 2015), which did not meet the minimum threshold (Chapter 4). This could conceivably have led to treat the moderating effects of eudaimonic orientations and employees' future focused FTP with caution. However, the lower level of reliability for some of the subscales in the ZTPI-S is a prevailing issue in the literature (Appendix 2; Table 1). A way forward for assessing the FTP, with greater reliability, in future research may have been unearthed during the analysis in Study 2 (Chapter 6). The internal consistency of the whole measure, and its subscales, far exceeded the accepted level of internal consistency. Future research incorporating the ZTPI-S measure could adopt the same items employed in this thesis (Chapter 6). In addition, this greater level of reliability, compared to previous literature, supported the replication of the relationship between eudaimonic orientations and having a future FTP from Study 1; and thus, supported their moderating effect on the relationship between job control and autonomous motivation (Table 7.1.).

One of the strengths of Study 1 may also be viewed as a limitation for this thesis. Research assessing engagement through the needs-satisfaction approach has been impeded by the need for a measure that aligns with this conceptualisation (Kahn, 1990, 1992). The Job Engagement scale (Rich et al., 2010) was chosen due its close alignment with Kahn's (1990) theory of engagement. This measure consisted of 18 items which was reduced through CFA, leading to an 11-item measure during the measurement analysis in Study 1 (Chapter 4). This

shortened version was then employed to assess engagement in Study 2. Post data collection for both studies, a shorter version of the Job Engagement scale was identified (cf. Crawford, LePine & Buckman, 2013), which could have served as a more succinct measure of engagement without the need for item reduction (Chapter 4). Research examining the needs-satisfaction approach to engagement validated a nine-item version of this scale with three items per engagement dimension (Crawford, et al., 2013). While this identified short version of the Job Engagement Scale has not gained attention in literature adopting Kahn's (1990) conceptualisation, the need for a shorter version of the original 18-item measure (cf. Rich et al., 2010) has been recognised in recent research.

The previous attempts to produce a shorter version of the Job Engagement Scale (Rich et al., 2010), due to the lack of an available validated shorter version of this measure, are argued to lack the same theoretical support as the 18-item version (Houle, et al., 2022). A recent study by Houle and colleagues aimed to address this gap, where the original measure was cross validated with a 9-Item version of the measure. The results indicated that there was strong psychometric support in both the English and French versions of the long and short form Job Engagement scale (Houle, et al., 2022). Future research adopting the need satisfaction theory of engagement (Kahn, 1990), and using a longitudinal design, may benefit from this shortened measure (Houle et al., 2022). While the UWES measure of engagement is not without its problems (cf. de Bruin & Henn, 2013), this new 9-item version of the Job Engagement scale would align with the wider application of a 9-item measure of engagement research (UWES; Schaufeli, et al., 2006). Future research adopting Kahn's (1990) theory of engagement, and in advancing the findings pertaining to the preferred selves in this thesis, could provide further insights by using this new shorter measure (cf., Houle et al., 2022). Thus, also creating the means to examine and apply this theoretical perspective on engagement in further longitudinal research.

7.8. Final Conclusions

This thesis made notable contributions to our understanding of the motivational processes underpinning engagement, which drew from two philosophical constructs (eudaimonia and hedonia), the FTP theory, SDT, and two JD-R antecedents. The conceptualisation of eudaimonia and hedonia as orientations overcame the difficulties in the literature surrounding eudaimonia, and its use in organisational research. This

conceptualisation enabled the operationalisation of eudaimonia and hedonia as motivational traits (Chapter 2), which were supported by the findings in this thesis. The results of Study 1 demonstrated that eudaimonic orientations were pivotal in explaining the reasons employees find their work psychologically meaningful; their current tasks having utility value for the future; and why they engaged in their work tasks. The support for the relationship between eudaimonic orientations and having a future focused FTP, in both studies, is the first theoretically supported evidence of an association between eudaimonic processes and long-term objectives. Importantly, the strong positive relationships between eudaimonic orientations and a future focused FTP provided support for one way to conceptualise, and explain, Kahn's (1990) concept of the preferred self. Hence, providing a foundation for understanding the role of this concept as an antecedent of engagement.

The novel approach of applying the FTP theory (Lens et al., 2012), and operationalising employees' FTP as cognitive motivational characteristics, had notable implications for our understanding of employee motivation, the psychological processes relating to JD-R antecedents, extending our current understanding of engagement. The findings from Study 1 offer a future avenue for understanding the FTP, impacts employees' task perceptions, and their levels of motivation in the present. The support for the motivational power of employees having a future focused FTP, in Study 2, related not only to their eudaimonic orientations, but also their job resources. The multiplicative relationship between eudaimonic orientations and having a future focused FTP, acted as a supporting mechanism for employees' levels of job control, leading to increased levels of autonomous motivation. Those moderating effects also indicate the reasons employees will sustain their levels of engagement, despite their levels of workload. For example, in contradiction to JD-R theory and the buffering hypotheses, which argues that job resources are required to mitigate the effect of job demands (cf. Bakker & Demerouti, 2017).

Finally, in addition to the contribution of this thesis presenting a way to understand how employees' express their preferred selves at work, the adoption of the needs-satisfaction theory of engagement (Kahn, 1990, 1992) provided additional insights. For example, it enabled the assessment of both individual proximal antecedents (via their orientations and FTP) and distal situational factors (JD-R antecedents), which explain engagement. The needs-satisfaction approach had previously been sidestepped in favour of the prevailing approach (cf. Schaufeli et al., 2002), despite Kahn's (1990) theory laying the foundations for our understanding of engagement as an organisational construct. The importance of eudaimonic orientations and the associated future focused FTP enabled the preferred self to

be contextualised, and act as a pathway for future research adopting the need satisfaction approach to engagement. The adoption of a validated measure that adhered strictly to Kahn's (1990) conceptualisation, i.e., the Job Engagement scale (Rich et al., 2010), also overcame previous reservations of using this needs-satisfaction approach to engagement (Chapter 2).

The purpose of this thesis was to extend our understanding of the processes that shape employee motivation leading to engagement, by examining the role of the preferred self, and extending our understanding of the relationship between JD-R and engagement. The findings in this thesis demonstrated that employees express their preferred selves in their work, and subsequently engage, when the following are evident: they are eudaimonically motivated by their tasks; they anticipate the distant future in their present actions; they have higher levels of job control, and their levels of workload are not perceived as a hindrance. Additionally, when they perceive their work to be worth the investment (psychological meaningfulness), and finally, they are autonomously motivated by their tasks. Hence, in answering the research question, eudaimonic orientations and higher levels of a future focused FTP clarified the way employees' express their preferred selves, and job demands more so than job resources explained the relationship between JD-R antecedents and engagement.

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Appendix 1

1. Study 1: Recruitment advertisement.



Investigating the impact of employees' orientations on their levels of engagement and meaning at work.

I would like to invite all employees currently working full-time within an organisation, and aged 18+ prior to taking part.

This study is an online-based survey and is part of a PhD research degree. You will be asked about how you approach your work tasks, how meaningful you find your work, and factors that influence your decisions to engage.

If you are interested in taking part, it will take approximately 10-15 minutes of your time, and can be completed on mobile devices. Any data collected from this study will be presented at conferences and published in academic journals. Participation in this study is voluntary and you can withdraw at any stage. There will be two prize draws of £50 (or equivalent in other currencies) in late April 2017.

If you would like to read more about this study, please click on the following link:

https://bbk.qualtrics.com/SE/?SID=SV_8do9VRNTZWvqCX3

Alternatively, you are free to contact the PhD researcher Aly Kelleher at:

akelle03@mail.bbk.ac.uk.

2. Study 1: Information Sheet.

INFORMATION SHEET FOR PARTICIPANTS

Please take a few minutes to read this information in detail, before proceeding to the questionnaire.

"The direct relationship between employees' orientations, the meaningfulness of work, and engagement."

I would like to invite you to participate in this research project, which is part of my PhD. Taking part is entirely voluntary, and you are free to withdraw at any stage, including after you have participated.

What is the purpose of the study?

The aim of the study is to assess how employees' orientations towards short vs. long term outcomes influence whether they find work meaningful and are willing to invest effort in their work.

Why have I been invited to take part?

I am inviting all employees who work full-time in their organisations, and who are over 18, to take part in this study.

What will happen to me if I take part?

If you decide to take part, please tick the yes response in the first question. By fully completing the online-based questionnaire, this implies your informed consent, and for your data to be re-used for publication, thesis dissemination and conferences.

All data collected will be anonymous, and you will not be asked for any information that could lead to your identity being known, e.g., your name. However, you will be invited to answer demographic information. Only complete questionnaires will be used in the analysis

and writing up of this study for my PhD research. Please note, this does not apply where only the demographic information is incomplete.

What are the possible risks of taking part?

There are no foreseeable risks in participating in the study. The main disadvantage is that you will be donating around 10-15 minutes of your time. After answering demographic questions, there will be ten questions in the main study. If you have any questions about the questionnaire content, you are free to contact me.

You have the option to skip any question if you do not wish to answer it.

What are the possible benefits of taking part?

There are no direct benefits to taking part. However, the results of this study will help to influence how organisations foster employee engagement in their workplace, and influence job design, so work tasks are more meaningful. There will also be two prize draws for £50 (or equivalent in different currencies), that will take place at the end of April 2017. There is an option to provide your email address at the end of the survey should you wish to be part of the prize draws. Please note: two participants will be chosen at random, and this will apply to completed surveys only.

Will my taking part be kept confidential?

Should you choose to take part; your responses are strictly confidential and will be held securely. If you change your mind, you are free to stop your participation and to have your data withdrawn without giving any reason up to the point of any publication, by April 20th, 2017. If you chose to withdraw your data before then, I would remove all traces of it from the records.

All data for analysis will be anonymised using unique identifiers. The UK Data Protection Act 1998 will apply to all information gathered within the study and held on password-locked encrypted computer files. No data will be accessed by anyone other than my PhD supervisor or me.

What if something goes wrong?

If you have any questions or require more information about this study, please contact me using the following contact details:

Aly Kelleher, PhD candidate,
The Department of Organizational Psychology,
Birkbeck, University of London,
Clare Management Building,
Malet Street, Bloomsbury,
London.
WC1E 7HX
akelle03@mail.bbk.ac.uk

Thank you for reading this information sheet, and for considering taking part in this research.

"I have read the Information sheet fully, and I wish to participate in this study".

Yes No

Appendix 2

2.1. Study 1: Measures.

1. Eudaimonic and hedonic orientations: Hedonic and Eudaimonic Motives for Activities (HEMA) scale (Huta & Ryan, 2010).

To what degree do you typically approach your activities with each of the following intentions, whether or not you actually achieve your aim? Please indicate this on the following scale: 1 (Not at all), 2 (Rarely), 3 (Occasionally), 4 (Now and again), 5 (Often), 6 (Most of the time), 7 (All of the time).

i. Eudaimonic motives:

- 'Seeking to pursue excellence or a personal ideal?'
- 'Seeking to use the best in yourself?'
- 'Seeking to develop a skill, learn, or gain insight into something?'
- 'Seeking to do what you believe in?'

ii. Hedonic motives

- 'Seeking enjoyment?'
- 'Seeking pleasure?'
- 'Seeking fun?'
- 'Seeking relaxation?'
- 'Seeking to take it easy?'

2. Employees' FTP: Short (full) version of the Zimbardo Perspective Inventory (ZTPI-S)
(Orkibi, 2015).

To what extent are the following statements characteristic of you? Please indicate this based on the following statements, using this response scale:

1 (Very Uncharacteristic), 2 (Slightly characteristic), 3 (Neutral), 4 (Characteristic), 5 (Very Characteristic).

i. Past positive

Familiar childhood sights, sounds, and smells often bring back a flood of wonderful memories.

Happy memories of good times spring readily to mind.

I get nostalgic about my childhood.

I like family rituals and traditions that are regularly repeated.

ii. Past negative

Painful past experiences keep being replayed in my mind.

I've taken my share of abuse and rejection in the past.

It's hard for me to forget unpleasant images of my youth.

I think about the bad things that have happened to me in the past.

iii. Present-hedonistic

I believe that getting together with one's friends to party is one of life's important pleasures.

Taking risks keeps my life from becoming boring.

I take risks to put excitement in my life.

I like my close relationships to be passionate.

iv. Present fatalistic

Since whatever will be will be, it doesn't really matter what I do.

You can't really plan for the future because things change so much.

My life path is controlled by forces I cannot influence.

It doesn't make sense to worry about the future, since there is nothing that I can do about it anyway.

v. Future

When I want to achieve something, I set goals and consider specific means for reaching those goals.

Meeting tomorrow's deadlines and doing other necessary work come before tonight's play.

I am able to resist temptations when I know that there is work to be done.

I keep working at difficult, uninteresting tasks if they help me get ahead.

3. Utility Value: The Job Challenge scale (Cohen-Meiter et al., 2009).

To what extent do the following statements apply to your current work tasks? Please rate on the following scale the extent to which each statement applies to you.

1) Strongly disagree 2) Disagree 3) Neither agree or disagree 4) Agree 5) Strongly agree.

- i. My work demands that I use some complicated abilities.
- ii. I have new interesting things to do in my job.
- iii. My work gives me new challenges.
- iv. My work is quite simple and routine (R).
- v. My role demands that I do different things at work and use various abilities and talents.

4. Psychological Meaningfulness: The Psychological Meaningfulness scale (May et al., 2004).

To what extent would the following statements apply to you? Please indicate this on the following scale:

1) Strongly disagree 2) Disagree 3) Neither agree or disagree 4) Agree 5) Strongly agree.

- i. The work I do on this job is very important to me.
- ii. My job activities are significant to me.
- iii. The work I do on this job is meaningful to me.
- iv. I feel that the work I do on my job is valuable.

5. Autonomous Motivation: Revised-Motivation at Work Scale (R-MAWS) (Gagné et al., 2012).

Please indicate the extent to which each statement best describes what motivates you at work, using the following scale:

- 1) Strongly disagree 2) Disagree 3) Neither agree or disagree 4) Agree 5) Strongly agree.

I. Identified Regulation

- i. Because I personally consider it important to put efforts in this job.
- ii. Because putting efforts in this job aligns with my personal values.
- iii. Because putting efforts in this job has personal significance to me.

II. Intrinsic Motivation

- i. Because I have fun doing my job.
- ii. Because what I do in my work is exciting.
- iii. Because the work I do is interesting.

6. Engagement: The Job Engagement Scale (Rich et al., 2010).

Please indicate how true these statements are for you on a normal working day, using the following scale:

- 1) Strongly disagree 2) Disagree 3) Neither agree or disagree 4) Agree 5) Strongly agree

I. Physical engagement

- i. I work with intensity on my job
- ii. I exert my full effort to my job
- iii. I devote a lot of energy to my job
- iv. I try my hardest to perform well on my job
- v. I strive as hard as I can to complete my job
- vi. I exert a lot of energy on my job

II. Emotional engagement

- i. I am enthusiastic in my job
- ii. I feel energetic at my job
- iii. I am interested in my job

- iv. I am proud of my job
- v. I feel positive about my job
- vi. I am excited about my job

III. Cognitive engagement

- i. At work, my mind is focused on my job
- ii. At work, I pay a lot of attention to my job
- iii. At work, I focus a great deal of attention on my job
- iv. At work, I am absorbed by my job
- v. At work, I concentrate on my job
- vi. At work, I devote a lot of attention to my job

2.2. Comparison of ZTPI-S measures in the literature

Table 1.: Comparison of sub scale length (number of items used) and reliability (alpha): across all studies that assessed the ZTPI-S

Authors	Past-Negative	Past-positive	Present-Hedonistic	Present-Fatalistic	Future
Dissel and Potgieter (2007)	(4) .22	(4) .21	(4) .05	(4) .05	(4) .11
Wakefield et al. (2010)	(5) .76 & .83	(5) .62 & .69	(5) .77 & .79	(5) .69 & .71	(5) .59 & .72
Laghi et al. (2013)	(5) .82	(5) .83	(5) .84	(5) .85	(5) .81
Zhang et al. (2013)	(3) .80	(3) .70	(3) .74	(3) .64	(3) .75
Orosz et al. (2015)	(4) 0.84	(3) .68	(3) .73	(4) .69	(3) .70
Perry et al. (2015) UK	(5) .70	(5) .78	(5) .56	(5) .60	(5) .66
Perry et al. (2015) US	(5) .75	(5) .62	(5) .48	(5) .62	(5) .59
Perry et al. (2015) Slovenia	(5) .80	(5) .71	(5) .67	(5) .55	(5) .73
Zimbardo & Boyd (1999):	(9) .80	(10) .82	(15) .79	(9) .77	(13) .77
Apostolidis & Fieulaine (2004)	(8) .70	(9) .72	(18) .79	(7) .64	(12) .74
Diaz-Morales (2006)	(8) .70	(14) .80	(14) .79	(9) .64	(11) .74
Milfont et al. (2008)	(6) .60	(7) .60	(9) .55	(6) .46	(10) .67
Liniauskaite & Kairys (2009)	(6) .63	(11) .79	(14) .77	(10) .73	(17) .77
Anagnostopoloulos & Griva (2011)	(8) .73	(10) .80	(15) .85	(8) .71	(13) .83
Carelli et al. (2011)	(9) .76	(10) .84	(15) .81	(9) .61	(13) .71
Gao (2011)	(4) .68	(4) .76	(4) .68	(4) .49	(4) .68
Kostal et al. (2015)	(3) .68	(3) .71	(3) .78	(3) .72	(3) .65
Kolesovs (2004)	(10) .71	(9) .63	(15) .71	(9) .63	(13) .71
Seema and Sircova (2013)	(5) .83	(5) .69	(5) .73	(5) .63	(5) .69
Boniwell et al. (2010)	(5) .79	(5) .77	(5) .75	(5) .68	(5) .76
Orkibi (2015)*	(4) .80	(4) .69	(4) .73	(4) .65	(4) .70

2.3. Study 1 Data Collection online Survey.

The online survey in Qualtrics for Study 1 began with demographic questions. It also included validated measures in the following order: Hedonic and Eudaimonic Motives for Activities (HEMA) scale (Huta & Ryan, 2010); Revised Motivation At Work Scale (R-MAWS; Gagné et al., 2012); Job Engagement scale (Rich et al., 2010); a Meaningful work item from Huta and Ryan (2010); the Psychological Meaningfulness scale (May et al., 2004); Job Challenge scale (Cohen-Meiter et al., 2009); Short version of Zimbardo Time Perspective Inventory (ZTPI-S; Orkibi, 2015); Short version of Self-Regulation Questionnaire (SSRQ; Gavora, Jakešová, J., & Kalenda, J., 2015); Ego Depletion scale (Deng, Wu, Leung & Guan, 2016; Twenge, Muraven & Tice, 2004); and the Core Self-Evaluation scale (CSES; Judge, Erez, Bono & Thoresen, 2003).

Post data collection, the following measures were dropped pre-analysis: Meaningful work item from Huta and Ryan (2010); Short version of Self-Regulation Questionnaire (SSRQ; Gavora et al., 2015); Ego Depletion scale (Deng et al., 2016; Twenge et al., 2004); and the Core Self-Evaluation scale (CSES; Judge et al., 2003).

End of Block: Introduction

Start of Block: Demographics

Q3 What is your Gender?

- Male (1)
- Female (2)
- Prefer not to say (3)

Q4 What is your age in years?

Q5 What is your ethnic origin?

- White British (1)
- White Irish (2)
- White European/other (3)
- Mixed - White and Black Caribbean (4)
- Mixed - White and Black African (5)
- Mixed - White and Asian (6)
- Asian / Asian British (7)
- Black or Black British - Caribbean (8)
- Black or Black British - African (9)
- Prefer not to say (10)

Q6 Type of Work

- Full-time (2)
- Full-time - flexible (3)
- Part-time (4)
- Self-employed (5)

Q7 Job Status

- Employee (General) (1)
- Executive manager (2)
- Senior manager (3)
- CEO/Managing director (4)

Q8 Location (City and Country)

Q9 How long have you worked for your organisation (years and months)?

Q10 What Organisation do you work for?

End of Block: Demographics

Start of Block: Main survey

Q11 To what extent do you normally approach your work tasks with each of the following intentions, even if you do not achieve your aim.

	Never (1)	Rarely (2)	Half the time (3)	Often (4)	Always (5)
'Seeking to pursue excellence or a personal ideal?' (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
'Seeking to use the best in yourself?' (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
'Seeking to develop a skill, learn, or gain insight into something?' (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
'Seeking to do what you believe in?' (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
'Seeking enjoyment?' (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
'Seeking pleasure?' (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
'Seeking fun?' (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
'Seeking relaxation?' (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
'Seeking to take it easy?' (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q12 Please indicate the extent to which each statement best describes what motivates you at work.

	Strongly Disagree (1)	Disagree (2)	Neither agree/disagree (3)	Somewhat agree (4)	Strongly agree (5)
Because I personally consider it important to put efforts in this job. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Because putting efforts in this job aligns with my personal values. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Because putting efforts in this job has personal significance to me. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Because I have fun doing my job. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Because the work I do is exciting. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Because the work I do is interesting. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q13 Please indicate how true these statements are for you on a normal working day.

	Strongly disagree (1)	Disagree (2)	Neither agree/disagree (3)	Agree (4)	Strongly agree (5)
I work with intensity on my job. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I exert my full effort to my job. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I devote a lot of energy to my job. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have tried my hardest to perform well at my job. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I strive as hard as I can to complete my job. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I exert a lot of energy on my job. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am enthusiastic in my job. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel energetic at my job. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am interested in my job. (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am proud of my job. (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel positive about my job. (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am excited about my job. (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

At work, my mind is focused on my job. (13)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
At work, I pay a lot of attention to my job. (14)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
At work, I focus a great deal of attention to my job. (15)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
At work, I have been absorbed by my job. (16)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
At work, I concentrate on my job (17)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
At work, I devote a lot of attention to my job. (18)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q14 In the past month, to what extent did you feel your work tasks were worthwhile or valuable?

	Not at all (1)	Not often (2)	Somewhat often (3)	Often (4)
Valuable (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Worthwhile (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q15 To what extent would the following statements apply to you?

	Strongly disagree (1)	Disagree (2)	Neither agree/disagree (3)	Agree (4)	Strongly agree (5)
The work I do on this job is very important to me. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My job activities are significant to me. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The work I do on this job is meaningful to me. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel that the work I do on my job is valuable. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q16 To what extent would the following statements apply to your current work tasks?

	Strongly disagree (1)	Disagree (2)	Neither agree/disagree (3)	Agree (4)	Strongly agree (5)
My work demands that I use some complicated abilities (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have new interesting things to do in my job (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My work gives me new challenges (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My work is quite simple and routine. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My role demands that I do different things at work and use various abilities and talents. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q17 To what extent are the following statements characteristic of you?

	Very Uncharacteristic (1)	Somewhat uncharacteristic (2)	Neutral (3)	Somewhat Characteristic (4)	Very characteristic (5)
Familiar childhood sights, sounds, and smells often bring back a flood of wonderful memories. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Happy memories of good times spring readily to mind (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I get nostalgic about my childhood. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I like family rituals and traditions that are regularly repeated. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Painful past experiences keep being replayed in my mind (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I've taken my share of abuse and rejection in the past. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It's hard for me to forget unpleasant images of my youth. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I think about the bad things that have happened to me in the past. (8)

I believe that getting together with one's friends to party is one of life's important pleasures. (9)

Taking risks keeps my life from becoming boring. (10)

I take risks to put excitement in my life. (11)

I like my close relationships to be passionate. (12)

Since whatever will be will be, it doesn't really matter what I do. (13)

You can't really plan for the future because things change so much. (14)

My life path is controlled by forces I cannot influence. (15)

It doesn't make sense to worry about the future, since there is nothing that I can do about it anyway. (16)

When I want to achieve something, I set goals and consider specific means for reaching those goals. (17)

Meeting tomorrow's deadlines and doing other necessary work come before tonight's play. (18)

I am able to resist temptations when I know that there is work to be done. (19)

I keep working at difficult, uninteresting tasks if they help me get ahead. (20)

Q18 Indicate on the following scale how true these statements are for you on an average working day.

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
I usually keep track of my progress toward my goals. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have trouble making up my mind about things. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I get easily distracted from my plans. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It's hard for me to see anything helpful about changing my ways. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When it comes to deciding about a change, I feel overwhelmed by the choices. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have trouble following through with things once I've made up my mind to do something. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can come up with lots of ways to change, but it's hard for me to decide which one to use. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I give up quickly (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
As soon as I see a problem or challenge, I start looking for possible solutions. (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I'm trying to change something, I pay a lot of attention to how I'm doing (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
As soon as I see things aren't going right, I want to do something about it (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There is usually more than one way to accomplish something. (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can usually find several different possibilities when I want to change something. (13)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<u>Usually</u> I see the need to change before others do. (14)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I'm good at finding different ways to get what I want (15)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q19 How often do you feel the following way when engaging in tasks at work?

	Never (1)	Sometimes (2)	Often (3)	Very Often (4)	Always (5)
I feel drained. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel worn out. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would want to quit any difficult task I was given (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel lazy. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel like any willpower is gone. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q20 To what extent does each statement best describe you?

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
I am confident I get the success I deserve in life. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sometimes I feel depressed. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I try, I generally succeed (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sometimes when I fail I feel worthless. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I complete tasks successfully. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sometimes, I do not feel in control of my work. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overall, I am satisfied with myself. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am filled with doubts about my competence. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I determine what will happen in my life. (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I do not feel in control of my success in my career. (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am capable of coping with most of my problems. (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There are times when things look pretty bleak and hopeless to me. (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q21 What sector does your organisation belong to?

- [Finance](#) (1)
 - [Consulting](#) (2)
 - [Marketing](#) (3)
 - none of the [above](#) (4)
-

Q30 If none of the above, which sector best describes the organisation you work for?

- [Manufacturing](#) (1)
 - [Lawyer/Solicitor](#) (2)
 - [Restaurant/Food](#) (3)
 - [Retail](#) (4)
 - [Mechanic](#) (5)
 - [I.T./Computers](#) (6)
 - [Education](#) (7)
 - [Real estate](#) (8)
 - [Civil service](#) (9)
 - [Admin](#) (10)
 - [Fashion](#) (11)
 - [Human resources](#) (12)
 - [Beautician](#) (13)
 - [Social work/Social services](#) (14)
 - [Profit organisation](#) (15)
 - [Non-profit organisation](#) (16)
 - [Engineering](#) (17)
 - [Hairdressing](#) (18)
-

Appendix 3

3A: Reliability & Validity (full measures).

Measure	<i>a</i>	1	2	3	4	5	6	7	8	9	10	11	12	13
1. HEMA Scale	.78	1												
2. Eudaimonic Motives (HEMA subscale)	.79	.67**	1											
3. Hedonic Motives (HEMA subscale)	.80	.88**	.24**	1										
4. Job Engagement Scale	.95	.39**	.59**	.14*	1									
5. Psychological Meaningfulness Scale	.93	.33**	.49**	.12	.73**	1								
6. Job Challenge Scale (Utility Value)	.84	.23**	.36**	.07	.62**	.62**	1							
7. Autonomous motivation (R-MAWS scale)	.82	.48**	.51**	.30**	.69**	.70**	.60**	1						
8. Identified Regulation (R-MAWS subscale)	.76	.32**	.41**	.16*	.56**	.58**	.41**	.85**	1					
9. Intrinsic Motivation (R-MAWS subscale)	.80	.50**	.47**	.36**	.63**	.64**	.62**	.89**	.53**	1				
10. S-ZTPI Scale (Employees' FTP)	.68	.27**	.27**	.17*	.31**	.19**	.23**	.19**	.13	.18**	1			
11. S-ZTPI subscale (Present-Hedonistic FTP)	.74	.35**	.20**	.32**	.16*	.11	.17*	.16*	.12	.16*	.55**	1		
12. S-ZTPI subscale (Present-Fatalistic FTP)	.68	-.01	.08	-.06	.13	.18**	.17*	.15*	.14*	.12	.32**	-.01	1	
13. S-ZTPI subscale (Future FTP)	.66	.14*	.26**	.01	.34**	.17*	.18**	.18**	.08	.22**	.48**	.15*	.11	1

Note: **p<.01, *p<.05.

3B: Inter-item Correlations for all measures: Measurement models (CFA).

Table 2a: HEMA: eudaimonic and hedonic orientations

Items	Eudaimonic Motives 1	Eudaimonic Motives 2	Eudaimonic Motives 3	Eudaimonic Motives 4	Hedonic Motives 1	Hedonic Motives 2	Hedonic Motives 3
Eudaimonic Motives_1	1						
Eudaimonic Motives_2	.62	1					
Eudaimonic Motives_3	.51	.49	1				
Eudaimonic Motives_4	.44	.49	.44	1			
Hedonic Motives_1	.30	.34	.33	.38	1		
Hedonic Motives_2	.24	.34	.31	.37	.81	1	
Hedonic Motives_3	.14	.17	.20	.20	.68	.72	1

Note: Modified scale: 7 items. Eudaimonic orientations – eudaimonic motives subscale, Hedonic orientations = hedonic motives subscale.

Table 2b: Job Engagement scale: engagement

Items	Physical 1	Physical 2	Physical 3	Physical 4	Emotional 1	Emotional 2	Emotional 3	Emotional 4	Cognitive 1	Cognitive 2	Cognitive 3
Physical_1	1										
Physical_2	.71	1									
Physical_3	.72	.69	1								
Physical_4	.66	.58	.79	1							
Emotional_1	.37	.41	.37	.42	1						
Emotional_2	.44	.42	.37	.36	.68	1					
Emotional_3	.39	.36	.31	.36	.73	.74	1				
Emotional_4	.39	.41	.32	.39	.75	.64	.79	1			
Cognitive_1	.55	.53	.47	.54	.56	.52	.53	.52	1		
Cognitive_2	.60	.58	.54	.64	.57	.53	.53	.49	.79	1	
Cognitive_3	.54	.49	.43	.48	.55	.44	.49	.46	.69	.70	1

Note: Modified scale: 11-items.

Table 2c: Psychological Meaningfulness scale

Items	Psychological Meaningfulness 1	Psychological Meaningfulness 3	Psychological Meaningfulness 3
Psychological Meaningfulness_1	1		
Psychological Meaningfulness_2	.79	1	
Psychological Meaningfulness_3	.66	.74	1

Note: Modified scale: 3 items.

Table 2d: Job Challenge scale: Utility value

Items	Utility Value 1	Utility Value 2	Utility Value 3	Utility Value 4
Utility Value_1	1			
Utility Value_2	.77	1		
Utility Value_3	.43	.41	1	
Utility Value_4	.62	.59	.50	1

Note: Modified scale: 4 items.

Table 2e: R-MAWS: Autonomous motivation

Items	Identified Regulation 1	Identified Regulation 2	Identified Regulation 3	Intrinsic Motivation 1	Intrinsic Motivation 2	Intrinsic Motivation 3
Identified Regulation_1	1					
Identified Regulation_2	.55	1				
Identified Regulation_3	.49	.53	1			
Intrinsic Motivation_1	.36	.34	.47	1		
Intrinsic Motivation_2	.36	.30	.46	.57	1	
Intrinsic Motivation_3	.37	.36	.38	.47	.63	1

Note: Full scale retained.

Table 2f: ZTPI-S (FTP): Present-hedonistic subscale

Items	Present Hedonistic 1	Present Hedonistic 2	Present Hedonistic 3
Present Hedonistic_1	1		
Present Hedonistic_2	.42	1	
Present Hedonistic_3	.29	.79	1

Note: Modified subscale: 3 items (1 item removed).

Table 2g: ZTPI-S (FTP): Present-Fatalistic subscale

Items	Present Fatalistic 1	Present Fatalistic 2	Present Fatalistic 3	Present Fatalistic 3
Present Fatalistic_1	1			
Present Fatalistic_2	.42	1		
Present Fatalistic_3	.29	.38	1	
Present Fatalistic_4	.25	.35	.35	1

Note: Full subscale retained.

Table 2h: ZTPI-S (FTP): Future subscale

Items	Future_1	Future_2	Future_3	Future_4
Future_1	1			
Future_2	.23	1		
Future_3	.30	.49	1	
Future_4	.26	.31	.28	1

Note: Full subscale retained.

Table 3. ZTPI-S (Full scale): employees' FTP

Items*	PP 1	PP 2	PP 3	PP 4	PN 5	PN 6	PN 7	PN 8	PH 9	PH 10	PH 11	PH 12	PF 13	PF 14	PF 15	PF 16	F 17	F 18	F 19	F 20
PP 1	1																			
PP 2	.53	1																		
PP 3	.66	.51	1																	
PP 4	.45	.37	.57	1																
PN 5	.07	-.10	.08	.08	1															
PN 6	.06	-.07	-.03	.09	.51	1														
PN 7	.03	-.11	.02	.05	.62	.60	1													
PN 8	.09	-.08	.07	.05	.68	.57	.79	1												
PH 9	.29	.23	.26	.24	-.03	-.13	-.04	-.02	1											
PH 10	.17	.17	.15	.09	-.06	-.00	-.09	-.04	.42	1										
PH 11	.18	.17	.11	.06	-.08	.04	-.06	.02	.29	.79	1									
PH 12	.34	.16	.22	.17	.03	.10	.08	.12	.29	.31	.32	1								
PF 13	.06	.02	.01	.04	-.14	-.13	-.15	-.19	.06	.04	.03	.05	1							
PF 14	.09	-.01	-.02	.10	-.13	-.16	-.13	-.16	.04	-.12	-.12	-.01	.42	1						
PF 15	.07	-.01	-.05	.02	-.14	-.19	-.09	-.13	.13	-.01	-.10	.03	.31	.39	1					
PF 16	.09	-.05	.02	.05	.17	-.02	.05	.08	.09	-.04	-.00	.15	.26	.37	.34	1				
F 17	.11	.04	.00	.01	-.13	-.01	.04	-.09	.08	.22	.19	.13	.20	.05	.10	.03	1			
F 18	.07	.01	.08	.05	.04	.05	.06	.03	.04	.03	-.00	.06	.12	.02	.03	.04	.24	1		
F 19	-.01	.01	.00	.02	-.18	-.12	-.13	-.23	-.03	.07	.01	.05	.18	.07	.02	.03	.32	.47	1	
F 20	.17	.14	.07	.15	.02	.13	.08	.08	.03	.13	.16	.22	.10	.05	-.06	.09	.27	.31	.38	1

Note: *PP = Past Positive; PN = Past Negative; PH = Present Hedonistic; PF = Present Fatalistic; F = Future.

3C: Additional Correlation

Table 4. Correlation analysis with all variables with the addition of age and tenure as demographic variables

Variable	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12
1. Age (Demographic)	39.66	11.82	1											
2. Tenure (Demographic)	4.90	1.40	.35**	1										
3. Eudaimonic Orientations (IV)	4.24	.61	.06	-.08	1									
4. Hedonic Orientations (IV)	3.22	.97	.02	-.07	.39**	1								
5. Engagement (DV)	4.10	.68	.00	-.12	.59**	.25**	1							
6. Psychological Meaningfulness	3.97	.81	.12	-.02	.48**	.23**	.72**	1						
7. Utility Value	3.92	.82	.14*	-.06	.29**	.15*	.58**	.58**	1					
8. Identified Regulation	4.44	.75	.08	-.06	.41**	.221*	.56**	.57**	.402*	1				
9. Intrinsic Motivation	3.77	.84	.05	-.13	.47**	.46**	.67**	.63**	.59**	.53**	1			
10. Present Hedonistic FTP	3.40	.90	-.11	-.10	.17*	.34**	.08	.07	.12	.11	.13	1		
11. Present Fatalistic FTP	3.92	.74	.06	.01	.10	-.02	.16*	.18**	.18**	.14*	.14*	-.01	1	
12. Future FTP	3.76	.72	.00	-.02	.26**	.07	.34**	.16*	.12	.08	.22**	.12	.14*	1

Note: **p<.01, *p<.05. Identified regulation (8) and intrinsic motivation (9) are subdimensions of autonomous motivation.

Appendix 4

4A Study 2: Information Sheet

INFORMATION SHEET FOR PARTICIPANTS

Please take a few minutes to read this information in detail and tick the statement at the end before proceeding to the questionnaire.

Employees orientations as self-motives for engagement in their daily tasks.

I would like to invite you to participate in this research project, which is part of my PhD in Organizational Psychology. Participation is entirely voluntary, and you are free to withdraw at any stage including after you have participated. To make an informed decision on whether you want to take part in this study, please take a few minutes to read this information sheet.

What is the purpose of the study?

The aim of the study is to assess the way employees' orientations, and their future related perspectives, explain their daily perceptions of their tasks. Specifically, the study examines the way daily perceptions of work tasks, and employees' levels of autonomous motivation led to momentary changes in daily levels of engagement.

Why have I been invited to take part?

I am inviting all employees who work full-time in their organisations, who are over 18, and ideally, have been working within the standard of 8 hours a day, to take part in this study.

What will happen to me if I take part?

If you decide to take part, participation involves an initial 15-minute (approx.) online survey on Day One i.e., Monday. This will be followed by shorter daily surveys for 4 consecutive working days, which will require 7 minutes (or less) of your time in a 2-hour window in the afternoon, Tuesday to Friday. You will receive an email invite each day of the study with an anonymised link, and please complete between 2pm and 4pm. To take part, click on the link, confirm your consent to taking part, and then rate statements on short scales, e.g., 1 Strongly disagree to 5 Strongly agree.

By reconfirming your decision to participate at the start of each diary entry, and fully completing each daily entry (i.e., short online surveys), this indicates your informed consent to take part in this study. The data collected in this study will be re-used for my PhD thesis, any resulting publications, and conferences.

All data collected will be anonymous. Your responses will only be linked to you unique Prolific ID, which cannot lead to you being identified. You will be invited to indicate your age, gender, and length of time in your organisation. Only completed daily surveys will be used in the analysis and writing up of this study for my PhD research. Please note, where only the demographic information has been completed (i.e., the initial longer online survey on Day One), this information will not be used in the overall analysis.

What are the possible risks to taking part?

There are no foreseeable risks in participating in the study. The one cost to you is your valuable time, 1 hour approx. spread over one working week.

If you have any questions about the questionnaire content or you continued participation in this study, you are free to contact me. You are also advised in this information sheet, and in the online surveys, that you are free not to answer any questions, which you do not wish to answer.

What are the possible benefits of taking part?

There are real benefits to you of taking part. These include the opportunity to receive detailed anonymised feedback on the findings of this research. The study will provide insight for you into your motivations at work, and the type of work you find particularly worthwhile.

This study will capture momentary changes in the way employees invest in the work based on their characteristics (i.e., orientations) and daily perceptions of tasks. Doing so, will allow for employees to gain insight into the work tasks that they find meaningful and instrumental for their short and long-term goals. The daily diary approach adopted enables an accurate account of the factors that contribute to why employees invest and persist in their daily actions.

By participating in this study, it is recognised that you will be volunteering your time. In acknowledgement of this, in addition to the study payment, you have the option of ‘opting in’ for a prize draw for £50, taking place late June/early July 2019. Please note, you will need to complete 100% of the study to be eligible for the draw, i.e. All five consecutive days. On the final screen there will be an option for you to indicate your wish to be considered for the prize draw. It is essential that you enter your Prolific ID at the start of every study, i.e., each day. This will be used to link all five days and confirm 100% of the study has been completed in order for full payment to be received.

Will my taking part be kept confidential?

Should you choose to take part, your responses are strictly confidential, and anonymised by using your Prolific ID. If you change your mind, you are free to stop your participation, and have your data withdrawn without giving any reason up to the point of the prize draw, e.g., 30th of June 2019. If you choose to withdraw your data before then, I will remove all traces of it from the records.

The GDPR will apply to all information gathered within the daily diaries and held on password-locked encrypted computer files. No data will be accessed by anyone other than my PhD supervisor or me.

Any further questions?

If you have any questions or require more information about this study before or during your participation, please contact me using the following contact details:

Aly Kelleher, PhD candidate,
Department of Organizational Psychology,
Birkbeck, University of London,
Clare Management Building,
Malet Street, Bloomsbury,
London.
WC1E 7HX
akelle03@mail.bbk.ac.uk

For information about Birkbeck’s data protection policy please visit: <http://www.bbk.ac.uk/about-us/policies/privacy#7>

If you have concerns about this study, please contact the School’s Ethics Officer at: BEI-ethics@bbk.ac.uk.
School Ethics Officer

School of Business, Economics, and Informatics
Birkbeck, University of London
London. WC1E 7HX

You also have the right to submit a complaint to the Information Commissioner's
Office <https://ico.org.uk/>.

Thank you for reading this information sheet, and for considering taking part in this research.

Day 1: "I have read the Information sheet fully, and I wish to participate in this study".

Yes No

4B. Study 2 description example: Prolific

Please note: This study involves taking short surveys over 5 consecutive days, i.e., there are 4 more follow up studies after Day 1. Due to the longitudinal nature of this study, payment will be delayed until completion of the 5 surveys. If you chose to complete all 5 days you will also have the option to 'opt in' to a prize draw for £50, as a bonus reward for providing 1 hour of your time over a working week.

Study purpose & benefits: Each daily entry in this study provides you with the opportunity to reflect on, and give honest responses to, what motivates you to invest in your work tasks. I am interested in understanding, based on your perspectives, what underpins your daily perceptions of the meaningfulness and value of your tasks for your short and long-term objectives, and subsequent engagement at work.

What is involved in participation?

On the 1st page of the study, you will be presented with an Information Sheet. This sheet provides you with full details on the purpose of the study, and what is involved in taking part. It also includes eligibility for participation. You will be asked to read this before providing your consent to taking part.

In part 1 (this study): you are asked, at a time convenient to you during the specified hours (i.e., 2pm to 4pm GMT/UK), to please complete the daily entry for that day. On the first day of participation (i.e., Monday; this study), there will be additional questions at the start of the survey. This should take you no longer than 15 minutes to complete.

From Day Two onwards (i.e., Tuesday to Friday inclusive), the daily surveys will involve completing less questions, which will take 7 minutes (or less) of your time. Please read each question carefully and answer as accurately as possible.

After completion of each day, you will receive an invite to take part in the survey the following day. It is important that you enter your Prolific ID at the start of each survey when prompted. This will enable your completion to be registered, and an invite to be generated for the next day of the study. It also ensures that payment is received after all 5 days have been completed.

4C: Study 2 measures

1. Eudaimonic and hedonic orientations: Hedonic and Eudaimonic Motives for Activities (HEMA) scale (Huta & Ryan, 2010).

To what degree do you typically approach your daily work activities with each of the following intentions, whether or not you actually achieve your aim? Please indicate this on the following scale: 1 (Not at all), 2 (Rarely), 3 (Occasionally), 4 (Now and again), 5 (Often), 6 (Most of the time), 7 (All of the time).

i. Eudaimonic motives:

- 'Seeking to pursue excellence or a personal ideal?'
- 'Seeking to use the best in yourself?'
- 'Seeking to develop a skill, learn, or gain insight into something?'
- 'Seeking to do what you believe in?'

ii. Hedonic motives

- 'Seeking enjoyment?'
- 'Seeking pleasure?'
- 'Seeking fun?'

2. Employees' FTP: Short version of the Zimbardo Perspective Inventory (ZTPI-S) (Orkibi, 2015).

To what extent are the following statements characteristic of you? Please indicate this based on the following statements, using this response scale:

1 (Very Uncharacteristic), 2 (Slightly characteristic), 3 (Neutral), 4 (Characteristic), 5 (Very Characteristic).

i. **Present-hedonistic**

I believe that getting together with one's friends to party is one of life's important pleasures.

Taking risks keeps my life from becoming boring.

I take risks to put excitement in my life.

ii. Present fatalistic

Since whatever will be will be, it doesn't really matter what I do.

You can't really plan for the future because things change so much.

My life path is controlled by forces I cannot influence.

It doesn't make sense to worry about the future, since there is nothing that I can do about it anyway.

iii. Future

When I want to achieve something, I set goals and consider specific means for reaching those goals.

Meeting tomorrow's deadlines and doing other necessary work come before tonight's play.

I am able to resist temptations when I know that there is work to be done.

I keep working at difficult, uninteresting tasks if they help me get ahead.

3. Workload: Workload sub-scale of the JCQ (Bakker et al., 2004).

Reflecting on your current workload, how accurate are these statements in relation to your work today? Please indicate this on the following scale:

1) Never 2) Sometimes 3) About half of the time 4) Most of the time 5) Always

- i. Today, I have too much work to do.
- ii. Today, my work requires working very hard.
- iii. Today, I have to work very fast.

4. Utility Value: The Job Challenge scale (Cohen-Meiter et al., 2009).

How do you feel about the work you are doing today? Please rate on the following scale the extent to which each statement applies to you.

1) Strongly disagree 2) Disagree 3) Neither agree or disagree 4) Agree 5) Strongly agree.

- I. Today, I have new interesting things to do in my job.
- II. Today, my work gives me new challenges.
- III. Today, my work is quite simple and routine (R).
- IV. Today, my role demands that I do different things at work and use various abilities and talents.

5. Job Control: The Job Content Questionnaire (JCQ) (Brisson et al., 1998).

How true are these statement in relation to the work you are doing today? Please rate on the following scale the extent to which each statement applies to you.

- 1) Strongly disagree 2) Disagree 3) Neither agree or disagree 4) Agree 5) Strongly agree.
- I. I have a lot to say about what happens on my job.
 - II. In my job, I have very little freedom to decide how I work.
 - III. My job allows me to make a lot of decisions on my own.

6. Psychological Meaningfulness: The Psychological Meaningfulness scale (May et al., 2004).

To what extent would the following statements apply to you? Please indicate this on the following scale:

- 1) Strongly disagree 2) Disagree 3) Neither agree or disagree 4) Agree 5) Strongly agree.
- I. Today, my job activities are significant to me.
 - II. Today, the work I do on this job is meaningful to me.

Today, I feel that the work I do on my job is valuable.

7. Autonomous Motivation: Revised-Motivation at Work Scale (R-MAWS) (Gagné et al., 2012).

Please indicate the extent to which each statement best describes what motivates you at work today, using the following scale:

Strongly disagree 2) Disagree 3) Neither agree or disagree 4) Agree 5) Strongly agree.

I. Identified Regulation

- I. Because I personally consider it important to put efforts in this job.
- II. Because putting efforts in this job aligns with my personal values.
- III. Because putting efforts in this job has personal significance to me.

II. Intrinsic Motivation

- I. Because I have fun doing my job.
- II. Because what I do in my work is exciting.
- III. Because the work I do is interesting.

8. Engagement: The Job Engagement Scale (Rich et al., 2010).

Please indicate how true these statements are for you today at work, using the following scale:

- 1) Strongly disagree 2) Disagree 3) Neither agree or disagree 4) Agree 5) Strongly agree

I. Physical engagement

- I. Today, I exert my full effort to my job.
- II. Today, I devote a lot of energy to my job.
- III. Today, I try my hardest to perform well on my job.
- IV. Today, I exert a lot of energy on my job.

II. Emotional engagement

- I. Today, I am interested in my job.
- II. Today, I am proud of my job.
- III. Today, I feel positive about my job.
- IV. Today, I am excited about my job.

III. Cognitive engagement

- I. Today, at work, my mind is focused on my job.
- II. Today, at work, I focus a great deal of attention on my job.
- III. Today, at work, I concentrate on my job.

4D. Study 2 Days 2-5: study purpose reminder & Consent

As advised in the study description:

Each diary entry in this study provides you with the opportunity to reflect on, and give honest responses to, what motivates you to invest in your work tasks. I am interested in understanding, based on your perspectives, what drives your daily perceptions of the meaningfulness and value of your work for your short and long-term objectives, and subsequent engagement at work. All responses provided are anonymous to ensure the confidentiality of your individual responses.

Each afternoon, at a time convenient to you during the specified hours (i.e., 2pm to 4pm), please complete the diary entry for that day. On the first day of participation (i.e., Monday), the diary entry includes additional questions at the start. This should take you no longer than 15 minutes to complete. From Day Two onwards (i.e., Tuesday to Friday inclusive), diary entries will involve completing shorter surveys taking 7 minutes (or less) of your time. Please read each question carefully and answer as accurately as possible.

Please re-confirm your consent to taking part in this study below:

Yes, I consent to continuing my participation in this study.

No, I do not wish to continue.

4E. Study 2: Data Collection Online Survey. Day 1

Q15 You will now be asked once-off background questions before you proceed to the main survey.

Q4 What is your gender?

- [Male](#) (1)
- [Female](#) (2)
-

Q5 What is your age (in years)?

Q6 What Organisation do you work for?

Q7 Please chose the option that best describes your work type.

- [Full-time](#) (1)
- [Full-time \(flexible\)](#) (2)
-

Q8 Please chose the option that best describes your job status.

- [General employee](#) (1)
- [Executive Manager](#) (2)
- [Senior Manager](#) (3)
- [Supervisor/line-manager](#) (4)
-

Q9 Location (City/Country):

Q10 Length of employment in current organisation.

- [0-3 Months](#) (1)
- [3-6 Months](#) (2)
- [6-11 Months](#) (3)
- [1 year](#) (4)
- [2+ years](#) (5)

End of Block: Block 1

Q16 The first part of this survey is interested in how your orientations govern the actions that you pursue at work. It also looks at the way your perceptions of the future in the present might explain your approach to your work tasks. Finally, this section is interested in your thoughts on employee development within your place of work.

*Please note the next two questions will only be asked on Day One of the study.

Q11 Please read the following statements carefully, and indicate how often you typically approach your daily work activities with each of the following intentions, whether or not you actually achieve your aim? If you tick number 1, this represents that you have never approached your work tasks with that intention. Conversely, if you tick number 7 this is how you normally

approach your work tasks. Please answer as honestly as possible in relation to your most recent work tasks.

	Not at all (1)	Occasionally (2)	Often (3)	Very often (4)	Most of the time (5)
'Seeking to pursue excellence or a personal ideal?' (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
'Seeking to use the best in yourself?' (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
'Seeking to develop a skill, learn, or gain insight into something?' (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
'Seeking to do what you believe in?' (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
'Seeking enjoyment?' (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
'Seeking pleasure?' (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
'Seeking fun?' (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q12 Each statement (below) reflects different approaches individuals apply to life and work-related decision-making. The response scale ranges from not characteristic at all to an accurate reflection of what influences your daily (i.e. Very Characteristic).

Please read the following statements carefully, and consider: To what extent are the following statements characteristic of you?

	Very Uncharacteristic (1)	Slightly Characteristic (2)	Neutral (3)	Characteristic (4)	Very Characteristic (5)
<input checked="" type="checkbox"/> I believe that getting together with one's friends to party is one of life's important pleasures. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input checked="" type="checkbox"/> Taking risks keeps my life from becoming boring. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input checked="" type="checkbox"/> I take risks to put excitement in my life. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input checked="" type="checkbox"/> Since whatever will be will be, it doesn't really matter what I do. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input checked="" type="checkbox"/> You can't really plan for the future because things change so much. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input checked="" type="checkbox"/> My life path is controlled by forces I cannot influence. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input checked="" type="checkbox"/> It doesn't make sense to worry about the future, since there is nothing that I can do about it anyway. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input checked="" type="checkbox"/> When I want to achieve something, I set goals and consider specific means for reaching those goals. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input checked="" type="checkbox"/> Meeting tomorrow's deadlines and doing other necessary work come before tonight's play. (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input checked="" type="checkbox"/> I am able to resist temptations when I know that there is work to be done. (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q17 The following four questions focus on understanding how you perceive your daily work tasks. You are asked to consider the work you are doing on that specific day, when you are answering the questions.

Q19 How true are these statement in relation to the work you are doing today? Please rate on the following scale the extent to which each statement applies to you.

	Strongly disagree (1)	Disagree (2)	Neither agree or disagree (3)	Agree (4)	Strongly agree (5)
I have a lot to say about what happens on my job. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In my job, I have very little freedom to decide how I work. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My job allows me to make a lot of decisions on my own. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q26 Reflecting on your current workload, which of the following statements is accurate?

	Never (1)	Sometimes (2)	About Half of the time (3)	Most of the time (4)	Always (5)
Today, I have too much work to do. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Today, my work requires working very hard. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Today, I have to work very fast. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q18 How do you feel about the work you are doing today? Please rate on the following scale the extent to which each statement applies to you.

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
Today, I have new interesting things to do in my job. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Today, my work gives me new challenges. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Today, my work is quite simple and routine. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Today, my role demands that I do different things at work and use various abilities and talents. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q20 To what extent would the following statements apply to your work today? Please indicate this on the following scale:

	Strongly Disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
Today, my job activities are significant to me. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Today, the work I do on this job is meaningful to me. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Today, I feel that the work I do on my job is valuable. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q21 Please indicate the extent to which each statement best describes what motivates you at work today? Please use the following scale:

	Strongly Disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
Because I personally consider it important to put efforts in this job. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Because putting efforts in this job aligns with my personal values. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Because putting efforts in this job has personal significance to me. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Because I have fun doing my job. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Because what I do in my work is exciting. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Because the work I do is interesting. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Block 3

Q22 Finally, you are now asked to answer questions in relation to your engagement levels at work on this specific day.

Q23 Please indicate how true these statements are for you today at work.

	Strongly Disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
Today, I exert my full effort to my job. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Today, I devote a lot of energy to my job. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Today, I try my hardest to perform well on my job. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Today, I exert a lot of energy on my job. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Today, I am interested in my job. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Today, I am proud of my job. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Today, I feel positive about my job. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Today, I am excited about my job. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Today, At work, my mind is focused on my job. (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Today, At work, I focus a great deal of attention on my job. (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Today, At work, I concentrate on my job. (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Block 4

Start of Block: Block 5

Q24 Thank you for completing today's diary entry.

If you have any questions about the study, you can contact the primary researcher Aly, on the following email: akelle03@mail.bbk.ac.uk.

You have the choice to 'opt in' to a prize draw of £50 at the end of each diary entry. If you wish to take part in this [draw](#) please enter your Prolific email below. To increase your chances of winning, you are advised to enter this email address every day you complete a diary entry.

Study 2: Days 2-5

The daily diary survey on the subsequent days did not include demographic questions, the HEMA scale (Huta & Ryan, 2010), and the ZTPI-S (Orkibi, 2015). All other validated measures were presented in the same format and order as Day 1

APPENDIX 5

Additional CFA Tables (Chapters 4 & 6)

Table 1: Standardised Loadings and Standard Errors for 3-factor (Reduced) CFA Model of Engagement (Job Engagement scale), that is cognitive, emotional, and physical engagement

Item descriptions	Physical		Emotional		Cognitive	
	β	S.E.	β	S.E.	β	S.E.
Exert my full effort	.72	.05				
Devote a lot of energy	.73	.05				
Try hard to perform well	.65	.05				
Exert a lot of energy	.76	.05				
Interested in my job			.80	.05		
Proud of my job			.73	.05		
Positive about my job			.90	.06		
Excited about my job			.95	.06		
At work, my mind is focused					.77	.05
At work, I pay a lot of attention					.81	.05
At work, I concentrate on my job					.58	.04

Note: SRMR = .03; RMSEA = .08. $X^2(41) = 80.72, p < .001$. Covariances: physical and emotional .53; physical and cognitive .75; emotional and cognitive .70. β = Standardised Loadings, S.E. = Standard Errors.

Table 2: Standardised Loadings and Standard Errors for 2-factor CFA Model of Eudaimonic and Hedonic Motives (HEMA; Huta & Ryan, 2010)

Items description	Eudaimonic Motives		Hedonic Motives	
	β	S.E.	β	S.E.
Seeking to pursue excellence	.66	.08		
Seeking to use the best in yourself	.75	.07		
Seeking to develop a skill, learn, or gain insight	.88	.07		
Seeking enjoyment			1.00	.05
Seeking pleasure			.53	.07
Seeking fun			.93	.06

Note: SRMR = .04; RMSEA = .07. $X^2(7) = 19.23, p < .01$. β = standardised loadings, S.E. = Standard Errors

Table 3: Standardised Loadings and Standard Errors for 2-factor CFA Model of ZTPI-S (FTP; Orkibi, 2015)

Item descriptions	Present-Focused		Future-Focused	
	β	S.E.	β	S.E.
Partying with one's friends is one of life's important pleasures	.54	.07		
Taking risks avoids boredom	.52	.06		
Taking risks adds excitement to my life	1.21	.05		
Whatever will be...it doesn't matter what I do	.89	.05		
You can't plan for the future	1.10	.05		
My life plan is controlled by forces...	1.85	.07		
Setting goals with a means to achieve them			1.18	.06
Meeting deadlines comes before play			1.43	.05
Resisting temptation to get work done			1.10	.06
Keep working at difficult uninteresting tasks to get ahead			.86	.07

Note: SRMR .04 RMSEA .09 $X^2 (29) = 125.889, p < .001$. β = standardised loadings, *S.E.* = Standard Errors