The Influence of Future Time Perspective, Goal Orientation, and Self-Leadership on Job Crafting and Goal Progress among Academics in Ghanaian Higher Education

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Declaration

I hereby declare that this PhD thesis entitled "**The Influence of Future Time Perspective, Goal Orientation, and Self-Leadership on Job Crafting and Goal Progress among Academics in Ghanaian Higher Education"** is my own original work and has not been submitted before to any institution for assessment purposes.

I have acknowledged all sources used and have cited these in the reference section.

Abstract

This study addresses the limited research of the motivational antecedents of job crafting, with a particular focus on its associations with goal orientation and future time perspective (FTP). Although job crafting is generally viewed as a goal-directed behaviour, empirical research has yet to establish its relationship with goal orientation, and the mechanisms linking FTP to job crafting remain underexplored in organisational literature. The present research examined the relationships between FTP, goal orientations, and job crafting. Additionally, the study examined the mediating roles of self-leadership, and perceived workplace support in the relationship between FTP and job crafting. It further explored the relationship between job crafting and goal progress, with a focus on the mediating role of approach crafting in the relationship between self-leadership and goal progress, and between perceived workplace support and goal progress.

A quantitative longitudinal survey design is employed, with data collected in three waves over a ten-month period from academics in Ghana (T1: n = 402; T2: n = 143; T3: n = 122), maintaining an average interval of two months between waves. Despite notable attrition, analyses of non-random sampling reveal no significant differences between the initial (T1) and final (T3) samples. Structural equation modelling is used in Study 1 to examine cross-sectional relationships among study variables at T1, while Study 2 applies time-lagged autoregression analysis across the three waves to evaluate the temporal stability of these relationships. Study 3 uses cross-lagged autoregressive modelling to explore potential reciprocal causal relationships among the variables.

Findings show that the direct associations between extended FTP and approach crafting, as well as between limited FTP and avoidance crafting, are not statistically significant in Studies 1 and 2. However, in Study 1, self-leadership and perceived workplace support mediate the relationship between extended FTP and approach crafting, though this mediating effect is not observed in Study 2. In contrast, Study 3 reveals that approach and avoidance crafting are directly associated with extended and limited FTP, respectively, over time. With respect to goal orientation, results indicate that approach goal orientation is not significantly related to approach crafting in either Study 1 or 2. Avoidance goal orientation is significantly associated with avoidance crafting in Study 1, but this association is not replicated in Study 2. These results suggest that goal orientation does not reliably predict job crafting over time. Furthermore, self-leadership, perceived workplace support, and approach crafting are

significantly associated with goal progress in Study 1, but these relationships are not observed in Study 2. In Study 3, goal progress is reciprocally related to job crafting, supporting a bidirectional association.

Overall, this research advances understanding of the dynamic processes underlying job crafting among academics in Ghana, highlighting the changing nature of these relationships over time.

***Keywords**:* Job crafting; achievement goal orientation; future time perspective; self-leadership; perceived workplace support; goal progress; structural equation modelling.

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Table of Contents

List of Figures

List of Tables

Chapter 1 Introduction

1.1 Background to the study

Management scholars and practitioners have theorised and explored the optimal methods for designing jobs to achieve desired outcomes and promote a healthy working environment for many years. Initially, job design was largely considered the responsibility of managers and organisational leaders, who aimed to create standardised work systems to simplify tasks and enhance productivity (Tims and Bakker, 2010). However, this mechanised and routine approach often proved counterproductive, making work monotonous and demotivating (Oldham and Hackman, 2010). This realisation led organisational scientists to investigate elements of job design that sustain employee effort and motivation. Research revealed that motivation is achieved when jobs make employees feel responsible, recognised, and competent, thereby enabling them to take ownership of their work (Herzberg, 1966). The job characteristics model suggests that incorporating skill variety, task identity, task significance, autonomy, and feedback into job design increases employee motivation and performance (Hackman and Oldham, 1976).

In the quest to identify the best job design model to enhance worker motivation, satisfaction, and performance, the active role of employees in shaping and redesigning their jobs to meet their needs was recognised. This concept, known as job crafting (Wrzesniewski and Dutton, 2001), highlights the importance of employees modifying their work to align it with their needs, values, preferences, abilities, and skills (Tims and Bakker, 2010; Tims *et al.,* 2016). Job crafting represents a departure from previous job design strategies by adopting a bottom-up approach. It involves employees actively redesigning their jobs to improve their working conditions. Job crafting has been found to predict significant work outcomes, including increased work engagement (Bakker, Tims and Derks, 2012), work meaningfulness (Wrzesniewski *et al.,* 2013), higher job satisfaction, increased work commitment (Leana, Appelbaum and Shevchuk, 2009), and enhanced employee performance (Petrou, Demerouti and Schaufeli, 2015; Tims, Bakker and Derks, 2015).

Since its introduction into the scientific literature in the early 2000s, job crafting has been studied from two main perspectives: role-based and resource-based perspectives (Lopper *et al.*, 2024). Role-based crafting includes cognitive crafting (i.e., changing how one thinks about

one's job), task crafting (i.e., changing the scope and/or number of roles), relational crafting (i.e., altering interactions with others at work), and skill crafting (i.e., efforts by employees to improve their skills and performance) (Clinton et al., 2024; Weisman *et al.,* 2022; Bindl et al., 2019; Wrzesniewski and Dutton, 2001). Resource-based perspective of job crafting involves employees' initiatives to increase the social and structural resources of a job and reduce hindering demands, making the job more challenging but less stressful (Tims and Bakker, 2010; Bakker, Tims and Derks, 2012).

Recent efforts to integrate these two streams of job crafting research suggest that job crafting is hierarchical (Zhang and Parker, 2019). At the higher level is crafting orientation (i.e., approach vs. avoidance), while at the lower level are the behavioural and cognitive strategies that manifest in daily activities such as task, skill, relational, and cognitive crafting (Bindl *et al.,* 2019; Bruning and Campion, 2018; Lopper *et al.,* 2024). Each of these crafting strategies is influenced by either an approach orientation (expanding the positive aspects of the job) or an avoidance orientation (minimising the negative aspects of the job).

1.2 Statement of research problem

Job crafting, conceptualised as a goal-oriented behaviour where employees modify their jobs in the present to achieve desired future outcomes (Bindl and Parker, 2011; Parker *et al.,* 2010), has not been empirically tested as such. This thesis aims to explore how time perspectives shape goal orientations and how these goals, in turn, influence proactive behaviour, specifically job crafting, in the workplace. The study examines employees' future time perspective (FTP), goal orientation, self-leadership, and perceived workplace support as antecedents of job crafting. While FTP has been identified as an antecedent to job crafting (Kooij *et al.,* 2015, 2017a), the mechanisms underlying this relationship remain underexplored. The studies presented in this thesis seek to contribute to the literature by investigating the direct and indirect effects of FTP on job crafting through goal orientation, self-leadership and perceived workplace support. By considering job crafting as a future-oriented behaviour, where employees modify their roles to align with career-related expectations and future desires, the present research integrates goal orientation into job design scholarship to identify the motivation behind job crafting. Additionally, while recent theorisations differentiate approach from avoidance crafting as distinct strategies (Ebert and Bipp, 2021), existing studies often treat job crafting as an aggregate construct (Lopper et al., 2023). This approach is challenged because different

crafting orientations have varied effects on work outcomes, including employee performance and engagement (Costantini, 2022; Rudolph *et al.*, 2017). Treating job crafting as an aggregate construct implies that employees engage in either approach or avoidance at a time, which is not always the case. Employees may simultaneously take on more roles, add complexity to tasks, and limit unproductive interactions (Bindl et al., 2019; Zhang and Parker, 2019). Therefore, it is important to distinguish between approach and avoidance crafting, as they have unique antecedents and different impacts on work outcomes (Costantini *et al.*, 2021).

Furthermore, despite the extensive research on job crafting, most studies have used cross-sectional designs, which limit the ability to observe how variables change over time and prevent establishing clear cause-and-effect relationships. Longitudinal studies on job crafting with longer time intervals suggest that job crafting behaviour remains relatively stable over time, as long as influencing factors like job autonomy remain unchanged (e.g. Clinton et al., 2024; Harju et al., 2016; Mäkikangas, 2018). However, diary studies that examine job crafting on a daily basis show that it can fluctuate significantly from one day to another (e.g. Demerouti et al., 2015; Petrou et al., 2012). The evidence is therefore mixed regarding how frequently job crafting changes over time. In addition, methodological research has recommended the use of shorter time intervals with multiple measurement points to better capture changes in employee behaviours and attitudes over time (Dorman and Griffin, 2015). As a result, this study adopts a two-month time lag to investigate the dynamic nature of job crafting and explore whether changes in job crafting are influenced by changes in goal orientation, self-leadership and perceived workplace support. Understanding these dynamics is important for explaining why approach and avoidance crafting produce different effects on individual and organisational outcomes (Bindl et al., 2019).

In addition to time perspective and goal orientation, other factors such as self-leadership and perceived workplace support have recently been examined as antecedents of job crafting (Liu *et al.,* 2023; Oubibi *et al.,* 2022; Uçar and Kerse, 2022). Despite these efforts, the use of cross-sectional designs in existing studies limits our understanding of how these variables relate to job crafting over time. Although individuals with strong self-leadership qualities and those who perceive higher organisational support are more likely to engage in job crafting, it remains unclear whether they maintain this behaviour over time, especially when previous levels of

crafting are controlled. The impact of changes in self-leadership and perceived support on job crafting is yet to be fully understood.

Furthermore, culture plays a crucial role in shaping psychological processes, including goals, interests, and values (Chang and Wong, 2008). Although it is established that culture influences achievement goals, and behaviours (Maehr, 1974; Zusho and Clayton, 2011), most studies on goal orientation and job crafting have been conducted in Western Europe and North America. There is limited evidence on the dynamics of achievement goals and job crafting in the African context. In cultures where both social integration and individual accomplishment are valued, such as in Africa and Asia, achievement goals may include gaining social approval and realising one's potential. Though some efforts have been made to study job crafting in Africa (Bell and Njoli, 2016; De Beer *et al.,* 2016; Peraal and Geldenhuys, 2016; Vermooten *et al.,* 2019), most research has been conducted in South Africa, limiting the generalisability of findings across the continent. Moreover, existing studies in Africa have primarily focused on the outcomes of job crafting and relied on cross-sectional designs, leaving the determinants of job crafting in this context largely unexplored.

1.3 Research objectives

The aim of the present research was to investigate the relationships between FTP, goal orientation, self-leadership, perceived workplace support and job crafting among academics in Ghanaian universities. The study also sought to find out whether the relationships between the study variables are stable over time, especially when previous levels of dependent variables are controlled.

Specifically, the present study sought to:

I. Examine the relationship between FTP and job crafting.
II. Examine the effect of self-leadership, achievement goal orientation, and workplace support on job crafting.
III. Examine the indirect effect of FTP on job crafting through self-leadership, achievement goal orientation, and workplace support.
IV. Examine the influence of job crafting on goal progress.
V. Examine the indirect effect self-leadership, achievement goal orientation, perceived workplace support on goal progress through job crafting.

VI. Explore the stability of the above stated relationships over a relatively shorter time periods (i.e., less than 3 months).

1.4 Contributions of the study

This study offers three key contributions to the literature. First, it extends the understanding of the antecedents of job crafting by proposing that self-leadership, achievement goal orientation, and perceived workplace support may act as mediators in the relationship between FTP and job crafting. While FTP has been recognised as an antecedent of job crafting, the mechanisms underlying this relationship require further investigation, as they are not well understood. Moreover, although self-leadership and perceived support are established predictors of job crafting, existing research predominantly relies on cross-sectional designs, limiting our understanding of how these variables relate over time.

Second, the studies presented in this thesis introduce a model that contributes to contemporary efforts to integrate the two main streams of job crafting research by incorporating a cognitive–motivational component. Recent studies (e.g. Bruning and Campion, 2018; Lichtenthaler and Fischbach, 2019) have attempted to merge the behavioural and cognitive perspectives of job crafting but have tended to overemphasise the behavioural aspect, neglecting the cognitive component integral to Wrzesniewski and Dutton's (2001) model. This study addresses this gap by arguing that employees' perceptions of their occupational future and their goal pursuit behaviour may serve as important antecedents of job crafting behaviour.

Third, the study contributes to the ongoing debate regarding self-leadership as a potentially redundant concept by examining the nomological network of both self-leadership and job crafting. Although previous research has demonstrated that self-leadership is conceptually distinct from self-regulation, personality, and intrinsic motivation (Houghton et al., 2004; Neck and Houghton, 2006; Neck and Manz, 1996b; Williams, 1997), no evidence currently supports its distinction from job crafting. This investigation is crucial, as both self-leadership and job crafting involve proactive behaviour aimed at achieving desired goals, suggesting a close relationship between these constructs.

1.5 Structure of the thesis

This thesis is organised into nine chapters. Chapter 1 provides a brief background to the study and outlines the problem statement. Chapter 2 defines the study variables, detailing their conceptualisation and measurement, and discusses the dynamic aspects of job crafting and goal orientation. Chapter 3 explores the relevant theories and presents the conceptual model, outlining the expected relationships between the study variables and identifying the independent, mediating, and dependent variables. This framework supports the specification of the structural model for testing hypothesised relationships. Chapter 4 describes the research methodology, including the research philosophy, approach, design, and ethical considerations. Chapter 5 presents the methods, results, and discussion for Study 1, which employs a cross-sectional design to establish relationships among the variables. This chapter includes a description of the participants, study design, and data collection instruments, followed by data analysis, presentation of the results and a discussion in relation to existing literature. Chapter 6 details the methods, results, and discussion for Study 2, which utilises a longitudinal design to assess the stability of the hypothesised relationships over time. It begins with a description of the participants, research design, and data collection procedures, along with the psychometric properties of the measures used across all measurement occasions. This is followed by attrition analysis, longitudinal confirmatory factor analysis (CFA), measurement invariance tests, hypothesis testing, and a discussion of the findings within the context of existing literature. Chapter 7 presents the methods and results of Study 3, which employs a cross-lagged analysis to test potential reverse causal relationships among study variables. This chapter includes a description of the data and structural model used for analysis and discusses the findings in relation to the existing literature. Chapter 8 offers a general discussion, integrating the results from all three studies within the broader context of existing research. Chapter 9 summarises the findings from all three studies and their implications, highlights the contributions to theory, acknowledges the limitations of the research, and provides recommendations for future studies. The chapter concludes with an overview of the study's overall contributions and insights.

Chapter 2 Literature Review 1

Background and Operational Definition of Variables

2.0 Introduction

This chapter presents a discussion of the variables considered in the present study, as represented and conceptualised in the literature. The variables are defined and theorised to help understanding, construction and their psychological measurement. First, job crafting, the focal variable in the study, is discussed. Next, the antecedents of job crafting, including achievement goal motivation, future time perspective (FTP), and self-leadership are discussed. Following this, workplace support is discussed, as it is anticipated to be an intervening variable in the relationship between FTP and job crafting. Finally, goal progress is described as a potential outcome of job crafting, given that job crafting is a future-oriented behaviour which could be seen as part of a goal striving process.

2.1 Operationalisation of study variables

2.1.1 Job crafting

The nature and structure of work largely determines employees' output and significantly affects the work climate (Hackman and Oldham, 1976). Consequently, organisational research has over the years studied how best to design a job to obtain the desired output and foster a healthy working environment. In so doing, the literature on job design emerged in the early days of industrial revolution to understand how jobs should be structured or designed to increase work output (Oldham and Hackman, 2010). The scientific management school of thought by Frederick W. Taylor in the early 20th century sought to provide standardised work systems and operations to simplify work for all workers to increase work output. However, in practice, this was found to be counterproductive as the mechanised system of work and routine standard operations made work boring and unmotivating (Oldham and Hackman, 2010).

By mid-20th century, organisational scientists started exploring the elements of job design that would sustain employee effort and enhance the motivation of workers. The revolutionary work by Herzberg (1966; 1976) introduced motivational factors to the job design scholarship by arguing that extrinsic aspects of a job are 'hygiene factors' which creates worker dissatisfaction when poorly managed, but 'worker motivation' is realised when jobs are designed in a way that

makes employees feel responsible, recognised, and competent while they work. Thus, employees should be able to own their jobs. Though, Herzberg's concept gained little empirical support it served as the foundation for subsequent research (Oldham and Hackman, 2010). For instance, the job characteristics model by Hackman and Oldham (1976) outlined five core job attributes including skill variety (i.e., performing different tasks that demand the use of different skills), task identity (i.e., performing whole task or specified piece of work from start to finish), task significance (i.e., performing tasks that make positive impact on others or the environment), autonomy (i.e., having the freedom to make important decisions on the job), and feedback (i.e., getting instant report on the worker's performance on the job) as factors that increase motivation and performance of workers.

It is necessary to note that the models of job design as developed by Herzberg, and Hackman and Oldham indicate that top management uphold the responsibility to design a job. Subsequently, employees' involvement in job design (job re-design) was acknowledged through a concept known as job crafting (Wrzesniewski and Dutton, 2001). Job crafting emphasised the role of employees in modifying their job to align it with their needs, values, preferences, abilities, and skills (Tims, Derks and Bakker, 2016; Tims and Bakker, 2010). Thus, job crafting is distinguished from previous job design strategies by adopting a bottom-up approach.

2.1.1.1 Perspectives of job crafting research

As already noted, employees' initiative to change or modify their jobs is referred to as job crafting. This initiative is a variant of employees' proactive behaviour and not directly sanctioned by their organisations (Parker et al., 2010). Job crafting refers to self-initiated (volitional) conscious behaviour to permanently change the structure and procedure as well as the social relations of a job to make it more meaningful (Bruning and Campion, 2018; Wrzesniewski and Dutton, 2001; Tims, Bakker and Derks, 2012). Thus, the crafted job is significantly distinguishable from the original job in meaningful ways (e.g. Berg, Wrzesniewski and Dutton, 2010). It must be emphasised that job crafting takes place within active work making it different from leisure crafting (Berg, Grant and Johnson, 2010). Job crafting is noticeable in jobs that have clearly outlined job descriptions, where work roles and task responsibilities are well-defined, although it occurs in many jobs and across different ranks and sectors (Nielsen and Abildgaard, 2012; Berg, Wrzesniewski and Dutton, 2010). Job

crafting has been shown to positively influence significant work outcomes, including work engagement (Bruning and Campion, 2018; Bakker, Tims and Derks, 2012), work meaningfulness (Wrzesniewski *et al.,* 2013), increased work attachment and commitment, higher job satisfaction (Leana, Appelbaum and Shevchuk, 2009), and enhanced employee performance (Petrou, Demerouti and Schaufeli, 2015; Tims, Bakker and Derks, 2015).

Over the years, job crafting has been studied from two main perspectives namely role-based (Wrzesniewski and Dutton, 2001) and resource-based (Tims and Bakker, 2010; Bakker, Tims, and Derks, 2012). From the role-based perspective, job crafting is defined as "the physical and cognitive changes individuals make in the task or relational boundaries of their work" (Wrzesniewski and Dutton, 2001, p. 179). Role-based model of job crafting asserts that crafting a job occurs in three main forms: cognitive crafting (changing how one thinks about one's job); task crafting (changing the scope and/or the number of roles) and relational crafting (altering the way one interacts with others at work) (Wrzesniewski and Dutton, 2001). Recently, skill crafting, which refers to employee-initiated efforts to improve their skill set to enhance their performance, has been recognised as a significant aspect of role-based job crafting (Bindl et al. 2019). Simply put, in role-based crafting, employees find ways to enlarge and enrich their jobs by either reducing or increasing tasks, building healthy relationships, focusing attention on positive aspects of the job, and improving skills to perform. This model of job crafting holds the assumption that changing tangible roles and building intangible social relations enhance work meaningfulness and increases employee satisfaction (e.g. Berg et al., 2013; Wrzesniewski and Dutton, 2001).

Resource-based crafting (rooted in job demands-resources theory; Bakker and Demerouti, 2007a; Tims et al., 2013) also conceives job crafting to be the changes that employees make to balance their job demands and job resources with their abilities and needs (Demerouti, Bakker, and Halbesleben, 2015). According to Tims et al. (2012) job crafting is an employee's initiative to increase social and structural job resources, make their jobs more challenging, and reduce hindering job demands. Similarly, Petrou et al. (2012) described job crafting as employees' strategy to optimise their job characteristics by seeking resources, seeking challenges, and reducing demands. Job demands are features of a job that tap the employee's physical, emotional, and mental efforts while job resources are also characteristics of a job that promote growth and are useful in reaching work goals (Bakker and Demerouti, 2007).

Although the two perspectives conceptualise job crafting differently, both agree that employees can expand their jobs by adding more tasks or relationships or reduce them by decreasing their workload. They also recognise the employee as the sole change agent (Lichtenthaler and Fischbach, 2019). Additionally, both perspectives generally assume that all forms of job crafting increase employee performance, motivation, and well-being. Though, some studies from the resource-based perspective indicate that decreasing hindering job demands can reduce motivation and well-being (Rudolph *et al.,* 2017a). It has even been documented that job crafting is not necessarily a positive organisational behaviour, as there are circumstances where it can have detrimental effect on employee performance and well-being (Demerouti, Bakker, and Halbesleben, 2015).

The two perspectives on job crafting also differ in many ways. For instance, while role-based crafting defines crafting as modifying task, cognitive and relational boundaries of a job to increase work meaningfulness and enhance worker identity; resource-based perspective considers job crafting to be a means of balancing job demands with resources to increase worker-job fit. It is noted that the resource-based model does not include cognitive crafting as proposed in the role-based conceptualisation (Rudolph *et al.,* 2017a). This differing view in the conceptualisation of job crafting makes it difficult to identify which behaviours are to be termed crafting and what actions are to be disregarded as crafting.

Based on these differences in the earlier conceptualisation of job crafting, some scholars have attempted to integrate the two streams of research (e.g. Bruning and Campion, 2018; Demerouti, 2014; Lichtenthaler and Fischbach, 2019; Zhang and Parker, 2019). However, it remains unclear how these different conceptions can be seamlessly merged. Cognitive crafting is sometimes considered maladaptive – a passive form of crafting that does not lead to any real change in behaviour despite being an integral part of the role-based crafting framework (Zhang and Parker, 2019). Due to these diverging views, it is challenging to succinctly distinguish job crafting from other related proactive behaviours, such as work adaptation, taking charge, and personal initiative (Zhang and Parker, 2019). Moreover, the definitional challenges have led to the development of distinct measures for assessing job crafting based on its operationalisation, which has made it difficult to identify the antecedents, mechanisms, and consequences of the construct (Zhang and Parker, 2019).

2.1.1.2 Approach and avoidance crafting

Efforts to integrate the two streams of job crafting research have led to the conceptualisation of job crafting into approach and avoidance forms. Bruning and Campion (2018) introduced an integrated model of job crafting called 'role-resource approach-avoid'. This model conceptualises job crafting through two distinct but complementary strategies: approach and avoidance crafting. Approach crafting involves actively seeking to enhance or expand one's job characteristics. This strategy aligns with Wrzesniewski and Dutton (2001) relational and task crafting strategies, where employees proactively alter their job tasks (i.e. take more roles), and relationships (i.e. expand relationships) to make their work more fulfilling and meaningful. Approach crafting can also be connected to the broader goal orientation literature. According to Elliot (1999) approach goals are oriented towards achieving positive outcomes and mastering challenges. In the context of job crafting, approach crafting reflects a mastery-oriented goal, where individuals focus on adding valuable job resources, taking on new challenges, and increasing job demands that contribute to personal and professional growth. In contrast, avoidance crafting refers to the strategy of reducing or minimising aspects of the job that are perceived as negative or burdensome. This strategy resonates with Tims and colleagues' (e.g. Tims et al., 2012a; Tims and Bakker, 2010) model, which posits that job crafting involves decreasing hindering job demands while maintaining or increasing beneficial job resources and challenging demands. Avoidance crafting aligns with Elliot's concept of avoidance goals, which are focused on avoiding negative outcomes or preventing failure. In job crafting, avoidance crafting reflects a constriction-oriented goal where employees aim to mitigate stressors, reduce obstacles, and alleviate negative aspects of their work environment. Thus, the 'approach-avoid' framework by Bruning and Campion (2018) integrates these strategies into a comprehensive model of job crafting, highlighting how employees can actively enhance their job roles (approach crafting) or minimise negative elements (avoidance crafting) to improve their overall work experience.

Similarly, following the assumptions of the regulatory focus theory by Shah and Higgins (1997), Lichtenthaler and Fischbach (2019) also categorised job crafting strategies into promotion-focused and prevention-focused. Promotion-focus crafting represents approach (expansion) strategies where employees extend aspects of the job to maximise gains while prevention-focus crafting also comprise avoidance (constricting) strategies where employees change aspects of the job to avert negative consequences (Bindl *et al.,* 2019). Thus, job crafting

occurs to either increase gains or prevent losses through modification of skills, tasks, relationships, and changing perceptions about the job. Prevention-focused crafting, however, represents the prevention of loss and preparation for future uncertainties, which is not the same as employee withdrawal behaviours as proposed by Bruning and Campion (2018). Thus, while Bruning and Campion (2018) suggest that avoidance crafting involves employees withdrawing from certain tasks or limiting social interactions at work to avoid negative experiences; prevention-focused crafting, involves proactive efforts to prevent losses by protecting current resources (Bindl et al., 2019). Prevention-focused crafting is characterised by active modifications in job roles and social relationships aimed at avoiding negative outcomes. Rather than withdrawing from work, employees engaging in prevention-focused crafting adopt behaviours that reflect proactivity, such as managing stress or safeguarding productivity. Practically, Bindl et al. (2019) illustrate that prevention-focused task crafting may focus on reducing stress by concentrating on the most crucial aspects of the job to prevent productivity loss.

A drawback of integrative models of job crafting is their predominant emphasis on behavioural aspects, often at the expense of cognitive crafting, which was a key component of the original job crafting concept. Bruning and Campion (2018) model, for instance, posits that role-based crafting enhances work meaningfulness and intrinsic motivation, while resource-based crafting (also referred to as mechanistic crafting by Zhang and Parker (2019)) primarily improves person-job fit. However, Zhang and Parker (2019) argue that resource crafting is not merely mechanistic but also contributes to worker motivation, and that role crafting also involves efforts to achieve demand-ability fit. Empirical support for this perspective is provided by Lu et al. (2014), who found that resource crafting can indeed foster a sense of meaningfulness. Zhang and Parker (2019) suggest that the concepts of role and resource crafting are more intertwined than Bruning and Campion (2018) propose, indicating that these forms of crafting overlap and are not as distinct as previously asserted. This highlights the need for a more nuanced understanding of job crafting that incorporates both behavioural and cognitive dimensions.

Following the earlier statement on the challenges faced by scholars in merging the two streams of job crafting research, Zhang and Parker (2019) proposed a hierarchical structure of job crafting unlike previous models which argued that job crafting was unilaterally

multidimensional. Similar to Bruning and Campion's (2018) categorisation, the first on Zhang and Parker's (2019) hierarchical structure of job crafting is crafting orientation (i.e., approach vs. avoid). They argued that both approach crafting and avoidance crafting occurs at a higher level, and they have different antecedents and outcomes and have weak or nonsignificant correlation. Thus, the two components of crafting orientations appear to be conceptually and empirically distinct, hence, should not be regarded as dimensions of the same construct.

The second level of the hierarchy is labelled crafting form (i.e., cognitive vs behavioural). They opined that job crafting can either take the form of an internal self-motivated efforts (i.e., intangible cognitive processes - changing one's perception of the job) or intentional behavioural strategies where the individuals make real changes to aspects of the job. Cognitive crafting is influenced by the real or imagined job characteristics and workplace social interactions (Daniels, 2006) and it takes the form of approach or avoidance (Parker, Wall and Jackson, 1997). Cognitive crafting and behavioural crafting are also aggregate constructs as they are not conceptually interchangeable and do have different antecedents and outcomes (Niessen, Weseler and Kostova, 2016). The two constructs can also be regarded as aggregate constructs since they are only moderately related (Slemp and Vella-Brodrick, 2013).

Zhang and Parker's third level of the hierarchy of job crafting was also named crafting content. Crafting content is concerned with what aspect the job crafting is targeted and what form the crafting takes (i.e., resources vs demands crafting). Originating from resource-based crafting, crafting content is concerned with how employees change the design of their jobs to match the demands with the available resources (Zhang and Parker, 2019). Unlike the two higher levels, crafting content is a reflective construct – its indicators are caused by the crafting content (i.e., behavioural or cognitive crafting). Hence, forms of content crafting are conceptually related, covary and have common antecedents and outcomes. Empirical evidence suggests that approach resource and approach demand crafting have moderate correlation (e.g. Rudolph, Katz, et al., 2017).

2.1.1.3 Temporal perspective on job crafting

Job crafting as an employee behaviour has been found to be dynamic, however, it is not well understood how this behaviour occurs over time (Harju & Tims, 2020). The majority of extant studies have only investigated the dynamic nature of job crafting using objective time. Such studies have considered job crafting as a relatively stable construct although others found it to

fluctuate on daily basis (e.g. Bipp and Demerouti, 2015; Clinton et al., 2024; Petrou et al., 2015). For example, it has been found that job crafting varies from a period of three months (Vogt et al. 2016) to a much longer period of three years (Harju *et al.*, 2016). This stability of the construct is believed to be determined by some stable individual and contextual or situational factors (Harju and Tims, 2020). It has also been established that the way employees craft on daily basis remains stable over time (Mäkikangas, 2018), as job autonomy, which serves as a motivator for employees to craft remains stable over time, thereby having little impact, except, where job design abruptly changes (Niessen, Weseler and Kostova, 2016). For instance, employees were found to craft more during periods of organisational change (e.g. Petrou et al., 2015, 2018). Furthermore, in relation to career, job crafting is perceived to be stable over short periods in each career stage but varies in a long run due to varying needs of individuals across different stages of their career and life (Kooij, Tims and Kanfer, 2015). Fried et al. (2007), for instance argued that stimulating aspects of a job (i.e., skill variety and task complexity) are most valuable for employees in early stages of their career since they have high learning needs compared to late career employees who have more safety, security and relationship needs. Consequently, employees in early stages of their career are expected to engage more in task and skill crafting while late career employees are also expected to engage more in cognitive and relationship crafting.

Between-subjects studies take crafting to be mutually exclusive for different individuals, hence, it is not well understood if different crafting strategies (i.e., approach vs avoidance) are employed concurrently or in succession by the same individual over time. It is known that job crafting is a function of changes in job characteristics or perceptions of them which occur on day-to-day basis (Daniels and Harris, 2005; Tims *et al.*, 2014). Increased work pressure together with high job autonomy have also been found to lead to more promotion-focused crafting (increasing job resources) and less prevention-focused crafting (decreased reduction in hindering job demands) on a daily basis (Petrou *et al.,* 2012b). Moreover, work colleague's crafting has been found to even diffuse among work groups daily, especially where there is low autonomy (Bizzi, 2017). However, these diary studies employed cross-sectional analyses (between-person analysis within days), which does not allow for understanding whether the same individual actively alternates in job crafting behaviours on daily basis (e.g. Demerouti et al., 2015; Petrou et al., 2012; Tims et al., 2014). To better understand the dynamic nature of job crafting it is important to examine its antecedents. Specifically, it is important to examine the

intrinsic factors that propel one to craft and the role that employees' perception of time play in their job crafting behaviour.

2.1.1.4 Gaps in job crafting research

Since its inception in the early 2000s, job crafting has received great attention by organisational researchers, however, the majority of studies have largely focused on the outcomes of job crafting including work engagement (e.g. Petrou et al., 2012; Tims et al., 2012), person-job-fit (e.g. Lu et al., 2014), and well-being (e.g. Slemp et al., 2015; Slemp and Vella-Brodrick, 2014), to mention a few. Although some scholars (e.g. Tims et al., 2012, 2013; Tims and Bakker, 2010), have theoretically outlined some important predictors of job crafting such as proactive personality, self-regulation, self-efficacy, task interdependence, job discretion and task interdependence, these assumptions have not empirically tested. Empirical evidence has though supported some of these propositions. For example, self-efficacy, proactive personality, work autonomy and workload have been found to influence employees' job crafting behaviour (Petrou et al., 2012b; Tims, Bakker and Derks, 2014, 2012a).

Despite the significant progress in understanding the antecedents of job crafting, it is evident that to date only contextual factors and stable personality characteristics have been examined as antecedents of job crafting. There is scant evidence on the motivation *(the why and how)* for job crafting (Bindl et al., 2019; Kooij, Tims and Akkermans, 2017b). Although individual motivation has been established as a strong predictor of proactive behaviour (Parker, Bindl and Strauss, 2010), it is just recently that scholars have begun exploring the reasons that intrinsically propels employees to craft their jobs. For example, future time perspective (FTP) has been found to relate to job crafting (Kooij, Tims and Akkermans, 2017a; Kooij, Tims and Kanfer, 2015), however, the mechanisms affecting this relationship are still not well understood (Zacher and Rudolph, 2019b, 2019a). More so, little is known about the relationship between goal striving and job crafting. Goals represent the mental image of future desired states that drives behaviour in the present (Austin and Vancouver, 1996). It is very important, therefore, to investigate how goals influence employees' proactive behaviour including job crafting. The present study aims at contributing to the existing literature by examining the influence of future time perspective and achievement goal orientation on job crafting. It also seeks to examine the mediating role of self-leadership, achievement goal orientation, and workplace support in the relationship between future time perspective and job crafting. Put differently, the present study

aims at examining how academic workers set proactive goals and strives to achieve them through job crafting. This is important since job crafting is a future-oriented behaviour, as employees craft job at present to obtain a desired outcome in the future such as either increase resources or decrease demands (Tims and Bakker 2010). The present study seeks to establish that employees' future time perspective and achievement goal orientation can help to explain how and why job crafting changes over time.

2.1.2 Goal orientation

Over the years goal orientation (GO) has become very integral to understanding employee motivation, because adoption of diverse goals has varying effects on employee outcomes such as productivity, well-being, engagement, and help-seeking (Baranik et al., 2013). Understanding of GO also makes significant contributions in human resource practices including recruitment, selection, training, performance appraisal (Payne *et al.*, 2007). Due to its significance, numerous scholars from various fields (e.g. Baranik et al., 2007; Daumiller et al., 2019; Elliot, 1999; Elliott and Dweck, 1988; Payne et al., 2007) have explored the concept, assigning it different, though closely related, meanings. This has made it challenging to establish a clear and consistent understanding of what GO is or should be. For example, DeShon and Gillespie (2005) identified five notable key words and phrases that were used to define the concept including dispositional characteristics, belief systems, mental frameworks, state-like characteristics, and goals. Scholars such as Colquitt and Simmering (1998) conceived goal orientation as stable traits indicating individual differences, whereas others have conceptualised it to be a situational variable that is limited to a specific achievement context (Elliot and Harackiewicz, 1994, 1996; Harackiewicz *et al.*, 1997). Moreso, some studies have conceived GO as a dispositional characteristic influenced by contextual factors. For example, Payne et al. (2007) defined goal orientation as *"one's dispositional or situational goal preferences in achievement situations"* (p. 128). Largely, GO in the achievement context has been described as a relatively stable individual characteristic that is affected by contextual variables.

In the present study, GO is conceptualised according to the goals concept, which is commonly adopted in organisational research. Thus, the terms achievement goals and goal orientation are used interchangeably, though some scholars argued that these are distinct constructs (Senko et al., 2011). This interchangeability is based on the notion that goals are hierarchical, meaning

GO directly manifests in individuals' achievement goals, which are considered state variables. Consequently, this study adopts the definition of achievement goals provided by Hulleman et al. (2010), who defined goals as cognitive representations of desired outcomes in achievement-related situations, to which individuals are committed, either to approach or avoid.

Although, many of the studies on GO take the goal approach and consider it to be adoption and pursuance of specific goals in achievement situations (e.g. Barron and Harackiewicz, 2001a; Elliot and Church, 1997; Elliot and Harackiewicz, 1996; Elliot and McGregor, 2001; Elliot and Thrash, 2001a; Grant and Dweck, 2003), there is still a debate concerning the nature of goals, features and dimensions of goals, as well as a lack of consensus on the multiple goals concept – the idea that individuals possesses multiple goals which interact to influence their behaviour (Hulleman et al., 2010; Senko et al., 2011; Vansteenkiste et al., 2014). Research on GO have expanded from two dimensions (e.g. Dweck, 1986; Nicholls, 1984) to ten dimensions (e.g. Daumiller et al., 2019). To better understand the GO concept, it is necessary to examine the nature of the construct.

2.1.2.1 Nature of GO in organisational research

GO originated from educational and developmental psychology in the 1970s and 1980s and was integrated in organisational psychology literature in early 1990s. As its theoretical underpinnings suggest (e.g. Dweck, 1986; Elliott and Dweck, 1988; Nicholls, 1984), organisational scholars have described it as a relatively stable variable that is affected contextual factors (Payne, Youngcourt and Beaubien, 2007). Historically, GO has been construed to be a bipolar construct, where an individual cannot be high on both learning and performance goals simultaneously. Nonetheless, subsequent researchers challenged this assumption and separated learning GO from performance GO indicating that individuals can have multiple competing goals at a specified time (Button, Mathieu and Zajac, 1996). These studies have argued that performance GO is multidimensional comprising approach and avoidance components (Elliot, 1999; Elliot and Harackiewicz, 1996; VandeWalle, 1997).

Performance approach GO is the desire to demonstrate one’s competence in the presence of others or striving to outperform others whereas performance avoidance GO is the desire to do well in order to avoid being labelled as the worst performer. For instance, a lecturer may want to teach well in order to avoid being considered as a bad lecturer by peers and students. Elliot

and colleagues came up with the trichotomous framework of achievement goal construct comprising learning, performance-approach, and performance avoidance (Elliot, 1999; Elliot and Harackiewicz, 1996). They argued that these different dimensions have different outcomes and determinants (Elliot and Church 1997). Nonetheless, while some scholars have argued that performance goal orientation in general is maladaptive and is associated with negative outcomes, others have indicated that it is only performance-avoidance that is maladaptive (Payne *et al.*, 2007). Following the trichotomous framework, the approach-avoidance valence was protracted to learning/mastery goals leading to a 2 x 2 dimensions of GO (Elliot and McGregor 2001). To reiterate, a significant aspect of the 2 x 2 GO framework is the inclusion of *mastery – avoidance goal* dimension. This dimension focuses on intrapersonal goals (the desire to avoid not learning something new or desire to not do worse than before). For example, a researcher may want to avoid having a publication in a lower ranked journal than the rank of the journal for their previous publication. Even though mastery-avoidance goals are considered the least dominant, such goals are seen to be more salient to older individuals, because of their concern to not lose important skills and abilities (Murayama, Elliot and Friedman, 2012).

Following the 2 x 2 framework, the achievement goal literature was revised where competence was seen to be pursued by developing either a task-based goals, self-based (intrapersonal) goals or other-based (interpersonal) goals (Elliot, Murayama, and Pekrun, 2011). This model created a matrix of six goal categories as these definitions of competence were cross tabulated with goal valences (approach vs avoidance). According to Elliot et al. (2011) task-based goals refer to the desire to meet absolute demands of a task as opposed to self-based goals which are focused on consistent self-improvement (i.e., learning goals; the desire to improve previous performance or avoid doing worse than before). Other-based goals represent performance-based goals (a focus on doing well in comparison to others). These definitions of competence produced a 3 x 2 matrix of achievement goals including task-approach, task-avoidance, self-approach, self-avoidance, other-approach, and other-avoidance (Elliot, Murayama and Pekrun, 2011). To name them differently, these goals can be referred to as task-based, learning-based, and performance-based, each having an approach and avoidance component. Aside the debate on the dimensionality of GO, scholars have also showed keen interest in understanding the hierarchical structure of GO.

2.1.2.2 Hierarchical structure of GO

Scholars generally agree that goals are hierarchical in nature in that pursuing a higher order goal leads to setting lower order goals (that can be achieved within shortest possible time) of which attainment leads to a progress towards attainment of the higher-order goal. However, there is no agreement on the number of levels in the goal hierarchy. Action Theory argues that goal hierarchies start with an overall goal to series of top-down functional (sub) goals (Frese and Zapf, 1994). Specifically, the theory considers an action process to start from; (i) having an intention (higher-order goal), (ii) framed by an orientation (a prediction of the future), (iii) developing strategies and plans (action-oriented goals), (iv) selecting of a plan amidst all other plans, (v) executing and monitoring the plan, and (vi) processing the feedback from performance. Action, therefore, results from a desire framed by an orientation, to goal planning and to its execution, followed by feedback regulated by environmental contingencies. Action theory is very significant to explaining the nature of goals as action is conceived as a goal-directed behaviour and an action is the lowest component of behaviour that is expected to lead to the attainment of a goal (Frese and Zapf, 1994). The study of GO is fundamentally an investigation into the choice of action or behaviour in achievement situations (i.e., how people behave in achievement contexts).

Using the assumptions of Action Theory, DeShon and Gillespie (2005) proposed the Motivated Action Theory (MAT) to explain the structure of achievement goals. Like Action Theory, MAT fundamentally argues that behaviour is goal-oriented (e.g. Austin and Vancouver, 1996), and goals are ordered in a hierarchy where high-order goals are future desired end-states and lower-order goals are plans, processes and strategies that are supposed to lead to attainment of the higher-order goals. MAT also argues that only one goal determines action at a time and stimulation intensity determines which goal will be attended to at a particular point in time. Moreover, MAT proposes that situational characteristics dynamically interact with activated goals to influence choice and behaviour. A goal is therefore considered an internalised representation of desired future states that are perceived to result from outcomes of present behaviour, choice, events (Austin and Vancouver, 1996).

As already demonstrated, many scholars have theorised the hierarchical structure of goals resulting in similar but varying conclusions. For example, Cropanzano et al. (1993) enumerated four levels of goals including values, identity, personal missions, and task goals similar to

Action Theory by Frese and Zapf (1994), which argued that goal structure constitutes four hierarchies including heuristic, intellectual, action-plan, and sensorimotor levels. MAT also outlined four hierarchies of goals namely self-goals (i.e., esteem, affiliation, agency), principle goals (i.e., growth, social value, fairness and structure), achievement goals (i.e., mastery and performance) and action plan goals (i.e., seeking feedback, and allocating resources). Self-goals are desired future states that do not include specific methods for achieving them. These goals are guided by life principles, which reflect an individual's understanding of what constitutes an achievement. These principles influence and establish the strategies or means for attaining those goals. Achievement goals are then pursued by adopting concrete (action-oriented) goals, which are in turn guided by the principles. These goals are construed as intermediate goals that denote general patterns of actions and choices made in achievement context to pursue the self-goals. Action plans are the malleable strategies, adopted for striving for desired goals. For instance, to pursue mastery goals, feedback is seen to be a report/assessment of past performance. Hence, individuals with mastery approach goals strive to acquire knowledge, enhance their skills, and do not worry much about making mistakes compared to individuals pursuing performance goals. Put differently, goals at the top of the hierarchy are fundamental to the individual's functioning, whereas goals at the lower level of the hierarchy are means of attaining the higher-order goals (Donovan and Williams, 2003). As a result, agency (i.e., having optimum control over circumstances), esteem (i.e., obtaining positive self-image, respect, dignity), and affiliation (i.e., belonginess or need to feel loved and accepted) are enumerated as higher-order goals (DeShon and Gillespie, 2005). In as much as people may have similar higher-order goals, the means of attaining these goals (lower-order goals) vary to a large extent. To summarise, MAT argues that goals range from long-term abstract goals to short-term concrete and actional steps that guide how the abstract goals are pursued over time (DeShon and Gillespie, 2005). Achievement goals denote steps to achieve higher-order goals like growth and social value and are achieved by attaining lower-level action-step goals such as resource allocation and seeking feedback.

A key development in GO research is the integration of Atkinson's (1957) work on achievement motives into the achievement goals literature by Elliot and his colleagues (e.g. Elliot, 1999; Elliot and Church, 1997). Achievement motives denote how competence is constructed by an individual; a person's self-construal of what is regarded as competence (i.e., need for competence or fear of failure). Need for competence refers to the tendency of a person to seek

success in an achievement-related task while fear of failure represents the tendency to avert shame and humiliation as outcome of failure in achievement situations (Atkinson, 1957). According to Atkinson, these motives (i.e., need for achievement/competence or fear of failure) serve as the overarching motivational force that propels individuals and orient them towards approaching competence or avoiding failure in achievement situations. Achievement goals hence represent the media through which the motive to achieve and/or the motive to avoid failure are manifested in achievement contexts (Elliot and Church, 1997).

In view of the various assumptions discussed about the hierarchical structure of goals, the present study theorises GO as starting from the need for competence/fear of failure that an individual is motivated to approach or avoid. These approach or avoidance goal orientations are pursued through adoption of mastery or performance goals. This leads to a subsequent action-level goals where a person with mastery-approach goals might decide to master the demands of a relevant task or strive to consistently expand his/her knowledge in a specific area of expertise (adoption of learning goal). People with mastery avoidance goals may also strive to avoid not learning or avoid not meeting the demands of a task in order prevent being perceived as incompetent. When a person adopts performance goals, they are likely to engage in behaviours aimed at showcasing their competence (appearance goals) or excelling in tasks relative to others (normative goals). Such individuals are very competitive and will do anything to be seen as the best performers in every activity that they engage in. Appearance and normative goals are hence conceived to be sub-goals of the broader performance goals (Daumiller, Dickhäuser and Dresel, 2019). Like mastery goals, these goals have both approach and avoidance valences. Figure 1 is a diagrammatic representation of the hierarchical structure of GO.

2.1.2.4 Components of GO

Although achievement goals have been conceived to be distinctive from achievement needs (generalised need for achievement/pursuance of competence in general) (Dweck, 1986; Nicholls, 1984), research on achievement goals does not reflect this differentiation and composition of achievement goal measures usually does not match its theoretical underpinnings (Hulleman *et al.,* 2010). More specifically, current operationalisations of the GO construct do not align with their proposed theoretical dimensions, which may explain the inconsistent findings regarding the relationship between these goals and their associated

outcomes (Hulleman *et al.,* 2010). For instance, some scholars have found performance-approach goals to be maladaptive while others find it adaptive (Elliot, McGregor and Gable, 1999; Barron and Harackiewicz, 2001a).

As already mentioned, GO concept was originally treated as an omnibus construct made up of mastery and performance facets which are driven by the desire to approach positive outcomes or a desire to avoid negative consequences (Atkinson, 1957). However, over the years, scholars (e.g. Dweck, 1986) have separated mastery (i.e., obtaining excellence through self-improvement and skills development) from performance (i.e., doing better than others). To reiterate, the components of achievement goal have been gradually extended from two (mastery and performance) (Dweck, 1986; Nicholls, 1984) to three (mastery, performance-approach, and performance-avoidance) (Elliot and Harackiewicz, 1996) to four (mastery-approach, mastery-avoidance, performance-approach, and performance-avoidance) (Elliot, 1999), and most recently to six – task-based (approach and avoidance), self-based (approach and avoidance) and other-based (approach and avoidance) (Elliot, Murayama and Pekrun, 2011). While task-based goals focus on mastering a specific task, self-based goals focus on self-improvement and learning in general. Other-based goals reflect the desire to appear competent or outperform others. More recently, specific to academics, achievement goals have been conceptualised to have six dimensions namely mastery (learning, task), performance (normative, appearance), relational goals and work avoidance goals (Daumiller *et al.*, 2019). For each of the two forms of mastery and performance goals, an approach and an avoidance component were also postulated in addition to the relational goals which are solely approach-based and work avoidance goals. GO in the present research is conceptualised following Daumiller et al.'s (2019) framework in the studies presented in the present thesis. The following section provides a detailed discussion of the different types of goal categories.

Mastery-approach goals

Extant literature indicates that mastery goals vary from having a mere interest to know, to a stronger desire to reach one's full potential (Hulleman et al., 2010). Mastery approach goals have therefore been theorised to be fuelled by curiosity, interest, mastering a task and constant improvement in one's competence, fulfilling one's potential by taking advantage of learning opportunities, and willingness to undertake challenging activities (Barron and Harackiewicz, 2001b; Hulleman et al., 2010; Elliot, McGregor and Gable, 1999; Grant and Dweck, 2003).

Mastery goals are not only concerned with developing competence in doing a specific task (known as task goals) but also encompass an overall intrapersonal development agenda (named learning goals) (Daumiller, Dickhäuser and Dresel, 2019). In other words, while task goals focus on mastery of a specific task, learning goals largely focus on self-development (a constant improvement in a desired area of expertise). This separation has been validated as task and learning goals have been found to have different associations with motivational outcome variables (e.g. self-efficacy) and learning strategies (Elliot, Murayama and Pekrun, 2011). It must be emphasized that these differences are more pronounced in mastery-approach goals than mastery-avoidance goals and although there is support for the compartmentalisation of mastery goals into task and learning, it is still a topic for discussion by achievement goal theorists. Compared to performance goals, mastery goals have maintained some level of consistency in theorising and measurement as it has largely been agreed that mastery goals are comprised of a desire for learning and mastering skills for self-development. Notwithstanding, there exists some variation regarding the specific components.

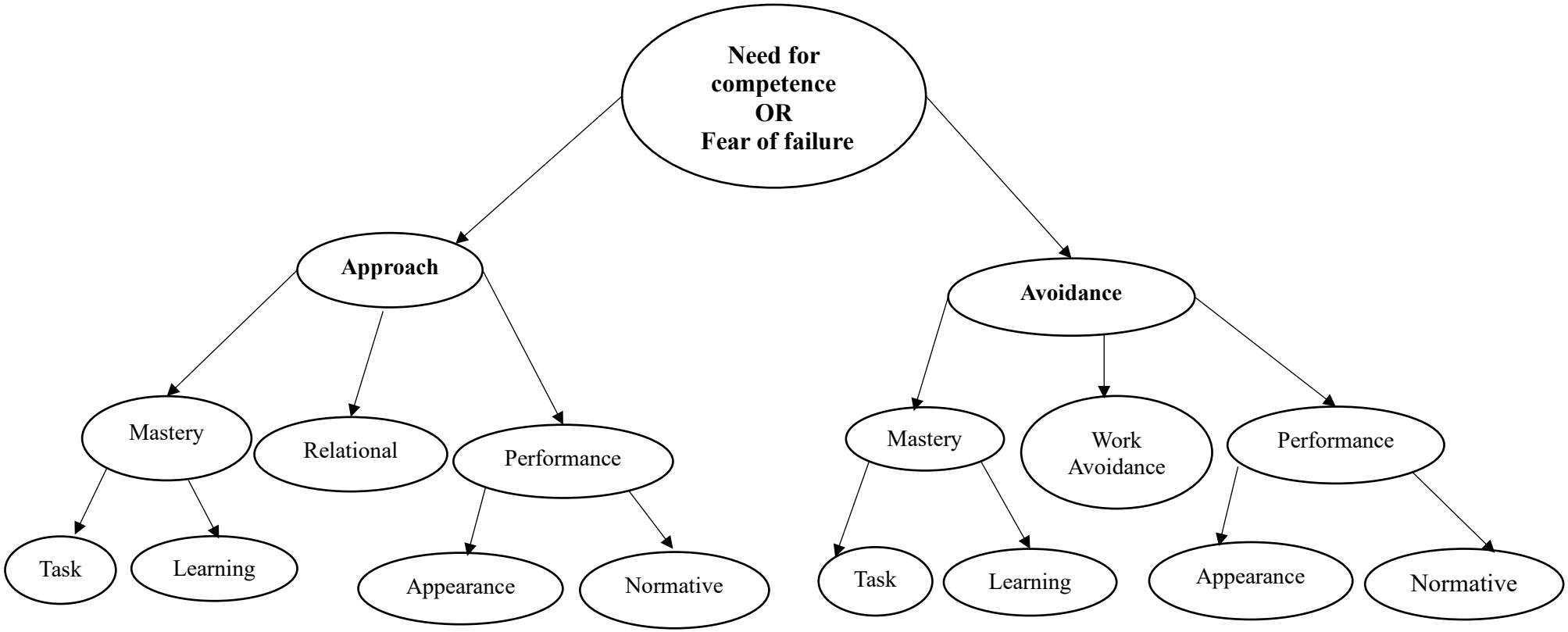

Figure 1: Hierarchical Components of Goal Orientation

Mastery -avoidance goals

This category of achievement goals is the most recent to be developed compared to the other goal categories. These goals are focused on avoidance of failure to learn, avoidance of failure to master a task/activity and the desire to prevent losing an already acquired skill or avoid not being able to live to one's full potential (Hulleman *et al.,* 2010). In addition to task and learning dimensions, mastery-avoidance goals encompass concern, worry, or fear related to an anticipated negative consequence if one fails to master a task or learn new skills (Daumiller, Dickhäuser and Dresel, 2019).

Performance-approach goals

Performance goals have been conceived to have two fundamental components including appearance (i.e., creating a good impression in the eyes of others) and normative (i.e., outperforming others) aspects (Elliot *et al.,* 2005; Scherrer *et al.,* 2020; Daumiller, Dickhäuser and Dresel, 2019). More closely, performance goals were seen to be focused on ability validation (appear smart to others), normative referenced (outperform others), and normative ability which reflects both ability validation and normative referenced (Grant and Dweck, 2003). In a more simplified form, Hulleman et al. (2010) in their meta-analysis identified three components of performance goals comprising appearance, normative, and evaluative goals. While appearance goals are concerned with showcasing one's ability, normative goals reflect the desire to perform better than others (Elliot, 1999; Grant and Dweck, 2003). The evaluative performance goals are a combination of appearance and normative goals: They comprise demonstrating ability and the desire to perform better than others (Grant and Dweck, 2003).

Performance-avoidance goals

Performance avoidance goals are considered negations of the performance approach goals that an individual is motivated to avoid. Here, the individual has the desire to avoid been regarded as not smart or not intelligent (appearance), wants to avoid been outperformed by others (normative) and is inclined to remain competitive in any achievement situation. As it is aimed at avoiding bad performance, Elliot and Church (1997) added concern, worry and fear of not meeting required standards as components of performance-avoidance goals.

Relational and work avoidance goals

In addition to mastery and performance goals, relational and work avoidance goals have been identified particularly among teachers and academics (Daumiller, Dickhäuser and Dresel, 2019). Relational goals (i.e., building strong relationships with students) and work avoidance goals (i.e., a determination to complete tasks with minimal effort) have received limited attention in the goal orientation literature. However, they are important to study due to their significant impact on the cognition, emotions, and behaviour of academics (Daumiller, Dickhäuser and Dresel, 2019). In a typical work environment that requires employees to perform many different demanding tasks, avoidance goals are prevalent and necessary to cope with the everyday challenges of work (King and McInerney, 2014). Among academics, it is established that setting personal avoidance goals is necessary to cope with the multitude of different tasks and responsibilities (Daumiller *et al.,* 2016).

2.1.2.5 Goal outcomes and the multiple goals concept

The GO components discussed has gained empirical support as all avoidance dimensions of the 2 x 2 framework were found to be associated with negative outcomes (Senko, Hulleman and Harackiewicz, 2011; Hulleman *et al.,* 2010). Performance-avoidance goals are characteristically related with increased anxiety, surface learning and unstructured learning habits, avoidance of help-seeking, reduced interest, and self-handicapping (Elliot and Church, 1997; Elliot, 1999; Elliot, McGregor and Gable, 1999). Mastery-avoidance goals were also found to be associated with low self-efficacy, task disengagement, increased anxiety, and low performance outcomes (Van Yperen, Blaga and Postmes, 2015). Earlier research on the intercorrelation of the various dimensions of GO established negative relationship between learning goals and performance goals, since people with these two different orientations perceive challenges and difficulties differently (Dweck, 1986; Elliott and Dweck, 1988; Nicholls, 1984; Elliot and Harackiewicz, 1994). However, recent studies have established that mastery-approach and performance-approach goals are positively related (Scherrer *et al.,* 2020). In a meta-analytic study, Payne et al. (2007) found that learning goals are positively and negatively related to performance-approach and performance-avoidance goals respectively. Though these correlations were found to be small, they are found to be stable over time. Put differently, while earlier theorists argued that only mastery goals have favourable outcomes, subsequent studies have reported that performance approach goals also have favourable outcomes (Harackiewicz *et al.,* 2002; Elliot, 1999). Additionally, studies that employed

performance goal measures that emphasized appearance-referenced performance goals found negative or no relationship with achievement goal outcomes (Button, Mathieu and Zajac, 1996; VandeWalle, 1997). In an academic context, performance goals focused on demonstration of competence also established negative relationships with performance outcomes (Grant and Dweck, 2003).

The unexpected evidence that performance goals have positive (adaptive) outcomes over mastery goals led Barron and Harackiewicz (2001a) to propose the multiple goal concept where they argued that an interaction between mastery and performance goals produce optimum competence outcomes. Specifically, they argued that mastery and performance goals together may have interactive, additive, or specialised effects on achievement related outcomes. Empirical evidence however supports specialised effects, where normative goals (desire to perform better than a referenced person or group) were found to be positively associated with performance outcomes and mastery goals were found to be associated with sustained interest, perseverance, and goal commitment (i.e., deep learning) (Elliot *et al.,* 2005). Nonetheless, there is a counter argument that a normative goal may also have negative effects since it could become intrusive and divert attention away from a task (Senko, Hulleman and Harackiewicz, 2011). It could also become distractive if the individual does not receive immediate constructive feedback on goal progress (Senko and Harackiewicz, 2005). Other studies using experimental designs have also established that having both normative and mastery goals increase task absorption – intrinsic motivation (Elliot and Harackiewicz, 1996; Barron and Harackiewicz, 2001a). Consequently, recent findings suggest that normative goals do not hinder performance but rather enhance task focus (Senko, Hulleman and Harackiewicz, 2011) contrary to the initial assumption that performance goals in general are maladaptive. Only performance avoidance goals are found to produce feelings of shame and anxiety associated fear of failure leading to task disruption (Senko, Hulleman and Harackiewicz, 2011).

2.1.2.6 A dynamic perspective of achievement goal concept

As described already, the process of striving for achievement occurs over time as goals are not attained instantly; instead, goal pursuit entails planning, monitoring performance, revising the plans, increasing efforts, and sometimes reviewing the goal altogether (Beck and Gödöllei, 2020). In other words, stimulation of one goal affects the stimulation of similar goals of the hierarchy and resources are allocated to the goals with the highest stimulation. Over the years,

studies have explored the dynamics of goal pursuit process. Specifically, studies have explored why and how goals striving vary over time (e.g. Converse et al., 2013; Donovan and Williams, 2003; Ilies and Judge, 2005; Yeo et al., 2009). In spite of these efforts, the understanding of the dynamics of goal pursuit in work context needs to be broadened since some of these studies were conducted using student participants pursuing academic goals which may be different from workplace context. Other studies also employed experimental designs which are not typical of the workplace situation. Understanding the dynamics of GO is necessary because it will help to appreciate how goals and future expectancies influence employees' behaviour in a typical work situation.

Many explanations have been given to how and why goal striving occurs over time. From a self-regulation perspective, it has been argued that individuals either continually work to narrow the gap between their goals and performance by monitoring their progress and increasing their efforts, or they adjust their goals to better match their performance levels (Beck and Gödöllei, 2020). This process of goal monitoring and goal revision is dynamic and occurs as a function of time. How goals are framed have also been found to have a great influence on how they are pursued over time. For instance, people were found to be more sensitive to goal-performance discrepancy by allocating more resources when goals were framed in avoidance terms than when they are framed in approach form (Schmidt and DeShon, 2007). Ballard, Yeo, Neal, et al. (2016) reported that people were more likely to allocate more resources to avoidance goals with high goal-performance discrepancy when time for goal attainment is limited, while the exact opposite is true for approach goals. Also, Ballard, Yeo, Loft, et al. (2016) established that goal priorities changes over time, in that, approach goals are initially of more priority but as time left for goal attainment elapses avoidance goals become the priority. Future time perspective is therefore expected to have significant influence on achievement goal striving process.

There is also evidence of intraindividual dynamics of domain-specific goals over time. However, these studies have either used relatively longer time periods (e.g. Anderman and Anderman, 1999; different stages in academic transitions of students), or relatively shorter time (e.g. Converse et al., 2013; daily assessment of exams goal orientations). Irrespective of time periods used, results did support the assumption of MAT that pursuit of goals vary significantly over time. An exceptional study that employed a longitudinal design with moderate time

interval is Yeo et al. (2009). Their study concluded that goal pursuit (i.e., mastery-approach, performance-approach, and performance-avoidance) varies over time. Specifically, the study concluded that mastery-approach goals have positive relationship with performance at the intrapersonal level, but not at the interpersonal level whereas performance-approach goals also have positive effect on performance at both the intrapersonal and interpersonal levels over time. Yeo and colleagues, however, used experimental design where many environmental conditions were controlled, and participants pursued only single task over time.

Several factors have also been identified to influence the process of goal pursuit over time. For example, higher expectations of goal success are associated with greater resource allocation towards achieving the goal (Van Eerde and Thierry, 1996). Sun et al. (2014) argued that expectancy only influences goal acceptance. Once a goal is accepted, however, expectancy may actually reduce resource allocation for goal striving, as more time tends to be devoted to goals that are perceived as less likely to be achieved. Nevertheless, this only happens when all competing goals are deemed obtainable given the limited resources (Schmidt and DeShon, 2007). Also, self-efficacy which reflects the perception of ability to pursue a goal, is negatively related to resource allocation when goals are less difficult and time is limited (Beck and Schmidt, 2012; 2018) as resources are directed to more difficult competing goals. This underscores the role of dual-goal expectancy framework (Schmidt and Dolis, 2009). The framework posits that individuals allocate more resources to goals with high goal-performance discrepancy when time for goal accomplishment is far off but tend to focus more attention on and allocate more resources to goals with low goal-performance discrepancies as deadline approaches (Schmidt and DeShon, 2007).

Aside the assumption that achievement goals vary over relatively short periods of time, MAT also argues that these changes are observable as they are determined by previous experiences of the individual or environmental and contextual changes over time. MAT suggests that achievement goals stimulations are affected by environmental changes and goal-related actions. For instance, as time passes, the amount of remaining time to achieve a goal diminishes (e.g. Donovan and Williams, 2003; Schmidt, Dolis and Tolli, 2009; Mitchell and James, 2001). Therefore, the perception of the remaining time may significantly impact how individuals pursue their achievement goals. This is more relevant regarding pursuing mastery and performance-related goals as individuals are likely to pursue mastery goals when they think

they have enough time to do so but will be more concerned with pursuing performance goals when they perceive that remaining time is limited (Ballard *et al.,* 2016b; Schmidt and DeShon, 2007). Also, as remaining time for goal attainment decreases, individuals may have initiated goal striving which provides them with more information about the task that they were not previewed to from the start. They may have also gathered some experience in their numerous attempts in reaching the goal, which may influence the process of achievement goal pursuit. This assumption aligns with MAT's proposition that goal-related actions influence the level of motivation for striving towards specific goals (DeShon and Gillespie, 2005). Resource allocation towards achieving lower-order goals is directly connected to the attainment of higher-order achievement goals.

Contradictory findings regarding the influence of goals on performance may be reconciled by modelling the dynamic nature of goal processes (Yeo *et al.,* 2009). Mastery GO is considered an adaptive process aimed at continuous improvement, making it a flexible and changeable construct (Dweck, 1986). More specifically, mastery-approach goals are closely linked to the desire to develop skills and task-related competencies, making them highly dynamic (Kanfer and Ackerman, 1989). Additionally, performance-approach goals have been shown to enhance output and performance through persistence and increased effort, driven by the desire to outperform others (Church *et al.*, 2001). This approach is expected to boost an individual's perception of their own competence, thereby making the concept highly adaptable. Furthermore, performance-approach goals are anticipated to reflect changes within individuals over time, as they strive to outperform others, leading to both intraindividual and interindividual variability (Kanfer and Ackerman, 1989; Yeo *et al.*, 2009).

Modelling the dynamics of achievement goal striving will give a better understanding of the antecedents and outcomes of goal orientation. In the current study, future time perspective is considered a determinant of achievement goals which are expected to result in behavioural outcomes such as job crafting. The current study seeks to demonstrate that employee's perception of remaining time influences the dynamism of goals which translates into variations in employees' proactive behaviour such as job crafting. In other words, interpersonal and intrapersonal variations in approach and avoidance crafting are expected to be attributable to the dynamic nature of goals as determined by employees' FTP on the job and careers. To understand the influence of cognition on goal pursuit behaviour in achievement contexts, it is important to model how goals are pursued at both intraindividual and interindividual levels

over time. Specifically, this study will examine (a) changes in domain-specific achievement goal orientations over time, (b) FTP as a determinant of the changes in achievement goal orientation over time, and (c) job crafting as an outcome of dynamics of achievement goal orientations over time.

2.1.3 Future Time Perspective

The ability of humans to reflect on the past, experience the present and anticipate the future and the question about the existence of time have remained subjects of interest to philosophers and psychologists for a very long time. While time, on one hand, is considered tangible and described as something that can be either gained or lost, it is evident that it can also be elusive and cannot be overtly perceived (Stolarski, Fieulaine and Zimbardo, 2018). The idea that time can be perceived and be felt led to the proposition that time is a psychological variable that can be theorised and researched. Psychologists (e.g. James, 1980) have considered time as an indicator of the number of actions one makes and the ability to perceive these events. It is the awareness of a duration and the ability to experience temporality as past, present or the future states. Time perspective refers to individuals' perception of their psychological past or future at a given time (Lewin, 1942). Zimbardo and Boyd (1999) defined time perspective as an individual's unconscious attitude towards time and the process of continuous flow of existence that brings order and meaning to life. Thus, time can be objective (clock) or a subjective experience (attitude to time).

Time perspective is closely related but different from other constructs, although studies have often used these terms loosely (Stolarski, Fieulaine and Van Beek, 2015). For instance, time orientation is considered the feeling of optimism or pessimism for future events and sensation seeking in the present (Carver *et al.,* 2010; Zuckerman, 1971). The duration of time perspective is also referred to as psychological distance by some scholars (e.g. Trope and Liberman, 2003) and the dominance of one perspective (i.e., past, present, or future) is considered temporal focus (Shipp, Edwards and Lambert, 2009). The problem of conflating these constructs can be linked to the fact that time perspective is not only composed of content (i.e., the direction of time one focuses on) but also encompasses how time is experienced (the totality of events in the dynamic temporal frame) as espoused by Lewin (1942). Experiential time denotes the way one behaves in relation to the perception one forms about time in a given instance (Wallace and Rabin, 1960). This allowed for some scholars to consider time perspective as a trait (e.g.

Gjesme, 1983; Strathman et al., 1994; Zimbardo and Boyd, 1999) whiles others see it as situational-specific variable (e.g. Carstensen, 2006; Kooij et al., 2018; Lang and Carstensen, 2002; Wallace and Rabin, 1960). Of all the various time perspectives (past, present, or future) organisational psychologists have showed particular interest in understanding future time perspective due to the significant influence that it has on employees' attitude and behaviour.

FTP conveys the idea that human behaviour is guided by future expectations (Nuttin, 1964). FTP at work has to do with employees setting their minds on the likelihood of events occurring within an occupation/organisation in the future. It has been described as employees' perception regarding their future in the context of their employment (Zacher and Frese, 2009). As with most psychological constructs the literature on FTP have witnessed varied conceptualisations across the different fields (i.e., organisational psychology, developmental and educational psychology) where it has been studied. These different conceptions have affected the way studies are conducted, and the results obtained from such studies (Seijts, 1998). Generally, FTP has been either conceptualised as an individual dispositional characteristic or as a situation-specific variable that is dynamic and fluid. For example, Gjesme (1983) posited that FTP has to do with individual differences in the ability to envisage and structure one's future. As such, the construct has been defined as "the extent to which individuals consider the potential distant outcomes of their current behaviours and are influenced by these potential outcomes" (Strathman et al., 1994, p. 743). Similarly, Wallace and Rabin (1960) defined FTP as "the timing and ordering of personalised future events" (p. 229). Carstensen (2006) also described FTP as a cognitive motivational construct that varies as a function of experiences across the lifespan. This view is supported by Kooij et al. (2018) who also stated that FTP is not strictly individual difference but rather a difference in intra-individually changing orientations about one's future. They described FTP as a dynamic cognitive framework or orientation concerning one's capacity to anticipate the future, which varies with age.

More specifically, Kooij et al. (2018) proposed in a meta-analysis that FTP is a flexible mental framework regarding one's future, rather than a fixed trait. They considered FTP to be a dynamic cognitive construct that evolves and changes in response to life's events and has the capacity to motivate employees to behave in particular ways. This perspective aligns with Ringle and Savickas' (1983) view that an individual may either feel positive about the future, indicating confidence in achieving future goals, or feel threatened, leading to anxiety and

negative emotions in the present. This outlook influences individuals to set goals they perceive as attainable in the future (De Volder and Lens, 1982). Consequently, FTP is regarded as a flexible, cognitive-motivational construct (Zacher and Frese, 2009).

2.1.3.1 Dimensions of FTP

FTP has its roots in lifespan development research based on socioemotional selectivity theory (Carstensen, 2006; Lang and Carstensen, 2002). The theory suggests that FTP diminishes with age and explains the dynamics of goal priorities across the lifespan. According to the socioemotional selectivity theory (SST), changes in goals and goal priorities are a result of the perception of the remaining time that an individual possesses in a given situation (Lang and Carstensen, 2002). Employees who think they have longer future time are said to have extended FTP, while those who perceive they have a short future time are said to have limited FTP. Precisely, the theory explains that employees with extended FTP (mostly younger employees), strive to acquire knowledge and expand their social networks. Thus, they engage in activities that maximise future opportunities. Individuals with limited future time on the contrary (i.e., older adults), establish goals that prevent loss and promotes well-being, meaningfulness, and positive emotions. The theory asserts that FTP becomes increasingly limited with age (Kooij, Tims and Akkermans, 2017b). Limited FTP is related to the interest to maintain *the status quo* to avoid extra losses/costs (Carstensen, Isaacowitz and Charles, 1999).

Younger people tend to have extended FTP making them prioritise knowledge seeking over safety and security whereas older people have the opposite tendency to hold a limited FTP. As such, Lang and Carstensen (2002) consider FTP as a unidimensional/bipolar construct, where people are said to have either expansive FTP and focus on opportunities or limited FTP and focus on limitations. Following this development, Zacher and Frese (2009), separated the concept into perceived remaining time (perception of the amount of time remaining in the employment/career) and focus on opportunities (focus on possibilities, and anticipated prospects in the future) when they integrated the concept into organisational literature. Both dimensions of FTP (remaining time and focus on opportunities) were found to be negatively associated with both chronological and subjective age (Zacher and Frese, 2009). Although these dimensions are positively related, they are reported to be conceptually and empirically distinct (Kochoian *et al.,* 2017). However, empirically testing the construct in unemployed individuals revealed that focus on future limitations can also be a dimension of FTP (Zacher,

2013). This finding is consistent with factorial validity research (e.g. Rohr et al., 2017). Rohr and her colleagues argued that FTP has three dimensions comprising extension, opportunity, and limitation. FTP extension is the construal of how much time is remaining in one's occupational/career life, which is influenced by chronological age, and/or subjective age. FTP opportunity entails the perception of remaining possibilities/opportunities in one's working life. Limited FTP reflects employees' "beliefs that they have a limited future time characterized by constraints, restrictions, and limited possibilities" (Kooij *et al.,* 2017a, p. 5). A look at the meaning of these components reveals that they are related and yet distinct – extension, opportunity, limitation.

In the present study, future time perspective (FTP) is conceptualised as a multidimensional construct, comprising both extended and limited dimensions. This conceptualisation is consistent with the work of Cate and John (2007), who identified a clear distinction between a focus on opportunities, which aligns with the notion of extended FTP, and a focus on constraints, which corresponds to limited FTP. A focus on opportunities entails individuals' perceptions that their future is expansive, offering numerous possibilities and goals to pursue. On the other hand, a focus on limitations involves the perception that the future is restricted, characterised by fewer opportunities and more constraints (Cate and John, 2007, Zacher and De Lange, 2011). By adopting this dual perspective, the present study aims to differentiate between extended and limited FTP, providing a more nuanced understanding of how individuals' perceptions of their future time influence their goal motivation, self-regulatory actions (i.e., self-leadership), and proactive behaviour at work. This approach recognises that people's outlook on the future can vary significantly, affecting their motivation, goal-striving behaviour, and overall self-leadership. By considering these differences, the study seeks to shed light on the ways in which varying future time perspectives impact work-related behaviours and attitudes, ultimately contributing to a deeper comprehension of the role of FTP in the workplace.

2.1.4 Self-leadership

Self-leadership appears to be an oxymoron as mainstream leadership theories have often considered leadership to be the process by which one person influences another (Stewart, Courtright and Manz, 2019). Organisational leadership research has largely focused on the influence that managers and supervisors have on employees and the outcomes of this

relationship (Stewart, Courtright and Manz, 2011). However, due to the rapid organisational transformation in recent decades, both scholars and practitioners have recognised the impact that individuals with no managerial positions have had on organisational outcomes (Stewart *et al.*, 2011, 2019). This has broadened the scope of leadership research to include how individuals can influence themselves to achieve set targets and objectives. Continuous improvement in leadership has often been found to be principal to managing an organisation to achieve its objectives (Avolio *et al.*, 2009). Now, both scholars and practitioners have recognised the value of employees' contribution towards the effective operation of businesses (Goldsby *et al.*, 2021). That is, performance is not solely the result of competent management but also a function of employees' valuable inputs (i.e., knowledge, skills, abilities, motivation, and positive work attitude). Attaining optimum performance requires smooth collaboration between managers with the right leadership skills and employees who are self-motivated. The study of self-leadership has become more salient given the recent focus on employees' self-development by organisations (Holt, Hall and Gilley, 2018; Reichard and Johnson, 2011). The process of employees setting self-targets and pushing themselves to reach these targets is referred to as self-leadership.

Generally, self-leadership is the act of influencing oneself (Manz and Sims, 1991). More precisely, the concept has been defined as the totality of self-influence where an individual leads himself or herself to obtain a certain level of performance in motivating tasks as well as managing oneself to execute the work that needs to be done even in a non-motivating situation (Manz, 1986). Houghton and Neck (2002) described it as self-influence by self-direction and self-motivation. Thus, in self-leadership literature, the same individual is seen as both the leader and the follower. According to Bendell et al. (2019), self-leadership denotes cognitive and behavioural strategies that are used to accomplish greater personal effectiveness. Self-leadership strategies are "self-imposed mechanisms for performing tasks with little or no motivation and self-influence that is based on the natural rewards (intrinsic motivation) of a task" (Manz, 1986, p. 585). To simplify it, self-leadership refers to the act of individuals influencing themselves using cognitive and behavioural strategies (Manz, 1986; Neck and Houghton, 2006).

Three strategies have been identified to be useful in achieving self-influence and self-direction, that is behaviour-focused, constructive thought patterns and natural-reward strategies

(Houghton and Neck, 2002; Neck and Houghton, 2006). The behaviour-focused strategies aim at increasing a person's self-awareness to engage in behaviour modification to complete challenging but necessary tasks. Some known behaviour-focused strategies are self-observation, goal setting, self-cueing, self-rewards, and self-punishment (Neck and Houghton, 2006). Self-observation represents the increasing of one's awareness (i.e., keeping in mind the why) of engaging in a particular behaviour (Neck and Houghton, 2006). Having the capability to keep oneself in check to ensure one is on track also means that one has a clear understanding of what needs to be accomplished (self-set goals). Having clear, specific, and challenging goals have been found to increase the motivation to perform (Latham and Locke, 1979; Locke and Latham, 2006). The provision of self-rewards for achieving self-set goals provides energy and helps to sustain efforts to optimise performance (Manz and Sims, 1980; Neck and Houghton, 2006). Self-rewards may take the form of mentally celebrating one's achievements or taking a more pragmatic action (i.e., taking days off) after the accomplishment of a significant task. Self-punishment can take the form of self-criticism (to the extreme) for not meeting the targeted performance, which can hinder performance in the face of a huge defeat. Self-cues are the things that are used to remind or prompt an individual of what needs to be done as well as how soon it should be done. These cues are effective ways of ensuring constructive behaviours and limiting distractions (Neck and Houghton, 2006). Examples of items used for self-cueing are notes, to-do lists, and motivational quotes on cards and posters. These help one to remain focused and concentrated in striving to meet the self-set targets. In a summary, behaviour-focused strategies aim to promote desirable behaviours to achieve self-set performance standards while reducing undesirable actions (Neck and Houghton, 2006).

Constructive thought pattern approaches also emphasise the value of positive thinking which leads to positive outcomes through visualising future success and affirming personal optimism through positive self-talk. Constructive thought pattern as a strategy of self-leadership seeks to promote habitual positivity even in the face of adversity which is found to be very crucial to achievement and performance (Manz, 1992). Some ways of ensuring constructive thinking include the identification and replacement of negative beliefs, positive self-talk, and mental imagery (Neck and Houghton, 2006). People are encouraged to first recognise irrational negative beliefs or views that they hold against themselves and the situation at hand and challenge these thoughts to create positive beliefs and positive self-image (Houghton, Wu, *et al.,* 2012). Conscious evaluation of these beliefs helps to identify areas where an individual

needs help and they can begin to put things into perspective by engaging in positive self-talk which helps to suppress the negative thoughts and replace them with more positive and optimistic beliefs (Neck and Manz, 1992). Mental imagery refers to the mental frameworks of successful task completion that individuals create before physically executing the task (Driskell, Copper and Moran, 1994; Neck and Manz, 1992, 1996a). Mentally visualising successful performance has been found to translate into actual performance (Driskell, Copper and Moran, 1994; Neck and Manz, 1992). Here, the individual reconstructs their mental framework/image of the work. This is done to consciously focus on the positive aspects of the job to increase one's motivation as it has been found that focusing on unpleasant aspects of a job (e.g. demands, bad relationships, pressure, insecurity, etc.) brings unfavourable behaviour, weakens well-being, reduces the energy, enthusiasm, vigour, and the motivation to perform (Neck and Manz, 1992). In contrast, a focus on desirable aspects/elements (opportunity for growth, challenge, skills variety, etc.) increases motivation and mental energy (i.e., grit, tenacity) to perform. Constructive thought patterns, therefore, are developed by managing internal verbalisations or self-talk and one's belief systems.

Natural reward strategies have to do with the inclusion of motivational incentives to make the task to be performed interesting and satisfying. This makes workers develop a sense of autonomy and become purpose-driven and competent. Notably, there are two principal forms of natural reward strategies. One is by incorporating interesting and satisfying features into the task to make it more pleasant and naturally rewarding (Houghton, Wu, *et al.,* 2012). The other way is by consciously focusing on the positive aspects of the job and taking satisfaction from these positives while taking off attention from the unpleasant aspects of the job.

2.1.4.1 The development of self-leadership from a self-management concept

Historically, self-leadership and self-management attracted the attention of organisational researchers as organisations aimed to promote self-development among employees to reduce costs by decreasing the number of supervisory staff (Markham and Markham, 1995). Over time, in the self-development literature, the concepts of self-management and self-leadership became distinct. This distinction emerged as the theory of self-management evolved to encompass the pursuit of higher-order goals as a rationale for self-control. From a self-control perspective, Manz and Sims (1980) defined self-management as the extent to which an individual takes management roles (i.e., planning, directing, organising, controlling and

decision-making) in addition to assigned duties of a job within an organisation. The concept has also been described as the process whereby an individual makes the rational choice to self-regulate his or her behaviour towards the attainment of a pre-determined goal (Markham and Markham, 1995). Self-management strategies include self-goal setting, self-observation, self-rewards, and self-punishment (Manz and Sims, 1980). Manz (1992) added that self-management practices also include self-administration of rewards, though it has been counterargued that self-reward is not limited to self-management since people who are not aware of self-management also reward themselves (Neck and Manz, 1996a). Neck and Houghton (2006) argued that self-management (i.e., self-rewards) is only possible when there are no organisational restrictions. Hence, self-management is interdependent on organisational norms, and practices (i.e., culture). In other words, though organisations exert external controls (i.e., have codes, norms, policies and practices, rules, and regulations) at the workplace that aim to control employee behaviour at work (Clegg, 1981), it has also been found that individuals also possess internal control mechanisms that make them behave appropriately and responsibly (Markham and Markham, 1995; Carver and Scheier, 2002). Individuals do self-assessments of their performance, have self-set standards, and can self-administer rewards and punishments as ways of monitoring their own behaviour (Manz and Sims, 1980).

As managers and scholars strive to find a substitute for leadership to cut down the cost of employing managers and supervisors, the study of self-management continued and later unfolded into self-leadership. This was necessary as self-management was found to be inadequate in providing the needed motivation in employees to the extent that there will be no need for employing a supervisor to enforce increased productivity. Using the assumptions of the control theory by Carver and Scheier (1981), self-management (transitioning into self-leadership) is explained as efforts to reduce the discrepancy between the current state of performance and performance standards set by the individual (internal regulation), rather than their organisation (external regulation). The need for self-leadership became apparent because it was found that striving to meet external standards could not yield the required motivation to exceed expectations on the part of employees. Thus, though self-leadership comprises self-management, it extends beyond self-management to include the self-regulatory and self-control mechanisms that internally generate superordinate performance standards (Manz, 1986; Markham and Markham, 1995). Superordinate goals are the reasons for engaging in a specific behaviour, which originates from the self-control processes and social learning perspectives

(Manz, 1986). Thus, while self-management focuses on meeting the organisational standards of performance, self-leadership has a much broader focus that reflects the need to achieve such an objective. In other words, self-management is focused on the completion of tasks for external rewards, whereas self-leadership recognises the intrinsic value of task engagement. Self-management is self-encouragement to meet the standard set by external agents while self-leadership concentrates on the *'why'* of behaviour (Manz, 1992, 1986).

This understanding of self-management and self-leadership corresponds with the concept of controlled and autonomous motivation proposed by Sheldon and Elliot (1998). Controlled motivation denotes the feeling that one is obliged or forced to do something by external agents whereas autonomous motivation denotes personal goals, values, interests, aspirations, and the inherent motivation to perform (Koestner *et al.,* 2008). Evidence suggests that goals that are not personalised tend to generate intrapersonal conflicts while autonomous (self-directed) goals provide the individual with the opportunity to tap on volitional resources (i.e., sustained effort) to attain an objective (Sheldon and Elliot, 1999). Therefore, helping employees to self-regulate their own behaviour is a more realistic way of controlling behaviour than a stern focus on external control mechanisms (Manz, 1986). Overly relying on external controls will make employees reactive rather than proactive (i.e., performing only behaviours that are rewarded/recognised).

The why of behaviour is very key when it comes to finding a broader perspective of self-influence (Manz, 1986). Self-influence is not only about the exertion of internal control but also about relying on external controls to constrain self-actions (Manz, 1992, 1986). In line with Bandura's (1978) reciprocal determinism, self-influence is a result of the interaction between environmental constraints and internal control mechanisms. Self-leadership involves taking responsibility to control one's own behaviour towards attainment of a goal. It includes implementing self-management strategies to achieve personal motivation as well as meet external standards. Self-leadership is a comprehensive self-influence mechanism "concerned with leading oneself to perform naturally motivating tasks and self-management strategy to perform necessary/needed tasks that are naturally unmotivating" (Manz, 1986, p. 289). To sum up, self-leadership provides (1) standards for self-influence, (2) includes intrinsic motivation for task performance, and (3) prescribes ways for employees' self-control.

2.1.4.2 Criticisms of self-leadership as a distinct construct

A counterargument of self-leadership is that the concept is conceptually indifferent and a needless duplication of personal motivation and self-regulation (Markham and Markham, 1995; Williams, 1997; Houghton *et al.,* 2004). As already discussed, self-leadership is a collection of strategies for self-influence and personal discipline to attain set objectives. These strategies were developed and largely derived from existing theories including self-regulation, control theory, social cognitive theory, and goal theories of motivation (Carver and Scheier, 1982; Bandura 1991, 2001; Latham and Locke, 1991). Due to this, some scholars have argued that the concept is just a repackaging of existing theoretical assumptions (Neck and Houghton, 2006). For instance, Markham and Markham (1995) asserted that self-leadership may overlap with personality types such as conscientiousness.

Meanwhile, self-leadership theorists have responded that the concept although originated from existing theories of self-control and self-regulation is a normative model and not a deductive theory or a descriptive model (Neck and Houghton, 2006). While traditional (descriptive) theories try to explain behaviour, normative (prescriptive) theories are found in applied disciplines and basically offer suggestions on how things ought to be done to achieve optimal results. Self-leadership is a constellation of modalities and strategies that are delineated from, related to, yet different from personality traits, self-regulation, and self-control theories (Neck and Houghton 2006). The concept is a prescription of self-regulatory processes for optimum personal effectiveness. These explanations have received empirical support (e.g. Houghton et al., 2004; Neck and Manz, 1996b; Williams, 1997).

The concept of self-leadership was predominantly developed in Western culture (i.e., USA), hence, its applicability needs to be examined in other cultures. A few studies have been, however, conducted in Chinese settings (e.g. Neubert and Wu, 2006). Some scholars are also of the view that self-leadership is a contingency concept as its strategies are not feasible for implementation in all circumstances (Manz and Sims, 2001). Thus, effectiveness of self-leadership is dependent on organisational factors. According to Stewart et al. (2019), self-leadership research is full of inconsistencies. For example, whereas some scholars believe that the capacity to lead oneself can deplete over time, others on the contrary, hold the view that self-leadership is a skill that can be enhanced over time through practice as workplace support acts as a buffer to mitigate against self-leadership depletion over time (Stewart, Courtright and Manz, 2019). Although these observations and assumptions have been made, there is no

empirical evidence to back these claims. That is no extant study that has examined the influence of self-leadership on work outcomes over time.

To sum up, critics argue that self-leadership overlaps with existing theories like self-regulation and is conceptually redundant. However, proponents view it as a prescriptive model offering strategies for optimal performance. The applicability of self-leadership across different cultures and organisational contexts remains a topic of debate. While some argue its effectiveness can vary, there is no definitive empirical evidence on its long-term impact on work outcomes.

2.1.5 Workplace support

Although self-leadership and other individual factors such as proactive personality are crucial for fostering employee proactivity (e.g. Bakker et al., 2012; Liu et al., 2023), it is well established that the organisational context in which work is conducted also significantly influences proactive behaviours. Organisational factors such as workplace culture, management practices, and available resources play a critical role in shaping employees' ability to engage in proactive behaviours (Wu and Parker, 2017; Park and Park, 2021). Consequently, the studies presented in this thesis investigated perceived workplace support as a potential factor influencing job crafting. The aim was to explore how supportive work environments can encourage employees to take initiative, modify their tasks, and enhance their roles to better align with their skills and interests. By understanding the interaction between individual agency and workplace support, we can gain insights into how to create environments that better foster proactive employee behaviour.

Perceived workplace support refers to "individual's perceptions of general support or specific supportive behaviours (available or acted on) from people in their social network, which enhances their functioning or may buffer them from adverse outcomes" (Malecki and Demaray, 2003, p. 232). Theoretically, research on support at work has identified numerous facets, encompassing various types of support from multiple sources. The present study adopts House's (1981) typology of social support (i.e., emotional, instrumental, informational and appraisal). Examples of emotional support at work are trust, respect, care, and listening (Fenlason and Beehr, 1994). Instrumental support also has to with the provision of tangible resources, giving needed assistance, and giving guidance to help employees to complete a task (Jing, Chou and Robert, 2008). Informational support entails giving the employee the right information while appraisal support is also concerned with the provision of constructive

feedback to the employee. Sources of support at the workplace include the institution, supervisors, and co-workers (Shimazu, Shimazu and Odahara, 2004). Supervisor's support, however, has been found to have a greater influence on employees' behaviour since they have more power control than co-workers (Fenlason and Beehr, 1994).

Psychological climate theory emphasises the importance of employees' perceptions of their work environment, suggesting that these perceptions significantly influence their behaviour and well-being. According to the theory, workplace support—comprising perceived organisational support, supervisor support, and peer support—plays a crucial role in shaping a positive psychological climate. This support is seen as essential in determining how employees experience their work environment, with strong support leading to more favourable perceptions and outcomes. Also, according to psychological climate theory, the effects of situational variables on employees' attitude and behaviour largely depend on how people perceive these events. For example, instrumental support may facilitate employees' proactivity while emotional support may help reduce employees' stress and increase job satisfaction (Parker *et al.*, 2003).

2.1.6 Goal progress

Goal progress (i.e., successes made on goal achievements) is a stronger predictor of well-being than goal attainment, which suggests end-state particularly when the goal has no link with subsequent future goals (Emmons and Diener, 1986; Harris *et al.*, 2003). Well-being is the state of optimum psychological functioning (Slemp and Vella-Brodrick, 2014). It is described as the absence of worry and the presence of happiness or satisfaction with life (subjective well-being) as well as embracing everyday challenges of life and achieving a sense of purpose in life (psychological well-being) (Linley *et al.,* 2009). Successful progress towards the realisation of personalised valued and important goals satisfies the needs of the individuals and increases well-being (Sheldon and Elliot, 1998; Sheldon *et al.,* 2002). Compared to goal progress, the effect of successful goal attainment on well-being is short-lived due to hedonic adaptation or rising aspirations (Klug and Maier, 2015). Research indicates that people return to baseline well-being states with time after goal attainment (Headey and Wearing, 1989). Goal progress is therefore important to study as it sustains the positive effects on well-being the individual and also increases motivation for sustained efforts in pursuit of the goal.

Job crafting as a goal-oriented behaviour may lead to successful goal progress since employees have been found to alter their jobs to align it with their personalised goals or motives (Tims, Bakker and Derks, 2012b; Wrzesniewski and Dutton, 2001). Employees who make realistic crafting goals may experience increased positive emotions when successful progress is made towards the achievement of such goals through job crafting (van den Heuvel, Demerouti and Peeters, 2015). Parker and colleagues (2010) identified different stages/phases of pursuing proactive goals including proactive goal envisioning (the awareness of a desirable future work situation); proactive goal generation (setting concrete and realistic goals); proactive goal planning (describing the ways and means to achieving the goal); and proactive goal striving (the actual pursuit of the goal set). They further added that such goals should be clear, feasible and should be achieved within a short-term period. The present study argues that job crafting is the stage of goal striving where goals' strategies and plans are implemented and expected to result in successful goal progress.

Similarly, intervention studies on job crafting require participants to set their own goals to increase structural and social job resources, to increase challenging job demands, and to decrease hindering job demands (e.g. van Wingerden, Bakker and Derks, 2017b). The crafting intervention entails employees refining their goals and making plans of how to achieve set goals. Participants afterwards implement their plans (put their crafting strategies into action) to obtain desired outcomes. When crafting, employees decide to change their perception about their job (cognitive crafting) or engage in behaviours that fulfilling and makes their work more meaningful (van Wingerden, Bakker and Derks, 2017b). They may also acquire relevant skills (skill crafting), which will enable them to perform better on the job, thereby implementing their mastery (task and learning) and performance (appearance and normative) goals, which is expected to lead to successful goal progress. Building healthy relationships (relational crafting) at the workplace is also expected to be an important predictor of goal progress for employees to get the needed support, which can help deal with the stressful work situation.

To summarise, this chapter discusses the study variables and how they have been conceptualised in literature as well as how they have been operationally defined and constructed in the present research. The chapter begins with a discussion on job crafting and its historical development. Following this, a discussion of goal orientation, FTP, self-leadership, and perceived workplace support are presented. The chapter concludes with a discussion on goal progress.

Chapter 3: Literature Review 2

Theoretical Frameworks, Conceptual Model and Hypotheses Development

3.0 Introduction

This chapter presents the theoretical framework, the conceptual model and reviews literature on empirical studies and theoretical understandings that explain the expected relationships between the study variables. Specifically, it discusses the assumptions of expectancy-value theory, self-determination theory, and self-regulation theory to argue that employees' future expectancies influence their self-determination needs, including autonomy through self-leadership, competence (achievement goals), and belongingness (workplace support). These needs are, in turn, expected to influence job crafting and goal progress, in accordance with the assumptions of self-regulation theory.

3.1 Theoretical framework

This study will be guided by the expectancy – value theory (Wigfield and Eccles, 2000, 1992; Eccles and Wigfield, 2020; Vroom 1964), self-determination theory (Ryan and Deci, 2000, 2020; Deci and Ryan 2008), and control theory of self-regulation (Carver and Scheier 1982, 2002, 1981).

3.1.1 Expectancy Value Theory

Expectancy – Value Theory (EVT), proposed by Vroom (1964), suggests that motivation for a specific behaviour or action is influenced by two main factors: (i) expectancy, which is the individual's perception of the likelihood that the desired outcome will be achieved through the behaviour or action, and (ii) value, which is the importance the individual places on the desired outcome. These factors combine multiplicatively, so that motivation equals expectancy multiplied by value. High motivation occurs when both expectancy and value are high, but motivation is absent if either factor is zero. Vroom (1964) also identifies two subcomponents of expectancy. The first subcomponent pertains to an individual's belief in their ability to perform a task at the required level, essentially the perceived link between effort and performance. This is also termed "expectancy." The second subcomponent involves the perceived probability that the performed activity will lead to the desired outcome, known as

"instrumentality." Overall expectancy is high when an individual believes both that they can perform the activity, and that this performance will likely result in the desired outcome.

Eccles and colleagues (e.g. Eccles and Wigfield, 2002; Wigfield and Eccles, 2000) and Lawler and Porter (1967) expanded on Vroom's model, defining additional factors that influence expectancy and value. Lawler and Porter (1967) assert that value is influenced by how much an outcome satisfies needs for autonomy, self-actualization, esteem, and security. Eccles and colleagues also suggest that expectancy and value are shaped by task-specific beliefs, such as perceived difficulty, and by individuals' self-concept and goals, which are further influenced by others' beliefs, socialisation, and past achievements (Eccles and Wigfield, 2020). They also identify four components of task value: intrinsic value (enjoyment), attainment value (importance of doing well), utility value (alignment with goals), and relative cost, which includes effort, lost opportunities, and negative emotions. Eccles and colleagues state that expectancy and value directly affect performance, persistence, and choice (Eccles and Wigfield, 2002).

The situated expectancy – value theory (SEVT) is a recent conceptualisation of expectancy – value theory (Wigfield and Cambria, 2010; Eccles and Wigfield, 2020). It incorporated ideas of scholars such as Lewin (1938) and Atkinson (1957) who also defined the concepts; expectancy and value, to explain human motivation. The theory states that people's expectations of success and subjective values shaped by contextual, and social factors are the most direct determinants of goal choices, and behaviour (Wigfield and Cambria, 2010; Wigfield and Eccles, 2000, 1992; Wigfield, 1994; Eccles and Wigfield, 2020). Thus, employees' views and beliefs about their future influence their behaviour and attitudes in the present while these beliefs are shaped by social and situational factors. The theory also argues that people's expectancies and values indicate a perception of their competence to engage in tasks (Wigfield and Cambria, 2010). According to the theory, people's evaluation of the likelihood of their actions leading to a desired outcome, and appraisal of the value of both outcome and behaviour/action are direct determinants of motivation and performance. Consequently, different forms of expectancies such as action-control expectancies, action-outcome expectancies, and situation-outcome expectancies have been outlined as determinants of motivation to perform (Wigfield and Cambria, 2010; Eccles and Wigfield, 2020). Action-control expectancies reflect the belief about whether the individual can take an action that will

produce a desired outcome, while action-outcome expectancy is the belief that an action will produce desired outcome. Situation-outcome expectancy also denotes the conviction that a given situation will lead to a certain outcome. Starting with future expectancies and the value placed on desired outcomes, the individual forms action-control expectancies, action-outcome expectancies, and situation-outcome expectancies, which determine his or her behaviour in the present. Value by way of definition is the utility, gratification, or satisfaction that an individual receives or is anticipated to be received from engaging in a specific task (Eccles and Wigfield, 2020). Behaviours that are related to the achievement of a future desired goals attract the greatest value and hence likely to be engaged in by the individual.

Similar to the assumptions of EVT, Parker et al. (2010) describe employee proactivity by stating that to undertake a proactive action, employees envision and anticipate the future (have expectancies), they set goals (value) and strive through to achieve them (motivation). Parker and her colleagues defined proactive behaviour as individual-level, future-oriented behaviour aimed at improving oneself and/or the situation in which one finds himself or herself. They came up with three principal direct predictors of proactivity (i.e., *'can do', 'reason to do' and 'energised to do'*), which closely align with action-control expectancies, action-outcome expectancies, and situation-outcome expectancy, respectively. *'Can do'* motivation has to do with the perception that one has what it takes to be able to accomplish the proactive task. It is a form of self-appraisal that concludes that the individual in question can meet the cost of action. '*Reason to'* factors have to do with the *'why'* of proactive behaviour. It is related to the concept of utility in expectancy theory, which drives employees' commitment and determination to reach set goals (Niessen, Weseler and Kostova, 2016; Wigfield and Cambria, 2010). '*Energized to'* determinants of proactivity refer to positive affects that enable individuals to set challenging goals (Parker, Bindl and Strauss, 2010). Positive affects (i.e., being enthusiastic) is important to stimulate proactive behaviour (Bindl and Parker, 2011). Emotional support and other workplace support have the potential to stimulate and energise employees to engage in proactive behaviours such as job crafting (van Wingerden, Bakker and Derks, 2017a).

Applying this theory to the current research suggests that employees' perceptions of their occupational future (expectancies) can influence several factors. These include their self-leadership (action control expectancy, 'can do'), goal motivation (action-outcome expectancy,

'reason to'), perceived workplace support (situation-outcome expectancy, 'energised to'), and job crafting (behaviour).

3.1.2 Self-Determination Theory (SDT)

Self-Determination Theory (SDT), developed by Deci and Ryan (e.g. Ryan and Deci, 2000, 2020; Deci and Ryan, 2008), is a comprehensive theory of motivation. It is based on the idea that humans have basic needs for competence, autonomy, and relatedness, and naturally engage in activities that meet these needs. According to SDT, motivation for an activity is influenced by how much the activity is perceived to provide feelings of competence, autonomy, and relatedness, as well as the current strength of these needs, which vary by individual and situation (Ryan and Deci, 2000). A major aspect of SDT is the distinction between intrinsic and extrinsic motivation, with intrinsic motivation seen as more beneficial for personal growth and well-being. SDT also divides extrinsic motivation into four types, based on the level of internalisation of the activity's benefits and behaviour regulation (Ryan and Deci, 2000). At one end is external regulation, where activities are done to meet external demands. At the other end is integrated regulation, where activities are fully internalised and align with personal values, satisfying psychological needs. Between these are introjected regulation and identified regulation. SDT suggests that autonomy and the quality of motivation increase along this spectrum, from external to integrated regulation. Additionally, SDT posits that external incentives can reduce intrinsic motivation. One main feature of SDT is that it implicitly values intrinsic motivation more than extrinsic motivation, suggesting that intrinsic benefits contribute more to the overall expected benefit of an activity.

SDT is relevant to the present study, shaping its conceptual framework by explaining the role of self-leadership, achievement goal orientation, and perceived workplace support as antecedents of job crafting since these variables align with the intrinsic needs for autonomy, competence, and belongingness. The theory posits that motivation is affected by the level of internalisation and perceived autonomy, explaining the present study's framework. Specifically, FTP, goal orientation and self-leadership are expected to be associated with job crafting and goal progress as they are known to increase intrinsic motivation (Elliot and Harackiewicz, 1994, 1996; Liu, Peng and Wen, 2023). Furthermore, SDT's viewpoint that activities governed by integrated regulation are valuable, have a high expectancy of instrumental outcomes, and are under personal control explains the anticipated relationship

between FTP, goal orientation, self-leadership, and job crafting. SDT argues that individuals are motivated by three basic psychological needs: autonomy, competence, and relatedness. Future-oriented individuals may engage in job crafting as a means of fulfilling these needs in alignment with their long-term goals. Self-leadership strategies empower individuals to take initiative and exert control over their work, while perceived workplace support provides the necessary support and resources to facilitate job crafting behaviours.

3.1.3 Control Theory of Self-Regulation

Regulation typically involves maintaining a constant state across varying conditions (Vancouver, 2000). Self-regulation refers to an individual's ability to internally control a variable to keep it at a desired level. The desired state is the target value that the system aims to maintain. In psychology, goals represent these internal desired states, and they can be regulated as they are internally represented (Vancouver, 2000, 2008). Effective self-regulation requires that an individual has significant control over the environment to keep the perception of a variable stable. Actions are taken when environmental changes disturb this state or when the desired state changes. Regulation thus helps individuals stay focused and goal-directed in different circumstances.

In an organisational setting, self-regulation involves directing actions and behaviour towards achieving goals in various contexts. Karoly (1993) described self-regulation as the process of allowing individuals to guide their goal-directed activities over time and across changing conditions. This includes monitoring and improving information on goal progress (Vancouver 2000). Research on self-regulation at work explores how employees influence their behaviour and attitudes to achieve desired performance. It involves the modification of thoughts, emotions, behaviours, or attention to meet set goals. Self-regulation is about maintaining goals, which are internally set desired states (Vancouver, 2000; Austin and Vancouver, 1996). Theories of self-regulation explain the processes and outcomes of striving for these goals, including setting, planning, and revising them (Austin and Vancouver, 1996; Vancouver and Day, 2005)

The cybernetic perspective on self-regulation, formally introduced by Wiener in 1948, has been applied in fields like engineering, economics, and medicine (Carver and Scheier, 1982). From this perspective, the principles of self-regulation are seen as universal across systems, which led to the term 'general systems theory' (Von Bertalanffy, 1972). Following the cybernetic

viewpoint, the control theory was developed. Control theory of self-regulation suggests that motivation comprises cognitive and affective components (Carver and Scheier, 1981). The cognitive aspect involves setting internal goals, processing information about the current state, and comparing this state with the goals. The affective aspect arises from discrepancy between desired and current states, prompting actions to reduce these discrepancies. A feedback loop is the fundamental unit of cybernetic control, working to minimise the discrepancy between the input function and the comparison value (desired goal). The input function is the perception of the current condition, such as goal performance, which is compared to the desired state via a comparator. Identifying a discrepancy triggers an action (output function) to reduce the discrepancy between the performance and the desired state. Carver and Scheier (1982), however, implied that the action taken when a discrepancy is observed does not aim to reduce the discrepancy directly but rather to influence the system's environment which determines future actions. This environmental impact alters the current condition, which is then reassessed against a new reference value, forming a closed-loop control system aimed at minimizing deviation from the standard.

Powers (1999) proposed that control systems can be hierarchically interconnected, supporting self-regulation of behaviour in living systems. A hierarchical system includes superordinate and subordinate goals, where achieving the latter is essential for the former. The superordinate system sets reference values for feedback systems at lower levels. At the lowest level, behaviour manifests as changes in behaviour or action. Complex behaviours result from hierarchies of feedback loops, with higher-order loops setting standards for lower-order (Powers, 1999; Schmidt and DeShon, 2007). Understanding these processes shows how self-regulation helps individuals and systems maintain stability and achieve desired outcomes despite external disruptions. This framework provides insights into the mechanisms underlying goal-directed behaviour and the modulation of thought, emotion, and actions in response to changing circumstances.

Future Goals: Task Value and Self-Regulation

Effective self-regulation involves two main components: goal setting and goal striving. Goal setting includes selecting appropriate goals with clear criteria for success, while goal striving involves implementing strategies and behaviours to achieve those goals (Vancouver, 2000). Goals are central to self-regulation, representing desired outcomes to which individuals commit

emotionally, cognitively, and behaviourally (Vancouver, 2008). According to Latham and Locke (1991), goals vary in motivational orientation (approach vs. avoidance), difficulty (easy vs. challenging), type (performance vs. mastery), specificity (concrete vs. abstract), and proximity (near vs. distant). Regulatory focus explains how individuals regulate emotions and behaviours in pursuit of goals. Promotion-focused individuals aim to maximise gains and aspirations, driven by positive emotions linked to creativity and productivity (Neubert et al. 2008). In contrast, prevention-focused individuals strive to avoid losses and fulfil responsibilities, motivated by negative emotions, prioritising safety, and task accuracy (Wallace and Chen, 2006). Prevention focus scenarios can deplete emotional regulation resources, discouraging engagement in resource-intensive behaviours.

As already noted, goals are hierarchical and vary in their future orientation (Nuttin, 1964). Some goals are indefinite and are thus pursued continuously (Emmons and Diener, 1986; Emmons and King, 1989). These goals are self-defining, guiding behaviour through identification with the goal and its integration into a set of self-determined objectives (Ryan and Deci, 2000). Examples include striving for career success and contributing to society (Miller and Brickman, 2004). Cultural influences shape life goals, with sociocultural factors like family, peers, education, and religious institutions playing significant roles. Knowledge of possibilities, values, and the feasibility of goal attainment also influence the adoption of life goals (Bandura, 1989). Since far-future goals often lack immediate incentive value, individuals set intermediate subgoals, which provide stronger motivation and facilitate self-regulation. A series of well-planned subgoals, believed to lead to a distant objective, enhances effective functioning and self-regulation (Eccles and Wigfield, 2002).

Although proximal goals offer self-guidance and make self-regulation possible, they are linked to distant life goals. Therefore, understanding self-regulation requires incorporating the concept of future goals. Earlier theorists, such as Bandura (1989), noted that combining distant aspirations with proximal self-control is essential for personal development. Thus, distant goals give meaning to our present actions (Miller and Brickman, 2004). Having a clear set of proximal subgoals that lead to the desired future goal activates self-regulation and task engagement, enabling self-observation, self-evaluation, and self-reaction (Miller and Brickman, 2004). Achieving these subgoals is rewarding, as it brings recognition and inner satisfaction. The incentive to complete a task increases if it is seen as instrumental in achieving

a valued future goal (Nuttin, 1964). Thus, the perception of the current task's role in achieving future goals is crucial for proximal self-regulation (Miller and Brickman, 2004). The cognitive appraisal of one's present context, including self-efficacy and expected outcomes, determines the goals pursued. People are less likely to adopt goals or tasks if they have low expectations or self-efficacy (Bandura 2001; Miller and Brickman, 2004). It is important to note that future expectations and self-efficacy beliefs are heavily influenced by past experiences in similar situations.

Based on the assumptions of self-regulation theory, the present study posits that an employee's FTP is likely to shape their achievement goal orientation, self-leadership, and perceived workplace support, all of which are expected to influence job crafting behaviour. Job crafting, in turn, is anticipated to facilitate goal progress. According to the feedback loop concept, goal progress and job crafting are also expected to exert a reverse causal influence on goal orientation and FTP.

3.2 Conceptual model

In accordance with the assumptions of the theories discussed, this study conceptualises future time perspective (FTP) as the primary predictor. FTP (open-ended vs limited) is posited to influence self-determination variables—namely self-leadership, achievement goal orientatioon, and workplace support—which are, in turn, expected to be associated with job crafting behaviours (approach vs avoidance). Specifically, self-leadership and workplace support are hypothesised to positively relate to approach-oriented job crafting, as these strategies aim to maximise gains. Furthermore, approach and avoidance goals are anticipated to predict approach and avoidance-oriented job crafting, respectively. Therefore, self-determination variables are proposed to mediate the relationship between FTP and job crafting behaviours. Job crafting is expected to predict goal progress, aligning with situated value expectancy theory (SEVT) and self-regulation theory, which suggests that individuals' present actions are aligned with their future desired goals (expectancies). Figure 2 below presents a diagram illustrating the hypothesised relationships between the study variables.

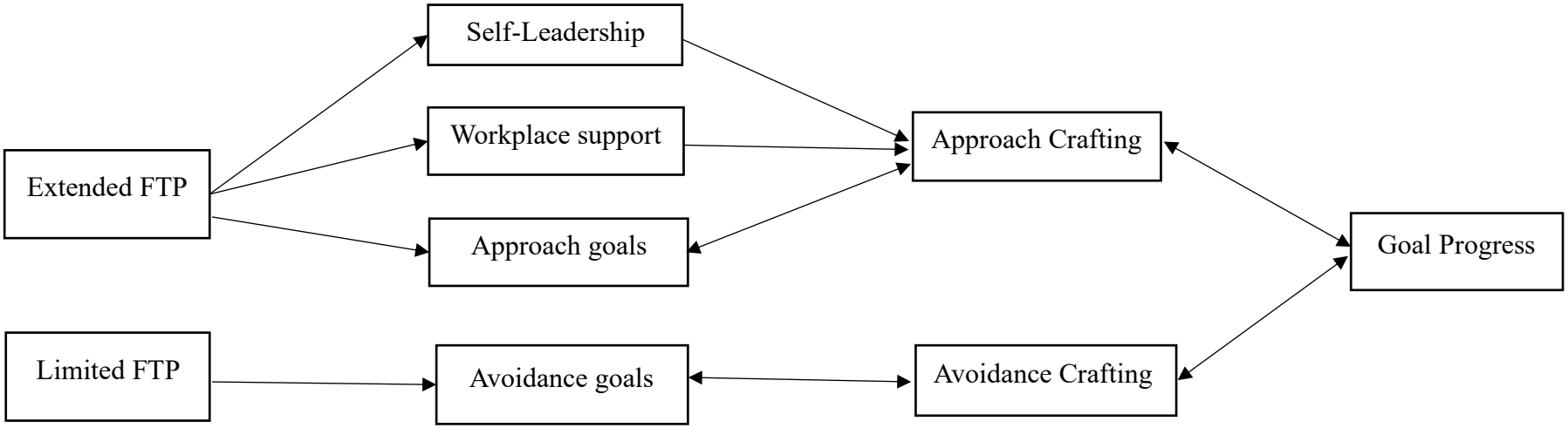

Figure 2: Conceptual Model Showing Hypothesised Relationships

3.3 Statement of hypotheses

Proactivity has been conceptualised from various perspectives, including individual differences (proactive personality), goal processes, and behavioural perspectives (Parker and Wu, 2014). In this study, proactivity is understood from the goal process viewpoint, where it is described as a process in which an individual foresees the future, sets goals, takes necessary actions, and persists in striving to achieve these goals (Parker, Bindl and Strauss, 2010). Goal striving involves overcoming obstacles and using feedback on progress to ensure goal attainment. Thus, individuals first assess the situation and develop expectancies before initiating proactive behaviour (Bindl and Parker, 2011). In the present study, future time perspective (expectancy), self-leadership ('can do'), achievement goal motivation ('reason to'), and workplace support ('energised to do') are expected to be antecedents of job crafting.

3.3.1 Relationship between FTP and job crafting

Time and its perception, which changes with age, significantly affect employee motivation and behaviour (Carstensen, 2006; Sonnentag, 2012). FTP is expected to influence job crafting because it is an antecedent of work motives, which in turn influence job crafting (Wrzesniewski and Dutton, 2001). Although existing studies have shown the importance of FTP in understanding age-related dynamics in motivation among older employees (e.g. Kooij et al., 2013, 2014, 2015), little attention has been given to the behavioural outcomes of changes in FTP across all working groups. This study examines extended and limited FTP as distinct predictors of job crafting.

Socioemotional selectivity theory proposes that FTP determines goal prioritisation in two main ways. Individuals with extended FTP value knowledge acquisition, growth, and development, and seek to achieve a certain level of competence (Lang and Carstensen, 2002; Carstensen, 2006). Conversely, individuals with limited FTP focus on emotional regulation to minimise stress and enhance psychological well-being, prioritising short-term, risk-free goals such as meaningfulness and generativity goals (Carstensen, 2006). Based on socioemotional selectivity theory, extended and limited FTP are expected to have different effects on job crafting behaviours. Extended FTP is anticipated to influence approach crafting—such as increasing task boundaries, learning new skills, developing a positive mindset, and building good workplace relationships—because individuals with extended FTP aim to expand their knowledge and establish significant relationships for future advantages. Limited FTP, on the

other hand, is expected to predict avoidance crafting—such as reducing hinderance demands—since employees with limited FTP focus on emotional regulation and prioritise positive affect and generativity needs (Kooij, Tims and Akkermans, 2017a). Empirical support for these ideas includes findings that extended FTP positively influences growth motives while limited FTP is associated with increased safety, security and generativity motives (Kooij *et al.*, 2011; Lang and Carstensen, 2002). As FTP varies with age, the present study adopts a cross-sectional and longitudinal designs to examine the relationships between study variables as well as find out if changes in extended and limited FTP lead to corresponding changes in approach and avoidance crafting. Differences in time perception may lead to the adoption of different motives and goals, likely influencing various forms of crafting. As individuals age, their motives and preferences change. Younger individuals are more likely to pursue growth goals, while older individuals focus on well-being and risk-free goals (Kooij and Van De Voorde, 2011; Kooij, Bal and Kanfer, 2014). Dynamics in FTP dimensions are thus expected to lead to corresponding positive effects on approach and avoidance crafting behaviours, respectively.

Empirical studies support these theoretical assumptions. For example, Kooij et al. (2017a) found that employees with extended FTP increased challenge demands and social resources of their jobs compared to those with limited FTP. Nagy et al. (2019) reported that subjective age (how old one thinks one is) impacts job crafting among older workers: those who perceive themselves as older (displaying limited FTP) reported lower levels of job crafting, while those who feel younger (indicating extended FTP) reported higher levels of job crafting. It must be noted that Nagy *et al.* (2019) only considered approach crafting, not differentiating the effects of extended and limited FTP on different forms of job crafting. Following Nagy et al. (2019), Zacher and Rudolph (2019a) concluded that feeling younger leads to more job crafting to achieve positive outcomes, with FTP mediating the relationship between subjective age and job crafting. Additionally, they found that job crafting can reduce subjective age through open-ended FTP. Therefore, an extended FTP increases the likelihood of an individual engaging in approach crafting, which consequently leads to lower levels of limited FTP. Based on these findings, the present study considers the possibility that job crafting influences FTP, as taking on more roles and tasks can make individuals feel more energetic and open to opportunities.

H1: FTP will have a significant positive effect on job crafting.
H1a: Extended FTP will positively relate to approach job crafting.

H1b: Limited FTP will positively relate to avoidance job crafting.

3.3.2 Relationship between FTP and goal orientation

The present studies presented in this thesis also examine the relationship between FTP and goal orientation, based on the premise that having an extended or limited FTP will correspondingly influence employees' approach and avoidance goal orientations. Extended FTP, characterised by a longer future time and the ability to see opportunities and possibilities (Kooij *et al.,* 2018, Przepiorka, Jankowski and Sobol, 2020), is likely to lead individuals to develop learning or mastery goal orientations (Lee *et al.,* 2010; Ng and Lucianetti, 2018). These individuals are more likely to believe they can seize future opportunities, thus having approach goals (Phan, 2009). Conversely, individuals with a limited FTP are expected to adopt avoidance goals, perceiving limitations and being more motivated to prevent loss rather than acquire gains (Lee *et al.,* 2010). They are likely to aim for only the minimum level of performance to avoid appearing as poor performers (Daumiller, Dickhäuser and Dresel, 2019). These individuals tend to be more selective and focus on a few relevant tasks to maintain their positions.

Although studies directly examining the relationship between FTP and goal orientation in organisational context are limited, research on students suggests that FTP increases self-efficacy, goal competence, and motivation (Elliot, 1999; Shell and Husman, 2001; Simons *et al.,* 2004). Specifically, Shell and Husman (2001) found that FTP beliefs influence achievement goal orientation and students' performance. Students with an expansive FTP also have increased competency beliefs, leading to higher academic achievement. Simons et al. (2004) demonstrated that having a deep extended FTP increases the instrumentality of present behaviour and improves performance through adoption of learning and mastery goals. Based on these finding, it is hypothesised that:

H2: FTP will have a positive relationship with goal orientation.
H2a: Extended FTP will have a positive relationship with approach goal orientation.
H2b: Limited FTP will be positively associated with avoidance goal orientation.

3.3.3 Relationship between goal orientation and job crafting

Although scholars have acknowledged that job crafting is a goal-oriented behaviour, the relationship between goal orientation and job crafting has not been empirically tested. Despite

indications that job crafting can manifest in both approach and avoidance forms (Bruning and Campion 2018), there is limited evidence on how achievement goals impact this behaviour. The need for competence is a key driver of job crafting (Bindl *et al.*, 2019), yet the influence of different orientations towards competence on job crafting is unknown. Given that resources are limited, individuals often set goals and make plans to meet their needs, suggesting that job crafting is a strategy employed by employees in pursuit of their goals. Although job crafting is suggested to align with an individual's goals, values, and interests (Berg, Wrzesniewski *et al.*, 2010), empirical evidence on how goals influence job crafting is lacking. Given that goals are proximal determinants of behaviour (Austin and Vancouver, 1996), understanding their influence on job crafting can help managers model employee behaviour through goal modification and adoption. This study examines both approach and avoidance crafting and investigates achievement goal orientation as a determinant of crafting, proposing that individuals with an approach orientation are more likely to engage in approach crafting, while those with an avoidance orientation will also have a higher tendency to engage in avoidance crafting. Understanding these dynamics is crucial for managers to comprehend the different strategies used by employees in job crafting.

Approach and avoidance goal orientation as discussed by Elliot and colleagues (e.g. Elliot, 1999; Elliot and Thrash, 2002, 2010) were adopted in this thesis to examine the relationship between GO and job crafting. According to these scholars, the fundamental instinct shaping one’s psychological functioning is the tendency to approach positive stimuli (real or imagined) and the vigilance to avoid negative situations and undesirable outcomes. Approach motivation is influenced by positive or desirable events and possibilities, whereas avoidance motivation is driven by the desire to avoid negative events and undesirable outcomes (Elliot, 1999). Elliot (1999) conceptualised goal orientation along these two primary dimensions: approach and avoidance goals. These orientations influence how individuals engage with their work environment and, possibly, their job crafting behaviours. Elliot's (1999) goal orientation dimensions, offer a useful framework for understanding how individuals' goals influence job crafting behaviours. Additionally, Bruning and Campion (2018) dimensions of job crafting, categorised as approach and avoidance crafting, provide a perspective on how these goals manifest in the workplace.

The present study explores how approach and avoidance goal orientations, along with mastery and performance goals, predict approach and avoidance crafting, respectively. Approach crafting involves proactive efforts to expand one's role, seek new challenges, and enhance job resources (Zhang and Parker, 2019). This might include seeking additional responsibilities, building social networks, and pursuing professional development opportunities. Conversely, avoidance crafting is characterised by behaviours aimed at reducing job demands, avoiding challenges, and minimising exposure to stressful situations (Costantini, 2022). This might involve delegating tasks, avoiding certain responsibilities, or reducing workload. In addition to the broad categories of approach and avoidance orientations, goal theory often distinguishes between mastery and performance goals. Mastery goals, also known as learning goals, are focused on developing competence and acquiring new skills (Daumiller, Dickhäuser and Dresel 2019; Sommet and Elliot, 2017). Individuals with mastery goals seek personal growth, increased knowledge, and continuous improvement whereas individuals with performance goals are concerned with demonstrating competence relative to others (Daumiller, Dickhäuser and Dresel, 2019). As mentioned above, these goals can be further divided into performance-approach goals, which focus on achieving success, and performance-avoidance goals, which aim to avoid failure.

Individuals with an approach orientation are motivated by the pursuit of positive outcomes and are more likely to engage in approach crafting. This proactive behaviour aligns with the goal of seeking growth and advancement. For example, an employee with an approach goal orientation might take on additional projects to develop new skills or actively seek feedback to improve performance. This aligns with Bruning and Campion's (2018) description of approach crafting, where employees expand their roles and increase job resources. Research by Costantini (2022) supports this, indicating that employees who actively seek to enhance their roles often experience higher engagement. Also, people with mastery goals are inherently inclined towards learning and personal development (Barron and Harackiewicz, 2001a). They seek to increase their knowledge and grow professionally, making them more likely to engage in approach crafting. These actions reflect the desire to enhance competence and are consistent with approach crafting behaviours as defined by Bruning and Campion (2018). Tims and Bakker (2010) also highlight that employees driven by learning and development tend to proactively shape their job roles to align with their growth aspirations. In contrast, individuals with an avoidance orientation are driven by the desire to evade negative outcomes. They are

more likely to engage in avoidance crafting behaviours aimed at reducing job demands and minimising stress. For example, an employee with an avoidance goal orientation might delegate tasks to avoid potential failure or limit their involvement in complex projects. This aligns with Bruning and Campion's (2018) concept of avoidance crafting, where employees reduce their roles and job demands. Research by Elliot and Harackiewicz (1996) further indicates that individuals with avoidance motivations may experience increased "anxiety, engage in self-protective withdrawal of affective and cognitive resources, experience disrupt concentration and task involvement, and orient the individual toward the presence of failure-relevant information" (p. 463). Performance goals can influence job crafting in many ways. Performance-approach goals, which focus on achieving success and outperforming others, may lead to approach crafting as employees seek opportunities to demonstrate their competence (Baranik *et al.,* 2013). However, performance-avoidance goals, which aim to avoid failure, are likely to result in avoidance crafting. Employees with performance-avoidance goals might take steps to minimise their workload or avoid tasks where there is a risk of poor performance, thus engaging in behaviours that reduce job demands. Payne et al. (2007) suggest that understanding these goal orientations can help managers design interventions that support positive employee behaviours.

H3: Goal Orientation will have a significant positive effect on job crafting.
H3a: Approach goal orientation will positively relate to approach job crafting.
H3b: Avoidance goal orientation will positively relate to avoidance job crafting.

3.3.4 Relationship between self-leadership and job crafting

Personal resources that stimulate creativity, increase motivation, and increase the desire for change such as self-efficacy have been found to have a positive association with job crafting behaviours including increasing resources and challenging demands (Berdicchia, 2015; Tims, Bakker and Derks, 2014). Similarly, employees who have increased control of their work, and have stronger belief in their ability (i.e., optimism, resilience, and hope) to effect desired change in their work environment are able to engage more in job crafting (Vogt *et al.,* 2016).

As discussed already, self-leadership is the self-influence to ensure that needed tasks are performed effectively. Self-leadership is the self-discipline and self-direction to pursue set objectives (Stewart, Courtright and Manz, 2011). In the present study, it is expected that

employees with more self-leadership skills will be more likely to engage job crafting over time. Since these individuals have the tendency to push themselves towards their established goals and standards, they are more likely to have optimal control over their own cognition and behaviour which will result in increased level of job crafting. Research has shown that self-leadership promotes job crafting (e.g. Liu *et al.,* 2023). Extant studies have highlighted the role of leadership in determining job crafting (Wang, Demerouti and Le Blanc, 2017). More specifically, it is established that strict supervision limits job crafting (Berg, Grant and Johnson, 2010), while autonomy have been found to promote job crafting (e.g. Hong et al., 2020; Slemp et al., 2015). For example, it has been reported that self-leadership promotes new employees' proactivity in socialisation at the workplace (Cranmer, Goldman and Houghton, 2019). Achieving self-influence through self-motivation and self-direction (Neck and Houghton, 2006), makes employees aware of what needs to be done and enables them to take the initiative to get such things done at the right time. The concept has been found to be related to many organisational outcomes including self-regulation behaviour (Bailey, Barber and Justice, 2018), self-efficacy in task completion (Neck and Manz, 1996a), and work commitment (Andressen, Konradt and Neck, 2012). These outcomes are favourable and highly covariant of job crafting, hence the assumption that self-leadership will positively predict job crafting.

Self-leadership refers to an individual's tendency to take personal initiative and their ability to regulate their own behaviour and thought processes (Manz, 2004). These characteristics are capable of leading to proactive motivation and goal pursuit (Parker, Bindl and Strauss, 2010), which may increase the chances of one engaging on job crafting. Empirically, Bakker et al. (2021) established that daily self-leadership (i.e., self-goal setting, and constructive cognition) facilitates proactive performance. Similarly, scholars assert that individuals use self-leadership to enhance their performance and improve their attitudes at work (Stewart, Courtright and Manz, 2011, 2019). Research has also shown that self-leadership is associated with employee self-development (e.g. Holt et al., 2018; Reichard and Johnson, 2011), a crucial mechanism for personal proactive behaviour (Manz, 1992; Stewart, Courtright and Manz, 2011).

Additionally, self-leadership has the tendency to positively relate to avoidance crafting, as individuals with self-leadership qualities can determine what they need to do at a given moment and decide what not to do (Manz, 1986a). Individuals with self-leadership are also able to exert self-control (Furtner, Sachse and Exenberger, 2012), enabling them to refrain from actions they

have resolved to avoid. This self-control has been found to increase job crafting (Berdicchia and Masino, 2019, 2020). Furthermore, self-leaders are known to have higher emotional regulation, which helps them effectively cope with stress (Houghton *et al.,* 2012).
Based on these assumptions and empirical findings of the previous studies discussed, the present study proposes that:

H4: Self-leadership will relate to job crafting.
H4a: Self-leadership will have a positive relationship with approach crafting.
H4b: Self-leadership will have a positive relationship with avoidance crafting.

3.3.5 Relationship between job crafting and goal progress.

To explain how job crafting influence's goal progress, it is necessary to integrate findings from various studies, as empirical research directly examining this relationship is limited. Zhang and Parker (2019) emphasise that job crafting interventions can benefit from including self-regulatory strategies that complement goal setting. This suggests that individuals who engage in job crafting can enhance their goal progress by incorporating strategies that align with their personal objectives. Parker and colleagues (Parker, Bindl and Strauss, 2010; Bindl and Parker, 2011) argued that job crafting is a goal-oriented behaviour where individuals optimise their work environment to achieve personal work-related goals. This indicates that job crafting directly influences goal progress by allowing individuals to alter their job demands and resources to meet their specific objectives.

Van den Heuvel et al. (2015) discussed how job crafting interventions can positively impact job resources, self-efficacy, and affective well-being, which are essential for goal achievement. By engaging in job crafting activities, individuals can enhance their well-being and self-efficacy, thereby contributing to progress towards their personal goals. Job crafting can lead to improved task performance (meeting work-related goals), increased work engagement and career satisfaction (Dubbelt, Demerouti and Rispens, 2019). This implies that job crafting influences not only individual well-being but also organisational outcomes, ultimately contributing to goal progress at both the individual and organisational levels. In a recent longitudinal study, Clinton et al. (2024) proposed that job crafting, and employees' attainment of self-concordant and organizational work goals are reciprocally related over time. Thus, there is a positive reciprocal relationship between job crafting and self-concordant goal attainment,

as well as an indirect positive relationship between job crafting and organizational goal attainment via self-concordant goal (Clinton *et al.,* 2024). This implies that job crafting is a means of attaining personal and organisational goals, hence its potential to predict goal progress. Simply put, job crafting plays a crucial role in influencing goal progress by enabling individuals to proactively modify their job designs to align them with their personal goals and preferences. By engaging in job crafting behaviours, individuals can enhance their well-being, self-efficacy, and job performance, which are essential components for making progress towards their goals (van den Heuvel, Demerouti and Peeters, 2015).

Approach crafting involves individuals actively altering their roles to enhance job meaningfulness which requires more precise and clarity personally relevant goal setting. This clarity enhances commitment, a crucial element for achieving goals as posited by Locke and Latham's (2006) goal-setting theory. By refining their goals and aligning them with personal strengths and interests, individuals are better positioned to make consistent progress towards their objectives (Koestner *et al.*, 2008). Approach crafting also promotes skill development and learning (Bruning and Campion, 2018), which are vital for achieving complex goals. Employees who engage in approach crafting actively seek out tasks that challenge and develop their abilities, leading to continuous skill enhancement (Zhang and Parker, 2019). This ongoing development not only improves their capability to make progress on current goals but also equips them with the skills needed to tackle future challenges. By creating opportunities for learning and growth, approach crafting supports long-term goal achievement and professional development. Avoidance crafting also have the potential to be positively related to goal progress since engaging in avoidance crafting relieves employees from their workload and provides resources for employees to engaging in tasks that bring fulfilment and energy to the individual (Bindl *et al.*, 2019).

H5: Job crafting will have a positive relationship with goal progress.
H5a: Approach crafting will be positively related to goal progress.
H5b: Avoidance crafting will be positively related to goal progress.

3.3.6 Relationship between FTP and self-leadership

The present study also examined the relationship between FTP and self-leadership. As previously discussed, FTP has two dimensions: extended FTP and limited FTP (Lang and

Carstensen 2002). This study hypothesises that employees with an extended FTP will demonstrate high self-leadership qualities. These individuals are expected to utilise self-influence and behavioural management strategies to achieve future goals. As individuals with an extended FTP are known to see future opportunities and possibilities (Schmitt *et al.*, 2013), they are more likely to adopt strategies that prepare them for these opportunities. Furthermore, individuals with an extended FTP tend to have a growth mindset and a willingness to learn (Lang and Carstensen, 2002), which motivates them to take proactive steps towards their goals, where self-leadership plays a crucial role. Extended FTP also involves setting long-term goals and developing strategies aligned with distant future expectations. These goals are expected to drive employees with an extended FTP to develop essential self-leadership skills for career growth. Since leading others effectively requires leading oneself first, employees with an extended FTP are expected to prioritise and develop self-leadership.

Empirical evidence suggests that an extended FTP promotes goal setting, leading individuals to monitor progress and take actions to achieve positive outcomes, which are components of self-leadership (Baird *et al.,* 2021). Baird et al. (2021) explored the effects of FTP on self-regulation through a meta-analysis, contributing to understanding how time perspective influences self-regulation processes and outcomes, potentially increasing self-leadership competencies. Self-regulation, defined as the efforts individuals make to modify their thoughts, feelings, desires, and actions in pursuit of personal goals, is intricately linked to time perspective (Bembenutty and Karabenick, 2004). Additionally, Bilde *et al.* (2011) also examined the association between FTP and self-regulated learning through the lens of self-determination theory, highlighting the positive relationship between an extended FTP and learning outcomes. This underscores the importance of time perspective in shaping self-leadership behaviours. Conversely, employees with a limited FTP, though, need some degree of self-leadership to focus on essential tasks, they are less likely to develop new self-leadership skills. As they perceive fewer opportunities and many future limitations, they might prefer maintaining only a few responsibilities, requiring minimal self-management skills. Older employees, who typically have a limited FTP, may already have established routines for self-motivation and self-direction, making changes in FTP unlikely to affect their self-leadership.
Based on this discussion, the present study proposes a positive relationship between extended FTP and self-leadership.

H6: *Extended FTP will be positively related to self-leadership.*

3.3.7 Relationship between FTP and perceived workplace support

The perception of workplace support is a critical in enhancing employees' proactive behaviour and increased performance (Uçar and Kerse, 2022). One critical variable that can significantly influence this perception is the employees' future time perspective. Specifically, an extended FTP, wherein individuals perceive their future as expansive and filled with opportunities, can have a positive influence on how they view the support available to them within their work environment. An extended FTP fosters optimism and engagement among employees (Kooij *et al.,* 2018). Those who perceive their future as endless and full of possibilities are generally more optimistic (Kooij *et al.,* 2013). This optimism translates into higher levels of engagement with their work and their surroundings (Schmitt, Zacher and de Lange, 2013). Such employees are more likely to be proactive in seeking out and recognising the support offered by their employers. The anticipation of future opportunities encourages them to be more involved in their current tasks and in the workplace community, thereby enhancing their overall experience and perception of support.

Moreover, employees with an open-ended view of the future tend to be goal-oriented (Lang and Carstensen, 2002). They are inclined to set long-term objectives and work diligently towards achieving them. This long-term orientation helps them see the resources and support provided by the workplace as crucial aids in their journey towards these goals (Brunstein, Dangelmayer and Schultheiss, 1996). Consequently, they are more likely to perceive their workplace as supportive, as they see the alignment between their personal aspirations and the organisational resources available to help them succeed. The ability to utilise available resources effectively is another advantage of having an open-ended future time perspective. Employees with this mindset are more likely to seek out and take advantage of feedback, mentorship, and training opportunities. This proactive behaviour enhances their perception of workplace support, as they feel that the organisation is providing the necessary tools for their personal and professional development. The active pursuit of these resources indicates a higher level of engagement and a positive view of the workplace environment.

Positive relationships within the workplace are also more prevalent among those with an extended FTP (Hill, Olaru and Allemand, 2023; Allemand and Hill, 2016; Kerry and

Embretson, 2018; Kessler and Staudinger, 2009). Employees who focus on the future are more likely to build and maintain supportive relationships with their colleagues and supervisors. These relationships foster a sense of community and support, making employees feel valued and backed by their peers and superiors. The presence of a reliable support network significantly contributes to the overall perception of workplace support. Lastly, resilience and adaptability are enhanced by an extended FTP (Simons *et al.,* 2004). Employees with this outlook view challenges as opportunities for growth rather than obstacles. This resilience is sustained by the perception that their organisation is supportive, providing the necessary resources and encouragement to help them overcome difficulties. This positive attitude towards challenges reinforces their view of the workplace as a supportive environment. Based on this discussion, the present study proposes a positive relationship between extended FTP and self-leadership.

H7: Extended FTP will positively relate to perceived workplace support.

3.3.8 Relationship between perceived workplace support and job crafting

This study further explores the relationship between perceived workplace support and job crafting. Different types of workplace support, such as emotional, instrumental, and informational support, can influence employees' crafting strategies. For instance, instrumental support, involving tangible assistance and resources, can empower employees to proactively address challenges (Ducharme and Martin, 2000a), potentially enhancing approach crafting.
Workplace support is crucial in shaping employees' behaviours and attitudes. Cohen and Wills (1985) highlighted the buffering effect of social support, showing that supportive social relationships can protect individuals from the adverse effects of stressful events. Job crafting involves employees proactively modifying their job roles to align with their preferences and strengths. Perceived workplace support refers to employees' beliefs about the extent to which the organisation as well as coworkers value their contributions and cares about their well-being. Several studies have examined how perceived support at work influences job crafting behaviours and outcomes.

Kim et al. (2018) argued that perceived support facilitates a conducive work environment that fosters job crafting and employee creativity. This study highlighted the role of perceived workplace support in fostering proactive changes in job roles. Perceived workplace support,

characterised by knowledge sharing, procedural justice, and promotion, can enhance employees' engagement in job crafting. Park et al. (2020) also argued that organisational support influences job crafting behaviours, suggesting that supportive organisational environments motivate employees to actively shape their job roles. Moreover, Zhang and Zhang (2021) explored a serial mediation model, showing that perceived support influences turnover intention through job crafting. This study emphasised the role of perceived support in fostering job crafting behaviours contributing reduced turnover intentions.

Similarly, Uçar and Kerse (2022) examined the relationship between perceived support, job crafting, and job performance, concluding that perceived support positively influences job performance both directly and indirectly through job crafting. Their findings underscored the importance of perceived supportive organisational environments in promoting job crafting behaviours that enhance employee performance outcomes. Likewise, Oubibi et al. (2022) investigated the mediating effects of job crafting on the relationship between perceived support and career satisfaction among Chinese teachers during the COVID-19 pandemic. Their study suggested that perceived support influences job crafting behaviours, which in turn impact career satisfaction. Van Wingerden and Poell (2017) also explored the relationship between employees' perceived opportunities to craft their jobs and in-role performance, finding that organisational support for job crafting can positively impact employees' performance through job crafting behaviours. Overall, the literature indicates that perceived workplace support significantly influences employees' job crafting behaviours. Organisations that provide a supportive environment and encourage employees to shape their job roles are likely to see increased job crafting activities.

H8: Perceived workplace support will be positively related to approach crafting.

3.3.9 Relationship between self-leadership and goal progress

Self-leadership can have a positive relationship with goal progress. Self-leadership encompasses a variety of strategies and techniques that enhance self-regulation and self-motivation, leading to improved performance and goal attainment. Self-leadership involves setting personal goals that are specific, measurable, achievable, relevant, and time-bound (Marques-Quinteiro and Curral, 2012; Neck, Nouri and Godwin, 2003). By setting clear and well-defined goals, individuals can direct their efforts more effectively and maintain a clear

focus on what needs to be achieved, thereby facilitating goal progress. Techniques such as self-reward, positive self-talk, and visualisation are integral to self-leadership (Neck and Houghton, 2006). These methods enhance intrinsic motivation, helping individuals stay committed to their goals. Enhanced motivation translates to persistent effort and resilience, which are crucial for goal progress. Self-leadership includes regularly monitoring one's progress towards goals. By keeping track of achievements and setbacks, individuals can adjust their strategies as needed, ensuring they stay on the right path. This continuous feedback loop helps in maintaining momentum and making necessary adjustments to achieve goals. Using reminders and cues to prompt goal-directed behaviour is another self-leadership strategy. This technique helps in maintaining focus and ensuring that goals remain a priority, thus aiding in consistent progress.

Studies have demonstrated the positive relationship between self-leadership and goal progress. For instance, Neck and Houghton (2006) reviewed various empirical studies and found that self-leadership strategies, such as self-goal setting, self-reward, and self-observation, are linked to improved performance outcomes. Similarly, a study by Manz and Sims (2001) highlighted that self-leadership leads to higher levels of self-efficacy and intrinsic motivation, which are critical for sustained goal pursuit. Houghton and Neck (2002) further explored the impact of self-leadership on performance and found that individuals who employed self-leadership strategies exhibited greater persistence and adaptability, leading to better goal achievement. Moreover, Stewart et al. (2011) conducted a meta-analytic review and confirmed that self-leadership positively influences individual performance through enhanced self-regulation and motivation. Thus, by employing self-leadership strategies such as goal setting, self-motivation, self-monitoring, and self-cueing, individuals can enhance their ability to achieve personal goals. Empirical evidence supports this relationship, demonstrating that self-leadership leads to improved performance and successful goal attainment through better self-regulation and intrinsic motivation.

H9: Self-leadership will positively relate to goal progress.

3.3.10 Relationship between perceived workplace support and goal progress

Perceived workplace support may relate to goal progress. Workplace support encompasses various forms of assistance and encouragement that employees receive from their organisation, supervisors, and colleagues. This support can manifest as emotional support, practical

assistance, resources, and constructive feedback. The perception of being supported in the workplace can significantly influence an individual's motivation, and eventually, their progress towards achieving goals. When employees perceive high levels of workplace support, they are likely to experience increased motivation and task engagement. Supportive work environments foster a sense of belonging and value, which can enhance employees' intrinsic motivation to pursue and achieve their goals. The encouragement and validation from supervisors and peers can boost employees' confidence in their abilities, leading to greater effort and persistence in goal-directed activities. Emotional support, such as empathy and understanding from colleagues and supervisors, can help employees manage stress and maintain a positive outlook. This emotional resilience is crucial for sustaining effort towards long-term goals, especially when facing challenges and setbacks. Practical support, such as providing necessary resources, training, and opportunities for professional development, equips employees with the tools and knowledge they need to make progress towards their goals. When employees have access to these resources, they are better prepared to tackle obstacles and perform effectively. Constructive feedback is another critical component of workplace support. Feedback helps employees understand their progress, identify areas for improvement, and refine their strategies for achieving goals (Kluger and Denisi, 1996). Regular, constructive feedback ensures that employees remain on track and make necessary adjustments to their efforts, thereby facilitating continuous progress. Finally, receiving workplace support means having an extra hand which reduces workload thereby providing positive relationship between perceived support and goal progress.

Empirical studies support the positive relationship between perceived workplace support and goal progress. For instance, Park et al. (2020) found that perceived organisational support is associated with increased employee adaptive performance, potentially leading to goal progress. Also Eisenberger et al. (1986) noted that perceived support can lead to increased levels of task commitment. This increased task commitment can translate into goal progress, as supported employees are more motivated to align their efforts with organisational objectives. Similarly, Shanock et al. (2019) reviewed research on perceived organisational support and concluded that it leads to higher performance, a possible outcome of goal progress. Based on these arguments, it is hypothesised that:

H10: Perceived workplace support will positively relate to goal progress.

3.3.11 Mediating role of goal orientation on the relationship between FTP and job crafting

The present study also examined the mediating role of achievement goal orientation on the relationship between FTP and job crafting. This relationship is expected because when people perceive they have expansive future and see many opportunities, they are likely to adopt approach goals to seize these identified opportunities (Kooij, Bal and Kanfer, 2014). Extended FTP is therefore likely to lead to mastery and learning approach goal orientation as these individuals will aim to learn, grow, and develop their skills and competencies to have the competitive advantage in the future (Ng and Lucianetti, 2018). This desire to learn and grow is expected to lead to approach crafting, where employees increase task complexity, expand the task and skill boundaries of their jobs, and broaden their social networks to establish beneficial relationships for their growth pursuits.

In contrast, having limited FTP is expected to predict avoidance goal orientations, since individuals with limited FTP engage more in emotional regulation and are more concerned about their safety and security (Kooij and Van De Voorde, 2011). They are more likely to adopt goals that make them stay committed to meeting minimum requirement of their jobs hence unlikely to expand their job roles and take on new challenges. Thus, the desire for safety and security will result in avoidance crafting – limiting aspects of the job to reduce protect resources from depletion (Bruning and Campion, 2018). Given these relationships, goal orientation is therefore conceptualised in the present study as a mediator of the relationship between FTP and job crafting.

Specifically, the hypotheses are stated as:

H11a: Approach goals will mediate the relationship between extended FTP and approach crafting.

H11b: Avoidance goals will mediate the relationship between limited FTP and avoidance crafting.

3.3.12 Mediating role of self-leadership on the relationship between FTP and job crafting

The mediating role of self-leadership on the relationship between extended FTP and approach crafting was also examined in the present study based on the premises that having extended FTP will increase self-leadership and this in turn leads to approach crafting. Extended FTP is characterised by seeing opportunities and believing that one can benefit from these opportunities (Przepiorka, Jankowski and Sobol, 2020). This serves as a motivation to adopt

self-management and self-influence strategies which are expected to manifest in approach crafting behaviours at work. Also having extended FTP makes employees feel they have enough time to develop their self-leadership competencies for a successful career. These means having extended FTP provides opportunity to learn and master self-leadership which will influence approach crafting.

Though studies that examined the relationship between extended FTP and self-leadership are limited, there is evidence to suggest that a positive relationship may exist between the former and the latter. For example, FTP has been found to have a positive relationship on goal setting, goal monitoring and self-control (Baird *et al.,* 2021). This supports the argument that having expansive FTP increases employee's motivation to set goal and monitor their progress towards attainment of such goals. This necessitates the relevance of self-leadership as it provides employees with the ability to instil self-discipline and persist on the goal achievement agenda. In other words, extended FTP increases the desire to develop self-leadership – the self-motivation, and self-direction deem to be beneficial for work-relevant cognition, attitudes, and behaviours (Houghton and Neck, 2002).

To conclude, the literature suggests that self-leadership plays a crucial role in mediating the relationship between open-ended FTP and approach and avoidance job crafting. By empowering employees to take control of their job roles and engage in proactive behaviours, self-leadership can enhance job crafting initiatives, ultimately leading to improved work engagement, task significance, and job satisfaction.

H12: Self-leadership will mediate the relationship between extended FTP and approach crafting.

3.3.13 Mediating role of perceived workplace support on the relationship between FTP and job crafting

As already discussed, extended FTP is expected to have a direct relationship with perceived support which is likely to lead to approach crafting. This relationship is expected because individuals with extended FTP tends to be more growth minded, they see more opportunities and possibilities (Kooij *et al.,* 2013), which is likely to make them more open to seeking workplace support. Seeing possibilities and opportunities in one's occupational future has the

potential of make individuals seek more support as part of their growth and development agenda. The perceived or used support is also expected to lead to approach crafting because having enough support increase one's job resources which increases one's capacity to take on more challenges (Park *et al.*, 2020; Uçar and Kerse, 2022)). Also having extended FTP enhances the motivation to set challenging goals which prompt individuals to seek available support within or even outside of the current job to ensure successful goal attainment. This proactivity increases perception of support and likely translates into approach crafting behaviour at work.

H13: Perceived workplace support will mediate the relationship between extended FTP and approach crafting.

3.3.14 Mediating role job crafting on the relationship between self-leadership and goal progress.

Though no existing study was found that examined the relationship between self-leadership and goal progress, it expected that self-leadership will have an indirect effect on goal progress through approach crafting. As already noted, self-leadership is the capacity to influence oneself towards goal attainment (Stewart, Courtright and Manz, 2019). Consequently, having self-leadership is expected to make employees have the ability and capacity to craft their job in ways to take on more challenging tasks that will lead to future desired objectives. People who possess self-leadership skills can set goals, develop strategies, and motivate themselves to strive to achieve these set goal (Knotts *et al.,* 2022). These behaviours are closely linked with approach crafting strategies and hence amounting to goal progress.

Self-leadership, a process through which individuals influence and control their own behaviours, is essential for setting and achieving personal and professional goals (Neck, Nouri and Godwin, 2003; Godwin, Neck and Houghton, 1999). It involves self-motivation, self-regulation, and various behavioural and cognitive strategies such as goal setting, self-reward, and positive self-talk (Manz, 1992, 1986a). These strategies enable individuals to stay focused and driven towards their objectives. However, the mechanism through which self-leadership translates into tangible goal progress can be further explained by examining the role of approach crafting as a mediator. Approach crafting, the proactive reshaping of one's job to

better fit personal strengths, interests, and values (Lopper, Horstmann and Hoppe, 2024), can play a critical role in facilitating the translation of self-leadership into actual goal progress.

Self-leadership fosters a proactive and goal-oriented mindset, enabling individuals to take initiative in their work environment (Ghosh 2015; Carmeli, Meitar and Weisberg, 2006). Employees with strong self-leadership skills are more likely to engage in approach crafting, as they actively seek to align their job roles with their personal and professional aspirations. This proactive behaviour involves identifying opportunities for development, optimising tasks to enhance job satisfaction, and seeking out resources that support goal achievement. Approach crafting, therefore, acts as a 'bridge' between self-leadership and goal progress by creating a work environment conducive to achieving set objectives.

Self-leadership enables individuals to set specific, challenging, and attainable goals (Godwin *et al.*, 1999). Approach crafting allows these individuals to modify their job roles in ways that make these goals more achievable. By aligning their tasks with their goals, interests, and strengths, employees can work more efficiently and effectively towards their goals, thereby enhancing goal progress (Marques-Quinteiro and Curral, 2012). Moreover, self-leadership strategies such as self-reward and positive self-talk increases intrinsic motivation (Manz, 1986a; Prussia, Anderson and Manz, 1998). This intrinsic motivation drives employees to engage in approach crafting, as they seek to make their work more fulfilling and aligned with their long-term goals. By finding greater satisfaction and meaning in their work, employees are more likely to remain committed to their objectives, leading to sustained goal progress.

Additionally, self-leadership involves self-regulation, which helps individuals manage their behaviour and emotions effectively (Bailey, Barber and Justice, 2018). This self-regulation is crucial for approach crafting, as it enables employees to navigate challenges, adapt to changes, and persist in their efforts to improve their job roles. By proactively crafting their jobs, employees can create a supportive and motivating work environment that facilitates continuous progress towards their goals. Furthermore, self-leadership enhances problem-solving skills, enabling employees to identify and implement innovative approaches to job crafting (Ghosh, 2015). This innovation can lead to more efficient work processes and better utilisation of resources, both of which are vital for achieving goals. By engaging in approach crafting,

employees can optimise their workflow and remove obstacles that may impede their progress, thereby making steady advancements towards their objectives.

Hypothesis 14: Approach crafting will mediate the relationship between self-leadership and goal progress.

3.3.15 Mediating role of job crafting on the relationship between perceived workplace support and goal progress.

It may sound simple that perceived workplace support will lead to approach crafting which in turn might lead to goal progress, yet it is important to check this relationship to understand whether workplace support initiatives lead to desired outcomes. Unlike the link between organisational support and job crafting that has been already established (e.g. Ji, 2022; Oubibi et al., 2022; Park et al., 2020), the relationship between approach crafting and perception of goal progress has not been examined in literature.

Perceived workplace support, encompassing the resources, encouragement, and assistance provided by an organisation, plays a vital role in employee motivation and performance (Lynch, Eisenberger and Armeli, 1999; Kraimer *et al.,* 2011). When employees perceive high levels of support, they are more likely to feel valued and empowered (Park *et al.,* 2020, Op den Kamp *et al.,* 2020), which can positively influence their goal progress. However, the process by which perceived workplace support translates into actual goal progress can be better understood by examining the role of approach crafting as a mediator. Approach crafting, the proactive reshaping of one's job to better fit personal strengths, interests, and values (Wrzesniewski and Dutton, 2001; Weisman *et al.,* 2022), can facilitate the effective use of workplace support to achieve goals.

Perceived workplace support includes emotional support from supervisors and colleagues, instrumental support such as resources and training, and informational support such as feedback and guidance (Deeter-Schmelz and Ramsey, 1997). When employees feel supported, they are more inclined to take initiative in their work environment (Wu and Parker, 2017; Suseno *et al.,* 2020). This sense of support may encourage employees to engage in approach crafting, as they are motivated to optimise their job roles and leverage the available resources to enhance their work experience and performance (Zhang and Zhang, 2021; Hong, Kwon and

Kim, 2020). Approach crafting, therefore, acts as a medium through which perceived workplace support is translated into tangible goal progress. The mediation effect of approach crafting can be looked at from different perspectives. Firstly, perceived workplace support fosters a positive work environment where employees feel secure and encouraged to set ambitious goals (Hong, Kwon and Kim, 2020). When employees perceive that their organisation supports their professional growth, they are more likely to engage in approach crafting. This proactive behaviour involves aligning their tasks with their strengths and interests, which more likely makes their goals attainable and enhances their overall job satisfaction. Moreover, the resources and assistance provided as part of workplace support increases intrinsic motivation (Aldabbas, Pinnington, and Lahrech, 2023). This intrinsic motivation drives employees to engage in approach crafting, as they seek to create a work environment that is both fulfilling and aligned with their long-term goals. By finding greater meaning and satisfaction in their work, employees are more likely to stay committed to their objectives, leading to sustained goal progress.

Additionally, perceived workplace support often includes access to training and development opportunities, which can enhance employees' skills and capabilities (Jung and Takeuchi, 2018). Employees who take advantage of these opportunities are more equipped to engage in approach crafting, as they have the knowledge and skills necessary to optimise their job roles. This continuous development ensures that employees are well-prepared to overcome challenges and achieve their goals effectively. Furthermore, feedback and guidance provided as part of workplace support are crucial for approach crafting. Constructive feedback helps employees identify areas for improvement and opportunities for growth (Senko and Harackiewicz, 2005). With this information, employees can proactively adjust their job roles to better align with their goals, thereby enhancing their efficiency and effectiveness. Approach crafting, facilitated by regular feedback and guidance, ensures that employees are on the right path towards achieving their objectives.

Hypothesis 15: Approach crafting will mediate the relationship between self-leadership and goal progress.

To summarise, this chapter presents a discussion on the theoretical and conceptual framework that unpins the expected relationship among study variables. More specifically, the expectancy

– value theory and the self-determination theory as well as self-regulations theory were used to explain relationships between FTP, goal orientation, job crafting and goal progress. The chapter continues with a discussion of the hypothesised relationships in light of extant literature. This chapter provides the foundation for establishing structural model to test the study hypotheses.

Chapter 4 Methodology

4.0 Introduction

This chapter presents the research methodology employed to conduct the studies produced in this thesis. It begins with a discussion of the philosophical underpinnings of the present research, followed by a description of the research approach, data collection methods for each of the three studies and the measurement scales, research participants and ethical considerations of the study. The chapter also discusses data analysis tools and general procedure followed in analysing the data in each study. Specifically, the current research embraced the ontology of objectivism and the epistemology of positivism. Methodologically, it employed the quantitative approach, and cross-sectional and longitudinal survey designs as the means of data collection.

4.1 Research philosophy and approach

A person's philosophy influences how the person perceives and interacts with the world around them (Saunders, Lewis and Thornhill, 2012). Management research is primarily shaped and defined by the philosophy that the researcher adopts (Saunders, Lewis and Thornhill, 2009). According to Clarke and Johnson (2006), researchers must be conscious of their philosophical stance and be capable of justifying it while considering alternative philosophies. Scientific research demands methodologies that are philosophically coherent and adhere to established procedures to ensure reliability and validity of the research findings (Saunders, Lewis and Thornhill, 2012). Adhering to a specific research philosophy provides direction and establishes acceptable practices throughout the study. However, bridging the gap between research philosophy and practice, particularly in social sciences, is challenging due to unclear boundaries and a lack of consensus on supporting epistemologies (Pascale, 2011). Two central concepts in research philosophy are ontology and epistemology.

Ontology addresses the question, "What is reality?" It involves the philosophical study of being, existence, and reality, focusing on what entities exist and how they can be categorised and related (Saunders, Lewis and Thornhill, 2012). In research, ontology shapes how researchers perceive reality and what they believe can be known about it. For instance, in social sciences, an ontological stance might determine whether social phenomena are seen as objective entities independent of human perception or as constructs shaped by human experience. The primary ontological perspectives are objectivism, which views social realities as independent of social actors, and subjectivism, which considers the world as socially constructed. Objectivism posits

that phenomena exist regardless of human perception, while subjectivism suggests that reality is constructed through social processes and interactions (Park, Konge and Artino, 2020).

Epistemology addresses the question "what is knowledge; how is knowledge acquired?". It is the study of knowledge and justified belief, and addresses the nature, scope, and origins of knowledge, as well as what constitutes valid knowledge (Saunders, Lewis and Thornhill, 2012). In research, epistemology concerns the methods and approaches used to understand the world and how knowledge is acquired and validated. It examines the relationship between the knower and the known, influencing research conduct and interpretation. Epistemological positions range from positivism, which advocates using scientific methods to obtain objective knowledge, to interpretivism, which focuses on understanding the subjective meaning of social phenomena (Saunders, Thornhill and Lewis, 2019). Positivism relies on observable, measurable evidence, whereas interpretivism values the interpretation of human experiences and social contexts.

Together, ontology and epistemology form the foundational philosophical basis of research methodology. They guide researchers in selecting methods and interpreting data, shaping the overall approach to inquiry. For example, a positivist epistemology aligned with an objectivist ontology would likely favour quantitative methods to uncover generalisable truths. Understanding these philosophical underpinnings is crucial for conducting rigorous and coherent research, as they influence every aspect of the research design, from hypothesis formulation to data collection and analysis.

Different ontologies and epistemologies have led to the development of various research philosophies, each with its own specific assumptions about how research should be conducted. As a result, Saunders et al. (2012) argued that the research objective should always be the yardstick for deciding which philosophy is suitable for conducting specific scientific research. Although previously scholars have debated the issue of research philosophy on the grounds of positivist versus interpretivist lines, recent arguments have resolved that researchers should see research philosophy as a collection of ideas on a continuum with one end representing the positivist views and the other end representing the interpretivist views (Saunders *et al.*, 2012). Thus, there exist a range of many philosophies that have properties of both positivism and interpretivism. This brings the understanding that these different views address how best a

research objective or question can be adequately answered rather than a debate of which philosophy is better (Niglas, 2010). Aside from the thinking that research philosophy is bipolar with degrees of objectivity and subjectivity, is the belief that choosing a stand is unrealistic and impractical - pragmatist philosophy (Saunders, Lewis and Thornhill, 2012). Pragmatism is based on the idea that one philosophy is inadequate to be considered throughout an entire study. Advocates of pragmatism consider that each research objective or question should determine what philosophy is more appropriate. "Pragmatists recognise that there are different ways of interpreting the world and undertaking research, that no single point of view can ever give the entire picture as there may be multiple realities" (Saunders et al., 2012, p. 130).

Based on the objectives of the studies conducted in this thesis, the research philosophy that closely aligns and better explain the direction of the studies is positivism. Positivism follows the approach of natural scientists who collect data on phenomena and seek to establish relationships to create or make assumptions about the nature of relationships and associations that exist among the interested variables (Gill and Johnson, 2002). Theories are used to develop hypotheses, and these hypotheses are tested with objective data collected using standardised questionnaires. Positivism assumes that scientific research is value-free (i.e., it is free from bias from the participants and the researcher). Hence, it facilitates the replication of studies as it makes use of a structured research methodology. This is however a general assumption that is difficult to implement as all researchers are likely to introduce some bias in the research process (un)consciously (Saunders, Thornhill and Lewis, 2019).

The positivist philosophy explained earlier guide the present study in the sense that it is assumed that higher educational institutions are independent of their social actors and academics form perceptions about their academic job and institutions where they work, which influence their motivation, emotions, and behaviour. These perceptions can therefore be objectively studied. This perception influences the attitudes, behaviours, and emotions of academics and can impact their performance. Specifically, academics are expected to have time perspectives, achievement goals and adopt different job crafting strategies on their job as a result of their interactions with the institutions where they work and their understanding of what their occupation entails. In summary, the present study is conducted with the belief that social reality is independent of its actors, and the actors make their own sense of this objective

reality. Academics, therefore, have their perceptions of time, have goals, and engage in job crafting behaviours in the expectancy of attaining the goals.

4.2 Validity and reliability

Surveys are a key research method in social science, enabling researchers to gather data from a large number of participants and analyse it statistically. Survey results can, however, be biased if researchers do not properly address issues of reliability and validity. Saunders et al. (2012) stated that validity concerns whether results truly reflect what a study seeks to examine and whether results can be generalised from a sample to an entire population. The aim of developing and validating an instrument is largely to minimise measurement error. Heale and Twycross (2015) identify three types of validity: content validity, criterion validity, and construct validity.

Heale and Twycross (2015) defined content, construct and criterion validity as follows. Content validity refers to the extent to which a measurement instrument covers the entire range of the concept being measured. It ensures that all relevant aspects of the concept are represented in the test items (Heale and Twycross, 2015). Construct validity is the degree to which a test measures the theoretical construct it is intended to measure. It involves demonstrating that the test is related to other measures as theoretically expected; (3) Criterion validity too refers to the extent to which a measure is related to an outcome (the criterion). It is divided into concurrent validity, where the measure and criterion are assessed at the same time, and predictive validity, where the measure predicts future outcomes (Heale and Twycross, 2015). Content and construct validity depend significantly on how well an empirical measure reflects a specific domain of content (Pallant, 2011). To address content validity, the researcher conducted a thorough review of existing literature and made use of relevant scales used in previous studies that have been found to have good psychometric properties. Construct validity was assessed through a confirmatory factor analysis where the relationship between the theoretical constructs and their respective indicators were tested. Criterion validity is also demonstrated in all the three studies presented in this thesis through correlation analysis where theoretically related constructs were observed to have moderate to high correlations and constructs which are not theoretically related were observed to have low and sometimes insignificant correlations coefficients.

Additionally, the researcher performed measurement invariance tests for all measurement scales across all measurement occasions to ensure that the variables produced consistent scores over time, particularly in the longitudinal studies (i.e., studies 2 and 3). Specifically, the measurement invariance assessed whether or not the same constructs were measured across the different time points. It ensured that the measurement model operates equivalently across all measurement occasions, thereby confirming that the construct has the same meaning and structure across these different measurement occasions.

Reliability which is also concerned with the consistency of results of a measure (Heale and Twycross, 2015), was assessed using internal consistency (Cronbach's alpha). Together, construct validity and reliability ensured that all the instruments used were both appropriate and accurate in all three studies presented in this thesis. This additionally confirms the reliability and validity of the study instruments.

4.3 Research design

The aim of the present research presented in this thesis was to examine the relationships between FTP, goal orientation, job crafting and goal progress as well as find out whether these relationships are stable over time. The survey research design was employed in conducting three studies. Survey data were collected at three time points, with the data gathered at time 1 (T1) analysed separately in Study 1 to explore the relationships between study variables. The data gathered across all three waves were also analysed in Study 2 to examine the relationship between study variables over time. The panel data was also utilised to test the potential for a reverse causal relationship between the study variables in Study 3.

4.4 Context of study

Data were collected from private and public universities in Ghana from June 2022 to March 2023. Ghana, a middle-income (developing) country located in West Africa, had the fastest-growing economy in the sub-Saharan Africa before the Covid-19 pandemic (Edmond, 2019). With a population of 31 million people, the country has over 265 tertiary institutions including 15 public universities, 10 technical universities, and an additional 9 professional universities (Mohammed *et al.*, 2022). It also has 7 chartered private universities in addition to other private universities that have not received a charter and are thus affiliated with existing public universities. Despite variations in size, numerical strength, and geographical locations across

the country, all the tertiary educational institutions are regulated by the Ghana Tertiary Education Commission (GTEC). Due to this supervision and accreditation, the activities of tertiary educational institutions in Ghana are harmonised. No known differences across these institutions were anticipated to significantly affect the outcome of the present study. Consequently, universities from the Greater Accra region, the Eastern region, and the Central region were sampled for the study, as there was no known major characteristic making one institution significantly different from another for the purposes of this research. Therefore, data were collected from both private and public universities.

Higher education institutions were selected for the three studies in this thesis because little is known about how FTP and GO influence job crafting behaviour of academics. Despite their high level of job autonomy (McNaughtan *et al.,* 2022), which likely encourages greater self-motivation and proactivity, this area remains under-researched. Also, the recent economic recession and rapid technological changes accelerated by the COVID-19 pandemic have necessitated restructuring in many organisations (including higher educational institutions) for survival and sustainability (Chen and Tang, 2022). These rapid changes occurring in academic institutions across the globe require academics to be adaptive and proactive to not only respond to the change but also propose interventions that will help address the challenges faced by individuals and businesses. Since employees are known to craft their jobs more during periods of organisational change (Chen and Tang, 2022; Petrou, Demerouti and Schaufeli, 2015, 2018b), higher educational institutions in Ghana were used for the present research.

4.5 Research ethics

Ethical considerations are paramount in all research endeavours, and researchers must address potential ethical concerns. Before commencing the present study, ethical approval was obtained from the Norwich Business School Ethics Committee at the University of East Anglia (ETH2122-1900). The study questionnaire was examined and screened by the UEA Ethics Committee, and issues of data protection and management were thoroughly reviewed before approval was granted. Consent was also secured from the participating universities' ethics committees and institutional review boards. Informed consent was obtained from all respondents at the outset of data collection, emphasising voluntary participation and the right to withdraw at any stage or skip uncomfortable questions. Approval was also obtained to collect participants' email addresses, which were promptly replaced with participant IDs. Participant

IDs are unique identifiers assigned to individuals in a study to ensure anonymity and confidentiality while allowing for tracking and analysis of data. The collection of email addresses, approved by the ethics committee, facilitated matching responses across the three waves of data collection. Although the study's measures were not overly sensitive, the researcher was mindful that survey participation can sometimes cause discomfort. All participants received comprehensive information about the study before consenting. This approach ensured the representativeness of the sample and adherence to recommended practices for data management and protection. Data were securely stored on the University of East Anglia’s password-protected OneDrive server.

Chapter 5 Study 1

5.0 Introduction

This chapter outlines the methods, results, and discussion of Study 1, a cross-sectional study that investigates the relationships between the study variables. It begins with a description of the participants, research design, and procedures used in the study. The chapter then details the data analysis strategy and presents the findings from Study 1. Finally, it discusses these findings in the context of existing literature, highlighting how they align with or differ from previous research.

5.1 Study objectives

As stated in Chapter 1, the primary aim of this research is to explore the relationships between FTP, goal orientation, self-leadership, perceived workplace support, and job crafting. Specifically, the current study (Study 1) aimed to identify the relationships among the study variables at a single point in time. More specifically, the two dimensions of FTP (extended and limited FTP) are expected to have both direct and indirect relationships with approach and avoidance crafting, mediated by approach and avoidance goals. The study also investigates the indirect influence of extended FTP on approach crafting through self-leadership and perceived workplace support. Additionally, the current study examines the direct relationship between job crafting and goal progress. Furthermore, the study explores the indirect effect of self-leadership and perceived workplace support on goal progress through approach crafting.

5.2 Method

5.2.1 Participants

The study employed a convenience sampling strategy to recruit participants. Although convenience sampling has faced criticism from organisational researchers, this bias and disapproval have limited theoretical support (Landers and Behrend, 2015). It is also argued that when carefully planned and executed, convenience sampling can increase external validity, as almost all samples used in organisational studies are convenient to some extent (Landers and Behrend, 2015). The sample size was determined using the formula by Tabachnick and Fidell (2007), which suggests a sample is adequate for multiple regression analysis if it is greater than or equal to $50 + 8m$, where m is the number of independent variables. With 8 independent variables in the present study, a sample size of 402 (at a response rate of 52.5%) was deemed

adequate and appropriate. A total of 800 questionnaires were distributed, and 402 were returned and used for analysis, resulting in a response rate of 52.5%. Additionally, approximately 60 online responses were excluded because participants started but did not complete the survey. All responses with more than 50% of the questions unanswered were also excluded from the analysis. The study included academics from universities in Ghana who have held an academic role in teaching, research, or both for at least one year. Administrators and Human Resource professionals in higher education institutions were not included. The distribution of the sample based on personal demographics is presented in Table 1.

5.2.1.1 Gender of Participants

The gender distribution among the participants in this study was 56.5% male and 43.5% female. Female participation in the study exceeded the national ratio of only 22% female academics in Ghana (Ayentimi and Abadi, 2023).

5.2.1.2 Age of Participants

The age distribution of the participants reflects the active working population in Ghana's formal sector. Specifically, 29.6% of participants are aged 30 to 39 years, 26.6% are 20 to 29 years old, 26.1% fall within the 40 to 49 years range, and 11.7% are between 50 to 59 years old. Only 6% of participants are over 60 years old. This age distribution suggests a diverse range of perspectives, particularly those from mid-career professionals who are most active in the workforce.

5.2.1.3 Job Role

The primary job roles reported by participants include teaching and research (63.9%), with smaller groups engaging solely in research (16.9%) or teaching (18.7%). Given the focus on academics in Ghanaian Higher Educational Institutions, these roles are expected and underscore the dual responsibilities often held by faculty members.

Table 1: Participants' characteristics

Variable		Frequency	Percentage
Gender	Male	227	56.5%
	Female	175	43.5%
Age	20 – 29 years	107	26.6%
	30 – 39 years	119	29.6%
	40 – 49 years	105	26.1%
	50 – 59 years	47	11.7%
	60+ years	24	6.0%
Education	Master's	182	45.3%
	PhD	185	46.0%
	Post-Doc	24	6.0%
	Prefer not to answer	11	2.7%
Role	Teaching	75	18.7%
	Research	68	16.9%
	Teaching and Research	257	63.9%
	Administration	2	.5%
Rank	Teaching Assistant	144	35.8%
	Assistant Lecturer	63	15.7%
	Lecturer	108	26.9%
	Senior Lecturer	67	16.7%
	Associate Professor	14	3.5%
	Professor	6	1.6%
Occupational Tenure	0 – 4 years	189	47.0%
	5 – 9 years	79	19.7%
	10 – 14 years	69	17.2%
	15 – 19 years	27	6.7%
	20+ years	33	8.2%
	Prefer not to answer	5	1.2%
Institutional Tenure	0 – 4 years	226	56.2%
	5 – 9 years	80	19.9%
	10 – 14 years	60	14.9%
	15 – 19 years	20	5.0%
	20+ years	16	4.0%
Sector	Public	324	80.6%
	Private	78	19.4%

NB; $N = 402$,

5.2.1.4 Highest Educational Level

Regarding the highest level of education attained, 46% of participants hold a PhD, and 45.3% possess a master's degree as their highest qualification. A smaller proportion, 6%, have completed post-doctoral studies, while 2.7% did not indicate their level of education. This high level of educational attainment aligns with the academic nature of the participants' roles, reflecting a well-qualified sample appropriate for assessing complex concepts like goal orientation and job crafting.

5.2.1.5 Rank

In terms of academic rank, 35.8% of participants were Teaching Assistants, 15.7% were Assistant Lecturers, 26.9% were Lecturers, and 16.7% were Senior Lecturers. Additionally, 3.5% were Associate Professors, while only 1.6% held the rank of Professor. This distribution reflects relates/corresponds with the age and tenure of participants as many were young and have worked for less than 5 years in the academic job role. Thus, very few senior academics took part in the study, which may be due to the demanding nature of such roles and their additional responsibilities, making participation in a study challenging.

5.2.1.6 Institutional Tenure

Over half of the participants (56.2%) have been with their current institutions for less than five years. A significant portion (19.9%) have institutional tenures of 5 to 9 years, 14.9% have 10 to 14 years, and 5% have 15 to 19 years. Only 4% have worked at their current institutions for 20 years or more. This suggests a majority with relatively short tenures, likely reflecting a younger academic workforce with shorter occupational histories in their current roles.

5.2.1.7 Occupational Tenure

Consistent with institutional tenure, 47% of participants have less than four years of experience in academia. Another significant group (19.7%) has 5 to 9 years of academic experience, while 17.2% have 10 to 14 years. Only 6.7% have 15 to 19 years, and 8.2% have over 20 years of experience in academia. This distribution indicates a workforce primarily composed of early to mid-career academics.

5.2.1.8 Sector

The data indicates that 80.6% of participants were from public universities, while 19.4% work in private universities. This reflects the prominence of public universities in Ghana and their larger academic staff compared to private institutions. Despite this, due to the fast growth of the population, private institutions are also contributing greatly to higher education in Ghana. These private institutions offer mainly undergraduate programmes helping to reduce the pressure on public universities. Participants were recruited from the private universities to have a representative sample of academic employees in Ghana.

Overall, the demographic data suggest the study participants were relatively young with 50% being 39 years old or younger, highly educated, and were at early stages of their career, primarily engaged in both teaching and research. The majority of participants also worked in public universities. This demographic profile is crucial for understanding the perspectives on goal orientation, job crafting, and goal progress among Ghanaian academics.

5.2.2 Research design, recruitment, and procedure

The present study (Study 1) utilised a cross-sectional survey design. While longitudinal surveys and experimental studies are often preferred, cross-sectional surveys offer specific advantages, particularly when exploring relationships between different variables at a single point in time (Spector, 2019). Although they cannot establish cause-and-effect relationships, cross-sectional surveys provide quick and efficient measurements of variables (Spector, 2019). This allows researchers to verify whether hypothesised relationships exist among variables, such as the relationship between FTP and goal orientation, self-leadership, job crafting, perceived workplace support, and goal progress. The findings from these surveys can then serve as a foundation for more detailed future studies.

Data for the present study were collected using both online (Qualtrics) and hard-copy questionnaires, which were destroyed once the responses were recorded in the data analysis software (SPSS), in line with data management protocols. Although the initial plan was to collect data solely online, a very low response rate at the beginning of the study prompted the researcher to amend the ethics application to include hard-copy questionnaires that fostered face-to-face interactions with potential participants. This helped improve the response rate and allowed participants to ask questions about the study. Given that participants were researchers

themselves, these face-to-face meetings facilitated discussions about ethical concerns. Participants in the present study were asked to indicate their informed consent through a tick box attached to the questionnaire. Similarly, for the online questionnaire, only participants who gave their consent by responding 'Yes' to a consent question were able to continue with the study, while those who answered 'No' were automatically opted out.

To further increase participation, the researcher amended the ethics application for a second time to include an incentive package for participants. After consulting with other researchers who had conducted similar surveys, the researcher decided to offer Gh₵50.00 (equivalent to £3.13 at the time) to each participant for taking part in the study, which took 25 minutes to complete. Although this initially helped increase participation, the response rate declined after a while, which could be attributed to the rapid depreciation of the cedi at the time.

After securing ethics approval, the researcher contacted 10 higher educational institutions in the Greater Accra, Central, and Eastern regions of Ghana, of which 7 institutions consented to participate in the study. The researcher explained the purpose of the study, emphasising its potential benefits to the participating institutions, and assured the heads of these institutions that a summary of the main findings would be made available upon request. Given that the organisations of interest are academic institutions, many had their own protocols and procedures for conducting research. The researcher was required to obtain ethical approval from the various ethics committees in these universities, some of which required a specified fee. The process of gaining approval across the various institutions took between two weeks and three months.

Shortly after obtaining institutional approval from the universities, lecturers in Ghana (the University Teachers Association of Ghana – UTAG) went on strike, necessitating a further four-week wait before the researcher could contact the departments, schools, and colleges within the participating universities. Once access was granted, some heads of departments (HODs), deans of faculties, and provosts of colleges sent memos to inform their colleagues and faculty about the study. Others simply gave their consent for the researcher to proceed, requiring the researcher to contact lecturers and researchers directly through personalised emails and face-to-face meetings. Some HODs assisted by distributing the Qualtrics link to the online questionnaire via their departmental email systems, while others informally discussed the study

with their colleagues, leaving them to decide whether to participate or not. Participants received weekly reminders via emails and text messages to continue with the study, which was necessary due to the length of the questionnaire and their busy work schedules. The use of hard-copy questionnaires further increased participation.

To summarise the procedure, links to the online surveys were sent to respondents via email after gaining ethical and institutional approvals. In-person follow-ups were conducted with paper-and-pencil questionnaires, giving respondents the choice of either taking the survey online or filling in the hard copy, after providing their informed consent through a tick box. The use of both hard-copy and online questionnaires increased participation in the study.

5.2.3 Measures

5.2.3.1 Job crafting

Job crafting was measured using Bindl *et al.'s* (2019) approach and avoidance crafting questionnaire. Participants were asked to indicate the extent to which they had engaged in the two forms of job crafting over the past month on a 5-point Likert scale ranging from 1 (not at all) to 5 (all the time). The questionnaire has 28 items in all with 16 items measuring approach crafting and 12 items measuring avoidance crafting. An example of items measuring approach and avoidance crafting are *"I actively tried to develop wider capabilities in my job"* (approach skill crafting), and *"I channelled my efforts at work towards maintaining a specific area of expertise,"* (avoidance skill crafting). Cronbach's alphas for the approach and avoidance crafting are .90 and .80 respectively.

5.2.3.2 Goal orientation

The shorter version of Daumiller et al. (2019) faculty *achievement goal scale* was used to assess the extent to which academics pursued mastery and performance approach goals as well as mastery and performance-avoidance goals on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The questionnaire has 20 items originally but only 16 were used as the present study did not include work avoidance goals (another component of Daumiller *et al.*'s scale not considered in the present study). Sample items are: *"I want to fulfil different requirements of my job very well"* (mastery approach), and *"My goal is to teach and publish more papers than my colleagues"* (performance approach). An example of a performance-avoidance goal is *"I wanted to avoid being perceived as incompetent"*. Cronbach's alpha for

the approach (both mastery and performance) and avoidance goals are .79 and .75 respectively for the present study.

5.2.3.3 FTP

FTP was measured with Carstensen and Lang's (1996) 10-items scale, which has seven items assessing open-ended FTP and three items assessing limited FTP. A sample item that assesses extended FTP is "*many opportunities await me in my occupational future*", whereas "*I feel there are only limited possibilities in my occupational future*" is a sample item that assesses limited FTP. All items were answered on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Cronbach alphas for extended FTP and limited FTP are .74 and .65 respectively.

5.2.3.4 Self-leadership

To reduce response fatigue, self-leadership was measured using Houghton et al.'s (2012) abbreviated questionnaire. The scale has nine items with three items each measuring the three dimensions of self-leadership namely behavioural focus, task motivation and constructive thought pattern which correspond to the theoretical dimensions of the construct by Manz (1992). A sample item of behavioural-focused strategies is *"I make a point to keep track of how well I'm doing at work*. An example of a constructive thought pattern item of self-leadership is *"I thought about my own beliefs and assumptions whenever I encountered a difficult situation".* An example of task motivation item is *"When I have successfully completed a task, I often reward myself with something I like"* Cronbach's alpha for the self-leadership measure for the first wave was .84.

5.2.3.5 Perceived workplace support

Workplace social support in the present study was measured using the instrument developed by Caplan *et al.* (1975) and recently validated by Kumar (2020). The scale assesses the availability of instrumental and emotional support from the immediate supervisor and the closest work colleagues. The workplace support scale captured supervisor emotional support, supervisor instrumental support, colleague emotional support, and colleague instrumental support in line with House's (1981) social support typology. The survey items included statements such as *"my immediate supervisor (closest work colleague) is willing to listen to my personal problems"* (emotional support subscale) and *"I can rely on my immediate supervisor*

(closest work colleague) when faced with challenging situations at work" (instrumental support subscale). Participants rated these items on a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). Cronbach's alpha for this measure for the present study is .86.

5.2.3.6 Goal progress

An individual's goal progress was assessed based on a summation of progress scores on only the domains selected as important during the achievement goal selection stage. This was measured with three items (two adopted from Judge *et al.* (2005) goal progress scale and one newly developed item. These items are (1) *"I have made a lot of progress toward the goals I set for myself",* (2) *"I feel I am on track with my plans"*, and (3) *"I have achieved the goals I set last month".* Cronbach's alpha for the scale in the present study is .83.

5.2.4 Analytical approach study 1

The data analysis began with an examination of missing data, followed by confirmatory factor analysis (CFA) of the individual scales to evaluate the construct validity of all measures. Next, a full measurement model was tested using parcelled indicators to assess and validate the relationships between observed variables (indicators) and their corresponding latent constructs. The full measurement model also allowed for the testing of alternative models which helped in establishing discriminant validity. This step ensured the reliability and validity of the measurement model before proceeding to the structural model, which focused on examining the relationships between the constructs themselves. Path analysis, employing structural equation modelling (SEM), was then conducted to explore the structural relationships between the study variables, as hypothesised in Chapter Three. In other words, relationships between variables were tested using composite scores of item-level data, after confirming the validity of the measurement scales through CFA.

5.2.4.1 Confirmatory factor analysis

Since the variables considered in the present study are conceptual and are measured with constructed scales that are believed to a large extent to adequately estimate these hypothetical variables, there is the need to use the confirmatory factor analysis technique to assess whether the constructs are adequately measured and to verify to what extent the instruments measured what they were supposed to measure. CFA offers the power to validate measurement models, assess construct validity, and model the structure of latent constructs. CFA assesses the

relationship between observed variables (indicators) and their latent constructs. In the CFA models, latent variables were estimated from manifest (measured) variables based on the assumption that they caused or predict their indicators (Zhang, Dawson and Kline, 2021). Unlike exploratory factor analysis (EFA), which seeks to uncover the underlying structure of data, CFA begins with a specified model, where the relationships between indicators and their respective latent constructs are predetermined based on theory or a priori hypotheses. The goal of CFA is to evaluate the goodness of fit between the data and the proposed model, thus confirming or rejecting the hypothesised relationships.

The primary reason for testing CFA models is to evaluate construct validity. CFA offers a systematic approach to validate these constructs by assessing how well the indicators cohere with the theoretical structure. It allows us to determine whether the indicators genuinely measure the intended constructs and how accurately they do so. CFA assists also in model specification by enabling researchers to operationalise the theoretical relationships between constructs and their indicators. In SEM, models comprise pathways, which denote the causal relationships between constructs, and error variances, reflecting the unique variance associated with each indicator (Little 2013). CFA helps ensure that the specified model accurately reflects the underlying theoretical structure, enhancing the model's ability to depict reality. In order to establish construct validity for all variables in the present study, a CFA was performed for all variables separately. Items that had high cross-loading values and very low factor scores were excluded from the model.

Another important reason for conducting CFA is to test discriminant validity. CFA plays a pivotal role in confirming the distinctiveness of latent constructs. Since multiple constructs were measured in the present study, it was essential to establish that these constructs are indeed different from one another. CFA was also used to examine discriminant validity by examining the correlations between constructs, thereby confirming that they are not measuring the same underlying phenomenon. In other words, a full measurement model was evaluated through CFA where all variables in the study and their corresponding indicators were included to verify if indeed these different latent constructs are distinct. Parcelled indicators were used in evaluating the model to reduce complexity of the model and reduce measurement error (Little *et al.,* 2002).

5.2.4.2 Item parcelling controversy in CFA

The use of parcelled indicators (instead of observed items) in CFA models remains a fundamental practice in SEM analyses. While some scholars have embraced this practice and have provided guidelines for its effective application (Little *et al.,* 2002), others have raised concerns regarding its use, contending that parcelling may inadvertently lead to the acceptance of mis-specified models (e.g. Bandalos, 2002). This section offers a brief discourse on the advantages of parcelling, the contentious issues surrounding its implementation, and the specific parcelling strategies employed in the current study to mitigate the inflation of parameter estimates. Item parcelling, as defined by Little and colleagues (2002, 2022), involves the aggregation of two or more items to create indicators for a latent construct. It proves particularly valuable in latent variable modelling, especially in longitudinal studies, where it serves to reduce the number of indicators, enhance model parsimony, corrects for measurement error, and facilitate the establishment of measurement invariance (Van De Schoot *et al.,* 2015; Little *et al.,* 2022). Parcelling has been found to offer several psychometric advantages and modelling benefits (Little *et al.,* 2022).

Psychometrically, parcelling has been shown to increase the reliability of indicators, increase the communalities of indicators, and enhance the ratio of common-to-unique factor variance (Little *et al.,* 2002). Item parcelling, as a form of partial aggregation, yields factors that more accurately represent the latent constructs compared to item-level data. Additionally, parcelling reduces the unique (residual) variances in items that arise due to measurement errors or social desirability biases while increasing the desirable (true) variance (Little *et al.,* 2002). This is underpinned by the domain sampling principle in psychometric theory, which posits that an infinite number of indicators are available for a theoretical construct, and a finite subset may be selected for measurement at any given time (Little *et al.,* 2013). Consequently, every indicator exhibits some association with the true score of the construct and carries a degree of noise (error) linked to the measurement process. The use of item-level data or composite scores of items as a representation of a construct increases the item's unique variance, thus augmenting contamination and leading to an underestimation of regression coefficients (Little *et al.,* 2022). This underscores the inadequacy of item-level data in precisely measuring a psychological construct. Parcelling, in contrast, allows for a more accurate modelling of item true variance, rendering it especially preferable in longitudinal SEM analyses.

Furthermore, parcelling leads to a more reliable approximation of the distribution of the construct under investigation (Little *et al.,* 2022). This results from the fact that individual items only capture specific facets of the construct, leading to a broader distribution when items are aggregated into more manageable parcels (Boyle, 1991). Parcelled data also yields more consistent and evenly spaced intervals between scale points compared to item-level data, making it particularly valuable when continuous constructs are measured on categorically ordered scales (e.g. Likert scales) (Little *et al.,* 2022). Likert scales typically assume whole-number values within a defined range (e.g. 1 to 5 in the present study), which may lead to the data being considered discrete (although it is treated as continuous when there are five or more response categories). Composite parcels, however, produce values that fall between these whole numbers (e.g. 3.5), rendering parcels more continuous than item-level data. This enhanced precision in capturing the distribution and establishing continuous variables permits the use of estimators that assume data normality and continuity, such as Maximum Likelihood – ML (Little *et al.,* 2013).

From a model specification perspective, parcelling further reduces the number of indicators in a model, which, in turn, enhances model convergence and stability (Little *et al.,* 2013). It also diminishes the likelihood of correlated residuals and cross-loadings (Little *et al.,* 2002). Parcelling serves to reduce the magnitude of residual variances, thus lessening the extent to which residual variances of one indicator may correlate with that of other indicators within the model. It is important to note that the approach used in the putting items together into parcels largely influences the likelihood that parcelling will reduce residual variances. For example, it is established that grouping items with correlated residuals within the same parcel reduces the correlated variance to only one-fourth but distributing them across different parcels reduces the correlated residual variance to one-ninth (Little *et al.,* 2013). Parcelling also has the advantage of reducing the effects of sampling error and parsimony errors in a model, proving particularly useful in modelling with small sample sizes by simplifying the model's complexity (Little *et al.,* 2022).

Despite the manifold advantages of employing parcels as indicators of latent constructs in SEM, the practice has been regarded sceptically as a means to assess model fit (e.g. Bandalos, 2002). A primary criticism is the concern that parcelling may lead to biased factor loadings, particularly when the constructs being studied are multidimensional. When items are combined

into parcels, the unique variance of individual items may be lost, potentially leading to a false improvement in model fit statistics. This can mislead researchers into thinking their models are more robust than they actually are, as it hides possible errors in the underlying factor structure (Marsh *et al.*, 2013). Additionally, the creation of parcels could introduce biases, especially if the items grouped together are not sufficiently similar or if they unintentionally represent different aspects of the construct being measured (Meade and Kroustalis, 2006). This concern is particularly significant in the context of measurement invariance, where the use of parcels may lead to incorrect conclusions about the equivalence of constructs across different groups (Meade and Kroustalis, 2006).

Additionally, the use of parcelling increases the likelihood of failing to detect mis-specified models (Bandalos, 2002). The methodological rigor of item parcelling has been called into question due to its reliance on arbitrary decisions regarding the number and composition of parcels. Critics argue that there is no universally accepted algorithm for creating item parcels, which can lead to inconsistencies and a lack of replicability in research findings (Hada *et al.*, 2022). The potential for Type II errors is also heightened when using item parcels, as the simplification of data can mask significant relationships that would be evident at the item level (Shi *et al.*, 2016). Furthermore, the assumption that parcels will yield normally distributed data is often violated, particularly in psychological constructs that are inherently complex and multidimensional (Hau and Marsh, 2004). This violation can result in the failure of CFA assumptions, ultimately compromising the validity of the findings (Nasser and Takahashi, 2003). Consequently, it is recommended that researchers provide detailed descriptions of their parcelling decisions and procedures and report any discrepancies in results when different parcelling methods yield varying outcomes (Sterba and MacCallum, 2010; Sterba, 2019).

It is crucial to recognise that the debate regarding the use of parcelling stems from differing philosophical stances, namely liberal-pragmatic and conservative-empiricist perspectives (Little *et al.,* 2002). The latter perspective advocates for modelling data as closely as possible to the original participants' responses, ensuring that all measurement variances are truly represented in the model to minimize bias in parameter estimates. In contrast, the former contends that it is often unfeasible to encompass all item variances, particularly in the context of longitudinal studies. Thus, parcelling is seen as a strategy for encapsulating only the most salient variances.

From the above discussion it can be deduced that the decision to use parcels in modelling is contingent on the researcher's discretion, significantly influenced by the underlying research philosophy. As posited by Little et al. (2002, 2022) the research objectives should determine whether parcelling is appropriate or not. They argue that when the study's aim is to examine relationships between items and model item behaviour (e.g. developing a new scale), parcelling should be avoided. However, when the objective is to assess relationships between latent constructs, parcelling offers distinct advantages in effectively modelling population variances (Little *et al.,* 2002, 2022). In the present study, parcel indicators were employed to test the full measurement model, a choice made to simplify the model, reduce the unique (residual) variances of indicators, and prevent factor cross-loadings. The specific parcelling strategies employed in the study varied based on the dimensionality of the respective constructs. For unidimensional constructs, items were either randomly allocated to parcels when they all had similar factor loadings, or purposefully grouped when some items had very high factor loadings and others had relatively low factor loadings. In the latter case, items with low factor loadings were paired with those with high factor loadings (Little *et al.,* 2022). For multidimensional constructs, items with shared secondary unique variance (i.e., correlated residuals) were grouped into parcels (e.g. FTP, achievement goals, workplace support). In the case of the job crafting construct, although the goal was not to assess domain-specific variances, items representing each subdomain (task, skill, relationship, and cognitive crafting strategies) were grouped together as parcels. For constructs that had only three indicators originally, no parcels were created (e.g. limited FTP and goal progress), as this prevents under-identified models.

5.2.4.3 Structural model (path analysis)

Although, researchers have advocated the use of covariance-based SEM to allow for the modelling of measurement errors (Cole and Preacher, 2014; Zhang and Yang, 2020), path analysis has been found to be useful in studies with many variables but small sample sizes, as it enhances model parsimony and helps to avoid the problem of model non-convergence (Devlieger and Rosseel, 2017; Hsiao *et al.*, 2018; Lai and Hsiao, 2021). Also, path analysis has been found to produce similar estimates to that of covariance-based full SEM when assumptions of establishing measurement models are met (e.g. Devlieger et al., 2016; Hsiao et al., 2018; Lai and Hsiao, 2021). An advantage of the use of path analysis following SEM procedure is the use of covariance matrices rather than correlations, which allows for simultaneous analyses of two or more endogenous variables in a single model (Burkholder &

Harlow, 2003). Another advantage of path analysis in SEM is that it can be used to simultaneously analyse observed variables and model the relationships between them (Zhang *et al.,* 2021). Path analysis using SEM techniques also considers measurement errors in outcome variables (Grewal *et al.*, 2004), leading to accurate estimations of path coefficients compared to simple regression coefficients (Hoyle and Smith, 1994; Zhang and Yang, 2020). Furthermore, it provides for the testing, interpretation, and quantitative comparison of a series of contrasting models, enabling researchers to identify theoretically precise and parsimonious models that provides best fit to the data (Zhang *et al.,* 2021). By this, structural coefficients can be compared through the analysis of differences (Burkholder and Harlow, 2003).

In SEM, the relationship between an independent variable and a dependent variable that is not affected by any other variable is known as a direct effect. It is denoted by coefficient betas (β-direct). The influence of a predictor on an outcome through another (intervening) variable is also known as an indirect effect in SEM analysis (denoted by β-indirect). This represents the variation in an outcome variable that is accounted for by the influence of an independent variable on a third variable called the mediator. The mediator, thus, transfers the original effect of the independent variable on the dependent variable. There are two betas in an indirect model (1) the path coefficient of the relationship between of the predictor (X) and the mediator (M) denoted by path "a" and (2) the path coefficient of the relationship between the mediator (M) and the outcome (Y) denoted by path "b" (Muthén and Muthén, 2017). The product of the coefficient betas of path a and path b (a*b) gives the indirect influence of X on Y through M. The total effect is obtained by adding the direct to the indirect path coefficients (Muthén and Muthén, 2017).

5.3 Results Study 1

5.3.1 Data screening

Before conducting preliminary analyses on the measures and testing the measurement model, and prior to commencing hypotheses testing the data was screened to assess the pattern of missingness, to identify univariate and multivariate outliers, and to evaluate normality using SPSS. Missingness in the data was analysed using the Expectation Maximisation (EM) algorithm (Little and Rubin, 1989). Little's Missing Completely at Random (MCAR) test at the aggregated level of data yielded significant results ($\chi 2 = 65.506$, df = 47, $p = .04$), indicating that the data were missing not completely at random. This was not a potential limitation as the

software (Mplus) used for the data analysis can perform analysis on data with missing values. These missing values were therefore correctly labelled (e.g. -99) to ensure that accurate estimates are obtained. Little's MCAR test was also applied at the item level, and the result was also significant ($\chi 2$ = 1050.601, df = 948, p = .01), further confirming that the data are not completely missing at random.

Modified *z*-scores were also computed for the variables to identify potential univariate outliers, following the approach outlined by Iglewicz and Hoaglin (1993). The modified z-score was appropriate to detect outliers as it uses the median and the median of absolute deviation of the median instead of mean and standard deviation which can be biased by extreme values (Iglewicz and Hoaglin, 1993). Most variables exhibited values within the recommended z = ± 3.5 cut-off point. Only three variables, namely approach crafting, self-leadership, and workplace support, had cases that displayed slightly lower z-scores (-3.5, -3.8). However, these deviations were minimal, affecting only two cases below the recommended cut-off point, aligning with expectations under a normal distribution (Field, 2017). Consequently, these scores were considered likely representative of genuine observations, particularly given the absence of highly isolated cases in the data inspection. Nevertheless, to mitigate the potential impact of outliers, robust estimation methods such as Maximum Likelihood (ML) estimation with robust standard errors and bootstraps were used (Field, 2013).

The examination of multivariate outliers was conducted through the application of Mahalanobis distance cutoff values, as proposed by Barbeau et al. (2019). Cases were categorised as multivariate outliers if their Mahalanobis distance yielded a *p*-value of less than .001, in accordance with the criteria outlined by Field (2013). The process identified five cases of multivariate outliers. Subsequent analyses were performed both with and without the inclusion of these identified outliers. No substantive differences were observed in terms of the models' fit indices, or the magnitude, direction, and significance of the relationships between variables. A thorough scrutiny of the identified outliers failed to reveal any anomalies, such as data entry errors or coding discrepancies. Consequently, these cases were deemed genuine responses from participants. Consistent with Field's (2013) assertion that removal of observations should only occur when compelling reasons exist to believe they do not originate from the studied population, the cases were retained. To address the potential impact of outliers, robust statistical estimators, specifically MLR estimator and bootstrapping methods, were

employed for the data analysis. These robust techniques, as advocated by Yuan and Zhong (2013) are useful in mitigating the influence of outliers and are designed to address the violations of assumptions and deviations from normality (Field, 2017; Muthén and Muthén, 2017). The distribution of the data for all variables in the present study was checked with skewness and kurtosis. Results of normality analysis also indicate that all variables were normally distributed with values of skewness and kurtosis within the accepted range of -2 and 2 (Field, 2013).

5.3.2 Confirmatory factor analyses

5.3.2.1 FTP

A CFA was conducted to validate the dimensionality of the FTP construct using Mplus version 8.10 (Muthén and Muthén, 2017). FTP was measured using Lang and Carstensen's (1996) 10-item scale. Originally, this scale assessed FTP on two dimensions: extended FTP and limited FTP. However, recent findings suggest it comprises three components: opportunities, extension, and limitations (Rohr *et al.*, 2017). The first four items measured opportunities, while extension and limitation were each measured by three items. It is important to note that Rohr et al.'s (2017) dimensions of opportunities and extension correspond directly to Lang and Carstensen's (1996) extended FTP dimension. Consequently, although three dimensions were identified in the current CFA, items from the opportunities and extension dimensions were combined and used as indicators of extended FTP in the present study. Items from the limitations dimension were retained and used as indicators of limited FTP in the current study. Previous studies support the two dimensions of FTP (e.g., Zacher and De Lange, 2011).

Results of the CFA presented in Table 5 indicate that all items loaded significantly on their respective latent factors ($p < .001$), except item 10, which was deleted due to low factor loading. Fit indices used to establish model fitness include Chi-Square difference test, Root Mean Square Error Approximation (RMSEA), Comparative Fit Index (CFI), Tucker Lewis Index (TLI), and Standard Root Mean Square Residual (SRMR). The results indicated that the 3-component model of FTP fit the data well after deleting item 10 due to its low factor loading. ($\chi 2$ (df) = 44.722 (24), $p < .001$; RMSEA = .046; CFI = .972; TLI = .958; SRMR=.044), The fit indices were suboptimal when item 10 was included ($\chi 2$ (df) = 102.617 (32), $p < .001$; RMSEA = .074; CFI = .919; TLI = .886; SRMR=.068). Standardised factor loadings are presented in Table 2.

Table 2: Standardised Coefficients of CFA of Future Time Perspective

No		Opportunities	Extension	Limitation
FTP1	Many opportunities await me in my occupational future	.855		
FTP2	I expect to set many new career goals in the future	.813		
FTP3	my occupational future is filled with possibilities	.816		
FTP4	I can do anything I want in my occupational future	.678		
FTP5	there is plenty of time left in my occupational life to make new plans		.491	
FTP6	most of my occupational life lies ahead of me		.478	
FTP7	my occupational future seems infinite to me		.389	
FTP8	I sense that my occupational time is running out			.650
FTP9	I have begun to experience time in my occupational future as limited			.687

5.3.2.2 Self-leadership

Self-leadership in the present study was measured using Houghton et al.'s (2012) scale, which identifies three latent factors: behaviour awareness, task motivation, and constructive cognition. CFA was performed to test the dimensionality of the construct. Results presented in Table 3 indicate that all items loaded significantly on their respective latent factors ($p < .001$). The fit indices also indicate that the 3-component model fits the data well ($\chi^2(df) = 53.225(24)$, $p < .001$; RMSEA = .055; CFI = .970; TLI = .955; SRMR = .042). In the full measurement model, items belonging to the same component were consolidated into parcels and used as indicators of the construct self-leadership, resulting in three parcel indicators. This was done to reduce model complexity (Little *et al.,* 2002, 2013, 2022).

Table 3: Standardised Coefficients of CFA of Self-Leadership

No		Behaviour awareness	Task Motivation	Constructive Cognition
SL1	I have established specific goals for my own performance	.781		
SL2	I made a point to keep track of how well I'm doing at work	.799		
SL3	I worked toward specific goals I have set for myself	.769		
SL4	I visualized myself successfully performing a task before I did it		.755	
SL5	I sometimes pictured in my mind successful performance before I did a task		.639	
SL6	When I completed a task, I often rewarded myself with something I like		.392	
SL7	I talked to myself sometimes (out loud or in my head) to work through difficult situations			.746
SL8	I tried to evaluate mentally the accuracy of my own beliefs about situations I am having problems with			.753
SL9	I thought about my own beliefs and assumptions whenever I encountered a difficult situation			.736

5.3.2.3 Goal orientation

Goal orientation in the present study was measured with the shorter version of Daumiller et al.'s (2019) university instructors' goal scale. The scale is multidimensional with subscales including mastery, performance approach, performance avoidance and relationship goals. Each of these dimensions was assessed with four items and the standardised factor loadings at each measurement occasion are presented in Table 4. Results indicate that all items loaded significantly ($p < .001$) except for items 11 and 16 which measured relationship avoidance and performance-avoidance goals respectively. Fit indices showed that the four-component model fits the data well when items 11 and 16 are deleted due to high cross-loading values ($\chi 2$ (df) = 99.785 (66), $p < .001$, RMSEA = .036; CFI = .980; TLI = .972; SRMR=.038). In line with the convention for modification indices, the residual variances (error terms) of items 1, 2 and 4 were correlated since they were high. The fit indices without modification indices (i.e., deleting items with low factor loadings and correlating residual variances) were poorer ($\chi 2$ (df) =

322.839 (93), $p < .001$; RMSEA = .078; CFI = .881; TLI = .846; SRMR=.081) than fit indices with modification indices ($\chi 2$ (df) = 99.785 (66), $p < .001$, RMSEA = .036; CFI = .980; TLI = .972; SRMR=.038).

Table 4: Standardised Coefficients of CFA of Achievement Goals

No		Mastery	Performance Approach	Relationship	Performance Avoidance
GO1	I wanted to fulfil the different requirements of my job very well	.642			
GO2	My main concern was to conduct my teaching and research tasks as well as possible	.686			
GO3	My goal was to expand my professional and methodological knowledge as much as possible	.806			
GO4	I wanted to develop my competencies further as much as possible	.805			
GO5	I wanted other people to notice how good I am as a lecturer		.683		
GO6	I wanted to be perceived as competent in what I do		.809		
GO7	I wanted to be a more competent instructor compared to others		.707		
GO8	My goal was to teach and publish more papers than my colleagues		.478		
GO9	It was important for me to achieve a personal connection with students and colleagues			.766	
GO10	One of my main goals was to develop a cooperative relationship with my colleagues			.724	
GO12	I wanted to avoid having other people think that I was a bad lecturer or researcher				.735
GO13	I wanted to avoid being perceived as incompetent				.838
GO14	I didn't want to be a less competent instructor when compared to others				.803
GO15	My goal was to NOT teach/research worse than my colleagues				.467

NB: Items 11, and item 16 were deleted because of cross-loading.

It is important to note that approach goal orientation was constructed in the present study by combining items from mastery, performance approach, and relationship goals, all phrased in approach terms. Avoidance goal orientation was similarly created by combining items from performance avoidance goals. In the full measurement model, items from the mastery goals dimension were consolidated into one parcel, items from the performance approach dimension into another parcel, and items from the relationship goal dimension into a third parcel, resulting in three indicators for the approach goal orientation construct. Since the performance avoidance dimension originally had only four indicators, two items remained as indicators, while the item with the lowest factor loading was combined with another item to form three indicators for the avoidance goal orientation construct.

5.3.2.4 Job crafting

As discussed in the methods section, job crafting was measured using Bindl et al.'s (2019) job crafting questionnaire. This questionnaire includes four content areas: skills, tasks, relationships, and cognitive crafting behaviours. Each area has both approach and avoidance valence, resulting in a total of eight components. The approach dimensions of each of the four crafting content areas have four items each, while the avoidance dimensions have three items each. Except for relationship avoidance crafting, all other avoidance crafting strategies had items that cross-loaded on other avoidance components. Consequently, these items were deleted, leaving only two indicators per latent factor. While this may be considered under-identified by some scholars (Kelloway, 2015), Little et al. (2022) argued that this may be acceptable in some cases. Also, one item each was deleted from the approach task and approach cognitive crafting subdimensions due to high cross-loading values. Results presented in Table 5 show that after deleting the items with high cross-loadings, all other items loaded significantly on their respective components ($p < .001$). Also, the fit indices indicate that the model fits the data excellently when items with high cross-loading values were deleted ($\chi2$ (df) = 303.595 (198), $p = .00$, RMSEA = .036; CFI = .966; TLI = .956; SRMR=.042). Results further indicates that the fit indices were poor when all items are included in the model ($\chi2$ (df) = 749.797 (318), $p < .001$, RMSEA = .058; CFI = .887; TLI = .866; SRMR=.070).

In the full measurement model, approach crafting was constructed by combining all items within each of the four components (i.e., task, skill, relationship, and cognitive) into parcels, resulting in four indicators for the approach crafting construct. For the avoidance crafting

construct, items were grouped into parcels based on their factor loadings, with items having low factor scores combined with those having high factor scores. Since the study did not aim to analyse the contribution of each subcomponent individually, the random assignment of items to parcels was not an issue (Little *et al.,* 2022).

Table 5: Standardised Coefficients of CFA of Job Crafting

No		Approach Relationship	Approach skill	Approach Task	Approach cognitive	Avoidance Relationship	Avoidance Skill	Avoidance Task	Avoidance cognitive
JC1	I actively sought to meet new people at work	.714							
JC2	I made efforts to get to know other people at work better	.806							
JC3	I sought to interact with other people at work, regardless of how well I knew them.	.801							
JC4	I tried to spend more time with a wide variety of people at work.	.721							
JC5	I actively tried to develop wider capabilities in my job		.816						
JC6	I tried to learn new things at work that went beyond my core skills.		.772						
JC7	I actively explored new skills to do my overall job		.777						
JC8	I sought out opportunities to extend my overall skills at work.		.734						
JC10	I added complexity to my tasks by changing their structure or sequence.			.851					
JC11	I changed my tasks so that they were more challenging.			.502					
JC12	I increased the number of difficult decisions I made in my work			.747					
JC14	I thought about how my job contributed to the organization's goals.				.805				
JC15	I thought about new ways of viewing my overall job.				.827				
JC16	I thought about ways in which my job contributed to society.				.768				

JC17	I minimized my interactions with people at work that I did not get along with	.548				
JC18	I changed my work so that I only interacted with people that I felt good about working with	.761				
JC19	I tried to avoid situations at work where I had to meet new people.	.757				
JC21	I sought to develop those skills in my job that helped prevent negative work outcomes		.611			
JC22	I made sure I stayed on top of knowledge in the core areas of my job.		.759			
JC24	I tried to simplify some of the tasks that I worked on			.752		
JC25	I sought to make some of my work mentally less intense			.774		
JC26	I focused my mind on the best parts of my job while trying to ignore those parts I did not like				.692	
JC28	I tried to think of my job as a set of separate tasks, rather than as a 'whole.'				.550	

Items JC9, JC13, JC20, JC23, and JC27 were deleted because they had high cross-loading values

5.3.2.5 workplace support

Workplace support was assessed with Caplan *et al.*'s (1980) workplace support scale which assesses the availability of instrumental and emotional support from supervisors and co-workers. Due to how the questions were phrased, the error terms (residual covariance) were very high and had to be correlated in the CFA, though two main dimensions were extracted in line with House's (1981) workplace support typology – instrumental and emotional support. Results of the CFA revealed that all items (standardised factor loadings presented in Table 6) are significant indicators of their respective latent factors of workplace support (p = .00). Results further showed that the model fits the data adequately ($\chi 2$ (df) = 23.992 (15), p = .06; RMSEA = .039; CFI = .990; TLI = .981; SRMR = .027). Fit indices when items are uncorrelated were poorer compared to when residual variances were correlated ($\chi 2$ (df)= 96.946 (13), p = .00; RMSEA = .127; CFI = .904; TLI = .793; SRMR = .069)

Table 6: Standardised Coefficients of CFA of Workplace Support

No	**items**	**Instrumental Support**	**Emotional Support**
Sup1	My immediate supervisor (i.e., head of department) would go all out to do things to make my work life easier for me	.674	
Sup2	My colleagues at work did everything they could to make my work easier	.692	
Sup3	I could easily talk with my immediate supervisor	.817	
Sup4	I could easily talk with my colleagues at work about a variety of issues.	.828	
Sup5	My immediate supervisor was willing to listen to my personal problems.		.557
Sup6	My colleagues at work were willing to listen to my personal problems.		.637
Sup7	I could rely on my immediate supervisor when things get tough.		.759
Sup8	I could rely on others at work when things get tough.		.733

5.3.2.6 Goal progress

Goal progress in the present was assessed with three items; two items adopted from Judge et al. (2005) and the third item generated by the researcher of the present study *(I have achieved the goals I set last month).* A CFA was performed to validate the goal progress measurement instrument, and the results of standardised factor loadings are presented in Table 7. It was observed from the analysis that all items significantly contributed to the factor (p = .000). The model was just identified since there are only three indicators, and the scale has only one dimension, hence it has perfect fit ($\chi 2 = 0$, df = 0, $p < .001$; CFI = 1.000; TLI = 1.000; RMSEA = .000; SRMR = .000).

Table 7: Standardised Coefficients of CFA of Goal Progress

items		**Factor loading**
GP1	I have made a lot of progress toward the goals I set for myself	.767
GP2	I am on track with my plans	.912
GP3	I have achieved the goals I set last month	.708

5.3.2.7 Full measurement model

The validation of the measurement model, developed in Chapter 3, involved a dataset that is estimated to be characterised by nine factors, namely extended FTP, limited FTP, self-leadership, approach goals, avoidance goals, approach crafting, avoidance crafting, workplace support, and goal progress. In line with standard practice, all latent constructs were estimated using three parcelled indicators (Little *et al.,* 2022), except for limited FTP, which was estimated with two manifest indicators at the item level. This was because limited FTP originally had only three items, one of which was removed due to a low factor loading. Explanation for the use of two indicators per latent construct is presented in Chapter 4 (see Analytical Approach section). Another notable exception pertained to the construct "approach crafting," which was estimated with four indicators, each distinctly representing various dimensions of approach crafting comprising skill, task, relationship, and cognitive crafting strategies.

The process of validation encompassed a comprehensive comparative evaluation, wherein the proposed model was compared against alternative models. Among these alternative models was the single-factor model, which sought to combine all indicators into a singular overarching factor. Notably, the outcome of the single-factor model revealed a lack of convergence, thereby precluding the computation of parameter estimates. Furthermore, a 4-factor model was postulated, wherein indicators related to both extended and limited FTP were combined into one factor. Within this same model, self-leadership and job crafting were put together into a second factor, approach and avoidance goals, and goal progress combined into a third factor, while workplace support constituted the fourth factor. Additionally, a 5-factor model was subjected to examination, wherein indicators of extended and limited FTP were separately linked to latent factors. Nevertheless, approach goals, approach crafting, and self-leadership were consolidated into one latent factor, while avoidance goals and avoidance crafting were similarly integrated into a distinct latent factor. The fifth factor in the model was workplace support and goal progress due to substantial covariance observed in preceding models. Subsequently, a six-factor model was considered with the objective of delineating discrete factors for each construct, irrespective of their approach-avoidance categorisation.

The principal aim underlying these comparative model assessments was to ascertain discriminant validity. The outcome of these analyses presented in Table 8, robustly supports the superior model fit of the proposed model relative to the alternative models ($\chi 2$ (df) = 459.203 (288), $p < .001$; CFI = .967; TLI = .960; RMSEA = .038; SRMR = .038). The results of standardised coefficients presented in Table 8 also show that all indicators significantly loaded on their respective latent factors ($p < .001$). Moreover, all the indicators demonstrate coefficients surpassing the threshold of .50 making them 'salient' (Brown, 2015). This substantiates both the conceptual structure and statistical robustness of the measurement model. Concurrently, it supports the distinctiveness of the latent constructs within the proposed model. The present study convincingly verifies the discriminant validity of the proposed measurement model.

Table 8: Standardised Coefficient for Confirmatory Factor Analysis of the Full Measurement Model using Parcelled Items

Parcelled Indicators	EFTP	LFTP	SL	ApGO	AvGO	ApCft	AvCft	Sup	Prog
FTPp1	.728								
FTPp2	.698								
FTPp3	.839								
FTP8		.631							
FTP9		.708							
SLp1			.907						
SLp2			.836						
SLp3			.779						
ApGp1				.812					
ApGp2				.846					
ApGp3				.837					
AvGp1					.676				
AvGp2					.859				
AvGp3					.775				
ApCtp1						.883			
ApCtp2						.910			
ApCtp3						.856			
ApCtp4						.888			
AvCtp1							.738		
AvCtp2							.860		
AvCtp3							.800		
WSp1								.870	
WSp2								.716	
WSp3								.939	
GP1									.781
GP2									.895
GP3									.714

$\chi 2$ = 459.203*, df = 288; RMSEA = .038, 90%CI [.032, .045]; CFI = .967; TLI = .960; SRMR = .038; FTP – future time perspective; SL – self-leadership; ApG – Approach Goals; AvG – Avoidance Goals; ApCft – Approach Crafting; AvCft – Avoidance Crafting; Prog – Goal Progress

As anticipated, both the 4-factor model (χ2 (df) = 2552.470 (344), $p < .001$; CFI = .584; TLI = .543; RMSEA = .126; SRMR = .113) and the 5-factor model (χ2 (df) = 2448.617 (340), $p < .001$; CFI = .603; TLI = .559; RMSEA = .124; SRMR = .108) yielded unsatisfactory fit indices. Although the 6-factor model exhibited improved fit indices (χ2 (df) = 1166.067 (335), $p < .001$; CFI = .844; TLI = .824; RMSEA = .079; SRMR = .074) in comparison to the previous alternative models, it did not attain the level of fit obtained by the hypothesised model (χ2 = 459.203, df = 288; RMSEA = .038, 90%CI [.032, .045]; CFI = .967; TLI = .960; SRMR = .038)

Table 9: Fit indices of comparative models

Factor model	$\boldsymbol{\chi 2(df)}$	**CFI**	**TLI**	**RMSEA**	**SRMR**	**Δχ2 (TRd)**	**Δ*df***
1-factor	No convergence						
4-factor	2552.470** (344)	.584	.543	.126	.113	1581.622	56
5-factor	2448.617** (340)	.603	.559	.124	.108	1650.058	52
6-factor	1166.067** (335)	.844	.824	.079	.074	1405.487	47
Hypothesised	459.203** (288)	.967	.960	.038	.038		

Note: ** $p < .01$

5.3.3 Descriptive statistics

Table 10 provides an overview of the descriptive statistics of the study variables, encompassing mean scores, standard deviations and correlations. Statistically significant intercorrelations among the variables imply relationships between them. This justifies the need for a more in-depth analysis to explain the nature and dynamics of these relationships. Notably, there were no indications of multicollinearity issues, as all correlation coefficients remained below .80 among all variables (Field, 2013).

Table 10: Means, Standard Deviations and Intercorrelations between Study Variables

Variables	N	Mean	SD	1	2	3	4	5	6	7	8	9
1. Extended FTP	402	3.798	.687	-								
2. Limited FTP	402	2.847	.980	-.142**	-							
3. Self-leadership	397	3.753	.684	.343**	-.030	-						
4. Approach goals	397	3.973	.588	.276**	-.006	.401**	-					
5. Avoidance goals	401	3.533	.821	.110*	.211**	.147**	.473**	-				
6. Approach crafting	395	3.385	.714	.251**	.067	.560**	.358**	.204**	-			
7. Avoidance crafting	394	2.890	.670	.110*	.168**	.325**	.244**	.295**	.504**	-		
8. Support	402	3.821	.760	.158**	.005	.221**	.299**	.157**	.333**	.116*	-	
9. Goal progress	402	3.973	.789	.135**	-.046	.420**	.338**	.155**	.418**	.266**	.309**	-

* $p < .05$ (two-tailed); ** $p < .01$ (two-tailed).

5.3.4 Hypotheses testing

Path analysis using the SEM technique was employed to test the hypotheses in the current after validating the full measurement model with parcelled indicators. Path analysis with manifest variables is particularly advantageous in studies with relatively small sample sizes because it simplifies the model (Lai and Hsiao, 2021). This approach enhances model parsimony and helps to avoid issues of model non-convergence (Devlieger and Rosseel, 2017; Hsiao *et al.,* 2018; Lai and Hsiao, 2021). Moreover, path analysis can yield estimates similar to those produced by covariance-based full SEM when the assumptions for measurement models are satisfied (Devlieger *et al.,* 2016; Hsiao *et al.,* 2018; Lai and Hsiao, 2021).

The hypotheses were tested by first comparing the fit indices of a fully saturated model to a nested (hypothesised) model. A saturated model perfectly reproduces all variances, covariances and means of all observed variables, hence it has the best possible fit (i.e., $\chi2 = 0$, $df = 0$) allowing for comparison of hypothesised and alternative models. The Satorra-Bentler Scaled Chi-square Difference Test showed no significant difference in Chi-square values of the fully saturated model and the hypothesised model in both MLR ($\Delta\chi2 = 13.857$, $\Delta df = 10$, $p = .18$) and ML with 1000 bootstrap estimations ($\Delta\chi2 = 13.814$, $\Delta df = 10$, $p = .18$). Put differently, fit indices of the hypothesised model were similar for both MLR ($\chi2 = 13.857$, $df = 10$, $p = .18$; CFI = .994; TLI = .978; RMSEA = .031; SRMR = .029) and ML with 1000 bootstrap ($\chi2 = 13.814$, $df = 10$; p = .18; CFI = .995; TLI = .981; RMSEA = .031; SRMR = .029) estimations. To reiterate, only the hypothesised model was tested given no difference in fit with the fully saturated model.

Table 11: Standardised regression coefficients of the cross-sectional effects of FTP and goal orientation on job crafting and goal progress.

Direct Effects			**β**	***SE***	**95% CI**			***p***
					LL	**-**	***UL***	
Approach crafting	→	goal progress	.168	.061	.068	-	.268	.006
Avoidance crafting	→	goal progress	.051	.047	-.026	-	.128	.273
Approach goals	→	goal progress	.136	.053	.049	-	.224	.010
Avoidance goals	→	goal progress	-.023	.050	-.105	-	.059	.641
Self-leadership	→	goal progress	.214	.058	.119	-	.309	.000
Workplace support	→	goal progress	.165	.051	.080	-	.249	.001
Approach goals	→	approach crafting	.069	.042	.000	-	.139	.100
Self-leadership	→	approach crafting	.471	.044	.398	-	.544	.000
Extended FTP	→	approach crafting	.038	.042	-.032	-	.107	.373
Workplace support	→	approach crafting	.198	.045	.124	-	.271	.000
Avoidance goals	→	avoidance crafting	.131	.047	.053	-	.208	.006
Self-leadership	→	avoidance crafting	.309	.048	.231	-	.387	.000
Workplace support	→	avoidance crafting	.025	.050	-.058	-	.108	.616
Limited FTP	→	avoidance crafting	.118	.043	.047	-	.189	.006
Extended FTP	→	approach goals	.230	.047	.152	-	.307	.000
Limited FTP	→	avoidance goals	.150	.046	.074	-	.226	.001
Extended FTP	→	self-leadership	.340	.048	.262	-	.418	.000
Extended FTP	→	workplace support	.145	.057	.052	-	.238	.011

Indirect Effects										
Extended FTP	→	self-leadership	→	approach crafting	.160	.028	.114	-	.206	.000
Extended FTP	→	approach goals	→	approach crafting	.016	.010	.000	-	.032	.094
Extended FTP	→	workplace support	→	approach crafting	.029	.012	.009	-	.048	.018
Limited FTP	→	avoidance goals	→	avoidance crafting	.020	.009	.005	-	.034	.026
Approach goals	→	approach crafting	→	goal progress	.012	.008	-.002	-	.025	.150
Avoidance goals	→	avoidance crafting	→	goal progress	.007	.006	-.004	-	.017	.303
Self-leadership	→	approach crafting	→	goal progress	.079	.030	.030	-	.128	.008
Workplace support	→	approach crafting	→	goal progress	.033	.014	.010	-	.057	.021
Total Effects										
Extended FTP	→	approach crafting			.242	.044	.170	-	.315	.000
Limited FTP	→	avoidance crafting			.138	.042	.069	-	.207	.001
Approach goals	→	goal progress			.148	.054	.058	-	.237	.007
Avoidance goals	→	goal progress			-.016	.049	-.097	-	.064	.736
Self-leadership	→	goal progress			.309	.051	.224	-	.393	.000
Workplace support	→	goal progress			.199	.052	.113	-	.285	.000

Note. Model fit: $\chi 2 = 13.857^*$, df = 10; RMSEA = .031, 90%CI [.000, .067]; CFI = .994; TLI = .978; SRMR = .029. EFTP – extended future time perspective; LFTP – Limited future time perspective.

5.3.4.1 Hypothesis 1

H1a: Extended FTP will positively relate to approach crafting.

H1b: Limited FTP will positively relate to avoidance crafting.

From the results presented in Table 11, it can be observed that the direct relationship between extended FTP and approach crafting is not statistically significant (β = .04, p = .373; 95%CI [-.032, .107]), although the total effect of extended FTP on approach crafting is significant (β = .242, p < .001; 95% CI [.170, .315]). This implies that although there is an association between extended FTP and approach crafting, the relationship is not direct, hence Hypothesis 1a is rejected. On the other hand, results in Table 11 indicate that the direct relationship between limited FTP and avoidance crafting is significant (β = .12, p = .006; 95% CI [.047, .189]), implying that Hypothesis 1b is supported.

5.3.4.2 Hypothesis 2

H2a: Extended FTP will positively relate to approach goal orientation.

H2b: Limited FTP will positively relate to avoidance goal orientation.

Results in Table 11 again reveal that extended FTP has a significant direct relationship with approach goal orientation (β = .23, p < .001; 95%CI [.152, .307]). This means that hypothesis 2a is supported by the data. Results further show that limited FTP also has a significant direct association with avoidance goal orientation (β = .15, p < .001; 95%CI [.074, .226]), denoting that Hypothesis 2b is supported.

5.3.4.3. Hypothesis 3

Hypothesis 3a: Approach goal orientation will positively relate to approach crafting.

Hypothesis 3b: Avoidance goal orientation will positively relate to avoidance crafting.

The results presented in Table 11 show that the direct relationship between approach goal orientation and approach crafting is not statistically significant (β = .07, p = .100; 95%CI [.000, .139]), hence hypothesis 3a is rejected. Results further show that avoidance goal orientation has a significant positive relationship with avoidance crafting (β = .13, p = .006; 95%CI [.053, .208]), lending support to hypothesis 3b.

5.3.4.4 Hypothesis 4

Hypothesis 4a: self-leadership will positively relate to approach crafting.

Hypothesis 4b: self-leadership will positively relate to avoidance crafting.

Results in Table 11 indicate that self-leadership has significant positive relationship with both approach crafting (β = .47, p < .001; 95%CI [.398, .544]) and avoidance crafting (β = .31, p < .001; 95%CI [.231, .387]), implying that both hypotheses 3a and 3b are supported by the data.

5.3.4.5 Hypothesis 5

Hypothesis 5a: Approach crafting will positively relate to goal progress.

Hypothesis 5b: Avoidance crafting will positively relate to goal progress.

Results presented in Table 11 show that approach crafting has a significant direct relationship with goal progress (β = .17, p = .006; 95%CI [.068, .268]), lending support to hypothesis 5a. Additionally, results show that the relationship between avoidance crafting, and goal progress is not statistically significant (β = .05, p = .273; 95%CI [-.026, .128]), hence, the Hypothesis 5b is not supported by the data.

5.3.4.6 Hypothesis 6

Hypothesis 6: Extended FTP will positively relate to self-leadership.

Results presented in Table 11 indicate that extended FTP has a significant positive relationship with self-leadership (β = .34, p < .001; 95%CI [.262, .418]). This means that the Hypothesis 6 is supported by the data.

5.3.4.7 Hypothesis 7

Hypothesis 7: Extended FTP will positively relate to perceived workplace support.

From Table 1, results showed that extended FTP has a positive significant association with the perceived availability of workplace support (β = .15, p = .011; 95%CI [.052, .238]), lending support to hypothesis 7.

5.3.4.8 Hypothesis 8

Hypothesis 8: Perceived workplace support will positively relate to approach crafting.

Results in Table 11 indicate that perceived workplace support is positively associated with approach crafting (β = .20, p < .001; 95%CI [.124, .271]), implying that the Hypothesis 8 is supported.

5.3.4.9 Hypothesis 9

Hypothesis 9: Self-leadership will have a positive relationship with goal progress.

The results presented in Table 11 show that self-leadership is positively associated with goal progress (β = .21, p < .001; 95%CI [.119, .309]), meaning that Hypothesis 9 is supported by the data.

5.3.3.10 Hypothesis 10

Hypothesis 10: Perceived workplace support will positively relate to goal progress.

Results in Table 11 indicate that perceived workplace support has a significant positive relationship with goal progress (β = .17, p < .001; 95%CI [.080, .249]). Thus, the hypothesis was accepted.

5.3.4.11 Hypothesis 11

Hypothesis 11: Approach goal orientation will mediate the relationship between extended FTP and approach-oriented crafting.

The results presented in Table 11 show that extended FTP has no significant indirect effect on approach crafting via approach goal orientation (β = .02, p = .094; 95%CI [.000, .032]), indicating that hypothesis 11 is not supported. It should be noted that although the confidence interval does not cross zero, the p-value was greater than .05, hence, the hypothesis was rejected.

5.3.4.12 Hypothesis 12

Hypothesis 12: Avoidance goals will mediate the relationship between limited FTP and avoidance crafting.

The results in Table 11 indicate that limited FTP has a significant indirect effect on avoidance crafting through avoidance goal orientation (β = .02, p = .026; 95% CI [.005, .034]). Therefore, Hypothesis 12 is supported by the data.

5.3.4.13 Hypothesis 13

Hypothesis 13: Self-leadership will mediate the relationship between extended FTP and approach crafting.

Based on results obtained from the path analysis (see Table 11), it was observed that self-leadership mediates the relationship between extended FTP and approach crafting (β = .21, p < .001; 95%CI [.119, .309]), lending support to hypothesis 13.

5.3.4.14 Hypothesis 14

Hypothesis 14: Perceived workplace support will mediate the relationship between extended FTP and approach-oriented crafting. Results presented in Table 11, indicate that perceived available support has a significant mediation effect on the relationship between extended FTP and approach crafting (β = .03, p = .018; 95%CI [.009, .048]), thus hypothesis 14 was supported.

5.3.4.15 Hypothesis 15

Hypothesis 15: Approach crafting will mediate the relationship between self-leadership and goal progress. Results presented in Table 11 suggest that approach crafting has a mediation effect on the relationship between self-leadership and goal progress (β = .08, p = .008; 95%CI [.030, .128]), lending support to hypothesis 15.

5.3.4.16 Hypothesis 16

H16: Approach crafting will mediate the relationship between perceived workplace support and goal progress.

Results further show that approach crafting mediates the relationship between workplace support and goal progress (β = .03, p = .021; 95%CI [.010, .057]), implying that the hypothesis 16 is supported by the data.

5.3.5 Observed model

Figure 3 illustrates the observed relationships between study variables in Study 1. The model reveals that limited FTP has significant direct and indirect relationship with avoidance crafting through avoidance goal orientation while extended FTP has only indirect effect on approach crafting through self-leadership and perceived workplace support but not through approach goals, contrary to expectations. Additionally, the relationship between extended FTP and approach goals is not significant, while limited FTP has a significant relationship with avoidance goals. The association between approach goals and approach crafting is also not significant. Self-leadership is significantly associated with both approach and avoidance crafting, whereas perceived workplace support is significantly related only to approach crafting. Avoidance goals are also related to avoidance crafting. Furthermore, approach goal orientation, self-leadership, and perceived workplace support are all associated with goal progress, whereas avoidance goal orientation is not.

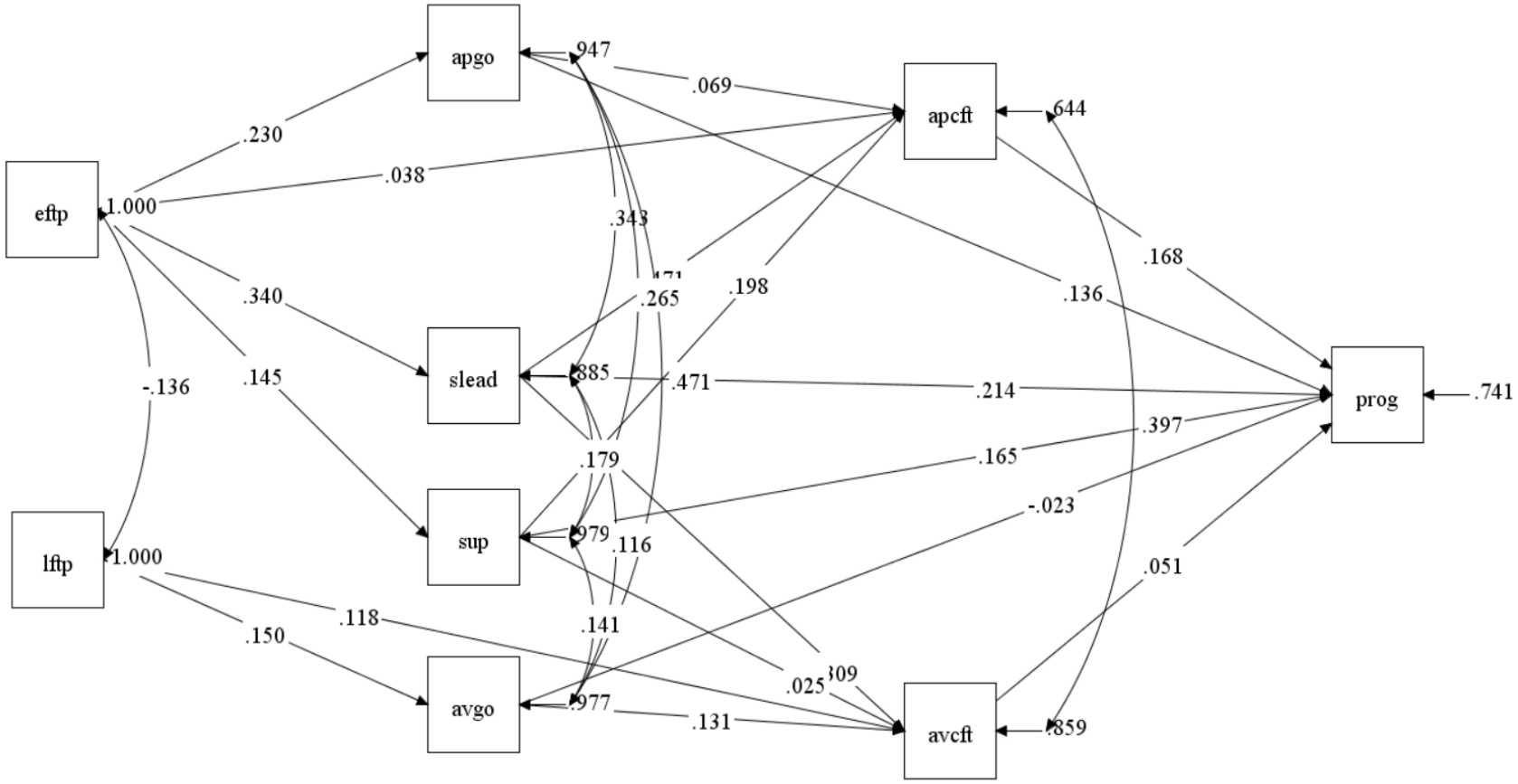

Figure 3: Cross-Sectional Path Diagram Indicating the Structural Relationships Between Study Variables

eftp – extended FTP; lftp – limited FTP; apgo – approach goal orientation; slead – self-leadership; sup – workplace support; avgo – avoidance goal orientation; apcft – approach-oriented crafting; avcft – avoidance-oriented crafting; prog – goal progress

5.4 Discussion Study 1

The primary objective of Study 1 was to investigate the concurrent relationships between dimensions FTP, approach and avoidance goal orientation, and approach and avoidance crafting. Additionally, the study examined the potential mediating roles of goal orientation, self-leadership, and perceived workplace support on the relationship between FTP and job crafting. Furthermore, the present research investigated whether the two forms of job crafting, namely approach and avoidance crafting, are associated with goal progress. In essence, the study sought to explain job crafting as a goal-oriented behaviour, wherein employees engage in it as part of their pursuit of desired future goals.

Based on assumptions of socioemotional selectivity theory (Carstensen *et al.*, 1999), individuals with extended or limited future time perspectives were expected to demonstrate distinct tendencies towards adopting approach and avoidance goals, consequently manifesting in approach and avoidance crafting strategies, respectively. Moreover, personal, and contextual variables such as self-leadership and perceived workplace support were hypothesised to play crucial roles in this process. Specifically, approach and avoidance goals were hypothesised as mediators of the relationship between extended and limited FTP and approach and avoidance crafting, respectively. Self-leadership was also expected to function as a significant mediator in transferring the influence of FTP on job crafting. This expectation was based on the premise that individuals with high levels of self-leadership exhibit a greater capacity to influence their own behaviours and attitudes towards the attainment of self-generated goals and objectives (Houghton and Neck, 2002). Additionally, individuals with an extended FTP were anticipated to be more receptive to workplace support, thereby fostering approach crafting behaviours. Conversely, individuals with a limited FTP were expected to display reduced receptivity to workplace support, thereby potentially predicting avoidance-oriented crafting behaviours. Accordingly, cross-sectional data were gathered from a sample consisting of 402 academics employed in Ghanaian Higher Educational Institutions, primarily situated in the Greater Accra Region. Through thorough analyses and interpretation of the gathered data, the study aims to provide insights into the complexity of the relationships between future time perspective, goal orientation, self-leadership, workplace support, and job crafting behaviours within the academic setting.

5.4.1 Direct Effects

5.4.1.1 Relationship Between FTP and Job Crafting

The findings from the current study indicate that extended FTP has no significant direct relationship with approach crafting, although it has a significant total effect on approach crafting. This finding suggests that although extended FTP is related to approach crafting, the relationship is not direct. Thus, from the present study the no conclusion can be made on whether perceiving one's future time to have longevity, full of possibilities and opportunities has directly influence adopting approach crafting behaviours such as taking on more responsibilities, learning new skills, and increasing social network ties. Limited FTP on the other hand was found to have both direct and indirect relationships (a partial mediational effect) with avoidance crafting, implying that seeing one's occupational future time to be limited (i.e., fewer opportunities and possibilities) is associated with engagement in avoidance crafting behaviours such as reducing tasks, concentrating on developing specific relevant skills and avoiding unproductive relationships at work.

The outcome of the present study contrasts the result of earlier studies (e.g. Kooij, Tims, and Akkermans 2017, Nagy, Johnston, and Hirschi 2019). For example, Kooij et al. (2017) established a positive direct relationship between extended FTP and approach crafting. They argued that employees with extended FTP engaged in approach crafting (increased job resources and challenging demands) to maximise future opportunities over a one-year period. Kooij and colleagues (2017) also found that limited FTP has no significant relationship with avoidance crafting (limiting hindering demands) contrasting the outcome of the present study. Another study by Nagy et al. (2019) also found that subjective age—how old one thinks, feels, and behaves is negatively related to job crafting. Thus, employees who perceive themselves to be subjectively younger (strongly associated with extended FTP) engaged more in job crafting whereas employees who perceive themselves to be subjectively older (associated with limited FTP) engaged less in job crafting. Although subjective age is not the same as FTP, the two concepts are closely related as employees who perceive themselves to be older tend to have limited occupational time remaining as a result of mandatory retirement (Zacher and Frese, 2009). A meta-analytic study found a significant negative correlation (r = -.55) between subjective age and FTP (Rudolph *et al.*, 2018). A limitation of Nagy et al.'s (2019) study is that it did only considered approach job crafting, hence did not examine the relationship between limited FTP and avoidance crafting. Similar to Nagy *et al.* (2019), Zacher and Rudolph (2019)

found direct negative relationship between FTP and job crafting. They explained that employees who possess extended FTP (subjectively younger) directly engaged more in job crafting. They also added that FTP mediates the relationship between subjective age and job crafting where subjective age negatively relates to FTP and FTP positively relates to job crafting.

Based on this discussion, it is concluded in the presented study that though the two dimensions of FTP (extended and limited) are related to approach and avoidance job crafting respectively, the relationship is not always direct. Personal and contextual variables play significant role in explaining this relationship. This supports the argument that individuals who focus on the far future are expected to engage in more approach crafting due to their ability to foresee potential benefits of their present actions enabling them to plan for increased workloads propelling them to have "comfort in taking on new or increasingly complex tasks" (Weisman et al. 2022, p. 164). However, this tendency is influenced by the individual's willingness and motivation to do so.

5.4.1.2 Relationship between FTP and goal orientation

Results of the present study also indicate that extended FTP has a significant positive relationship with approach goal orientation while limited FTP also has positive association with avoidance goal orientations. These findings imply that employees who perceive longevity in their occupational future have a higher tendency to adopt and pursue approach-oriented goals. They will strive to attain mastery over their work tasks and seek to perform better than their colleagues. On the other hand, academics who think they have limited FTP will more likely seek to obtain just the minimum level of acceptable performance and try to avoid not learning relevant skills on their jobs. These findings are similar to that of previous studies who found that students who have extended future time (future-oriented) also possess higher motivation to learn and perform in school as they believe their doing well in school will be beneficial in the future (De Bilde *et al.*, 2011; Phan, 2009; Simons *et al.*, 2004). Though studies on the effect of FTP on goal orientation in the work context is limited, some studies have found that extended FTP is significantly related to learning goal orientation which enhances employees' career success (Kiani *et al.*, 2020). The current study's findings also support Lee et al.'s (2010) assertion that futuristic goals that are similar to an individual's immediate goal orientations have higher intrinsic value in present motivation of the individual which influences the

individual to pursue like valenced goals. In other words, people are more motivated to pursue goals that are aligned with higher order futuristic goals (DeShon and Gillespie, 2005). This finding also aligns with the assumption of the motivated action theory (DeShon and Gillespie, 2005) which explains that goals are hierarchical in nature and achievement – related goals are usually aligned with long-term higher order goals (i.e., purpose or mission).

5.4.1.3 Relationship between FTP and self-leadership

The present study also found that extended FTP is positively related to self-leadership, implying that individuals with extended FTP are more likely to exhibit self-leadership qualities in their daily work activities. This suggests that having an extended FTP (perceiving longevity in one's occupational future, seeing possibilities and opportunities) potentially influences employees to adopt self-leadership behaviours including behavioural and cognitive strategies that makes them take control their work. Thus, possessing extended FTP may lead to an increase in intrinsic motivation providing self-direction to take certain actions towards attainment of the expected goals (Baird *et al.*, 2021). The result is in line with earlier arguments that individuals with extended FTP due to their growth mindedness and higher sense of purpose would be more likely to adopt self-control mechanisms (behavioural and cognitive strategies) to ensure that they stay on track with the pursuit of their future dreams and aspiration (Simons *et al.*, 2004). It also supports the argument that individuals with extended FTP due to their focus on future opportunities can adopt behaviours and mindsets that enables them to pursue their future goals and ambitions (Black *et al.*, 1991; Stewart *et al.*, 2019). The finding also agrees with the assumption that being hopeful about the future increases chances of developing self-leadership qualities such as self-goal setting, action planning and adoption of behaviours that instils self-discipline to remain committed to self-generated goals (Stewart *et al.*, 2011). Finally, this finding is similar to previous studies that found that FTP leads to promotion-focus self-regulation (e.g. Baird et al., 2021). Baird et al. (2021) in their meta-analysis found that (extended) FTP is related to goal setting, goal monitoring, goal operating, and self-regulatory ability: behaviours that were identified by Manz (1986), and Manz and Sims (1980) as important components of self-leadership. Baird et al. (2021) also found present time perspective - being present-hedonistic and present-fatalistic to be negatively related to self-regulatory processes and abilities. It is important to add that though self-regulation and self-leadership are related they are distinct constructs (Bailey *et al.*, 2018).

5.4.1.4 Relationship between FTP and perceived workplace support

The current study also found that extended FTP has a positive relationship with perceived workplace support implying that employees who have extended FTP are also more likely to perceive higher levels of workplace support. This relationship was expected in the present study since employees who have extended FTP are also known to be more optimistic and have positive attitude towards their future (Schmitt *et al.*, 2013), and prioritise relationships that is able to provide instrumental support (Lang and Carstensen, 2002). It is, therefore, expected that having extended FTP will increase employees' openness to workplace support.

While studies that explored the relationship between FTP and perceived workplace support is limited, the current findings are similar to related studies that reported that extended FTP is associated with higher levels of gratitude (Allemand and Hill, 2016), which could foster positive relationships with colleagues and appreciation for workplace support. Research has also shown individuals with extended FTP report more positive emotions increasing their chances of giving and receiving workplace support (Kerry and Embretson, 2018). Similarly, extended FTP has been linked to adaptive and positive approaches to interpersonal interactions, including seeking and providing support in the workplace (Kessler and Staudinger, 2009). On the other hand, employees who have limited FTP tend to be more pessimistic about their future (Kooij *et al.,* 2018), which may also limit their openness to available support at the workplace. In conclusion, these findings suggest that individuals who see possibilities in their future occupational life are also more likely to seek available support to aid them make their possibilities a reality, hence being more receptive to workplace support.

5.4.1.5 Relationship between goal orientation and job crafting

Results of the present study indicates that approach goals have no significant relationship with approach crafting when self-leadership is controlled for, implying that having mastery approach and performance goals alone do not result in approach crafting behaviours. This finding is contrary to the assumption by earlier researchers who theorised job crafting as a goal-oriented behaviour (Bruning and Campion, 2018; Parker *et al.*, 2010). Avoidance goal orientation on the other hand was found to have a positive direct relationship with avoidance crafting in the current study. This finding means that employees who have avoidance goal orientation are more likely to engage in avoidance crafting.

5.4.1.6 Relationship between self-leadership and job crafting

Additionally, the present study found that self-leadership has a positive relationship with both approach and avoidance crafting. This suggests that monitoring one's own behaviour, developing task motivation, and having constructive thought patterns increases the tendency to engage in both approach and avoidance job crafting behaviours such as increasing task complexity, learning new skills, developing new relationships as well as avoiding unhealthy relationships and/or concentrating on only necessary tasks. Thus, self-leadership empowers the individual to stay true to the self and keep doing what one has purposed to do in a given moment. This finding supports the outcome of previous studies (e.g. Liu et al., 2023), which established a positive relationship between self-leadership and job crafting. The finding also agrees with the assertion that self-regulatory practices increase personal autonomy and self-efficacy (Noughabi and Amirian, 2021), which in turn promote job crafting behaviours (Tims *et al.*, 2014). Although self-regulation has been found to theoretically distinct from self-leadership, these two concepts are highly correlated (Bailey *et al.*, 2018). For a detailed discussion on the differences and similarities between self-leadership and self-regulation, see Chapter 2.

5.4.1.7 Relationship between perceived workplace support and job crafting

It was also established in the present study that perceived workplace support is associated with approach crafting indicating that individuals who perceive higher workplace support are also more likely to engage in approach crafting such as task expansion, skills advancement and increasing relational networks within the work environment. This was expected as employees who are supported by their colleagues and the organisation will also possess more resources which will enable them adopt strategies that increases the challenging demands (Wingerden *et al.*, 2018). This result supports the findings of Kim et al. (2018) and Oubibi et al. (2022) which established a positive relationship between perceived workplace support and job crafting among hospitality industry employees and teachers respectively. Receiving both instrumental and emotional support at work have been found to make employees develop trust and autonomy which also empowers them to engage in job crafting to make their jobs meaningful and more rewarding (Slemp *et al.*, 2015).

5.4.1.8 Relationship between job crafting and goal progress.

The present study also examined the relationship between the two forms of job crafting and goal progress. Approach crafting is found to have a positive association with goal progress, implying that employees who engaged in approach crafting also reported having made significant progress with their goal pursuit activities. This is expected as taking on more roles, learning new skills and building relationships are likely to be perceived as significant steps towards goal attainment (Daumiller *et al.*, 2019). In other words, individuals who engage in approach crafting behaviours have the tendency to experience growth and development through their goal pursuit activities. The finding of the present study supports the assertion that job crafting is a means of employees aligning their behaviours with their personal goals and preferences (Tims *et al.*, 2013). Thus, job crafting is a goal-oriented behaviour (Parker *et al.,* 2010; Xin *et al.,* 2021), where individuals optimise their work environment to achieve personal work-related goals (Renkema *et al.*, 2023). Employees engaging in approach crafting also more often review goal progress which has positive impact on their job resources, and self-efficacy (van den Heuvel *et al.*, 2015). These positive effects possibly explain the positive association between approach crafting and goal progress.

Avoidance crafting however was found to have no significant association with goal progress in the present study implying that employees who engage in avoidance crafting are less likely to report making significant progress with their goal pursuit agenda. Though this finding does not support the hypothesis (initial assumption), it is not surprising as this can be attributed to the difference in the construction of avoidance crafting and goal progress. While avoidance crafting is a behaviour aim at limiting number of tasks and reducing workload (Bruning and Campion, 2018), goal progress is usually framed as obtaining something of value (Schmidt and DeShon, 2007), making it difficult to detect or report progress through avoidance crafting. Employees may be unable to relate goal progress with avoidance crafting since they construe progress to be attaining desired states and avoidance crafting which is associated with avoidance goals seem to drive employees towards avoiding or evading undesirable states (Elliot, 1999). Put simply, the discrepancy in the construction of avoidance crafting and goal progress could be a reason why the relationship between avoidance crafting and goal progress is not significant. This differential effect of approach and avoidance crafting on goal progress support that argument that the two crafting orientations are conceptually different and have opposing effects on employee outcomes including engagement and performance (Costantini *et al.*, 2021; Ebert and Bipp, 2021; Lopper *et al.*, 2024).

5.4.2 Indirect effects FTP on job crafting

5.4.2.1 Mediating role of goal orientation on the relationship between FTP and job crafting

Interestingly, the present study also found that although extended FTP is associated with higher levels of approach goal orientation, approach goals do not lead to approach crafting. Thus, the mediating effect of approach goal orientation on the relationship between extended FTP and approach crafting is not significant. This finding contrasts the existing arguments that goal orientation influences job crafting (Bruning and Campion, 2018; Zhang and Parker, 2019). In other words, it emerged from the current findings that approach goal orientation does not automatically result in approach crafting behaviours. Therefore, while it is important though to have learning, mastery, and performance approach goals, it is also necessary to develop strategies and plans on how to pursue these goals.

Avoidance goals, however, were found to mediate the relationship between limited FTP and avoidance crafting in line with the stated hypothesis. This implies that seeing the future to be limited of opportunities may influence employees to adopt avoidance goals such as meeting minimum level of performance and learning only relevant skills which eventually leads to avoidance crafting. Thus, limited FTP has positive relationship with avoidance goals, and avoidance goals in turn leads to avoidance crafting. For instance, previous research has argued that perceiving time to be limited makes individuals pursue avoidance goals to avoid negative judgments of ability (Ballard, Yeo, Neal, *et al.*, 2016). Avoidance goal orientation characterised by a desire to hide lack of competence and prevent negative evaluations (Sommet and Elliot, 2017), potentially leads to avoidance crafting, which involves proactively changing work boundaries to reduce tasks and interactions with others (Lopper *et al.*, 2024). Academics with limited FTP are more likely to strive to meet just the minimum level of acceptable performance and learning only relevant skills within their work domain. These individuals will approach their work by concentrating on only the important tasks and not want to do extra work that will not bring in any significant returns – a rational way of making use of the perceived limited time.

5.4.2.2 Mediating role of self-leadership on the relationship between FTP and job crafting

Furthermore, self-leadership is established as mediator of the relationship between extended FTP and approach crafting in the present study, implying that having an extended FTP is positively related to self-leadership resulting in approach crafting. The present finding is in line

with the hypothesis and the findings of earlier research. Extended FTP is characterised by perception of longevity and possibilities which increases awareness of available opportunities and resources (Lang and Carstensen, 2002), potentially promoting self-leadership behaviours such as self-goal setting, goal planning and behavioural focused strategies including task motivation and natural rewards (Stewart *et al.*, 2019) that results in approach-oriented job crafting. The finding also supports the argument that employees who have a more positive outlook for their future (i.e., optimism, resilience, and hope), and increased control of their work, also engage more in approach crafting (Vogt *et al.*, 2016). Similarly, Bakker et al. (2021) established that daily self-leadership (i.e., self-goal setting, and constructive cognition) facilitates employee proactive performance. Extended FTP, therefore, influences promotion-focus self-regulation (Shah and Higgins, 1997) in the form of self-leadership and approach crafting.

5.4.2.3 Mediating role of perceived workplace support on the relationship between FTP and job crafting

Moreover, the present study also found that perceived workplace support mediates the relationship between extended FTP and approach crafting, meaning that individuals who have extended future also perceive higher workplace support, which promotes approach crafting. This supports the result of earlier studies which argued that people with extended FTP generally have a more positive attitudes towards their future which makes them open to explore opportunities – seeking more support (e.g. Przepiorka and Sobol-Kwapinska, 2021). For example, extended FTP has been associated with higher levels of gratitude (Casu *et al.*, 2020), which potentially fosters positive relationships with colleagues and appreciation for workplace support (Allemand and Hill, 2016; Hill *et al.*, 2023). The type of support provided in the workplace, such as emotional, instrumental, or informational support, can also influence employees' crafting strategies. For example, instrumental support, which involves tangible assistance and resources, can empower employees to approach challenges proactively (Ducharme and Martin, 2000b), hence engaging in approach crafting. Individuals with an extended FTP also tend to prioritize instrumental or knowledge-related goals, which may lead to a focus on growth and development (Lang and Carstensen, 2002), possibly enhancing their perception of workplace support resulting in approach crafting behaviours. In addition, expansive FTP has been linked to adaptive and positive approaches to interpersonal interactions (Kessler and Staudinger, 2009). This positive outlook may influence how individuals perceive

and interact with their work environment, including the support they receive from colleagues and supervisors.

5.4.3 Indirect effect of self-leadership and perceived support on goal progress

5.4.3.1 Mediating role of approach crafting on the relationship between self-leadership goal progress

The present study also established the mediating role of approach crafting on the relationship between self-leadership and goal progress. This finding implies that self-leaders due to their capacity to set challenging goals and the ability to hold themselves accountable towards achievement of such goals possess the ability to adopt behaviours that ensures they attain the level of self-discipline and self-direction that includes proactive job crafting behaviours (Abid *et al.*, 2021; Bakker *et al.*, 2021), potentially resulting in goal progress. Thus, self-leadership qualities including constructive cognition, behavioural focused strategies such as task motivation and natural rewards all increase approach crafting behaviours (Cranmer *et al.*, 2019), which likely results in goal progress. In other words, the ability to decide what to do and develop strategies that enables one to do what was purposed to be done results in adoption of approach crafting behaviours which eventually leads to making steps towards goal attainment. Self-leadership is therefore important in employee proactive behaviour as it enhances employees' ability to put their proactive intentions into practice therefore leading to significant progress made towards goal achievement. The finding agrees with the findings of other studies that examined the effectiveness of self-leadership on employees' motivation and behaviour at work (e.g. Liu et al., 2023).

5.4.3.2 Mediating role of approach crafting on the relationship between workplace support and goal progress

Additionally, the current study reveals that approach crafting mediates the relationship between perceived workplace support and goal progress. This means that employees who perceive the workplace to be supportive are more likely to craft their jobs in ways that helps them make progress on their goal pursuit agendas. Workplace support is therefore crucial to goal progress as the more employee receive support, they become resourceful and empowered to take on more challenges which results in goal progress. Workplace support or the perception of it creates a conducive atmosphere where employees are able to exercise their creativity to pursue

their future desired goals (Mathieu *et al.*, 2019). Through the conservation of resources theory, Mathieu et al. (2019) argued that workplace support is a resource which is useful in achieving work goals by increasing one's ability to deal with challenging demands. The findings of the present study align with Ji's (2022) research, which demonstrated that supervisors' recognition of employees' job crafting efforts enhances employees' motivation to engage in further crafting behaviours. Again, the current finding is similar to that of studies that examined employee creativity and innovative work behaviour which often found that support form coworkers, supervisors and managers is very important in unleashing employee creativity and innovation which results in progress with individual learning and growth (Suseno *et al.*, 2020).

Chapter 6 Study 2

6.0 Introduction

This chapter details the methods, results, and discussion of Study 2, a longitudinal study investigating the relationships between study variables over time. It starts with a description of the participants, research design, procedures, and analytical approach, including an attrition analysis to evaluate potential non-random sampling. The chapter then presents preliminary analyses such as longitudinal confirmatory factor analysis (CFA), measurement invariance testing, and results from hypothesis testing. Finally, it discusses the study's findings in the context of existing literature, highlighting how they align with or differ from previous research.

6.1 Method Study 2

6.1.1 Participants

The sample of the present study consists of 402 academics at T1, 143 at T2 and 122 at T3, indicating high attrition rate (i.e., 34.05% at T2 and 29.05% at T3). To facilitate ease of responding to the survey and reduce response fatigue, demographic data of participants were taken only at T1. Because data for each participant was matched across all three waves, it was possible to analyse and compare the demographic characteristics of participants who took part in all three surveys with the demographic data of the total sample at T1. Results of this analysis are presented in Table 12 below. Although there is high attrition rate, the participants who remained in the study are not significantly different from the total sample at T1. A detailed discussion of the attrition analysis is provided in the results section of this chapter (see the Attrition Analysis section).

6.1.2 Research design

To establish cause-and-effect relationships among study variables, the present study employed a longitudinal survey design, measuring all study variables on three occasions with an average time lag of two months. Ployhart and Vandenberg (2010) defined longitudinal survey as "research emphasizing the study of change and containing at minimum three repeated observations on at least one of the substantive constructs of interest" (p. 97). Longitudinal studies are effective for examining how changes in independent (predictor) variables lead to changes in dependent (outcome) variables over time (Selig and Preacher, 2009). In contrast, cross-sectional designs, which provide a snapshot of variables at a single point in time, can result in flawed conclusions and model inaccuracies due to their inability to account for

temporal changes. Since the variables considered in the present study are subject to change over time, it is essential to measure them repeatedly to detect these changes. Longitudinal designs facilitate this and enable more accurate causal inferences compared to cross-sectional designs (Gollob and Reichardt, 1987). Ployhart and Vandenberg (2010) noted that cross-sectional studies are inadequate for predicting dynamic relationships among variables, often leading to inaccurate conclusions. Consequently, organisational researchers are encouraged to use longitudinal designs to test theories effectively, as most management theories explain how changes in predictor variables influence outcome variables (Dormann and Griffin, 2015; Wang, Beal, et al., 2017; Zapf et al., 1996).

Furthermore, longitudinal studies are better suited for testing mediational hypotheses (indirect effects) because causal relationships take time to manifest (Pitariu and Ployhart, 2010; Selig and Preacher, 2009). To assert that one variable predicts another, the cause must precede the effect temporally, making cross-sectional designs inadequate for such assumptions. Cross-sectional designs also risk encountering endogeneity problems due to the potential omission of key variables, leading to model misspecification (Selig and Preacher, 2009).

To sum up, this study (Study 2) adopted a longitudinal design to enable the testing of causal relationships (Selig and Preacher, 2009). Data from longitudinal studies facilitate both between-group and within-group analyses, aiding in understanding variance over time among and within individuals. The longitudinal design in this study enabled the determination of how variability in FTP and goal orientation influences job crafting behaviour over time. Studying achievement goals and job crafting requires a longitudinal approach, as these variables are highly malleable and likely to change within short periods (DeShon and Gillespie, 2005; Harju *et al.*, 2016; Harju and Tims, 2020; Petrou *et al.*, 2012b; Schmidt and DeShon, 2007).

Table 12:Demographic characteristics of participants who took part in all three surveys.

Variable	Categories	Total sample *N* (%)	Stayers *n (%)*
Gender	Male	227 (56.5%)	77 (63.1%)
	Female	175 (43.5%)	45 (36.9%)
Age	20 – 29 years	107 (26.6%)	43 (35.2%)
	30 – 39 years	119 (29.6%)	32 (26.2%)
	40 – 49 years	105 (26.1%)	26 (21.3%)
	50 – 59 years	47 (11.7%)	12 (9.8%)
	60+ years	24 (6.0%)	9 (7.4%)
Education	Master's	182 (45.3%)	47 (38.5%)
	PhD	185 (46.0%)	58 (47.5%)
	Post-Doc	24 (6.0%)	8 (6.6%)
	Prefer not to answer	11 (2.7%)	9 (7.4%)
Role	Teaching	75 (18.7%)	24 (19.7%)
	Research	68 (16.9%)	23 (18.9%)
	Teaching and Research	257 (63.9%)	75 (61.5%)
	Administration	2 (0.5%)	0 (0.0%)
Rank:	Teaching Assistant	144 (35.8%)	47 (38.5%)
	Assistant Lecturer	63 (15.7%)	13 (10.7%)
	Lecturer	101 (25.1%)	41 (33.6%)
	Senior Lecturer	60 (14.9%)	10 (8.2%)
	Associate Professor	10 (2.5%)	3 (5.7%)
	Professor	24 (6.0%)	8 (6.5%)
Occupational Tenure	0 – 4 years	189 (47.0%)	58 (47.5%)
	5 – 9 years	79 (19.7%)	20 (16.4%)
	10 – 14 years	69 (17.2%)	21 (17.2%)
	15 – 19 years	27 (6.7%)	9 (7.4%)
	20+ years	33 (8.2%)	11 (9.0%)
	Prefer not to answer	5 (1.2%)	3 (2.5%)
Institutional Tenure	0 – 4 years	226 (56.2%)	68 (55.7%)
	5 – 9 years	80 (19.9%)	23 (18.9%)
	10 – 14 years	60 (14.9%)	17 (13.9%)
	15 – 19 years	20 (5.0%)	8 (6.6%)
	20+ years	16 (4.0%)	0 (0.0%)
Sector	Public	324 (80.6%)	106 (86.9%)
	Private	78 (19.4%)	16 (13.1%)

NB; $N = 402$, $n = 122$

6.1.2.1 Number of waves and time lag

One important issue that is considered in designing a longitudinal study is the duration and timing of measurements. Introducing a time lag is the process where an assessment of IVs (at time T1) precedes that of the mediator (at time T2) and the DV (at a later time T3). Although, the researcher is at liberty to choose the number of observations and how frequently to observe variables, practical constraints do not usually permit this. Theory and literature on how frequently variables are likely to change usually guide researchers in determining the time lags between their measurements (Ployhart and Vandenberg, 2010). In terms of the number of repeated measures required in a longitudinal study, researchers generally agree that it is best to have three or more repeated measures in a longitudinal study (Chan, 1998). As well, Ployhart and Vandenberg (2010) argued that having three repeated measurements of a variable is adequate for making causal predictions. Having only two repeated measures in a study is considered inadequate as only one comparison could be made - thus, all changes are linear which does not allow for modelling real change over time (Singer and Willet, 2003). Measurement errors can also have a huge impact on the change, which may lead to inaccurate conclusions (Singer and Willet, 2003).

In terms of duration of time lag, current arguments in literature on the variables in the present study influenced the decision. For instance, longitudinal and diary studies conducted on job crafting have indicated that job crafting is a daily behaviour (e.g. Demerouti et al., 2015; Hetland et al., 2018; Petrou et al., 2012; Tims et al., 2014) and varies from short-term – less than 3 months (e.g. Vogt et al., 2016) to long term - over 3 years (e.g. Harju et al., 2016). Like job crafting, the literature is inconclusive on how frequently goal motivation changes over time as some scholars consider it as an orientation and relatively slow to change (e.g. Payne et al., 2007) and others have considered it as goals that vary within a very short period (e.g. Yeo et al., 2009). Generally, goals are considered hierarchical with the higher-order goals slow to change and lower-order goals very dynamic and changing within short periods of time (DeShon and Gillespie, 2005). Besides, Dormann and Griffin (2015) argued that most of the variables examined in organisational studies are malleable and likely to change with short periods hence they recommended that organisational studies should consider longitudinal designs with short time lags ('shortitudinal' designs). Based on these arguments, the present study aimed to have a 1-month (4 weeks) time lag, though, this was not achieved as respondents took longer than expected to respond to the questionnaire after they were sent the first link to the surveys. Consequently, the average time lag for the present study is 1 to 2 months (i.e., 4 to 8 weeks).

This scenario is in line with Ployhart and Vandenberg's (2010), argument that “one does not have to provide equally spaced repeated measurements…, and sometimes it is even better to have unequal time lags” (p. 104).

6.1.3 Procedure and context

It is important to note that data for Study 1 also served as the first wave of Study 2. As already discussed in Study 1, participants were sent the links to the online questionnaire in addition to an in-person presentation with a hard-copy questionnaire to increase participation in June 2022. Although they were informed that the link to the second wave will be sent in a month after the first wave, many respondents took longer than two weeks to respond to survey at T1. This delayed the start date for the survey at T2 and did not allow all respondents to have an equal time lag. The second wave commenced in late July 2022 and like the first wave, it also took longer than expected. The survey at T3 started in September 2022. The entire study lasted till May 2023. Intermittent strike actions by the lecturers were a key cause for this delay.

As already mentioned, data collection at T1 (first wave) involved participants responding to a questionnaire that contained measures on FTP, goal orientation, self-leadership, job crafting, workplace support and goal progress. Participants were also asked to provide their demographic details including how long they have been working as academics. The purpose of this phase of the data collection was to establish a baseline for all the variables that were considered in the study. The second wave of data collection required participants to respond to a questionnaire that comprised all variables in the study, except the demographics. Demographics were not required since the questionnaire was only sent to participants who had already taken part in the first wave and had at least a 95% completion rate (Mason and Suri, 2012). Although there was an unequal time lag among participants, the study only used responses that were gathered at a time interval of 4 to 8 weeks for the first and second waves. The purpose of this phase is to examine how the variables compare to their initial levels. As the participants are expected to have initiated actions towards the attainment of their goals, it is expected that job crafting, goal motivation and goal progress would have changed. The third and final wave commenced in September 2022 and involved taking data on all variables in the study. This was necessary since there was no consensus on how frequently the variables in the study are likely to change. The purpose and emphasise here was to assess how the variables have changed since the first and second measurements. This will help to understand both within and between-person variability on the study variables. The third wave also assessed goal

progress to find out if job crafting could mediate the relationship between goal orientation and goal progress.

6.1.4 Measures

All instruments used at T1 (described in study 1) were used for all the three surveys. Table 13 provides a summary of the instruments and reliability coefficients for all measures across the three measurement occasions. The alpha values indicate that all measures obtained acceptable reliability coefficients.

Table 13: Measurement instruments and reliabilities for all measurement occasions

Variables	Instrument	No of items	Sample items	T1 α	T2 α	T3 α
Extended FTP	Lang and Carstensen (1996)	7 items	Many opportunities await me in the future	.74	.77	.84
Limited FTP		3 items	There are only limited possibilities in my occupational future	.65	.71	.79
Self-leadership	Houghton *et al.* (2012)	9 items	I make a point to keep track of how well I'm doing at work	.84	.86	.83
Approach Goals	Daumiller *et al.* (2019)	10 items	I want to fulfil the different requirements of my job very well	.79	.82	.73
Avoidance Goals		6 items	I want to avoid being perceived as incompetent	.75	.84	.80
Approach Crafting	Bindl *et al.* (2019)	16 items	I added complexity to my tasks by changing their structure or sequence	.90	.93	.94
Avoidance Crafting		12 items	I tried to simplify some of the tasks that I worked on	.80	.84	.84
Perceived workplace support	Caplan *et al.* (1980)	8 items	My supervisor listens to my personal problems	.86	.83	.82
Goal progress	Judge *et al.*	3 items	I have made significant progress on my goals	.83	.85	.88

6.1.5 Analytical approach

Like Study 1, data analyses in Study 2 were performed by first examining missingness and attrition to ensure participants who remained in the study are not significantly different from those who left the study or to the entire sample which started the study at T1. This helps to reduce response-bias. Detailed discussion on attrition analysis is presented in chapter 5. After the attrition analysis, CFA was performed on each construct to establish their dimensionality and a full longitudinal CFA also performed to assess fitness of the full measurement model, followed by a specification of the structural model. As part of the longitudinal CFA analyses, time invariant tests for all measurement scales were also performed to ensure that study instruments measured same constructs over time and obtained similar results. At least metric invariance was obtained for all variables in the present study. Detailed discussion of the procedure for longitudinal invariance testing is presented in the paragraphs below.

4.5.5.1 Longitudinal Measurement Invariance

Measurement invariance (MI), also referred to as measurement equivalence, is a property of a measurement scale which ensures that it measures the same underlying construct with consistent attributes or structure under varying conditions (Leitgöb *et al.*, 2023; Putnick and Bornstein, 2016). MI testing seeks to address the fundamental question of whether the same construct is measured with the same structure consistently over time or across different groups. It is crucial to distinguish MI from equality of measurement scores, where different groups exhibit similar or identical scores on a construct (Leitgöb *et al.*, 2023). MI guarantees that comparisons can be made across different measurement occasions, as it ensures that the measured construct maintains a consistent structure in every measurement occasion. Conversely, measurement non-invariance implies that a construct exhibits different structural characteristics on different measurement occasions, thereby rendering the comparison of latent means infeasible (Putnick and Bornstein, 2016). Over the years, researchers in psychometrics have established a framework consisting of four hierarchical steps for examining measurement invariance (Leitgöb *et al.*, 2023; Putnick and Bornstein, 2016). These steps are (1) configural invariance - equivalence of model form; (2) metric (weak factorial) invariance - equivalence of factor loadings; (3) scalar (strong factorial) invariance - equivalence of item intercepts or thresholds; and (4) residual (strict) invariance - equivalence of items' residuals or unique variances.

Configural invariance, the first step in MI testing, assesses whether the same set of items (indicators) is employed to measure the same theoretical construct under varying measurement conditions (Leitgöb *et al.*, 2023). It examines whether the same model fits the data well across different measurement conditions, allowing factor loadings to be estimated freely, except for those constrained for model identification (Liu *et al.*, 2017). Therefore, in configural invariance, factor loadings, intercepts, and residual variances take distinct values. However, it is important to note that configural invariance alone does not suffice to establish MI because variations in factor loadings and intercepts can influence the mean scores of latent constructs within the model (Kim *et al.*, 2020). This limitation of configural invariance underscores the necessity to conduct metric and scalar invariance tests.

Metric (weak) invariance, the second step in MI testing, requires that each indicator contributes to the latent construct to a similar extent over time or across different groups (Putnick and Bornstein, 2016). It necessitates that the factor loadings of indicators measuring a latent construct remain the same across different measurement conditions (Luong and Flake, 2022). Metric invariance is verified by constraining the factor loadings to be equivalent across all measurement occasions. The fit of this constrained model is then compared to that of the configural invariance model. If the model fit indices do not significantly reduce (i.e., the chi-square is not significant, and CFI values do not worsen by more than 0.01), metric invariance is established (Leitgöb *et al.,* 2023; Putnick and Bornstein, 2016). Given that chi-square difference testing can be overly stringent and sensitive to sample size, alternative fit criteria (i.e., ΔCFI) may be employed in the assessment of measurement invariance (Putnick and Bornstein, 2016).

Scalar (Strong) Invariance, the third step in MI testing, posits that both factor loadings and item intercepts are equivalent across different comparison groups (Leitgöb *et al.*, 2023). It involves constraining the item intercepts of all indicators to be equivalent across all measurement occasions and subsequently evaluating the fit of this more restricted model in comparison to the metric model. Scalar invariance is established when the model fit does not significantly worsen (i.e., CFI values do not reduce by more than 0.01) (Putnick and Bornstein, 2016).

Although included in the framework, it is important to note that residual invariance is not obligatory when assessing mean differences. This is because residuals, which represent the unique variances associated with each item, do not contribute to the latent factor (Leitgöb *et*

al., 2023). Therefore, many researchers often omit this step in their analyses, aligning with the established practice. In the current study, as with many previous studies, residual invariance was not examined. It is also crucial to emphasise that the omission of residual invariance does not undermine the validity of the measurement invariance testing process, particularly when the primary objective is to assess mean differences across different measurement conditions (Putnick and Bornstein, 2016; Vandenberg and Lance, 2000).

6.2 Study 2 Results

6.2.1 Missing data analysis

Missingness in the dataset was tested using Little's (1988) Missing Completely at Random (MCAR) test. Although the test was not significant at T1 ($\chi2 = 2760.580$, df = 2649, $p > .05$) and T2 ($\chi2 = 752.284$, df = 713, $p > .05$), it was significant at T3 ($\chi2 = 814.423$, df = 733, $p < .05$). This means missingness was not completely at random for the data at T3.

6.2.2 Examination of attrition

An analysis of attrition was carried out following the Goodman and Blum's (1996) procedure. A multiple logistic regression analysis was conducted to investigate the presence of non-random sampling within the dataset. The purpose was to determine whether participants' decision to leave or stay in the study was influenced by the scores of any of the study variables (i.e., FTP, self-leadership, achievement goals, job crafting, workplace support and goal progress) or demographic characteristics (i.e., Age, Sex, Education, Tenure, Rank and Sector of institution) measured at time 1. A binary dummy variable was used as the dependent variable, distinguishing participants who left (coded as 0, participating only in the first survey) from those who stayed (coded as 1, participating in all three surveys). All study variables (measured at time 1) and demographic participant characteristics served as independent variables in the model. The model explained a variation ranging from 15.4% (Cox and Snell R^2) to 21.5% (Nagelkerke R^2) in the outcome variable (i.e., leaving or staying in the study). The results, presented in Table 14, revealed that among all the independent variables considered, only workplace support and participants' rank predicted the likelihood of leaving or staying in the study. Specifically, participants experiencing higher levels of workplace support stayed in the study ($\beta = .521$, $p < .05$), whereas individuals identifying themselves as lecturers (compared to teaching assistants, assistant lecturers, senior lecturers, associate professors, and professors) systematically left the study ($\beta = -1.250$, $p < .05$). Thus, among the various rank categories only

lecturers exhibited a systematic drop-out pattern. In summary, while attrition was observed based on rank (an individual characteristic) and workplace support, participants did not selectively exit the study based on other relevant variables.

Table 14: Summary of logistic regression indicating the likelihood of participants leaving or staying in the study as predicted by study variables and participants' characteristics.

Variables		**B**	**S.E.**	**Wald**	***df***	***p***	**Odd Ratio**
Perceived Workplace Support_T1		.521	.202	6.660	1	.010	1.684
Extended FTP_T1		.154	.214	.520	1	.471	1.167
Limited FTP_T1		.048	.163	.088	1	.767	1.049
Approach Goals_T1		.168	.279	.363	1	.547	1.183
Avoidance Goals_T1		.118	.228	.268	1	.605	1.125
Approach Crafting _T1		-.046	.253	.033	1	.855	.955
Avoidance Crafting_T1		-.138	.228	.365	1	.545	.872
Self-Leadership_T1		-.042	.260	.026	1	.872	.959
Goal Progress_T1		-.031	.036	.747	1	.387	.969
Gender (Male, Female)		-.393	.279	1.988	1	.159	.675
Age	20 – 29 years			6.220	4	.183	
Age (1)	30 – 39 years	-.671	.397	2.849	1	.091	.511
Age (2)	40 – 49 years	-1.039	.503	4.278	1	.039	.354
Age (3)	50 – 59 years	-1.259	.728	2.995	1	.084	.284
Age (4)	60+ years	-.292	.937	.097	1	.756	.747
Education	Master's			6.914	3	.075	
Education (1)	PhD	.450	.307	2.146	1	.143	1.569
Education (2)	Post-Doc	.160	.626	.065	1	.798	1.174
Education (3)	Prefer not to answer	1.968	.862	5.217	1	.022	7.159
Role	Teaching			.270	3	.966	
Role (1)	Research	.198	.444	.200	1	.655	1.219
Role (2)	Teaching and Research	.020	.372	.003	1	.958	1.020
Role (3)	Administration	-20.232	28355.570	.000	1	.999	.000

Rank	Teaching Assistant			14.952	6	.021	
Rank (1)	Assistant Lecturer	-.319	.457	.487	1	.485	.727
Rank (2)	Lecturer	.588	.405	2.110	1	.146	1.800
Rank (3)	Senior Lecturer	-1.250	.597	4.382	1	.036	.286
Rank (4)	Associate Professor	-.531	.963	.305	1	.581	.588
Rank (5)	Professor	.295	1.069	.076	1	.782	1.344
Rank (6)	Emeritus Professor	.599	1.504	.158	1	.691	1.820
Occupational Tenure	0 – 4 years			1.942	5	.857	
Ocu_Tenure (1)	5 – 9 years	-.383	.613	.391	1	.532	.682
Ocu_Tenure (2)	10 – 14 years	.401	.675	.352	1	.553	1.493
Ocu_Tenure (3)	15 – 19 years	.665	1.014	.430	1	.512	1.944
Ocu_Tenure (4)	20+ years	-.180	1.275	.020	1	.888	.836
Ocu_Tenure (5)	Prefer not to answer	.135	1.084	.016	1	.901	1.145
Institutional Tenure	0 – 4 years			2.339	4	.674	
Inst_Tenure (1)	5 – 9 years	.437	.572	.584	1	.445	1.549
Inst_Tenure (2)	10 – 14 years	.213	.664	.103	1	.749	1.237
Inst_Tenure (3)	15 – 19 years	1.119	.972	1.327	1	.249	3.063
Inst_Tenure (4)	20+ years	1.255	1.281	.960	1	.327	3.508
Sector (1)	Public, Private	-.731	.379	3.723	1	.054	.481
Constant		-2.931	1.501	3.813	1	.051	.053

NB: $N = 402$, Role (3) had odd values due to only few participants in that category.

Following the detection of the presence of non-random attrition, the effect of non-random sampling on means of all study variables measured at time was examined (Goodman and Blum, 1996). Specifically, an independent samples t-test was conducted to examine the mean differences between leavers and stayers for all study variables at time 1. Results presented in Table 15 indicates no significant differences between the two groups (i.e., leavers and stayers) for all variables, except for workplace support, where Stayers exhibited a significantly higher mean of workplace support compared to leavers ($t = 3.145$, $p < .05$). Thus, participants who stayed in the study reported higher levels of workplace support in comparison to those who left the study.

Table 15: Summary of t-test results indicating mean differences between participants who left and stayed in the study.

Variables		**N**	**M**	**SD**	***t***	***df***	***p***
Perceived workplace Support	Leavers	275	3.750	.797	-3.145	394	.002
	Stayers	121	4.000	.613			
Extended FTP	Leavers	280	3.769	.671	-1.433	400	.153
	Stayers	122	3.876	.727			
Limited FTP	Leavers	278	2.953	.871	.237	397	.813
	Stayers	121	2.931	.825			
Approach goals	Leavers	276	3.907	.635	-1.726	395	.085
	Stayers	121	4.023	.571			
Avoidance goals	Leavers	269	3.649	.691	-1.305	383	.193
	Stayers	116	3.573	.778			
Approach crafting	Leavers	269	3.370	.693	-.914	387	.361
	Stayers	120	3.441	.739			
Avoidance Crafting	Leavers	267	2.912	.686	.133	386	.894
	Stayers	121	2.902	.717			
Self-leadership	Leavers	275	3.730	.703	-1.113	395	.266
	Stayers	122	3.810	.637			
Goal progress	Leavers	280	21.020	4.228	.299	400	.765
	Stayers	122	20.890	3.740			

After comparing mean differences between Leavers and Stayers, the differences between variances of the population of participants (sample at time 1) and the sample of participants at

time 3 (Stayers) were tested (Goodman & Blum, 1996). Put differently, the Chi-square distribution test for single variance was used to verify whether the distribution of sample variance (variance of stayers) was significantly different from the population variance (variance of the total sample at time 1). Since SPSS does not directly conduct this test on its menu, the test was conducted using an online calculator (Chi-square Test for Variance Calculator - VrcAcademy) with the formulae $\chi^2 = \frac{(n-1)s^2}{\sigma^2}$, where χ^2 is the Chi-square observed value, n is the sample size (number of stayers), s is the sample variance and σ is the population variance (VrcAcademy, 2023). The test was conducted after computing for the descriptive statistics (mean, standard deviations, and variances) for stayers and the population of participants at time 1. At a 95% confidence interval on a two-tailed test (alpha level of .05), the values of calculated χ^2 were compared with the χ^2 critical derived from the Chi-square distribution table (with their corresponding degrees of freedom) and the p-values obtained.

Results displayed in Table 16 indicated no significant difference in the variance for all study variables (i.e., $p > .05$ for all χ^2 observed values). Since no significant difference in variances was observed between the total sample at T1 and the sample at T3, the effect of non-random sampling on relationships between variables was not tested in the present study. This aligns with Goodman and Blum's (1996) assertion that "steps 2 to 4 are only necessary when the presence of non-random sampling is observed" (p. 635). Previous studies, such as Russell et al. (2021), used only two steps from Goodman and Blum (1996) when no issue of non-random sampling was identified in the first two steps.

Table 16: Summary of Chi-Square single variance test results indicating differences in variance of the total sample (whole sample for the first survey) and final sample (sample for all three surveys).

Variables		N	*M*	SD *(Variance)*	χ^2	*df*	*p*
Perceived Support	Whole sample	402	3.821	.760 *(.557)*	79.491	121	.999
	Stayers	122	4.011	.616 *(.379)*			
Extended FTP	Whole sample	402	3.798	.687 *(.471)*	135.500	121	.610
	Stayers	122	3.876	.727 *(.528)*			
Limited FTP	Whole sample	402	2.854	.857 *(.725)*	112.405	121	.610
	Stayers	122	2.924	.826 *(.683)*			
Approach goals	Whole sample	397	3.959	.560 *(.359)*	112.825	120	.666
	Stayers	121	4.036	.543 *(.295)*			
Avoidance goals	Whole sample	401	3.614	.756 *(.572)*	146.199	121	.059
	Stayers	122	3.667	.831 *(.690)*			
Approach crafting	Whole sample	395	3.385	.714 *(.510)*	133.467	120	.189
	Stayers	121	3.427	.753 *(.566)*			
Avoidance Crafting	Whole sample	392	2.903	.670 *(.484)*	140.900	121	.104
	Stayers	122	2.891	.723 *(.523)*			
Self-leadership	Whole sample	397	3.753	.684 *(.468)*	104.943	121	.851
	Stayers	122	3.810	.637 *(.405)*			
Goal progress	Whole sample	402	3.973	.789 *(.622)*	105.576	121	.840
	Stayers	122	3.989	.737 *(.543)*			

6.2.3 Longitudinal confirmatory factor analyses

Before testing the longitudinal measurement invariance, the CFA of individual variables was performed to ascertain whether all items retained at time 1 loaded significantly on their respective latent factors across all three waves. The tables below indicate that all items loaded significantly across time on the hypothesised factor models fitting the data adequately.

6.2.3.1 FTP

Results of the CFA presented in Table 5 indicate that all items loaded significantly on their respective latent factors at all three measurement occasions ($p < .01$). Results presented in Table 14 show that the model fits the data well across all three measurement occasions **T1** ($\chi 2$ (df) = 44.722 (24), p < .01; RMSEA = .046; CFI = .972; TLI = .958; SRMR=.044), **T2** ($\chi 2$ (df) = 28.765 (20), p > .05; RMSEA = .055; CFI = .970; TLI = .946; SRMR=.056), and **T3** ($\chi 2$ (df) = 23.047 (23), p > .05; RMSEA = .035; CFI = .992; TLI = .986; SRMR=.039). It is important to add that item 10 deleted in study 1 was excluded from subsequent waves.

Table 17: Standardised Coefficients of CFA of Future Time Perspective

Items	**Opportunities**			**Extension**			**Limitation**		
items	**T1**	**T2**	**T3**	**T1**	**T2**	**T3**	**T1**	**T2**	**T3**
FTP1	.855	.746	.837						
FTP2	.813	.714	.733						
FTP3	.816	.681	.689						
FTP4	.678	.631	.693						
FTP5				.491	.695	.699			
FTP6				.478	.695	.857			
FTP7				.389	.542	.591			
FTP8							.650	1.049	.845
FTP9							.687	.638	.878

6.2.3.2 Self-Leadership

All items of the self-leadership scale underwent CFA at each measurement occasion. Results presented in Table 6 indicate that all items loaded significantly on their respective latent factors ($p < .01$). The fit indices also indicate that the model fits the data well at **T1** ($\chi 2$ (df) = 53.225 (24), $p < .01$; RMSEA = .055; CFI = .970; TLI = .955; SRMR=.042), at **T2** ($\chi 2$ (df)= 30.770 (24), $p > .05$; RMSEA = .044; CFI = .982; TLI = .973; SRMR=.051), and at **T3** ($\chi 2$ (df) = 31.491 (23), $p > .05$; RMSEA = .055; CFI = .968; TLI = .949; SRMR=.055).

Table 18: Standardised Coefficients of CFA of Self-Leadership

Items	**Behaviour awareness**			**Task Motivation**			**Constructive Cognition**		
items	**T1**	**T2**	**T3**	**T1**	**T2**	**T3**	**T1**	**T2**	**T3**
SL1	.781	.877	.791						
SL2	.799	.855	.810						
SL3	.769	.789	.725						
SL4									
SL5				.755	.746	.688			
SL5				.639	.565	.408			
SL6				.392	.572	.579			
SL7							.746	.820	.702
SL8							.753	.784	.837
SL9							.736	.743	.718

6.2.3.3 Goal orientation

Like the other constructs, a CFA was performed on the goal orientation scale. Results presented in Table 19 showed that all the items retained at T1 significantly loaded onto their respective components of the four-factor goals construct across all measurement occasions ($p < .01$). Fit indices also showed that the model fits the data well across all three waves (**T1:** $\chi 2$ (df) = 99.785 (66), p < .05, RMSEA = .036; CFI = .980; TLI = .972; SRMR=.038; **T2:** $\chi 2$ (df)= 92.625 (65), p < .05; RMSEA = .055; CFI = .963; TLI = .948; SRMR=.062; **T3:** ($\chi 2$ (df) = 102.099 (69), p < .05; RMSEA = .062; CFI = .947; TLI = .930; SRMR=.060). It is crucial to add that modification indices were applied by correlating the residual variances of items 1, 2, and 4, and deleting items 11 and 16 due to high cross-loading values. The fit indices without the just mentioned modification indices are **T1** (**:** $\chi 2$ (df) = 322.839 (93), p < .01, RMSEA = .078; CFI = .881; TLI = .846; SRMR=.081; **T2:** $\chi 2$ (df)= 155.380 (92), p < .01; RMSEA = .069; CFI = .930; TLI = .908; SRMR=.064; **T3:** ($\chi 2$ (df) = 253.122 (96), p < .01; RMSEA = .115; CFI = .789; TLI = .737; SRMR=.100).

Table 19: Standardised Coefficients of CFA of Achievement Goals

Items	Mastery			Performance Approach			Relationship			Performance Avoidance		
items	**T1**	**T2**	**T3**	**T1**	**T2**	**T3**	**T1**	**T2**	**T3**	**T1**	**T2**	**T3**
GO1	.642	.659	.723									
GO2	.686	1.010	.907									
GO3	.806	.406	.717									
GO4	.805	.727	.720									
GO5				.683	.859	.823						
GO6				.809	.603	.762						
GO7				.707	.947	.557						
GO8				.478	.544	.440						
GO9							.766	.870	.764			
GO10							.724	.861	.751			
GO12										.735	.972	.831
GO13										.838	.690	.954
GO14										.803	.628	.814
GO15										.467	.426	.610

6.2.3.4 Job crafting.

As with the other scales, a CFA was performed to establish the dimensionality of the job crafting in the present study across all three measurement occasions. Results presented in Table 20 showed that all items retained at T1 loaded significantly on their respective components ($p < .01$). Also, the fit indices indicate that the model fits the data well across all three measurement occasions (**T1:** $\chi 2$ (df) = 303.595 (198), $p < .01$, RMSEA = .036; CFI = .966; TLI = .956; SRMR=.042; **T2:** $\chi 2$ (df) = 277.032 (198), $p < .01$, RMSEA = .053; CFI = .953; TLI = .940; SRMR=.054; **T3:** $\chi 2$ (df) = 258.762 (198), $p < .01$, RMSEA = .050; CFI = .960; TLI = .950; SRMR=.056).

Table 20: Standardised Coefficients of CFA of Job Crafting

Items	Ap_Rel			Ap_Skill			Ap_Task			Ap_Cognitive			Av_Rel			Av_Skill			Av_Task			Av_Cognitive		
Items	T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3
JC1	.714	.773	.789																					
JC2	.806	.839	.915																					
JC3	.801	.852	.874																					
JC4	.721	.785	.884																					
JC5				.816	.870	.750																		
JC6				.772	.833	.849																		
JC7				.777	.886	.793																		
JC8				.734	.805	.749																		
JC10							.851	.824	.817															
JC11							.502	.724	.676															
JC12							.747	.758	.792															
JC14										.805	.861	.826												
JC15										.827	.805	.825												
JC16										.768	.793	.763												
JC17													.548	.695	.711									
JC18													.761	.855	.887									
JC19													.757	.666	.766									
JC21																.611	.840	.717						
JC22																.759	.788	.872						
JC24																			.752	.764	.713			
JC25																			.774	.676	.826			
JC26																						.692	.777	.779
JC28																						.550	.654	.598

6.2.3.5 Workplace support

Results of the CFA of perceived workplace support at all three measurement occasions revealed that all items (see standardised factor loadings presented in Table 21) are significant indicators of their respective latent factors ($p < .01$). Results further showed that the model fits the data well across all measurement occasions (**T1:** ($\chi 2$ (df)= 23.992 (15), p > .05; RMSEA = .039; CFI = .990; TLI = .981; SRMR = .027; **T2:** $\chi 2$ (df) = 7 (15), p > .05, RMSEA = .000; CFI = 1.000; TLI = 1.000; SRMR= .030; **T3:** $\chi 2$ (df) = 20.676 (15), p > .05; RMSEA = .055; CFI = .968; TLI = .940; SRMR=.053).

Table 21: Standardised Coefficients of CFA of Workplace Support

Items	**Emotional Support**			**Instrumental Support**		
items	**T1**	**T2**	**T3**	**T1**	**T2**	**T3**
Sup1	.674	.673	.600			
Sup2	.692	.540	.523			
Sup3	.817	.832	.875			
Sup4	.828	.848	.722			
Sup5				.557	.626	.450
Sup6				.637	.488	.522
Sup7				.759	.870	.888
Sup8				.733	.727	.578

6.2.3.6 Goal progress

It was observed from the longitudinal CFA that all items of goal progress scale significantly loaded on the single factor ($p < .001$). The model was just identified since there are only three indicators, and the scale has only one dimension ($df = 0$), hence fit indices were not generated. Results are presented in Table 22 below.

Table 22: Standardised Coefficients of CFA of Goal Progress

Items	**Factor loadings**		
items	**T1**	**T2**	**T3**
Progress 1	.767	.804	.877
Progress 2	.912	.971	.873
Progress 3	.708	.663	.772

6.2.4 Longitudinal full measurement model

As in Study 1, a full measurement model (CFA) was tested, using independent variables from T1, mediating variables from T2, and dependent variables from T3. Specifically, items for extended FTP and limited FTP were drawn from T1. Items for approach goals, avoidance goals, self-leadership, and perceived workplace support were selected from T2. Items for approach and avoidance crafting, as well as goal progress, were chosen from T3. These manifest variables were grouped into parcels following the procedure outlined in the Analysis section. However, limited FTP, which originally had only three items, had one item deleted due to low factor loading, leaving two items as indicators.

Consistent with the findings of Study 1, the nine-factor model demonstrated superior fit indices (χ^2 = 417.377, df = 289, p < .01; RMSEA = .033, 90% CI [.026, .040]; CFI = .949; TLI = .938; SRMR = .060) compared to alternative models. These included a one-factor model (χ^2 = 1948.661, df = 324, p < .01; RMSEA = .122, 90% CI [.107, .116]; CFI = .350; TLI = .295; SRMR = .206), a four-factor model (χ^2 = 1420.422, df = 318, p < .01; CFI = .559; TLI = .513; RMSEA = .093, 90% CI [.088, .098]; SRMR = .149), a five-factor model (χ^2 = 1308.240, df = 315, p < .01; RMSEA = .089, 90% CI [.084, .094]; CFI = .602; TLI = .557; SRMR = .161), and a six-factor model (χ^2 = 836.833, df = 309, p < .01; RMSEA = .065, 90% CI [.060, .071]; CFI = .789; TLI = .760; SRMR = .114). The results of the standardised coefficients for the factor loadings of all parcelled indicators are presented in Table 23.

Table 23: Standardised Coefficient for Longitudinal Confirmatory Factor Analysis of the Full Measurement Model using Parcelled Items

Parcelled Items	EFTPt1	LFTPt1	SLt2	ApGOt2	AvGOt2	WSt2	ApCft3	AvCft3	Progt3
FTPp1_T1	.741								
FTPp2_T1	.712								
FTPp3_T1	.815								
FTP8_T1		.834							
FTP9_T1		.545							
SLp1_T2			.917						
SLp2_T2			.844						
SLp3_T2			.853						
ApGp1_T2				.699					
ApGp2_T2				.891					
ApGp3_T2				.827					
AvGp1_T2					.724				
AvGp2_T2					.928				
AvGp3_T2					.880				
WSp1_T2						.942			
WSp2_T2						.658			
WSp3_T2						.841			
ApCtp1_T3							.884		
ApCtp2_T3							.931		
ApCtp3_T3							.934		
ApCtp4_T3							.941		
AvCtp1_T3								.835	
AvCtp2_T3								.839	
AvCtp3_T3								.876	
GP1_T3									.855
GP2_T3									.892
GP3_T3									.797

$\chi 2 = 417.377$*, df = 289; RMSEA = .033, 90%CI [.026, .040]; CFI = .949; TLI = .938; SRMR = .060; FTP – future time perspective; SL – self-leadership; ApG – Approach Goals; AvG – Avoidance Goals; ApCft – Approach Crafting; AvCft – Avoidance Crafting; Prog – Goal Progress

6.2.5 Longitudinal measurement invariance analysis

The analysis of the longitudinal invariance (Table 21 and 22) supported the generalisability of the measurement scales across the three time points (Steinmetz, 2013). Specifically, configural and metric invariance were fully achieved for all variables expect for achievement goals which was borderline) when using change in CFI (ΔCFI < .01). Change in CFI is widely used as $\Delta\chi 2$ is considered very stringent and overly sensitive to sample size (Meade *et al.,* 2008; Putnick and Bornstein, 2016). Apart from FTP and self-leadership, scalar invariance was also achieved for all other measures in the present study considering change in CFI (ΔCFI < .01). Despite that configural and metric invariance were observed, it must be noted that the fit indices were acceptable but not very good. From this, it can be argued that at least metric invariance was attained for all study constructs.[1]

[1] Although establishing measurement invariance is a prerequisite for the use of latent variables in autoregression modelling (Little *et al.,* 2013), obtaining configural and metric invariance are sufficient for modelling relationships between latent constructs (Zhang and Yang, 2020). Since the present study is only interested in testing the direct and indirect effects of variables measured over time with the same indicators, the mean structure of the various latent constructs is not relevant hence scalar invariance violation is not an issue of concern (Zhang and Yang, 2020), unlike growth models where the interest is on means and variances of latent constructs/factors (e.g., Liang et al., 2018). In autoregression models, structural paths denote the relationships between theoretically defined constructs over time, hence it is important to obtain metric (weak) factorial invariance to ensure accurate estimates and inferences regarding growth parameters and structural path coefficients (Zhang and Yang, 2020).

Table 24: Summary of longitudinal invariance of study variables

Model	$\chi 2(df)$	CFI	RMSEA	SRMR	$\Delta\chi 2$ (Δ *df*)	ΔCFI	ΔRMSEA	ΔSRMR	Decision
Future Time Perspective									
Configural	469.067 (276)	.910	.042	.074	-	-	-	-	-
Metric	477.712 (288)	.912	.040	.077	8.646 (12)	.002	.002	.003	Accept
Scalar	540.839 (300)	.888	.045	.081	63.126* (12)	.024	.005	.004	Reject
Self-leadership									
Configural	552.704 (285)	.899	.048	.073	-	-	-	-	-
Metric	563.468 (297)	.899	.047	.076	10.764 (12)	.000	.001	.003	Accept
Scalar	673.279 (309)	.862	.054	.079	109.811*(12)	.037	.007	.003	Reject
Achievement goals									
Configural	1255.357** (729)	.885	.042	.077	-	-	-	-	-
Metric	1326.876** (749)	.874	.044	.086	71.519* (20)	.011	.002	.009	Reject
Scalar	1356.122 (769)	.872	.044	.089	29.247 (20)	.002	.000	.003	Accept

Table 24: Summary of longitudinal invariance of study variables (continued)

Model	$\chi 2(df)$	CFI	RMSEA	SRMR	$\Delta\chi 2$ (Δ df)	ΔCFI	ΔRMSEA	ΔSRMR	Decision
Job crafting									
Configural	3176.858 (1989)	.870	.039	.069	-	-	-	-	-
Metric	3200.538 (2019)	.870	.038	.070	23.68 (30)	.000	.001	.001	Accept
Scalar	3282.795 (2049)	.865	.039	.071	82.257* (30)	.005	.001	.001	Accept
Workplace support									
Configural	476.951** (225)	.908	.053	.089	-	-	-	-	-
Metric	501.338** (237)	.903	.053	.103	24.387* (12)	.005	.000	.014	Accept
Scalar	512.474** (249)	.903	.051	.108	11.137 (12)	.000	.002	.005	Accept
Goal progress									
Configural	64.387** (24)	.961	.065	.058	-	-	-	-	-
Metric	72.018** (28)	.957	.063	.084	7.632 (4)	.004	.002	.026	Accept
Scalar	74.419** (32)	.959	.057	.090	2.401 (4)	.002	.006	.006	Accept

6.2.6 Descriptive statistics

The table below presents the descriptive statistics and reliability coefficients of all study variables in study 2. As can be seen all measures were reliable as the alpha values are all greater than .70 (Field, 2017).

Table 25: Descriptive statistics for all variables in the longitudinal model

Variables	*N*	*M*	*SD*	*α*
Extended FTP_t1	402	3.7982	.68655	.70
Extended FTP_t2	142	3.9205	.70961	.77
Extended FTP_t3	124	3.8986	.73473	.84
Limited FTP_t1	402	2.8470	.98028	.65
Limited FTP_t2	143	3.1154	1.13939	.71
Limited FTP_t3	124	3.0887	1.05354	.79
Approach Goals_t1	397	3.9730	.58793	.80
Approach Goals_t2	141	3.8028	.66836	.82
Approach Goals_t3	124	3.9782	.53046	.73
Avoidance Goals_t1	401	3.5333	.82082	.76
Avoidance Goals_t2	141	3.4527	.97332	.84
Avoidance Goals_t3	122	3.5205	.80248	.80
Self-leadership_t1	397	3.7523	.68384	.83
Self-leadership_t2	142	3.7559	.69587	.86
Self_leadership_t3	124	3.9104	.59146	.83
Workplace support_t1	402	3.8206	.75967	.87
Workplace support_t2	140	4.0375	.63520	.83
Workplace support_t3	124	4.0302	.63144	.82
Approach crafting_t1	395	3.3851	.71397	.89
Approach crafting_t2	142	3.5062	.78502	.93
Approach crafting_t3	124	3.4914	.78510	.94
Avoidance crafting_t1	394	2.8895	.67043	.79
Avoidance crafting_t2	142	2.9499	.67897	.84
Avoidance crafting_t3	124	2.9982	.71322	.84
Goal progress_t1	402	3.9726	.78858	.85
Goal progress_t2	141	4.0307	.77960	.85
Goal progress_t3	124	4.0081	.77619	.88

Table 26: Intercorrelations between study variables

	1	2	3	4	4	6	7	8	9	10
1. Extended FTP_t1	-									
2. Extended FTP_t2	.456**	-								
3. Extended FTP_t3	.381**	.521**	-							
4. Limited FTP_t1	-.142**	.008	.064	-						
5. Limited FTP_t2	.002	-.039	-.268**	.082	-					
6. Limited FTP_t3	-.055	-.242**	-.273**	.160	.459**	-				
7. Approach Goals_t1	.276**	.399**	.205**	-.006	.056	-.028	-			
8. Approach goals_t2	.344**	.417**	.248**	-.024	.171*	-.036	.345**	-		
9. Approach goals_t3	.194*	.193*	.364**	.026	.163	.028	.316**	.418**	-	
10. Avoidance goals_t1	.110*	.148	.180*	.211**	.032	.053	.473**	.197*	.220*	-
11. Avoidance goals_t2	.109	.115	-.015	.104	.241**	.013	.193*	.498**	.174	.429**
12. Avoidance goals_t3	.092	.118	.154	.176	.203*	.317**	.245**	.245**	.403**	.429**
13. Self-leadership_t1	.343**	.284**	.214*	-.030	.010	.023	.401**	.188*	.137	.147**
14. Self-leadership_t2	.293**	.447**	.205*	-.075	.098	-.026	.348**	.376**	.101	.133
15. Self-leadership_t3	.254**	.338**	.574**	.042	-.029	-.115	.296**	.221*	.372**	.195*
16. Workplace support_t1	.158**	.160	.080	.005	-.025	.039	.299**	.112	.021	.157*
17. Workplace support_t2	.119	.172*	.122	.082	.039	.209**	.106	.248**	.012	.124
18. Workplace support_t3	.077	.094	.282**	.049	.031	.046	.061	.169	.238**	.021
19. Approach crafting_t1	.251**	.298**.	.307**	.067	.011	.050	.358**	.333**	.211**	.204**
20. Approach crafting_t2	.232**	.297**	.254**	-.018	.120	.079	.291**	.459**	.225**	.182*
21. Approach crafting_t3	.257**	.245**	.253**	.073	-.017	.014	.239**	.339**	.345**	.153
22. Avoidance crafting_t1	.110*	.132	.132	.168**	.032	.145	.244**	.305**	.025	.295**
23. Avoidance crafting_t2	.107	.145	-.007	.128	.184*	.109	.147	.366**	-.037	.261**
24. Avoidance crafting_t3	.081	.111	.158	.149	.142	.235**	.262**	.115	.058	.358**
25. Goal progress_t1	.135**	.219**	.005	-.046	.050	-.086	.338**	.239**	.093	.155**
26. Goal Progress_t2	.090	.223**	.091	.000	-.063	-.075	.207**	.269**	.131	.163
27. Goal progress_t3	.108	.215**	.339**	-.060	.082	-.022	.108	.267**	.354**	.045

Table 26: Intercorrelation between study variables (continued)

	11	12	13	14	15	16	17	18	19	20	21
10. Avoidance goals_t1	-	-									
11. Avoidance goals_t2	.280**	.016	-								
12. Avoidance goals_t3	-.023	.098	.589**	-							
13. Self-leadership_t1	.022	.099	.509**	.437**	-						
14. Self-leadership_t2	-.048	.067	.221**	.165	.014	-					
15. Self-leadership_t3	-.004	.169	.155	.149	.158	.542**	-				
16. Workplace support_t1	.102	.138	.193*	.174	.203*	.517**	.513**	-			
17. Workplace support_t2	-.068	.238**	.560**	.417**	.417**	.333**	.259**	.245**	-		
18. Workplace support_t3	.174*	.209**	.429**	.447**	.344**	.234**	.308**	.331**	.728**	-	
19. Approach crafting_t1	.157	.244**	.430**	.386**	.537**	.303**	.298**	.472**	.697**	.726**	-
20. Approach crafting_t2	-.007	.201*	.325**	.240**	.256**	.116*	.162	.093	.504**	.346**	.268**
21. Approach crafting_t3	.288**	.195*	.238**	.291**	.127	.157	.142	.068	.435**	.493**	.248**
22. Avoidance crafting_t1	.332**	.453**	.235**	.260**	.274**	.131	.172	.073	.378**	.361**	.360**
23. Avoidance crafting_t2	.121	.081	.420**	.442**	.148	.309**	.147	.075	.418**	.377**	.332**
24. Avoidance crafting_t3	.026	.132	.310**	.377**	.226**	.201*	.261**	.166	.488**	.541**	.497**
25. Goal progress_t1	.083	.114	.284**	.347**	.465**	.080	.127	.421**	.247**	.363**	.557**

Table 26: Intercorrelation among study variables (continued)

	21	22	23	24	25	26	27
21. Approach crafting_t3	-						
22. Avoidance crafting_t1	.268**	-					
23. Avoidance crafting_t2	.248**	.617**	-				
24. Avoidance crafting_t3	.360**	.530**	.494**	-			
25. Goal progress_t1	.332**	.266**	.285**	.278**	-		
26. Goal progress_t2	.497**	.235**	.288**	.307**	.633**	-	
27. Goal progress_t3	.557**	.181*	.105	.231**	.404**	.475**	-

** $p < .01$; * $p < .05$ [two-tailed].

6.2.7 Hypotheses testing

Study 2 employed longitudinal data analysis, utilising both time-lagged models with no autoregression (omitting control for previous levels of dependent variables) and autoregression path models (including control for previous levels of dependent variables). Independent variables (i.e., extended FTP and limited FTP) at time point T1 were used to predict mediating variables (i.e., goal orientation, self-leadership, and perceived workplace support) at T2, as well as dependent variables (i.e., job crafting and goal progress) at T3. This analysis sought to investigate the temporal stability of relationships established in Study 1. It must be added that both fully saturated (partial mediation) and hypothesised (full mediation) models were tested.

The fully saturated models were compared to nested (hypothesised) models using the Satorra-Bentler Scaled Chi-square Difference test since the MLR estimator was used in estimating the models (Satorra and Bentler, 2010). No significant differences were found for both the time-lagged without autoregression model ($\Delta\chi2 = 11.749$, $\Delta df = 10$, $p > .05$) and the time-lagged autoregression model ($\Delta\chi2 = 45.153$, $\Delta df = 36$, $p > .05$), employing the MLR estimation method. Fit indices for the hypothesised time-lagged without autoregression model were slightly superior with the MLR estimator (CFI = .989; TLI = .961; RMSEA = .021; SRMR = .039) compared to the ML estimator with 1000 bootstraps (CFI = .984; TLI = .942; RMSEA = .027; SRMR = .039). Fit indices for the time-lagged hypothesised autoregression model were, however, similar for both MLR estimation (CFI = .982; TLI = .947; RMSEA = .042; SRMR = .049) and ML estimation with 1000 bootstraps (CFI = .982; TLI = .948; RMSEA = .044; SRMR = .049).

Standardised path coefficients for the time-lagged without autoregression and time-lagged autoregression models can be found in Tables 27 and 28, respectively. It is crucial to note that hypotheses were considered confirmed only when path coefficients achieved significance in the time-lagged autoregression model. Thus, if a variable in previous waves predicted other variables in subsequent waves, controlling for the effect of the previous level of the dependent variables, there is sufficient evidence to conclude that the independent variable serves as a significant predictor of the dependent variables in the model (see Table 27 and Table 28 for details).

Time-Lagged Without Autoregression

Table 27: Standardised regression coefficients of the longitudinal effects of FTP and goal orientation on job crafting and goal progress with controlling for previous levels of each outcome construct.

EFFECTS			**β**	***SE***	**95% CI**			***p***
Direct					***LL***	-	***UL***	
Approach crafting_t3	→	goal progress_t3	.450	.092	.299	-	.601	.000
Avoidance crafting_t3	→	goal progress_t3	.066	.074	-.055	-	.187	.372
Approach goals_t2	→	goal progress_t3	.186	091	.037	-	.335	.040
Avoidance goals_t2	→	goal progress_t3	-.199	.082	-.334	-	-.063	.016
Self-leadership_t2	→	goal progress_t3	.094	.097	-.065	-	.253	.332
Support_t2	→	goal progress_t3	-.089	.085	-.228	-	.051	.297
Approach goals_t2	→	approach crafting_t3	.162	.087	.019	-	.305	.062
Self-leadership_t2	→	approach crafting_t3	.279	.093	.126	-	.432	.003
Extended FTP_t1	→	approach crafting_t3	.062	.079	-.068	-	.192	.435
Support_t2	→	approach crafting_t3	.229	.085	.088	-	.369	.007
Avoidance goals_t2	→	avoidance crafting_t3	.094	.088	-.050	-	.238	.283
Self-leadership_t2	→	avoidance crafting_t3	.249	.078	.120	-	.377	.001
Workplace Support_t2	→	avoidance crafting_t3	.115	.085	-.025	-	.256	.177
Limited FTP_t1	→	avoidance crafting_t3	.118	.089	-.027	-	.264	.181
Extended FTP_t1	→	approach goals_t2	.288	.073	.167	-	.408	.000
Limited FTP_t1	→	avoidance goals_t2	.010	.076	-.114	-	.135	.891

Extended FTP_t1	→	self-leadership_t2			.289	.088	.144	-	.433	.001
Extended FTP_t2	→	Support_t2			.113	.086	-.029	-	.255	.190
Indirect Effects										
Extended FTP_t1	→	self-leadership_t2	→	approach crafting_t3	.080	.038	.019	-	.142	.032
Extended FTP_t1	→	approach goals_t2	→	approach crafting_t3	.047	.028	.000	-	.094	.101
Extended FTP_t1	→	Support_t2	→	approach crafting_t3	.026	.022	-.010	-	.062	.236
Limited FTP_t1	→	avoidance goals_t2	→	avoidance crafting_t3	.001	.007	-.011	-	.013	.894
Approach goals_t2	→	approach crafting_t3	→	goal progress_t3	.073	.042	.004	-	.142	.082
Avoidance goals_t3	→	avoidance crafting_t3	→	goal progress_t3	.006	.008	-.008	-	.020	.458
Self-leadership_t2	→	approach crafting_t3	→	goal progress_t3	.125	.050	.043	-	.207	.012
Workplace Support_t2	→	approach crafting_t3	→	goal progress_t3	.103	.044	.031	-	.175	.019
Total Effects										
Extended FTP_t1	→	approach crafting_t3			.215	.077	.087	-	.342	.006
Limited FTP_t1	→	avoidance crafting_t3			.119	.090	-.028	-	.267	.184
Approach goals_t2	→	goal progress_t3			.259	.099	.096	-	.421	.009
Avoidance goals_t2	→	goal progress_t3			-.192	.082	-.328	-	-.057	.019
Self-leadership_t2	→	goal progress_t3			.236	.087	.092	-	.379	.007
Workplace support_t2	→	goal progress_t3			.022	.085	-.118	-	.162	.797

$\chi 2$ = 11.749*, df = 10; RMSEA = .021, 90%CI [.000, .060]; CFI = .989; TLI = .961; SRMR = .039; EFTP – extended future time perspective; LFTP – Limited future time perspective

Time-Lagged Autoregression Model

Table 28: Standardised regression coefficients of the longitudinal effects of FTP and goal orientation on job crafting and goal progress with autoregression effects.

EFFECTS		**β**	***SE***	**95% CI**			***p***
				LL	-	***UL***	
Autoregressive effects							
Goal progress_t2 →	goal progress_t3	.283	.099	.121	-	.445	.004
Approach crafting_t2 →	approach crafting_t3	.641	.077	.514	-	.768	.000
Avoidance crafting_t2 →	avoidance crafting_t3	.520	.077	.393	-	.647	.000
Approach goals_t1 →	approach goals_t2	.222	.065	.116	-	.329	.001
Avoidance goals_t1 →	avoidance goals_t2	.390	.082	.255	-	.525	.000
Self-leadership_t1 →	self-leadership_t2	.554	.077	.428	-	.681	.000
Workplace support_t1→	workplace Support_t2	.543	.067	.433	-	.652	.000
Direct effects							
Approach crafting_t3 →	goal progress_t3	.335	.102	.167	-	.503	.001
Avoidance crafting_t3→	goal progress_t3	.038	.074	-.085	-	.168	.608
Approach goals_t2 →	goal progress_t3	.173	.085	.034	-	.312	.041
Avoidance goals_t2 →	goal progress_t3	-.206	.085	-.346	-	-.067	.015
Self-leadership_t2 →	goal progress_t3	.062	.096	-.095	-	.220	.515
Workplace Support_t2→	goal progress_t3	-.113	.084	-.251	-	.024	.176

Approach crafting_t2 →	approach crafting_t3	.641	.077	.514	-	.768	.000
Self-leadership_t2 →	approach crafting_t3	.082	.084	-.057	-	.221	.330
Extended FTP_t1 →	approach crafting_t3	.090	.062	-.011	-	.192	.142
Workplace support_t2→	approach crafting_t3	.073	.067	-.038	-	.184	.281
Avoidance goals_t2 →	approach crafting_t3	-.145	.082	-.279	-	-.011	.076
Limited FTP_t1 →	approach crafting_t3	.132	.057	.039	-	.226	.020
Avoidance goals_t2 →	avoidance crafting_t3	-.013	.091	-.162	-	.136	.887
Self-leadership_t2 →	avoidance crafting_t3	.193	.076	.067	-	.318	.012
Workplace support_t2→	avoidance crafting_t3	.148	.079	.018	-	.277	.061
Approach goals_t2 →	avoidance crafting_t3	-.166	.094	-. 321	-	-.012	.076
Limited FTP_t1 →	avoidance crafting_t3	.053	.082	-.081	-	.188	.514
Workplace support_t1→	avoidance crafting_t3	-.159	.083	-.296	-	-.022	.056
Extended FTP_t1 →	approach goals_t2	.242	.077	.115	-	.242	.002
Limited FTP_t1 →	avoidance goals_t2	-.088	.075	-.211	-	.035	.237
Extended FTP_t1 →	self-leadership_t2	.084	.093	-.069	-	.237	.366
Workplace support_t1→	Workplace Support_t2	.543	.067	.433	-	.652	.000
Extended FTP_t1 →	Support_t2	.075	.072	-.043	-	.193	.293
Indirect Effects							
Extended FTP_t1 → self-leadership_t2 → approach crafting_t3	.007	.011	-.012	-	.026	.547
Extended FTP_t1 → approach goals_t2 → approach crafting_t3	.004	.021	-.030	-	.038	.850

Extended FTP_t1 → workplace Support_t2 → approach crafting_t3	.005	.008	-.007	-	.018	.468
Limited FTP_t1 → avoidance goals_t2 → avoidance crafting_t3	.001	.008	-.012	-	.014	.888
Approach goals_t2 → approach crafting_t3 → goal progress_t3	.005	.029	-.042	-	.052	.850
Avoidance goals_t2 → avoidance crafting_t3 → goal progress_t3	.000	.004	-.007	-	.006	.895
Self-leadership_t2 → approach crafting_T3 → goal progress_T3	.027	.030	-.021	-	.076	.352
Workplace support_t2 → approach crafting_T3 → goal progress_T3	.024	.024	-.015	-	.064	.307
Total Effects						
Extended FTP_T1 → approach crafting_T3	.128	.084	-.010	-	.267	.128
Limited FTP_T1 → avoidance crafting_T3	.101	.088	-.043	-	.245	.250
Approach goals_T2 → goal progress_T3	.172	.091	.023	-	.321	.057
Avoidance goals_T2 → goal progress_T3	-.255	.090	-.404	-	-.107	.005
Self-leadership_T2 → goal progress_T3	.097	.103	-.072	-	.266	.344
Workplace support_T2 → goal progress_T3	-.084	.087	-.226	-	.059	.336

$\chi 2$ = 45.153, **df** = 36; **RMSEA** = .042, 90%CI [.000, .077]; **CFI** = .982; **TLI** = .947; **SRMR** = .049.

6.2.7.1 Hypothesis 1

H1a: Extended FTP will positively relate to approach-oriented crafting.

H1b: Limited FTP will positively relate to avoidance-oriented crafting.

Results displayed in Table 27 and 28, indicate that extended FTP has no significant direct relationship with approach crafting over time, regardless of whether previous levels of approach crafting were controlled (β = .09, p = .142; 95%CI: [-.011, .192]) or not controlled (β = .06, p = .435; 95%CI: [-.068, .192]). This implies that the hypothesis 1a is rejected. Results further revealed that the direct relationship between limited FTP and avoidance crafting over time is not significant, irrespective of whether previous levels of avoidance crafting were controlled (β = .05, p = .514; 95% CI: [-.081, .188]) or not (β = .12, p = .181; 95% CI: [-.027, .264]), hence, hypothesis 1b is not supported. Additionally, although it was not hypothesised, a significant direct relationship was found between limited FTP and approach crafting over time, contrary to expectations (β = .132, p = .020; 95% CI: [.039, .226]).

6.2.7.2 Hypothesis 2

H2a: Extended FTP will positively relate to approach goal orientation.

H2b: Limited FTP will positively relate to avoidance goal orientation.

Results (see Table 27 and Table 28) again reveal that the direct relationship between extended FTP and approach goal orientation is significant when prior levels of approach goal orientation were included in the model (β = .24, p = .002; 95%CI: [.115, .242]) and excluded from the model (β = .29, p < .001; 95%CI: [.167, .408]). This means that hypothesis 2a is supported by the data. Results further showed that the direct relationship between limited FTP and avoidance goal orientation is not significant when prior avoidance goal orientation was controlled (β = -.09, p = 237; 95%CI: -.211, .035), or not controlled (β = .01, p = .891; 95%CI: [-.114, .135]), indicating that the significant relationship identified in Study 1 is not sustained over time, therefore, Hypothesis 2b is rejected.

6.2.7.3 Hypothesis 3

H3a: Approach goal orientation will positively relate to approach crafting.

H3b: Avoidance goal orientation will positively relate to avoidance crafting.

The results presented in Table 27 and 28 showed that the direct relationship between approach goal orientation and approach crafting was not statistically significant when previous levels of approach crafting were both controlled (β = .02, p = .849; 95%CI: [-.123, .156]), and not

controlled (β = .16, p = .062; 95%CI: [.019, .305]). Hence, the hypothesis 3a is rejected. Results further showed that the association between avoidance goal orientation and avoidance crafting was not statistically significant, irrespective of whether the previous level of avoidance crafting was controlled (β = -.01, p = .887; 95%CI: [-.162, .136]), or not (β = .09, p = .283; 95%CI: [-.050, .238]). Hence, hypothesis 3b is rejected.

6.2.7.4 Hypothesis 4

H4a: Self-leadership will positively relate to approach crafting.

H4b: Self-leadership will positively relate to avoidance crafting.

Results in Table 27 and Table 28 indicate that the association between self-leadership and approach crafting when previous level of approach crafting was controlled is not significant (β = .08, p = .330; 95%CI: [-.057, .221]), although the relationship is significant when previous level of approach crafting was not controlled (β = .28, p = .003; 95%CI: [.126, .432]). Nonetheless, hypothesis 4a is rejected. Additionally, the results indicated that self-leadership is significantly related to avoidance crafting, regardless of whether the previous level of avoidance crafting was controlled (β = .19, p = .012; 95% CI: [.067, .318]) or not (β = .23, p < .001; 95% CI: [.120, .377]). This suggests that Hypothesis 4b is supported.

6.2.7.5 Hypothesis 5

H5a: Approach crafting will be related to goal progress.

H5b: Avoidance crafting will be related to goal progress.

Results of the analysis further revealed that approach crafting has a significant direct relationship with goal progress while controlling for previous level goal progress (β = .34, p < .001; 95%CI: [.167, .503]) as well as when previous levels of goal progress were not controlled (β = .45, p < .001; 95%CI: [.299, .601]) lending support to hypothesis 5a. Additionally, results showed that the relationship between avoidance crafting and goal progress was not statistically significant in both the autoregression model (β = .04, p = .608; 95%CI: [-.085, .168]), and the model without autoregression (β = .07, p = .372; 95%CI: [-.055, .187]) therefore, the hypothesis 5b was not supported by the data.

6.2.7.6 Hypothesis 6

H6: Extended FTP will positively relate to self-leadership.

Result presented indicated that the relationship between extended FTP and self-leadership is not statistically significant when accounting for previous levels of self-leadership (β = .08, p = .366; 95%CI: [-.069, .237]) but significant when previous level of self-leadership was not accounted for (β = .29, p < .001; 95%CI: [.144, .433]). This implies that, although extended FTP is related to self-leadership, extended FTP does not account for a change in self-leadership over time. Therefore, Hypothesis 6 is rejected.

6.2.7.7 Hypothesis 7

H7: Extended FTP will positively relate to perceived workplace support.

Results indicate that the relationship between extended FTP and perceived availability of workplace support is not statistically significant, when controlling for the previous level of perceived workplace support (β = .08, p = .293; 95%CI: [-.043, .193]) or not (β = .11, p = .190; 95%CI: [-.029, .255]). Thus, Hypothesis 7 is rejected.

6.2.7.8 Hypothesis 8

H8: Perceived workplace support will positively relate to approach crafting.

The results of the time-lagged autoregression path analysis presented in Table 28 indicate that perceived workplace support is not significantly associated with approach crafting, when controlling for previous level of approach crafting (β = .07, p = .281; 95%CI: [-.038, .184]), although the relationship was significant when previous level of approach crafting was not controlled (β = .23, p = .007; 95%CI: [.088, .369]). Thus, hypothesis 8 is rejected.

6.2.7.9 Hypothesis 9

H9: Self-leadership will have positive relationship with goal progress.

The path analysis results displayed in Table 27 and 28 showed that the relationship between self-leadership and goal progress is not statistically significant whether previous level of goal progress was controlled for (β = .06, p = .515; 95%CI: [-.095, .220]), or not (β = .09, p = .332; 95%CI: [-.065, .253), meaning that the hypothesis was not supported by the data, hence rejected.

6.2.7.10 Hypothesis 10

H10: Perceived workplace support will positively relate to goal progress.

Results in Table 27 and 28 showed that the relationship between perceived workplace support and goal progress is not significant whether previous level of goal progress was controlled (β = -.11, p = .176; 95%CI: [-.251, .024]), or not (β = -.09, p = .297; 95%CI: [-.228, .051]), meaning that the hypothesis was rejected.

6.2.7.11 Hypothesis 11

H11: Approach goal orientation will mediate the relationship between extended FTP and approach crafting.

The results presented in Table 27 and 28 showed that the mediation effect of approach goals on the relationship between extended FTP and approach crafting is not significant whether previous levels of approach crafting and approach goals were controlled for (β = .00, p = .850; 95%CI: [-.030, .038]), or not (β = .05, p = .101; 95%CI: [.000, .094]), indicating that hypothesis 11 is not supported.

6.2.7.12 Hypothesis 12

H12: Avoidance goals will mediate the relationship between limited FTP and avoidance crafting.

Results in Table 27 and 28 showed that the mediation effect of avoidance goal orientation on the relationship between limited FTP and avoidance crafting is not significant when prior levels of avoidance crafting and avoidance goals were controlled for (β = .00, p = .888; 95%CI: [-.012, .014]), or not controlled (β = .00, p = .894; 95%CI: [-.011, .013]), therefore, the hypothesis is rejected.

6.2.7.13 Hypothesis 13

H13: Self-leadership will mediate the relationship between extended FTP and approach crafting.

Based on results obtained from the time-lagged and autoregression analysis it was observed that the mediation effect of self-leadership on the relationship between extended FTP and approach crafting is not significant when previous levels of approach crafting and self-leadership were controlled (β = .01, p = 547; 95%CI: [-.012, .026]), although it was significant when prior levels of approach crafting and self-leadership were not controlled (β = .08, p = .032; 95%CI: [.019, .142]). This means that although self-leadership is related to approach

crafting, a variation in self-leadership does not necessarily cause a significant variation in approach crafting implying that hypothesis 13 is rejected.

6.2.7.14 Hypothesis 14

H14: Perceived workplace support will mediate the relationship between extended FTP and approach-oriented crafting.

From the analysis, it was found that the mediation effect of perceived support on the relationship between extended FTP and approach crafting over time is not significant, whether previous level of approach crafting was controlled for (β = .01, p = .468; 95%CI: [-.007, .018]), or not (β = .03, p = .236; 95%CI: [-.010, .062]; see Table 27 and 28), hence, hypothesis 14 was rejected.

6.2.7.15 Hypothesis 15

H15: Approach crafting will mediate the relationship between self-leadership and goal progress.

Results presented in Table 27 and Table 28 suggest that the mediating effect of approach crafting on the relationship between self-leadership and goal progress is not significant over time when previous level of goal progress was controlled for (β = .03, p = .352; 95%CI: [-.021, .076]), although the indirect effect of self-leadership on goal progress is significant when the previous level of goal progress was not controlled (β = .13, p = .012; 95%CI: [.043, .207]). Hypothesis 15 was therefore rejected.

6.2.7.16 Hypothesis 16

H16: Approach crafting will mediate the relationship between perceived workplace support and goal progress.

Results further show that the mediation effect of approach crafting on the relationship between workplace support and goal progress was not statistically significant (β = .02, p = .307; 95%CI: [-.015, .064]), when previous level of goal progress was accounted for, although the mediating role of approach crafting was significant when previous level of goal progress was not controlled for (β = .10, p = .019; 95%CI: [.031, .175]). Hypothesis 16 is however rejected.

6.3 Study 2 Discussion

As previously noted, the main aim of Study 2 was to investigate the relationships between FTP, goal orientation, and job crafting over time. Additionally, the study sought to determine whether self-leadership and perceived workplace support mediate the relationship between FTP and job crafting over time. Put differently, the aim of study 2 was to investigate whether FTP leads to changes in goal orientation, and job crafting. The study also assessed whether changes in self-leadership and perceived workplace support significantly influence a change in job crafting behaviour over time. Finally, the study examined whether changes in job crafting behaviour predict a change in goal progress. Using three-wave data with an average time lag of two months from 122 academics at Ghanaian Higher Education institutions, the study employed time-lag autoregressive analysis to model the relationships between the study variables. This approach controlled for previous levels of all dependent variables in the model. This section of the thesis presents a discussion of the findings from the study, which provides an insight into the relationship between the variables of interest over time, implications for research and practice, while also highlighting the limitations of the present study.

6.3.1 Direct effects

6.3.1.1 Relationship between FTP and job crafting

From the results obtained after the data analysis, it was observed that both extended and limited FTP at T1 have no significant direct relationship with approach and avoidance job crafting at T3, after controlling for previous levels job crafting. The results of the present study imply that the effect of extended and limited FTP on approach and avoidance job crafting is not statistically significant over time. In other words, FTP does not predict change in job crafting over time. Thus, how individuals perceive their future in the past (four months ago) has no significant effect on their job crafting behaviour in the present. This means, thinking that one's future is expansive and is full of opportunities and possibilities is not significantly related to employees' approach crafting behaviour (i.e., increasing task complexity, expanding work roles and responsibilities, building more relationships, etc over the four months period (i.e. the time lag between T1 and T3). This result contrasts with Kooij et al.'s (2017) study, which found that extended FTP had a significant direct relationship with approach crafting over a one-year period. However, Kooij et al.'s (2017) study also reported no significant relationship between limited FTP and avoidance crafting over time, aligning with the findings of the present study. This suggests that individuals with limited FTP do not necessarily engage in avoidance crafting

behaviours, such as limiting roles, simplifying tasks, or focusing on learning only a few relevant skills over time.

Although extended FTP is generally associated with growth motives and limited FTP with emotional regulation and generativity motives (Kooij et al., 2013, 2014; Kooij and Van De Voorde, 2011), which are expected to directly influence approach and avoidance job crafting strategies, respectively, the present study did not find these relationships to be significant over time. However, as discussed in Study 1 in the previous chapter, a significant direct relationship was observed between limited FTP and avoidance crafting. This discrepancy might be due to differences in the time frame of measurement, as the relationship in Study 1 was identified at a single time point. It is possible that this phenomenon occurs quickly and then stabilises over time, making changes harder to detect. Additionally, an individual's perception of the future may not change substantially over a four-month period (i.e., the time lag between T1 and T3). Studies employing longitudinal designs that identified significant relationships between FTP and employee growth motives, proactivity, and job crafting typically used longer time lags of at least one year (Kooij et al., 2014, 2017).

Interestingly and unexpectedly, the present study discovered – despite not being hypothesised that limited FTP, rather than extended FTP, has a significant direct relationship with approach crafting over time. This finding indicates that as academics perceive fewer opportunities and feel that their occupational future is limited, they actively engage in approach crafting. A possible explanation is that academics in Ghana can extend their contracts with their institutions upon retirement, particularly if they retire as associate professors or professors. Academics approaching retirement may, therefore, seek to remain active beyond retirement by continuing to explore opportunities and engage in approach crafting behaviours.

Another interesting finding in the present study was that both approach and avoidance crafting had significantly moderate to high autoregressive coefficients, suggesting that employees' job crafting behaviours remained relatively stable over the two-month period. While research on job crafting is mixed regarding the frequency of behavioural changes, the findings of this study (Study 2) align with earlier research suggesting that job crafting is a relatively stable construct (Clinton et al., 2024; Harju et al., 2016; Harju and Tims, 2020). However, other studies have argued that job crafting can vary over shorter periods, such as daily or within three months (Demerouti et al., 2015; Hetland et al., 2018; Vogt et al., 2016). This stability is believed to be

influenced by relatively enduring individual and contextual or situational factors, which remain constant unless significant changes in job design occur (Niessen et al., 2016). Although job crafting is a malleable construct, daily crafting behaviours tend to exhibit stability over time (Mäkikangas, 2018). Furthermore, job autonomy, which acts as a key motivator for job crafting, has been found to remain stable over time, thereby exerting limited influence on short-term changes in crafting behaviours (Harju and Tims, 2020).

6.3.1.2 Relationship between FTP and goal orientation

Results obtained from the present study also indicated that extended FTP has a positive significant relationship with approach goal orientation over time, when previous levels of approach goal orientation were controlled. This means that individuals who perceive their occupational future to be expansive, full of opportunities and possibilities are likely to have learning, mastery, and performance approach goals over time. Thus, they are more likely to pursue growth and a personal development agenda due to their desire to achieve mastery of their jobs and constantly strive to learn to expand their knowledge in their respective fields (Sommet and Elliot, 2017). Academics with high extended FTP are more likely to also adopt goals that will challenge them to increase their skills, knowledge, and abilities. Such individuals are also more likely to be competitive as they are likely to perceive that being an expert means performing better than colleagues. This finding is similar to previous studies that also examined the relationship between FTP and goal motivation. For instance, Simons et al. (2004) observed in their study that having extended FTP increases the instrumentality of one's present behaviour which leads to increased motivation, learning, and better performance. De Bilde et al. (2011) also reported positive association between an extended FTP and students' learning outcomes through high internal motives, personal conviction, and intrinsic motivation. Similarly, Lee et al. (2010) reported a positive relationship between future aspirations and goal orientation. The present finding also supports the argument by Ng and Lucianetti (2018) that employees who anticipate that their future is connected to that of their organisations show increased learning goal orientation.

Unlike extended FTP, limited FTP was found in the present study to have no significant direct relationship with avoidance goal orientation, even when previous levels of avoidance goals were not controlled. This implies that individuals who perceive their future occupational time as limited with opportunities and possibilities are not necessarily more likely to adopt

avoidance goals. More specifically, the relationship between limited FTP in the past and avoidance goals was not significant over the period of 2 months. This means the relationship established in study 1 between limited FTP and avoidance goals is not found over time. While studies the examine the direct relationship between limited FTP and avoidance goals are limited, the current findings contrast that of Phan (2009) who found a direct positive relationship between limited FTP and avoidance goals among college students.

6.3.1.3 Relationship between FTP and self-leadership

Additionally, the results of Study 2 reveal that extended FTP has no significant association with self-leadership when controlling for previous levels of self-leadership, although the relationship was significant when previous levels were not controlled. This suggests that, over an average time lag of two months, while extended FTP and self-leadership may be related, extended FTP does not significantly predict changes in self-leadership. This indicates that perceiving the future as expansive and full of opportunities may not necessarily lead employees to increasingly adopt self-leadership strategies, such as self-goal setting, self-observation, or behaviour modification, to stay aligned with their objectives or cognitively prepared to achieve self-set targets. This finding contradicts earlier studies (e.g., Baird et al., 2021), which concluded that having an extended FTP increases the likelihood of monitoring goal progress and taking actions to achieve desired future outcomes. These studies suggested that viewing the future as rich with opportunities motivates individuals to adopt adaptive behaviours to capitalise on anticipated possibilities. It is important to note that most of these earlier studies employed cross-sectional designs, and subsequent meta-analyses based on these studies may have reinforced the findings derived from such designs.

6.3.1.4 Relationship between FTP and perceived workplace support

The results of Study 2 further indicate that the relationship between extended FTP and perceived workplace support is not statistically significant over time when previous level of perceived workplace support was controlled for. This implies having extended FTP in the past is not likely to make employees open or receptive to workplace support over time. The present finding contrasts results of previous studies as it has been established that having extended FTP makes employees receptive to workplace support (Kerry and Embretson, 2018). Thus, employees in their bid to take advantage of the opportunities and possibilities in the foreseeable future makes them become receptive to support from coworkers, supervisors and their

organisations (Jung & Takeuchi, 2018). In this case, seeking support is construed as a proactive behaviour to build network and associations that will yield potential benefits in the future. However, the current study indicates that having extended FTP has no significant influence on how people perceive workplace support.

6.3.1.5 Relationship between goal orientation and job crafting

The findings from Study 2 also revealed that the relationship between approach goals and approach crafting was not statistically significant over time when the previous level of approach crafting was controlled for. This result shows that how employees frame goals or think about their goals has little influence on how they craft their jobs over time. In other words, having mastery, learning and performance approach goal orientations is not likely to influence employees to engage in approach crafting behaviours such learning new skills, task expansion or taking on more responsibilities over time. This finding is not in line with previous findings that suggest that having approach goal orientations will likely result in approach-oriented crafting behaviours among employees (e.g. Bruning and Campion, 2018). The finding also challenges earlier assumptions that job crafting changes more rapidly over relatively smaller time periods (i.e., days, months), as previous levels of approach crafting were found to significantly predict current levels. Thus, how employees craft their job stays the same over time and is hence not likely to be influenced by goal orientations with such relatively smaller time periods (Demerouti *et al.*, 2015; Vogt *et al.*, 2016). The finding does not support the argument that goals have a great influence on job crafting behaviour. Similarly, avoidance goal orientation did not have any significant influence of avoidance crafting over the two-month period. Thus, having the orientation to only master relevant tasks, and avoid not learning relevant skill in order to avoid been labelled as a bad performer will not likely influence academics to employ avoidance crafting behaviours. The present study concludes that the goal orientation has no statistically significant effect on job crafting contrary to earlier expectations.

6.3.1.6 Relationship between self-leadership and job crafting

The findings of the present study further indicate that self-leadership has no significant association with approach crafting over time when controlling for previous levels of approach crafting, although the relationship was significant when previous levels were not controlled. This suggests that, while the two variables are related, self-leadership does not cause significant changes in approach crafting over time. In other words, exhibiting self-leadership skills in

previous months does not necessarily mean that employees will continue to apply these skills to increasingly engage in approach crafting in the future. This finding contrasts with existing studies that suggest self-leadership promotes proactive behaviour among employees (e.g., Liu et al., 2023). The discrepancy may, in part, be attributed to differences in study design. While cross-sectional studies have demonstrated an association between self-leadership and approach crafting, indicating that self-leaders tend to engage more in job crafting (between-person variation), such designs are unable to assess whether changes in self-leadership correspond to changes in job crafting over time (within-person variation). Cross-sectional studies are also limited in showing whether the relationship between self-leadership and job crafting remains consistent over time. They cannot establish whether self-leadership itself enhances employees' approach crafting behaviours over time, whether approach crafting instead predicts self-leadership, or whether another variable simultaneously predicts both self-leadership and approach crafting.

Surprisingly, although not hypothesised in the present study, self-leadership was found to significantly influence avoidance crafting over time. This implies that people who possessed self-leadership skills are more likely to engage in avoidance crafting behaviours over time. Thus, they become proactive in ways that makes them limit tasks, master only relevant skills. This finding supports the argument that people are likely to be concerned about avoidance goals as time for task completion is near (Schmidt and DeShon, 2007). Thus, people will channel their resources including time and efforts to reaching avoidance – oriented goals when the time for completion nears (Schmidt *et al.*, 2009). Similarly, the present study argues that self-leaders were more likely to channel their self-leadership abilities into avoidance crafting behaviours over time.

6.3.1.7 Relationship between perceived workplace support and job crafting

Results of the time lag autoregression analysis showed that perceived workplace support at T2 has no relationship with approach crafting at T3 when previous levels of approach crafting was controlled, whereas the relationship was significant when previous levels of approach crafting was not controlled. This finding implies that perceived availability of workplace support from colleague workers and supervisors is not able to predict a change in job crafting behaviour. A change in perceived support not significantly related to a corresponding change in how employees craft their jobs. The finding is contrary to outcome of previous studies which

established positive relationship between perceived workplace support or organisational support and job crafting (Ingusci *et al.,* 2016; Oubibi *et al.,* 2022; Park *et al.,* 2020; Uçar and Kerse, 2022). It must be highlighted that these studies employed cross-sectional designs, therefore, could not analyse how changes in support at work predict changes in job crafting.

6.3.1.8 Relationship between job crafting and goal progress.

The current study also found that only approach crafting is related to goal progress but not avoidance crafting, suggesting that employees who engage in approach crafting are more likely to experience progress with their goal pursuit agenda unlike employees who engage in avoidance crafting. The finding supports extant studies that argue that job crafting is a goal pursuit behaviour where employees utilise job crafting strategies to obtain desired future goals (Bindl and Parker, 2011; Parker *et al.,* 2010).

6.3.2 Indirect effects FTP on job crafting

6.3.2.1 Mediating role of goal orientation on the relationship between FTP and job crafting

Contrary to expectations, neither approach nor avoidance goal orientations mediate the relationship between FTP (extended and limited) at T1 and job crafting (approach and avoidance) at T3. This is because FTP has no statistically significant relationship with goal orientation over the two-month period, and goal orientation is also not significantly related to job crafting over the same time lag. This finding challenges the prevailing notion that job crafting is inherently goal-oriented (e.g. Bruning and Campion, 2018). It suggests that while goals may play a crucial role in shaping proactive behaviours in the short term, their influence diminishes over time.

6.3.2.2 Mediating role of self-leadership on the relationship between FTP and job crafting

The results also indicate that self-leadership at T2 does not mediate the relationship between extended FTP at T1 and approach crafting at T3. This suggests that the mediating role of self-leadership between extended FTP and approach crafting, as established in Study 1, is not sustained over time. In other words, the relationships between extended FTP in the past and both self-leadership and approach crafting in the present are not statistically significant, contrary to findings from previous studies (e.g., Liu et al., 2023). It is important to note that these earlier studies primarily relied on cross-sectional designs, which are insufficient for modelling how changes in self-leadership influence changes in job crafting over time.

6.3.2.3 Mediating role of perceived workplace support on the relationship between FTP and job crafting

Similar to self-leadership, the mediating role of perceived workplace support at T2 in the relationship between extended FTP at T1 and approach crafting at T3 is not statistically significant. This suggests that perceiving future possibilities does not necessarily lead to an increased perception of workplace support or enhanced approach crafting over time. This finding contrasts with existing arguments that extended FTP enhances employees' sense of purpose, which in turn fosters openness to seeking and providing support at work (Allemand and Hill, 2016; Hill et al., 2023) and subsequently promotes job crafting behaviours (Ji, 2022; Park et al., 2020; Uçar and Kerse, 2022).

6.3.3 Indirect Effect of Self-Leadership and Perceived Support on Goal Progress

6.3.3.1 Mediating role of approach crafting on the relationship between self-leadership and goal progress

Moreover, the present study found that that the mediation effect of approach crafting on the relationship between self-leadership and goal progress over time when previous level of goal progress was controlled is not significant, although the indirect effect of self-leadership on goal progress is significant when the previous level of goal progress was not controlled. This means self-leadership and job crafting get into a state of equilibrium and changes are hard to find between these variables over time. This suggests that self-leadership and job crafting eventually reach a point of stability, where their interaction remains consistent, and significant changes between these variables become difficult to observe over time. As a result, any fluctuations in self-leadership do not appear to influence job crafting behaviour, indicating that both factors may settle into equilibrium states in the long term. This finding contradicts previous studies (e.g., Liu et al., 2023), which reported a positive association between self-leadership and job crafting. It also challenges the assumption made by Bindl and Parker (2011), who argued that job crafting is a goal-oriented behaviour, suggesting self-leadership could be an antecedent of it (job crafting).

6.3.3.2 Mediating role of approach crafting on the relationship between workplace support and goal progress

Finally, the present study found that the mediating effect of approach crafting on the relationship between perceived workplace support and goal progress over time is not

statistically significant when previous levels of goal progress were taken into account. However, when the previous level of goal progress was not controlled, the mediating role of approach crafting at T3 was significant. This suggests that while approach crafting may have a role in linking workplace support to goal progress, this relationship is not evident when prior goal progress is considered. This finding contrasts with the argument put forward by Park et al. (2020), who suggested that workplace support encourages job crafting behaviours. According to their view, the support employees receive at work helps foster proactive behaviours, such as job crafting, which in turn leads to better goal achievement. The results of the present study challenge this perspective, highlighting that the impact of approach crafting on goal progress may not be as direct or consistent over time when past progress is factored in.

Chapter 7 Study 3

7.0 Introduction

This chapter outlines the methods and findings of Study 3, which employs a cross-lag analysis to investigate potential reverse causal relationships among the study variables. It begins by describing the reversed structural model tested in Study 3, followed by a discussion of the findings in relation to existing literature.

7.1 Study 3 Method and Results

Study 3 aims to explore whether the relationships identified in the longitudinal model of Study 2 might be subject to reverse causation. This involves examining whether the dependent variables might influence the independent variables over time, contrary to the originally hypothesised direction of influence. All hypotheses were reversed, except for those testing variables measured in the same wave (i.e., job crafting and goal progress), for which reversing was unnecessary since similar results to those observed in Study 2 would automatically be observed. This approach helps to understand the possible bidirectional nature of the relationships between the constructs. Data for this analysis was taken from Study 2, which had previously established a robust measurement model. Given this validation, Study 3 focused on respecifying the structural model. The primary change involved reversing the waves from which the variables were drawn. In the original model, goal progress and job crafting behaviours (approach and avoidance crafting) were considered as dependent variables and were measured at T3. In the reverse causation model, these variables were instead measured at T1 and treated as independent variables. As in Study 2, relationships are deemed significant only when previous levels of the outcome variables are controlled for, meaning only the results from autoregression models are reported.

The mediating variables, including approach and avoidance goals, self-leadership, and perceived workplace support, remained unchanged and were measured at T2. The dimensions of FTP changed from being predictors to outcomes and were measured at T3 instead of T1. This change allows the model to assess whether FTP at T3 could be influenced by goal progress and job crafting behaviours observed at T1, with mediation by goal orientation, self-leadership, and perceived workplace support at T2. The study evaluated the model fit indices to ensure the robustness of the reverse causation model. All indices indicated excellent fit: both the MLR (χ^2 = 17.530, *df* = 26, *p* = .892; CFI = 1.000; TLI = 1.000; RMSEA = .000, 90% CI [.000, .018];

SRMR = .029) and ML estimation methods with bootstrapping (χ^2 = 18.215, *df* = 26, *p* = .868; CFI = 1.000; TLI = 1.000; RMSEA = .000, 90% CI [.000, .021]; SRMR = .029) demonstrated that the model was well-specified and that the data fit the hypothesised reverse causation model. This analysis offers insights into the potential for reverse causation in the studied relationships, providing a nuanced understanding of the dynamics between goal progress, job crafting behaviours, and FTP. The standardised coefficients indicating the reversed relationship between variables are presented in Table 29.

Reverse Causation Model

Table 29: Standardised regression coefficients of the longitudinal effects of Goal Progress and Job Crafting on Goal Orientation and FTP.

EFFECTS			**β**	***SE***	**95% CI**			***p***
Autoregressive effects					***LL***	-	*UL*	
Extended FTP_T2	→	Extended FTP_T3	.511	.093	.358	-	.663	.000
Limited FTP_T2	→	Limited FTP_T3	.484	.064	.378	-	.590	.000
Approach Goals_T1	→	Approach Goals_T2	.245	.093	.092	-	.398	.009
Avoidance Goals_T1	→	Avoidance Goals_T2	.376	.092	.255	-	.527	.000
Self-Leadership_T1	→	Self-Leadership_T2	.443	.097	.283	-	.603	.000
Workplace Support_T1	→	Workplace Support_T2	.600	.078	.471	-	.728	.000
Indirect effects								
Limited FTP_T2	→	Extended FTP_T3	-.248	.079	-.378	-	-.118	.002
Approach Goals_T2	→	Extended FTP_T3	.053	.096	-.106	-	.211	.583
Self-Leadership_T2	→	Extended FTP_T3	-.014	.086	-.156	-	.129	.875
Workplace Support_T2	→	Extended FTP_T3	.030	.083	-.106	-	.167	.714
Approach Crafting_T1	→	Extended FTP_T3	.183	.087	.040	-	.327	.036
Goal Progress_T1	→	Extended FTP_T3	-.111	.091	-.260	-	.039	.223
Extended FTP_T2	→	Limited FTP_T3	-.223	.085	-.364	-	-.083	.009
Workplace Support_T2	→	Limited FTP_T3	.207	.077	.081	-	.334	.007
Avoidance Goals_T2	→	Limited FTP_T3	-.148	.074	-.269	-	.027	.044

Avoidance Crafting_T1	→	Limited FTP_T3	.173	.087	.030	-	.316	.047
Goal Progress_T1	→	Limited FTP_T3	-.205	.070	-.319	-	-.091	.003
Self-Leadership_T1	→	Approach Goals_T2	-.026	.103	-.195	-	.144	.804
Approach Crafting_T1	→	Approach Goals_T2	.109	.090	-.038	-	.257	.224
Workplace Support_T1	→	Approach Goals_T2	-.060	.090	-.208	-	.088	.504
Avoidance Crafting_T1	→	Approach Goals_T2	.154	.069	.040	-	.268	.026
Goal Progress_T1	→	Approach Goals_T2	.135	.095	-.021	-	.292	.155
Approach Goals_T1	→	Avoidance Goals_T2	-.004	.113	-.190	-	.182	.972
Avoidance Crafting_T1	→	Avoidance Goals_T2	.075	.084	-.063	-	.213	.373
Goal Progress_T1	→	Avoidance Goals_T2	-.052	.083	-.188	-	.085	.535
Approach Goals_T1	→	Self-Leadership_T2	.083	.092	-.069	-	.235	.369
Approach Crafting_T1	→	Self-Leadership_T2	.079	.088	-.066	-	.224	.369
Avoidance Crafting_T1	→	Self-Leadership_T2	.013	.063	-.090	-	.115	.840
Workplace Support_T1	→	Self-Leadership_T2	-.056	.084	-.194	-	.082	.503
Goal Progress_T1	→	Self-Leadership_T2	.222	.091	.073	-	.372	.014
Approach Goals_T1	→	Workplace Support_T2	-.043	.074	-.165	-	.080	.567
Self-leadership_T1	→	Workplace Support_T2	.077	.087	-.066	-	.219	.374
Approach Crafting_T1	→	Workplace Support_T2	.065	.094	-.089	-	.220	.487
Goal Progress_T1	→	Workplace Support_T2	-.083	.071	-.200	-	.034	.244
Approach Goals_T1	→	Extended FTP_T2	.320	.101	.154	-	.486	.001
Self-Leadership_T1	→	Extended FTP_T2	.085	.120	-.112	-	.282	.476

Approach Crafting	→	Extended FTP_T2		.105	.104	-.067	-	.277	.315
Workplace Support_T1	→	Extended FTP_T2		.029	.103	-.141	-	.199	.779
Goal Progress_T1	→	Extended FTP_T2		.040	.091	-.109	-	.189	.656
Avoidance Crafting_T1	→	Limited FTP_T2		.022	.091	-.128	-	.172	.808
Avoidance Goals_T1	→	Limited FTP_T2		.023	.094	-.132	-	.178	.804
Goal Progress_T1	→	Limited FTP_T2		.041	.107	-135	-	.217	.703
INDIRECT EFFECTS									
Approach crafting_T1	→	Self-leadership_T2	→	Extended FTP_T3	-.001	.011	-.020	-	.018	.925
Approach crafting_T1	→	Approach Goals_T2	→	Extended FTP_T3	.006	.014	-.018	-	.029	.684
Approach crafting_T1	→	Workplace Support_T2	→	Extended FTP_T3	.002	.010	-.015	-	.019	.844
Avoidance crafting_T1	→	Avoidance goals_T2	→	Limited FTP_T3	-.011	.016	-.037	-	.014	.475

χ2 = 18.215, **df** = 26; **RMSEA** = .000, 90%CI [.000, .021]; **CFI** = 1.000; **TLI** = 1.000; **SRMR** = .029; EFTP – extended future time perspective; LFTP – Limited future time perspective.

7.1.1 Reversed hypotheses testing

In the reverse hypothesised model, the results presented in Table 29 indicate that, similar to the longitudinal autoregression model in Study 2, all variables significantly predicted themselves in subsequent waves over the two-month period, with standardised autoregression coefficients ranging from .376 to .600 (β = .376 - .600, p < .001). This implies that all variables are relatively stable. Again, similar to the results in Study 2, most of the reverse hypothesised relationships are not significant (p > .05). The following paragraphs present the results of the significant reversed relationships.

From the reversed causation model, results indicate that both approach and avoidance crafting at T1 significantly predict extended FTP at T3 (β = .18, p = .036; 95% CI: [.040, .327]) and limited FTP at T3 (β = .17, p = .047; 95% CI: [.030, .316]), respectively, when previous levels of FTP were controlled. It must be noted that the p-value for avoidance crafting predicting limited FTP is borderline (p = .047), indicating a very small lag effect of avoidance crafting on limited FTP over time. This suggests that although both approach and avoidance crafting may influence extended and limited FTP, respectively, over the four months period, the effect of avoidance crafting on limited FTP is marginal.

Additionally, the reverse analysis revealed that goal progress at T1 has a significant positive relationship with self-leadership at T2 (β = .22, p = .014; 95% CI: [.073, .372]), suggesting that the more employees progress on their goals, the more self-leadership behaviours they exhibit over time. Moreover, goal progress at T1 was found to have a significant negative relationship with limited FTP at T3 (β = -.21, p = .003; 95% CI: [-.319, -.091]), indicating that the more people make progress towards their goal attainment, the less likely they are to have limited FTP over the four months period. Goal progress is, therefore, important in determining employees' limited FTP.

Results further revealed that perceived workplace support at T2 is significantly related to limited FTP at T3 (β = .21, p = .007; 95% CI: [.081, .334]), which implies that employees who perceived high workplace support are more likely to also have higher limited FTP over time, contrary to earlier expectations.

7.2 Discussion Study 3

As previously stated, the purpose of Study 3 is to examine the possibility of reverse relationships between the study variables. Consequently, all hypotheses were reversed, except for those testing variables measured in the same wave (i.e., job crafting and goal progress), for which reversing was unnecessary since similar results to those observed in Study 2 would automatically be observed. Results of the autoregression analysis revealed that the variables remained relatively stable over an average time lag of 2 to 4 months, with moderate standardised autoregression coefficients. Similar to Study 2, all reverse causal relationships were not significant, except for approach and avoidance crafting at T1, which were found to have positive associations with extended and limited FTP, respectively, even when previous levels of extended and limited FTP were controlled, indicating that job crafting has a significant effect employees' FTP over time. Specifically, employees who engaged more in approach crafting tend to have higher extended FTP, whereas those who engaged more in avoidance crafting tend to have limited FTP over time. These findings support Kooij et al.'s (2017) argument that job crafting influences individuals' perceptions of future occupational time. This suggests that job crafting is crucial in shaping employees' time orientation and motivation to perceive possibilities and opportunities in their future occupational life.

Additionally, the present study found that goal progress has a positive relationship with self-leadership over time. This finding suggests that experiencing progress on goals increases the likelihood that employees will adopt self-leadership strategies, including task motivation and sustained effort in future goal pursuit activities. Although no existing study has examined the relationship between goal progress and self-leadership, this finding is not surprising. Making progress on previous goals likely increases task motivation and the chances of future resource allocation (Schmidt *et al.*, 2009). Furthermore, goal progress may enhance both the behavioural and cognitive dimensions of self-leadership, where individuals develop task motivation from previous progress and receive signals affirming optimism (Neck et al., 1999; Neck and Manz, 1992, 1996a) for the future.

Moreover, the present study also found that goal progress at T1 has a negative association with limited FTP at T3, when previous levels of limited FTP were controlled. This result implies that making progress towards goal attainment may reduce employees' level of limited FTP. While no extant study has established this relationship, the finding is not surprising. It is expected that making significant progress on goals brings a sense of achievement and hope for

the future (Schmidt *et al.*, 2009), which is likely to reduce limited FTP. Progress on current goals may open future opportunities and possibilities, likely decreasing levels of limited FTP.

The findings further revealed that approach and avoidance goal orientations are positively associated with extended and limited future time perspective (FTP), respectively, over time. Specifically, the pursuit of approach goals characterised by a desire to achieve mastery and develop competencies was linked to an extended FTP, where individuals perceive the future as abundant with opportunities and possibilities. Conversely, a focus on meeting only minimal performance standards was associated with a limited FTP, where the future is viewed as constrained and less optimistic. Although research in this area remains limited, it is anticipated that individuals striving for mastery and high performance are more likely to adopt a positive outlook on their future. In contrast, those with avoidance goals are expected to hold a more pessimistic perspective of the future (Lee, McInerney, et al., 2010).

Finally, results of the reverse causal analysis revealed that perceived workplace support has a positive association with limited FTP over time. These finding contrasts prior expectations as perceiving support was expected to predict extended FTP instead. While studies on this subject is limited, this could be that employees who perceive high levels of support may become reliant on this assistance, potentially reducing their incentive to develop independent long-term strategies, thus limiting their FTP. Furthermore, such support might encourage a focus on immediate tasks and short-term objectives, inadvertently reducing consideration of long-term career planning. This is particularly applicable in organisational cultures that emphasise short-term results, directing support towards immediate goal achievement rather than fostering long-term career development. Moreover, if the support provided is primarily instrumental rather than developmental, employees might not perceive a clear path for future advancement, resulting in a limited FTP. Therefore, to fully comprehend this relationship, it is crucial to consider the nature of the support, the organisational culture, and the specific workplace environment.

In conclusion, Study 3 discovered reverse relationships between study variables. Approach and avoidance crafting were positively associated with extended and limited FTP, respectively, indicating that job crafting shapes employees' perceptions of future occupational time. Additionally, goal progress positively influenced self-leadership and negatively influenced limited FTP over time, suggesting that progress on goals enhances self-leadership and reduces

limited FTP. Surprisingly, perceived workplace support was positively associated with limited FTP over time, indicating that high levels of support might lead to reliance on immediate assistance, reducing long-term planning incentives. These findings underscore the importance of job crafting and goal progress in shaping FTP and self-leadership, while highlighting a nuanced role of workplace support in shaping employees' FTP.

Chapter 8 Integrated Results

8.0 Introduction

This chapter provides a comprehensive discussion of the results from all three studies. It reveals how different results were obtained from the cross-sectional and longitudinal study designs. Through thorough analyses and interpretation of the data, this chapter aims to synthesise the findings from the three studies, offering valuable insights into the relationships between FTP, goal orientation, self-leadership, workplace support, and job crafting behaviours. The chapter begins with a summary of the overarching research aim, followed by an integrated discussion of the findings from the three studies.

The studies presented in the current thesis investigated the relationships between dimensions of FTP, approach and avoidance goal orientation, and approach and avoidance crafting. The studies also examined the mediating roles of goal orientation, self-leadership, and perceived workplace support on the relationship between FTP and job crafting. Furthermore, the present research also investigated whether the two forms of job crafting, namely approach and avoidance crafting, are associated with goal progress. In essence, the study sought to explain job crafting as a goal-oriented behaviour, wherein employees engage in it as part of their pursuit of desired future goals.

Three studies were conducted using a survey research design to thoroughly investigate the relationships among the variables. Study 1 aimed to identify the anticipated relationships between these variables. To achieve this, cross-sectional data were collected from a sample of 402 academics working at higher educational institutions in Ghana, predominantly in the Greater Accra Region, Eastern Region and Central Region. Study 2 extended this investigation by collecting longitudinal data from 122 participants over three measurement points, with an average interval of two months between assessments. This allowed for an analysis of how changes in predictor variables accounted for changes in outcome variables over time. In Study 3, data from the longitudinal study were used to explore the possibility of reverse causal relationships. Specifically, the hypothesised directions of influence were reversed to assess if the dependent variables could also influence the independent variables. Structural Equation Modelling (SEM) was used to analyse data from the first wave in Study 1. In Study 2, the three-wave panel data was analysed using time-lagged autoregression. In Study 3, all hypotheses were reversed and analysed to determine if the dependent variables could predict the independent variables.

Table 30: Comparison results of the effect of FTP and Goal Orientation of Job Crafting and Reverse Causation Effects

Effects					Study 1 Cross-sectional	Study 2 Longitudinal	Study 3 Reverse Causation
H1A: Extended FTP	→	Approach Crafting			ns (β = .04, p = .373)	ns (β = .09, p = .142)	(β = .18, p = .036)
H1B: Limited FTP	→	Avoidance Crafting			(β = .12, p = .006)	ns (β = .05, p = .514)	(β = .17, p = .047)
H2A: Extended FTP	→	Approach Goals			(β = .23, p = .000)	(β = .24, p = .002)	(β = .183, p = .036)
H2B: Limited FTP	→	Avoidance Goals			(β = .15, p = .001)	ns (β = -.09, p = .237)	(β = -.15, p = .044)
H3A: Approach Goals	→	Approach Crafting			ns (β = .07, p = .100)	ns (β = .02, p = .849)	ns (β = .11, p = .218)
H3B: Avoidance Goals	→	Avoidance Crafting			(β = .13, p = .006)	ns (β = -.01, p = .887)	ns (β = .08, p = .371)
H4A: Self-Leadership	→	Approach Crafting			(β = .47, p = .000)	ns (β = .08, p = .330)	ns (β = .08, p = .369)
H4B: Self-Leadership	→	Avoidance Crafting			(β = .31, p = .000)	(β = .19, p = .012)	ns (β = .01, p =.840)
H5A: Approach Crafting	→	Goal Progress			(β = .17, p = .006)	(β = .34, p = .001)	(β = .41, p < .001)
H5B: Avoidance Crafting	→	Goal Progress			ns (β = .05, p = .273)	ns (β = .04, p = .608)	(β = .25, p < .001)
H6: Extended FTP	→	Self-leadership			(β = .34, p = .000)	ns (β = .08, p = .366)	ns (β = -.01, p =.875)
H7: Extended FTP	→	Workplace Support			(β = .15, p = .011)	ns (β = .08, p = .293)	ns (β = .03, p = .714)
H8: Workplace Support	→	Approach Crafting			(β = .20, p = .000)	ns (β = .07, p = .281)	ns (β = .07, p = .488)
H9: Self-Leadership	→	Goal Progress			(β = .21, p = .000)	ns (β = .06, p = .515)	(β = .22, p = .014)
H10: Workplace Support	→	Goal Progress			(β = .17, p = .001)	ns (β = -.11, p = .176)	ns (β = -.08, p= .244)
H11: Extended FTP	→	Approach Goals	→	Approach Crafting	ns (β = .02, p = .094)	ns (β = .00, p = .850)	ns (β = .01, p = .684)
H12: Limited FTP	→	Avoidance Goals	→	Avoidance Crafting	(β = .02, p = .026)	ns (β = .00, p = .889)	ns (β = -.01, p= .475)
H13: Extended FTP	→	Self-leadership	→	Approach Crafting	(β = .16, p = .000)	ns (β = .01, p = .547)	ns (β = -.00, p= .925)
H14: Extended FTP	→	Workplace support	→	Approach Crafting	(β = .03, p = .018)	ns (β = .01, p = .468)	ns (β = .00, p = .844)
H15: Self-Leadership	→	Approach Crafting	→	Goal Progress	(β = .08, p = .008)	ns (β = .03, p = .342)	ns (β = .03, p = .375)
H16: Workplace Support	→	Approach crafting	→	Goal Progress	(β = .03, p = .021)	ns (β = .03, p = .304)	ns (β = .03, p = .486)

The findings reveal that the direct relationship between extended FTP and approach job crafting is not statistically significant in both Study 1 and Study 2. However, limited FTP is directly related to avoidance crafting in Study 1 but not in Study 2. Interestingly, approach crafting was found to have a significant direct effect on extended FTP in Study 3, indicating a reverse relationship between extended FTP and approach crafting. While the relationship between approach goal orientation and approach crafting is not statistically significant in both Study 1 and Study 2, avoidance goal orientation is significantly related to avoidance crafting in Study 1 only. Additionally, self-leadership has a significant association with approach crafting in Study 1 but not in Study 2, indicating that the relationship is not stable over time. While perceived workplace supports significantly predicted approach job crafting in Study 1, it did not predict approach crafting in Study 2, indicating that this relationship is not permanent. Approach crafting is related to goal progress in both Study 1 and Study 2, but the relationship between avoidance and goal progress is not statistically significant in both Study 1 and Study 2. Furthermore, the mediating role of self-leadership and perceived workplace support on the relationship between extended FTP and approach crafting are statistically significant in Study 1, though not significant in Study 2. Avoidance goal orientation partially mediated the relationship between limited FTP and avoidance crafting in Study 1, though this mediation effect was not significant in Study 2. None of these mediational effects were significant in Study 3 (cross-lagged), indicating that these relationships are not reversible.

These findings are discussed within the theoretical framework of expectancy-value theory and control theory of self-regulation, providing valuable insights into the mechanisms driving job crafting behaviours among academics. The implications of this research extend to a broader understanding of how temporal perspectives and goal orientations influence job crafting practices, thereby contributing to the academic discourse in this field.

8.1 Hypothesised relationships

8.1.1 Relationship between FTP and job crafting

As already discussed separately, results indicate that extended FTP has no direct relationship with approach job crafting in both Study 1 and Study 2. Limited FTP on the other hand has a direct relationship with avoidance crafting in Study 1 but not in Study 2. Again, even though both extended and limited FTP has significant indirect relationship with approach and avoidance crafting, respectively in Study 1, these indirect relationships were not observed in Study 2, indicating that FTP does not lead to changes in job crafting. In study 3, it was observed

that both approach and avoidance crafting have a significant direct relationship with extended and limited FTP respectively over time. This finding implies that, while FTP may be indirectly related to job crafting momentarily, job crafting rather significantly predicts FTP in the long run. Thus, job crafting influences employees' FTP over time. More specifically, people who engage in approach crafting are more likely to have extended FTP over time whereas employees who engage in avoidance crafting also are more likely to have limited FTP over time. This finding supports the argument by Kooij et al. (2017) who also found job crafting to be associated with employees' FTP over a period of 1 year. Generally, it was established in these three studies that though people future orientations may have an indirect impact on their present proactive behaviours, their proactive behaviours rather directly influence their time perspectives over time.

8.1.2 Relationship between FTP and goal orientation

Results from all three studies indicate that extended and limited FTP were associated with approach and avoidance goal orientations, respectively in Study 1. However, in Study 2, only extended FTP demonstrated a significant relationship with approach goal orientation over time. In Study 3, when the hypotheses were reversed, it was found that approach goal orientation at T1, but not at T2, positively correlated with extended FTP at T3, indicating that the effect of approach goal orientation on extended FTP takes much longer than two months to be observed. Conversely, avoidance goals at T2 were negatively associated with limited FTP over the two months period. These findings suggest a bidirectional relationship between the dimensions of FTP and approach/avoidance goal orientations. Employees with an extended FTP are likely to adopt an approach goal orientation over time, and vice versa. Similarly, over time, avoidance goal orientation appears to reduce employees' levels of limited FTP, and vice versa. This implies that progress on avoidance goals reduces the likelihood that employees will perceive their future occupational time as constrained. These results align with the notion that individuals often prioritise avoidance goals as the time for goal attainment becomes limited (Ballard et al., 2018; Ballard, Yeo, Neal, et al., 2016). Furthermore, progress on avoidance goals provides relief, enhancing employees' sense of achievement and self-efficacy (Ballard, Yeo, Loft, et al., 2016), thereby reducing levels of limited FTP. The findings also support the decision-making and normative models of multiple goal-pursuit behaviour, which posit that individuals tend to be risk-averse when pursuing approach goals but adopt risk-seeking behaviours when pursuing avoidance goals (Ballard, Yeo, Loft, et al., 2016).

8.1.3 Relationship between FTP and self-leadership

A culmination of results from the three studies reveals that while extended FTP was related to self-leadership in Study 1, extended FTP had no association with self-leadership in Study 2. In Study 3 when the hypotheses were reversed, the relationship between self-leadership and extended FTP was not significant. This implies extended FTP is only related to self-leadership in the interim. Thus, the relationship between extended FTP and self-leadership is not stable over time. The current finding is contrary to the argument that extended FTP predicts self-regulatory abilities, task motivation and constructive thoughts over time (Baird *et al.*, 2021). Although these self-regulatory behaviours are not the same as self-leadership, they have close similarities. See chapter 2 for detailed discussion on the differences and similarities between self-regulation and self-leadership. Although studies that explored the relationship between FTP and self-leadership are limited, it can be argued that FTP although is related to self-leadership, this relationship is not stable over time, especially when previous levels of self-leadership are controlled.

8.1.4 Relationship between FTP and perceived workplace support

Results obtained from the three studies also revealed that although extended FTP was related to perceived workplace support in Study 1, this relationship was not significant in Study 2 and Study 3. This implies that the relationship observed in study 1 is not sustainable over time. This means also that while people with higher extended FTP may perceive higher available support at the same time, having an extended FTP does not necessarily make one perceive higher available workplace support over time. While studies that explored the direct relationship between FTP and perceived support are limited, the finding in Study1 agrees with earlier studies that reported that extended FTP is linked to adaptive and positive interpersonal interactions such as giving and seeking workplace support (Kessler and Staudinger, 2009). Also, the findings from the longitudinal studies appear to contradict those of Casu *et al.* (2020), who reported that extended FTP is linked to perceived workplace support via dispositional gratitude. It must be emphasised that Casu et al.'s (2020) was cross-sectional, hence it did not examine how extended FTP relates to perceived support over time.

8.1.5 Relationship between goal orientation and job crafting

Additionally, the relationship between goal orientation and job crafting was also examined in all three studies. Results showed that only avoidance goals are related to avoidance crafting in Study 1. The relationships between approach/avoidance goals and approach/avoidance

crafting, respectively were not significant in Study 2. In Study 3, neither approach crafting, nor avoidance crafting is related to their corresponding goal orientations indicating no reverse causality. This means that people's goal orientations do not predict their proactive behaviours (i.e., job crafting) over time. These findings are contrary to earlier assumptions that goal orientations shape people's crafting behaviours (e.g. Bruning and Campion, 2018). Through the recent efforts to integrate the two streams of job crafting research, it is argued that job crafting is goal-oriented where individuals with approach goal orientations were expected to engage more in approach crafting, likewise avoidance goal orientation was expected to predict avoidance crafting among employees (Bruning and Campion, 2018; Costantini, 2022; Lopper *et al.*, 2024). The present study found that though, job crafting has approach and avoidance components, dimensions of goal orientation do not directly map on to dimensions of job crafting, especially in the presence of other potential intervening variables. In other words, the relationship between goal orientation and job crafting have been found in the current study to be influenced by other variables such as self-leadership and perceived support. More specifically, when self-leadership and perceived workplace support were introduced into the model even in Study 1, the relationship between goal orientation and job crafting became insignificant indicating a weak relationship.

8.1.6 Relationship between self-leadership and job crafting

Moreover, analyses revealed that self-leadership, although was associated with both approach and avoidance crafting in the Study 1, it was only related to avoidance crafting in Study 2. In study 3 neither approach nor avoidance crafting were related to self-leadership indicating no reverse causation. This result means that while self-leaders are more likely to engage in both approach and avoidance crafting in the present, they are more likely to engage only in avoidance crafting over time. This finding is similar to the outcome of Liu et al.'s (2023) study, which found a positive relationship between self-leadership and job crafting. It is important to add that Liu et al.'s (2023) study examined the mediating role of autonomous motivation on the relationship between self-leadership, hence the relationship established between self-leadership and job crafting was not direct as done in the present studies. It is also not too surprising to find that self-leadership is associated with avoidance crafting over time since this aligns with the argument that people usually prioritise growth and mastery when they believe they have ample time and resources but tend to focus on safety and security when resources are limited. It could be that over time, employees perceive that time left for their goal attainment is limited hence the decision to adopt avoidance crafting strategies to limit roles, tasks, in other

to prevent loss in the future (Lichtenthaler and Fischbach, 2019). In other words, self-leaders were found to employ contraction-oriented skill, task and relational crafting or reduce hindering demands in the long-run, whereas they were more likely to use expansion-oriented crafting in the short term.

8.1.7 Relationship between perceived workplace support and job crafting

Furthermore, results showed that perceived workplace support is associated with approach crafting in Study 1 but not in study 2. Thus, when previous levels of approach crafting were controlled, perceived workplace support is not significantly related to approach crafting. In Study 3 also, the relationship between approach crafting and perceived workplace support was not significant indicating no reverse causal relationship. This implies that although perceived workplace support may be related to approach crafting in the present, the relationship is temporal. Thus, perceived support in the past does not predict approach crafting in the future. The finding is not in line with previous studies (e.g. Park et al., 2020; Uçar and Kerse, 2022; Zhang and Zhang, 2021), which established a positive relationship between workplace support and job crafting. These studies had limitations as they used only cross-sectional data, hence could not tell how a change in perceived support leads to a corresponding change in job crafting.

8.1.8 Relationship between job crafting and goal progress.

The relationship between job crafting and goal progress was also examined in all three studies with results indicating that approach crafting is significantly related to goal progress in study 1 and study 2, although avoidance crafting is unrelated to goal progress in both study 1 and study 2. In study 3, goal progress was found to positively relate to both approach and avoidance crafting indicating presence of reverse causal relationships between goal progress and the two dimensions of job crafting. Thus, the relationship between approach crafting and goal progress is bidirectional. This means that the more employees engage in approach crafting, the higher the likelihood of achieving goal progress and the more employees experience goal progress the more likely they are to engage in both approach and avoidance crafting. Engagement in avoidance crafting however does not lead to goal progress which underlines that significant impact of approach crafting.

8.1.9 Mediating role of goal orientation on the relationship between FTP and job crafting

Results further showed that although approach goals do not mediate the relationship between extended FTP and approach crafting in Study 1, avoidance goals play a mediating role on the relationship between limited FTP and avoidance crafting in Study 1. In Study 2, however, both approach and avoidance goals were found to have no significant mediation effect on the relationship between FTP and job crafting. In Study 3, when the hypothesis was reversed, approach and avoidance goals were found to have no significant mediation effect on the relationship between job crafting and FTP. Thus, while people with limited FTP were more likely to adopt avoidance goals and avoidance crafting behaviours instantly, this behaviour is not stable over time. The findings are contrary to earlier expectations as it was anticipated that having extended FTP will positively be related to approach goal orientations and eventually result in approach crafting. The findings therefore do not support the assertion that FTP influence's goal orientation (Simons *et al.*, 2004), which likely translates into job crafting behaviours (Bruning and Campion, 2018).

8.1.10 Mediating role of self-leadership on the relationship between FTP and job crafting

Furthermore, although results showed that self-leadership mediates the relationship between extended FTP and approach crafting in Study 1, this mediation effect of self-leadership on the extended FTP – approach crafting relationship was not significant in Study 2. This implies that although employees with extended FTP in the interim adopt self-leadership capabilities and engage in approach crafting behaviours, having extended FTP in the past does not relate to exhibition of self-leadership qualities and demonstration of approach crafting behaviours in the future. In other words, the mediating role of self-leadership on the relationship between extended FTP and approach crafting is not stable over time. The findings disagree with extant studies which argued that extended FTP can increases self-leadership (Baird *et al.*, 2021) attributes that could result in employee proactivity (Bakker et al., 2021; Cranmer et al., 2019; G. Liu et al., 2023). The use of cross-sectional data in these previous studies is a significant limitation of these extant studies. An exception is Bakker et al.'s (2021) study which employed experience sampling (daily dairy method), and established that a change in self-leadership leads to a change in employee proactivity momentarily but could not tell whether self-leadership in the past is associated with employee proactivity in the future. The present findings illustrate that in the long run, present levels of extended FTP have no significant influence on self-leadership, whereas self-leadership in the present is not related to job crafting in the future,

when previous levels of job crafting are controlled. It also demonstrates that these variables are relatively stable as they are unlikely to change in the two months or four months period.

8.1.11 Mediating role of perceived workplace support on the relationship between FTP and job crafting

Moreover, results from all three studies indicate that perceived workplace support has no mediation effect on the link between extended FTP and approach crafting in Study 2, although it mediates the same relationship in Study 1. In Study 3, perceived workplace support does not mediate the relationship between approach crafting at T1 and extended FTP at T3. This shows that while extended FTP may be associated with perceived workplace support and result in approach crafting instantly, this same scenario cannot be said to occur over time, especially when previous levels of perceived workplace support and approach crafting are controlled. The result does not support the earlier assumptions that perceiving an extended future is associated with openness to workplace support (Casu *et al.*, 2020), and workplace support in turn is related to job crafting (Chen *et al.,* 2021; Hong *et al.,* 2020; Park *et al.,* 2020; Slemp *et al.,* 2015; Uçar and Kerse, 2022). As previously mentioned, the reliance on cross-sectional data in these studies presents a significant limitation. Cross-sectional studies capture a snapshot of a single point in time, providing a limited view that cannot account for changes over time. Additionally, cross-sectional data cannot effectively track the progression or development of the variables under study, leading to potential inaccuracies in understanding long-term effects. The inability to account for temporal variations and the potential for confounding variables further complicate the interpretation of results from cross-sectional studies. Therefore, while cross-sectional data can offer valuable insights, it is important to recognise these inherent limitations when drawing conclusions from such research.

8.1.12 Mediating role of job crafting on the relationship between self-leadership and goal progress

The present also examined the mediating role of approach crafting on the association between self-leadership and goal progress. Results reveal that though approach crafting plays a mediating role on the relationship between self-leadership and goal progress in Study 1, this was not the case in Study 2. In Study 3 also, approach crafting did not mediate the relationship between goal progress and self-leadership, indicating no reverse causal relationship. Thus, while self-leaders were found to adopt approach crafting behaviours and report higher goal progress at a point in time, higher levels of self-leadership do not lead to job crafting and goal

progress over time, when prior levels of approach crafting, and goal progress were controlled. These finding contrasts earlier expectations that exhibition of self-leadership qualities will lead to adoption of approach crafting strategies (Liu *et al.*, 2023) and eventually lead to significant progress made towards to attainment (Clinton *et al.*, 2024).

8.1.13 Mediating role of job crafting on the relationship between perceived workplace support and goal progress.

Like the previous hypothesis, approach crafting although mediated the relationship between perceived workplace support and goal progress in Study 1, this mediation effect was not significant in Study 2. This means that levels of perceived workplace support in the past does not predict approach crafting in the present and goal progress in the future. Thus, the mediation effect of approach crafting is not stable over time. This means while perceived workplace support may be important in influencing employees' proactivity in the present, its long-term impact is not always realised. This result challenges existing understanding that organisational support predicts job crafting among employees (Ji, 2022; Park *et al.,* 2020; Slemp *et al.,* 2015; Uçar and Kerse, 2022), and job crafting potentially leading to goal progress (Clinton *et al.*, 2024).

8.2 Observed model

Figure 4 below summarises the relationships between variables as found across all three studies. This model contributes to the understanding that FTP, offering explanation to how individuals gradually shift from having extended FTP to limited FTP. The current findings suggest that FTP can be influenced by specific events and short-term goals, meaning it should not be regarded solely as a long-term construct. This shift occurs when an individual commits to a goal and perceives they have sufficient time to complete it. Such long-term thinking encourages the development of achievement goals aligned with this extended perspective. Although this relationship was not significant in Study 2, it was significant in Study 1, indicating that certain moderating variables may influence this connection.

Additionally, these goals can impact employees' use of approach crafting behaviours, aimed at achieving the desired outcomes. Approach crafting has a bidirectional relationship with goal progress, where the progress made influences future crafting behaviours. If goal progress is unsatisfactory, individuals may use self-leadership strategies, adopting avoidance crafting behaviours, which can later predict a limited FTP. The model integrates self-management

principles with job crafting and temporal focus research, explaining how individuals gradually shift from an extended to a limited FTP, and the cognitive and behavioural mechanisms involved. This research contributes to the literature on FTP, job crafting, and self-leadership by highlighting how time perspective affects proactive behaviours, and how these behaviours, in turn, shape time orientation. It suggests that time perspectives are tied to specific goals, and that these orientations shift depending on the individual's aspirations and objectives.

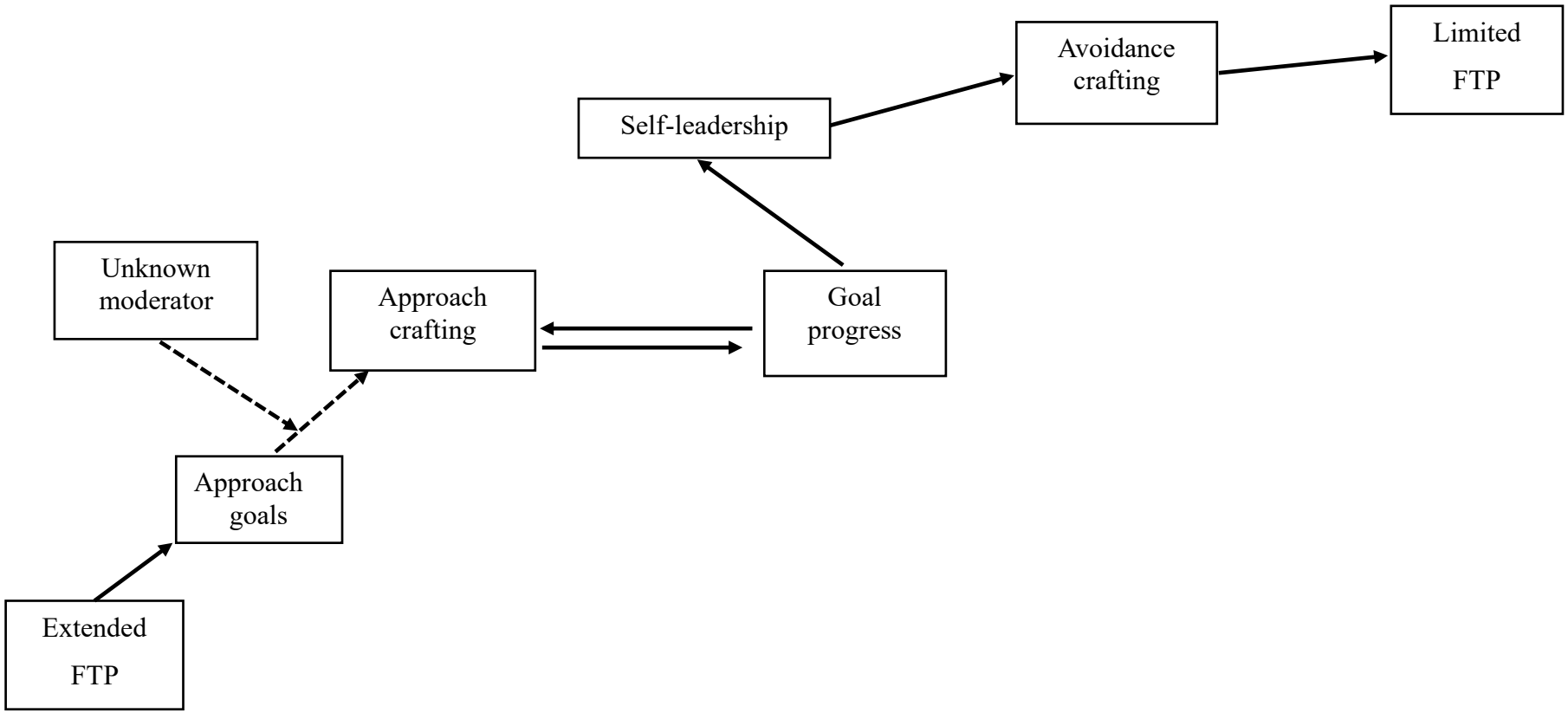

Figure 4: Observed model based on findings from all three studies.

Note: Dotted arrows represent insignificant relationships in the present study that needs to be examined further by future studies. The straight arrows were significant in the present study

Chapter 9 Discussion and conclusion

9.0 Introduction

The chapter presents the contributions of the current research, addressing practical implications, study limitations, and recommendations for future research. A general conclusion of the entire research is also provided.

9.1 Originality and theoretical contribution

Originality is a fundamental criterion for evaluating the quality of doctoral research. Clarke and Lunt (2014) note that while there is broad agreement among academics that originality entails contributing to knowledge, interpretations of what constitutes originality vary across disciplines. In the social sciences, originality is frequently associated with methodological innovation and researcher attributes such as integrity and authenticity (Clarke and Lunt, 2014). It may also be evidenced through novel approaches, including the formulation of new research questions, the adoption of alternative perspectives, or the synthesis of previously unconnected ideas (Johnston, 1997). Research that engages with understudied contexts, particularly those situated in non-Western regions or populations, represents another important dimension of originality (Guetzkow *et al.*, 2004). Within this context, originality can also be demonstrated by applying established theories in novel settings or through innovative research designs (Clarke and Lunt, 2014). Guetzkow et al. (2004) further suggest that originality in the social sciences can stem from employing new theories, methods, or data; addressing novel topics; investigating marginalised areas; or generating unique empirical insights. For instance, using both cross-sectional and longitudinal approaches may yield insights that underscore the importance of aligning research designs with theoretical aims.

In line with the discussion on originality in the preceding paragraph, the studies presented in this thesis demonstrate originality by exploring relationships between established constructs such as FTP, goal orientation, self-leadership, and goal progress – within a context that has received limited research attention (i.e., academics in Ghana). Although these constructs have been widely examined in Western contexts, to the best of the researcher's knowledge, no prior studies have explored them in the African setting. This investigation therefore contributes to the cross-cultural validation of these constructs. Notably, some scale items underperformed within the African sample, suggesting the need for item refinement. Future research may benefit from rewording and piloting these items for greater contextual fit.

The originality of the present thesis is also reflected in its methodological approach, which employed both cross-sectional and longitudinal designs. Additionally, the exploration of reverse causality provided insights into the potential bidirectional relationships among key variables, challenging initial assumptions. This multi-method approach enabled a more comprehensive understanding of the complex relationships among the studied constructs. The research further integrated perspectives from several theoretical frameworks, including situated value-expectancy theory, self-regulation theory, and the proactive motivation framework. By combining these perspectives, the thesis offers a novel conceptualisation of employee proactive behaviour. Specifically, it proposes that proactive behaviour originates from future-oriented beliefs and expectations, which shape individuals' goal orientations and subsequently lead to goal adoption and goal striving through self-leadership strategies. This process then activates behavioural and cognitive self-influence mechanisms that drive proactive behaviour such as job crafting. While the full model was not supported by the longitudinal data, findings from cross-sectional analyses offer preliminary support and highlight the need for future research to examine the temporal dynamics of this process. The integration of these frameworks contributes to theory development in the areas of proactive motivation, self-regulation, and expectancy-based models of employee behaviour.

Additionally, the UK Framework for Higher Education Qualifications (FHEQ) (QAA, 2024) outline key criteria for the award of a doctoral degree. These include the generation and interpretation of new knowledge through original research, systematic understanding of a substantial body of knowledge, the capacity to design and execute research projects, and in-depth familiarity with relevant research methods. As demonstrated in this thesis, new knowledge was generated through cross-cultural validation efforts and through the examination of the relationships between FTP, goal orientation, self-leadership, and job crafting. Furthermore, the thesis contributed to the understanding of the nomological networks of job crafting and self-leadership. It demonstrated that, although conceptually similar, self-leadership and job crafting are empirically distinct constructs. This finding contributes to the ongoing scholarly debate regarding the potential conceptual redundancy of self-leadership in relation to other forms of self-regulation and proactive behaviour.

This research provides a unique contribution to the understanding of job crafting. Specifically, the three studies presented in this thesis provide empirical evidence to support the theoretical argument that job crafting occurs in both approach and avoidance forms (Bruning and

Campion, 2018; Zhang and Parker, 2019), with distinct antecedents for each. The present research also advances the conceptualisation of job crafting into approach and avoidance dimensions by conducting an empirical examination of the relationship between goal orientation and job crafting. This investigation is timely because although extant research argues that approach and avoidance goal orientation directly shape approach and avoidance job crafting strategies respectively (Bruning and Campion, 2018), there is limited empirical evidence to confirm or contend this assumption. The present study found no statistically significant relationship between the dimensions of goal orientation and their corresponding forms of job crafting challenging the existing assumption that approach and avoidance goal orientations directly influence approach and avoidance crafting behaviour at work. It is important to add that including other variables such as self-leadership and perceived support in the model rendered the relationship between goal orientation and job crafting insignificant, indicating that other factors may impact the relationship between goal orientation and job crafting.

The studies presented in this thesis also demonstrate novel contribution by showing the dynamic transition individuals experience from expectancies to self-influence and proactive behaviour. Specifically, the study presents and individualised view of job crafting where FTP and goal orientations influences self-leadership and job crafting momentary but not over time. Rather, it was discovered that approach and avoidance job crafting directly relate to extended and limited FTP respectively, over time. This accentuates the cyclical nature of the relationship between the variables reflecting the idea that perception influences attitudes and manifests in behaviour only immediately, whereas behaviour influences perception over time. Specifically, extended FTP is directly related to self-leadership, which in turn is associated with job crafting only temporarily (cross-sectional level), job crafting was found to have a direct association with FTP over time. This extends the proactive framework by Parker et al.'s (2010) which argues that job crafting is a personalised behaviour that is strongly influenced by the motivation, beliefs, and expectations of the individual. The current research argues that proactive behaviours in turn influence perceptions, expectancies, beliefs and motivation over time which may help employees to take further proactive actions.

This thesis also makes significant contribution by establishing that the relationships between FTP and job crafting is not direct as argued by extant studies (e.g., Kooij et al., 2017) highlighting the mediating roles of self-leadership and perceived workplace support in this

relationship. Through rigorous design and data analyses, it was revealed that there is no statistically significant direct association between FTP and job crafting, challenging the existing argument that FTP is directly related to job crafting (Kooij et al., 2017). The present research thus, argues that changes in FTP would result in changes in motives and goal prioritisations first before resulting proactive behaviour in response to the changed motives. This argument aligns with assertion that employees with extended FTP have growth motives while those with limited FTP have generativity and emotional regulation motives (e.g., Kooij and Van De Voorde, 2011; Kooij et al., 2011, 2014; Lang and Carstensen, 2002).

The studies presented in this thesis also makes noteble contribution to extant research by demonstrating that FTP is not a static trait but rather a dynamic concept shaped by specific events and short-term goals. Together, the studies indicate that individuals cannot simultaneously maintain both an extended and a limited FTP regarding a specific goal or aspect of life; rather, their perspective shifts as they commit to goals and perceive their temporal resources as either unlimited or limited. Although extant literature show that chronological age is negatively related to FTP and people gradually shift from extended to limited FTP as they age (Zacher and Frese, 2009), the present study is the first to demonstrate how goal striving (goal orientation and goal progress), self-leadership and job crafting could explain how employees' gradually shift from extended to limited FTP in a relatively short period of time rather than a life time shift as argued by lifespan theories. This shift is critical, as it suggests that FTP should not be viewed solely as a long-term construct but rather as a flexible cognitive framework that can adapt based on immediate aspirations and situational contexts (Kunwijaya *et al.*, 2021; Rabinovich *et al.*, 2010). The study highlights the implications of this transition for proactive behaviours in the workplace, particularly through the lens of job crafting and self-leadership. As individuals progress toward their goals, their crafting behaviours—actions taken to shape their work environment to achieve desired outcomes—are influenced by their perceived goal progress. This relationship is bidirectional; while successful goal attainment fosters proactive crafting behaviours, stagnation may lead to avoidance strategies, ultimately predicting a limited FTP. By integrating principles of self-leadership with job crafting and time perspective literature, this research shows the cognitive and behavioural mechanisms that underpin the gradual shift from an extended to a limited FTP. This contribution enriches the literature on FTP, job crafting, and self-leadership by demonstrating how time perspectives are complexly linked to goal orientation and how these perspectives can shape proactive behaviours in organisational settings.

Another important contribution is the finding that self-leadership and job crafting maintain a state of equilibrium over time. This is recognised by the moderate to high autoregression coefficients found during the data analysis stage. While existing literature is inconclusive about the frequency of changes in these variables, the present study reveals that in a stable organisational context, these variables remain relatively stable over 2 to 4 months. This implies that although job crafting is considered a daily behaviour, how employees craft their job can remain stable over relatively short periods. The study also established that the association between FTP, goal orientation, self-leadership, and job crafting is non-significant among academics, especially when previous levels of job crafting and goal orientation and self-leadership are controlled – demonstrating a state of dynamic equilibrium among study variables.

This temporal stability suggests that the variables are relatively stable in highly structured and institutionalised work environments. A key explanation for this stability may be the structured nature of academic work and the institutionalised environment in which academics operate. Academic roles are often characterised by well-defined job descriptions, formalised career progression pathways, and standardised performance expectations (Kallio *et al.*, 2016). Such structures impose constraints on work behaviours, reinforcing routinised actions that ensure stability in task engagement and work practices (Harju *et al.*, 2016; Niessen *et al.*, 2016). As a result, job crafting may become embedded within habitual work patterns, creating a self-sustaining state of dynamic equilibrium. This finding indicates that job crafting tends to be more stable in highly structured work environments where role expectations and job autonomy remains constant (Harju and Tims, 2020). In such settings, even when employees possess proactive traits or a future-oriented outlook, their ability to engage in job crafting may be moderated by institutional norms and organisational rigidity (Petrou *et al.*, 2018b). Consequently, the study makes that contribution that the dynamic nature of job crafting is influenced by the institutional factors in that the structured nature of academic institutions and routinised nature of academic jobs could contribute to the relative stability in job crafting, irrespective of changes in FTP, goal orientation, or self-leadership.

In summary, this study demonstrates significant originality through its innovative approach to understanding the dynamics of job crafting, goal orientation, self-leadership, and perceived workplace support in the relationship between FTP and goal progress. It challenges existing

assumptions, extends theoretical frameworks, and provides valuable insights into the stability and interplay of these variables over time in structured organisational contexts.

9.2 Practical implications of the study

The current study reveals that while FTP accounts for interpersonal differences in job crafting behaviour, it does not explain within-person variation in job crafting behaviour. This means that having an extended or limited FTP in the past does not predict approach or avoidance crafting in the future. Although employees with extended FTP are more likely to adopt approach crafting strategies and those with limited FTP tend to engage more in avoidance crafting, an individual's past FTP levels do not influence their crafting strategies over time. This suggests that it is insufficient to assume employees will engage in proactive workplace behaviours, such as job crafting, solely based on their time perspectives. As demonstrated in Parker et al.'s (2010) proactive motivation model, employees require the right conditions to stimulate proactivity, even if they possess the capability. Therefore, managers should foster a supportive environment and offer employees both the opportunities and autonomy to shape their roles, if they are to encourage proactive behaviour. Also, job crafting was found to directly influence FTP over time, highlighting the importance of job crafting in shaping employees' FTP. Managers should, therefore, create interventions to encourage job crafting, which in turn can enhance FTP, which can be beneficial for the ageing workforce (Taneva and Peng, 2024).

The study also found that employees with extended FTP exhibited self-leadership qualities that facilitate approach crafting. However, this does not mean that having an extended FTP will promote self-leadership and approach crafting behaviours over time. While it is beneficial to have employees with extended FTP, these individuals will not always demonstrate self-leadership or approach crafting without the right conditions or management intervention (i.e., support). Organisations should foster extended FTP and self-leadership skills through tailored human resources practices, including training, and creating opportunities for personal growth and development. Research indicates that both FTP and self-leadership are attributes that can be developed or enhanced through individual experiences (Goldsby *et al.*, 2021; Harari *et al.*, 2021; Kooij *et al.*, 2018)

Contrary to prior studies, approach goal orientation was not directly associated with approach crafting. This suggests that while goal orientations are important, they alone may not elicit desired proactive behaviours. Management should help employees to adopt learning, mastery,

and performance approach goals while also allowing employees the autonomy to develop their own behaviour management strategies, fostering proactivity and creativity (Manz, 1986a; Slemp *et al.*, 2015). Employees should be empowered to set their own goals in line with organisational strategies to increase their propensity to engage in proactive behaviours such as job crafting. Interestingly, self-leadership was positively related to both approach and avoidance crafting in Study 1 but only to avoidance crafting in Study 2. This indicates that self-leaders can engage in behaviours that expand or reduce their work, aiding in goal achievement and enhancing well-being and work meaningfulness (Kim and Beehr, 2018, 2020). Managers can support self-leadership by creating interventions or endorsing personal initiatives. Managers can also adopt leadership styles that promote self-leadership in followers such as transformational leadership (Andressen *et al.*, 2012), to enhance employees' self-leadership at work.

Perceived workplace support emerged as a significant predictor of employee proactivity and a precursor to goal progress in Study 1, though not in Study 2. This suggests that while employees with higher perceived workplace support are more likely to engage in approach crafting, this does not always persist over time. Workplace support should be varied and comprehensive, addressing the instrumental, emotional, and psychosocial needs of employees (Sarros and Sarros, 1992). Despite claims of adequate support in academic institutions, substantial improvements are needed, especially given the increasingly stressful nature of academic jobs. Management must create environments that support employee welfare throughout all career stages (Hollywood *et al.*, 2020). Support mechanisms should be tailored to the needs of all employees, particularly those with limited FTP who prioritise emotional regulation and work meaningfulness. Promoting proactivity and job crafting among late-career academics requires establishing supportive environments with accessible resources. The study also highlights the mediating role of approach crafting in the relationship between self-leadership, workplace support, and goal progress in the between-person analysis in Study 1, though this was not seen in Study 2. Employees engaging in approach crafting feel a sense of accomplishment, promoting the adoption of more challenging goals. Previous research indicates that goal progress facilitates the adoption of more ambitious future goals, driving employees towards greater achievements (Ballard *et al.*, 2018; Ballard, Yeo, Neal, *et al.*, 2016; Yeo *et al.*, 2009). Therefore, work design and human resource systems should facilitate job crafting through opportunities and autonomy. While academia is known for workplace autonomy, many higher

education institutions exhibit bureaucratic structures with limited flexibility, potentially stifling employee proactivity (McNaughtan *et al.*, 2022).

Furthermore, the current study conceptualised job crafting as a personalised proactive behaviour and found that such proactivity can yield beneficial outcomes for employees (i.e., the crafter), particularly by enhancing progress toward personal goals. Although changes in job crafting did not directly predict changes in goal progress, the findings revealed a positive association between job crafting and goal progress at the individual level. However, job crafting may also enable employees to pursue personal ambitions, aspirations, and agendas in ways that undermine the wellbeing of coworkers and compromise the functioning of teams and organisations (Tims *et al.*, 2015). Previous research has shown that when employees craft their jobs in overly self-centred ways, the consequences can be detrimental at both the team and organisational levels (Rudolph *et al.*, 2017). Organisations should therefore not only encourage employees to engage in job crafting but also guide this behaviour to align with organisational goals and values. Managers and leaders must implement mechanisms that direct proactive behaviours toward collective outcomes rather than individual interests. By clearly communicating organisational goals and fostering a sense of ownership among employees, organisations can create conditions where job crafting supports rather than detracts from shared objectives. Leaders should embed organisational values deeply within the workforce and intentionally shape a culture that nurtures organisational membership and team orientation over individualism. By promoting collaboration instead of competition, organisations can help employees craft their jobs in ways that leverage personal strengths to enhance team effectiveness rather than pursuing self-serving goals. To further support constructive job crafting, organisations should foster a participative climate that encourages both individual and collaborative (team-level) job crafting. Research has demonstrated that such climates can improve team performance and collective effectiveness (Khan *et al.*, 2022). By cultivating these environments, organisations can ensure that job crafting serves both individual development and broader organisational success.

9.4 Limitations

The present research, while providing valuable insights, encountered several significant limitations that warrant careful consideration. By highlighting these limitations, this discussion aims to foster an understanding of the methodological challenges inherent in the current study and their implications for research interpretation. One of the primary limitations addressed in

the study was the cross-sectional design used in Study 1. This design limitation was mitigated in Study 2 by employing a longitudinal approach. However, the longitudinal design also was not without limitations. For instance, the longitudinal survey, which involved three waves of data collection using extensive questionnaires, experienced high attrition rates possibly due to participant fatigue and dropout over time. This high attrition rate impacted the study as it significantly reduced the final sample size potentially introducing bias. High attrition is a significant limitation in longitudinal surveys (Ployhart and Vandenberg, 2010), particularly when the rate of dropout is high across multiple waves of data collection. In the present study, conducted among academics working in Ghanaian universities, attrition was evident as the number of participants decreased from 402 at Time 1 to 143 at Time 2, and further down to 122 at Time 3. This substantial reduction poses various methodological and analytical challenges (Goodman and Blum, 1996). Firstly, high attrition reduces the sample size, which limits the statistical power of the study. A smaller sample size makes it harder to detect significant effects or relationships between variables, leading to less reliable conclusions. In this study, the initial number of 402 participants at Time 1 reduced to less than a third by Time 3. As a result, the findings drawn from the final wave may not represent the full population of Ghanaian academics, weakening the generalisability of the results.

Maturation effects also posed a challenge, as participants' responses could change merely due to the passage of time rather than the variables under investigation. Additionally, social desirability bias and learning effects were concerns, as participants might alter their responses to appear more favourable or become more familiar with the survey questions over time. Furthermore, participants may have faced difficulties accurately recalling their goals and previous levels of FTP, and job crafting, possibly leading to confounded data. Thus, the study was susceptible to response bias and recall errors. Factors such as faulty memory, common method bias, social desirability bias, and misinterpretation of survey questions could introduce inaccuracies into survey responses. Despite employing the Podsakoff et al. (2003), and finding common method bias not to be an issue, these potential inaccuracies necessitated rigorous validation procedures and careful consideration during data analysis.

Generalisability of the findings was constrained by cohort effects. The specific historical and social contexts of the cohort studied may have influenced the observed relationships, limiting the applicability of results to other cohorts or time periods. This temporal specificity was particularly problematic in rapidly changing environments, where factors influencing job

crafting behaviours could evolve significantly over short periods, reducing the replicability of the findings. The intermittent strikes of academic employees and other industrial actions during the research period could have had a significant impact on the study's results. As the research focused on the effects of FTP and goal orientation on job crafting—factors that are closely tied to work environments and employee engagement—the disruptions caused by strikes may have negatively influenced participants' behaviour. Strikes often create uncertainty and reduce motivation, which could diminish employees' focus on long-term goals and their ability to engage job crafting. With workplace stability compromised, participants may have found it difficult to maintain their goal orientation or to craft their jobs in ways that align with their future aspirations. This could lead to a skewed representation of how these variables interact under normal working conditions, potentially resulting in weaker or non-significant associations between FTP, goal orientation, and job crafting. As a result, the study's findings may not fully reflect typical behaviour in a stable work environment, and the influence of external disruptions like strikes should be considered when interpreting the results. The exclusive focus on academic employees further limited the generalisability of the findings to other organisational contexts. The inability to employ probability sampling, due in part to the impact of COVID-19, further restricted the generalisability of the findings.

Logistical and practical challenges were prominent in the longitudinal study. The extended duration of data collection demanded significant financial and human resources, straining the budget of the study. Details of this challenge is presented in Chapter 4. Additionally, maintaining consistent contact with participants over time was difficult, necessitating interventions such as regular reminders or incentives, which could inadvertently influence participant responses and compromise the study's integrity. Ethical considerations in the present research presented a significant limitation, as obtaining ethical clearance from all participating institutions was both challenging and time-consuming.

In addition to the typical challenges of conducting a scientific study and the technical issues related to the study design, the researcher also encountered further difficulties due to the impact of COVID-19 and various socio-economic problems. A key issue was the rapid depreciation of the Ghanaian Cedi, which lost 30 percent of its value against the US Dollar during the study period (Bank of Ghana, 2023). Furthermore, inflation reached 54.1 percent nationwide, and in the Greater Accra region, where the study was conducted, it was as high as 66.7 percent (Ghana

Statistical Service, 2022). These economic conditions placed a considerable strain on the study's budget, adding to the overall challenges.

9.5 Directions for future research

Examine effects of job crafting at the team and organisational levels

The present study adopted an individualised perspective on job crafting and found that job crafting is positively associated with goal progress. It also demonstrated that job crafting is related to FTP over time. However, as already mentioned, these individual-level benefits may not necessarily translate into positive outcomes at the team or organisational level, particularly when employees engage in job crafting to prioritise personal goals over team objectives or organisational aims. Future research should therefore explore whether job crafting, in conjunction with FTP and goal orientations, can yield beneficial outcomes at the team and organisational levels. It would be valuable to examine whether collaborative (team-level) crafting contributes to team goal progress, as previous studies have shown that collaborative crafting can have positive implications for both individuals and teams (e.g., de Jong et al., 2025; Leana et al., 2009; Mcclelland et al., 2014). Specifically, collaborative crafting has been found to positively relate to team control, team interdependence, and team efficacy, which in turn have been associated with increased work engagement and enhanced team performance (Mcclelland *et al.*, 2014). These findings suggest that team-level crafting may potentially enhance team's goal progress.

Further research could also investigate whether FTP at the team level and team-based goals serve as antecedents of collaborative crafting. Such inquiry would help to determine whether team-level FTP is associated with team goal adoption and whether these constructs influence collaborative crafting. This line of research is particularly important given that FTP has predominantly been conceptualised as an individual-level construct in existing literature. However, as employees typically function within social and interdependent work contexts, being future-oriented may foster the development of shared perceptions, attitudes and behaviours aimed at achieving long-term goals over immediate rewards. Particularly, a future-oriented leader may exert considerable influence on team members, encouraging them to adopt similar perspectives and thereby promoting collaborative crafting, which may, in turn, reinforce team-level FTP.

Moreover, future studies should consider the role of contextual or team-level moderators in this relationship. Factors such as competitive climate, team cohesion, and safety climate may shape the extent to which job crafting impacts team and organisational outcomes. Researchers are encouraged to employ methodologies that enable the collection of multilevel and multisource data in order to comprehensively assess the implications of job crafting at higher levels of analysis.

Explore moderating variables in the FTP-achievement goals relationship

A key direction for future research is to examine potential moderating variables in the relationship between FTP and achievement goals. Mixed findings between Study 1 and Study 2 suggest that individual or contextual factors may influence how FTP affects goal orientation. For example, personality traits such as conscientiousness or extraversion could moderate the FTP-goal orientation relationship. Prior research suggests that conscientious individuals tend to have a more extended FTP, which may strengthen the connection between FTP and future goal orientation (Dunkel and Weber, 2010; McCabe *et al.*, 2013). Similarly, intrinsic motivation has been associated with extended FTP and long-term goal pursuit (Lee *et al.*, 2010; Simons *et al.*, 2004). Investigating how these traits interact with FTP could offer a more nuanced understanding of how individuals develop and sustain long-term achievement goals. Experimental or quasi-experimental designs could further establish causality by manipulating moderating variables and examining their impact on FTP-goal orientation dynamics.

Examine temporal shifts in FTP across life stages and significant events

Another important research direction is to explore how FTP changes across life stages or significant life events. The present study underscores that FTP is dynamic and evolves in response to short-term goal orientations. Longitudinal studies could effectively capture these temporal shifts, examining how FTP changes in response to events like career transitions, retirement planning, or major challenges (e.g., illness). Previous research shows that FTP tends to diminish with age or in the face of life changes (Kooij *et al.*, 2018; Rudolph *et al.*, 2018), which can be particularly relevant for organisations managing multigenerational workforces. Studying these shifts could offer valuable insights for career counselling and retirement planning (Fasbender *et al.*, 2019; Kooij and Van De Voorde, 2011). To deepen this understanding, researchers could employ experimental designs to assess how specific interventions or life events impact FTP. Additionally, qualitative methods such as interviews or

case studies could provide rich insights into how individuals perceive and adapt their FTP across different life stages.

Link FTP to organisational contexts and leadership styles

Future research should explore how organisational contexts, including leadership styles, influence employees' FTP. Leaders' time orientation has been shown to significantly impact team's (i.e., employees') temporal perspectives (Briker *et al.*, 2020), with transformational leadership associated with extended FTP and proactive behaviours (Zhang *et al.*, 2014). Understanding how leadership styles shape employee's FTP could help organisations create environments that foster long-term thinking and planning. Additionally, organisational policies, such as career development programs or flexible working arrangements, may enhance employees' extended FTP, leading to greater motivation and long-term engagement. Experimental or quasi-experimental designs could be used to manipulate leadership styles or policies and assess their effects on FTP. Qualitative research could also explore cultural influences on how leadership shapes temporal perspectives, providing a more in-depth understanding of context-specific factors.

Examine self-leadership and its role in managing temporal shifts

Another promising area for research is examining self-leadership and its role in managing FTP shifts. Self-leadership strategies, such as self-reward, constructive self-talk, or visualising success, may help individuals maintain an extended FTP even when progress towards goals is slow. Understanding which self-leadership strategies are most effective in preventing shifts into limited FTP could inform organisational interventions aimed at boosting resilience and long-term career planning. Previous research links self-leadership to proactive and adaptive work performance (Marques-Quinteiro *et al.*, 2019; Marques-Quinteiro and Curral, 2012), which were found in the present study to influence FTP over time. Experimental designs could assess the effectiveness of specific self-leadership interventions in influencing FTP and goal pursuit behaviours. Additionally, qualitative approaches could offer deeper insights into how employees experience and implement self-leadership in managing their temporal perspectives.

Compare FTP and job crafting behaviours across cultural contexts

Future research could also investigate how FTP and job crafting behaviours differ across cultural contexts. Time perspectives are known to vary significantly across cultures, with Western cultures often promoting future-oriented thinking, while non-Western cultures may

prioritise present-orientated perspectives (Sircova *et al.*, 2015). Also, collectivist cultures may tend to engage more in relational crafting, focusing on relationships and collaboration, while individualist cultures may focus on task crafting. Comparative studies could explore how cultural differences shape the relationship between FTP, job crafting, and self-leadership, providing valuable insights for global organisations. A qualitative approach could be especially useful for exploring cultural narratives and attitudes towards time and work, offering a more nuanced understanding of the cultural context.

Methodological considerations in future research

To improve future research, experimental or quasi-experimental designs should be employed, where data is collected before and after interventions on job crafting, self-leadership, and goal orientation. This would help researchers determine whether FTP, job crafting, and goal progress vary before and after an intervention. The lack of control over previous levels of variables (T-1) in this study could have influenced relationships between T1 and T2 variables. Employing more rigorous methodologies, such as experience sampling methods and experimental designs, will help establish causality and control for potential extraneous variables. Addressing these methodological gaps is essential, given the limitations encountered in this study. High attrition rates and recall biases suggest a need for more robust study designs, such as quasi-experimental or longitudinal methods, to better control for these limitations. By adopting more sophisticated research methodologies, future studies can enhance the reliability and validity of their findings and contribute to a deeper understanding of the dynamics between FTP, goal setting, self-leadership, and job crafting behaviours.

As this study focused on personal and highly individualised constructs, future research should consider adopting methods that capture the lived experiences of participants. Qualitative approaches—such as interviews, ethnography, and audiovisual diaries—can offer valuable insights into how individuals' time perspectives and goal orientations influence their self-influence strategies and proactive behaviours. These methods can also illuminate the role of contextual factors, including both national and organisational cultures, in shaping individuals' time perspectives and goal orientations, and how these, in turn, relate to self-leadership and job crafting at work. This approach is particularly relevant given that most studies on FTP, goal orientation, and self-leadership have employed quantitative methods. While such studies have advanced our understanding of the effects of these constructs on individuals, teams, and organisations, they offer limited insight into how individuals develop these perceptions,

attitudes, and behaviours. Qualitative research can help bridge this gap by uncovering the processes through which these constructs emerge and manifest in the workplace.

Expand the present research to different work contexts

Future studies should aim to replicate these findings using random samples from diverse work settings. This would help verify whether the statistically insignificant relationships observed in this study are consistent across different workgroups. Additionally, employing experience sampling methods could provide real-time insights into how goals influence job crafting behaviours on a daily basis, thereby offering a more detailed understanding of these processes in everyday work environments.

9.6 Conclusion

The present study examined the influence of extended and limited FTP and approach and avoidance goal orientation on approach and avoidance job crafting. It also explored the mediating roles of self-leadership and perceived workplace support on the relationship between extended FTP and approach job crafting. Furthermore, the study investigated the influence of both approach and avoidance crafting on goal progress and the mediating role of approach job crafting in the relationship between self-leadership and goal progress. Finally, the study examined the mediation effect of approach crafting on the relationship between perceived workplace support and goal progress. Data were collected from a sample of academics in Ghana using a combination of online and paper questionnaires over ten months. Specifically, 3-wave panel data were collected from academic employees with an average time lag of two months. Structural equation modelling techniques were employed to analyse the data gathered in the first wave separately in Study 1 while the 3-wave panel data were also analysed in Study 2 using time-lagged autoregression. All hypotheses were also reversed and analysed to find out whether the dependent variables also predicted the independent variables using cross-lagged autoregression in Study 3.

The findings show no direct link between extended or limited FTP and approach job crafting in both studies. However, limited FTP was associated with avoidance crafting in Study 1 but not in Study 2. Notably, approach crafting at Time 1 predicted extended FTP at Time 3, suggesting a reverse relationship. Approach goal orientation did not relate to approach crafting in either study, while avoidance goals were linked to avoidance crafting in Study 1 but not Study 2. Self-leadership had a significant association with approach crafting in Study 1, but

this was not consistent over time. Perceived workplace support predicted job crafting in Study 1 but not in Study 2, indicating an unstable relationship. Approach crafting was consistently related to goal progress in both studies, whereas avoidance crafting was not. Self-leadership and workplace support mediated the relationship between extended FTP and approach crafting in Study 1, but not Study 2. Similarly, avoidance goal orientation partially mediated the link between limited FTP and avoidance crafting in Study 1 but not in Study 2. None of these mediations were significant in Study 3, implying no reverse effects. The results align with previous research, such as Kooij *et al.* (2017), which found a reverse causal relationship between job crafting and FTP. The study demonstrates that job crafting can influence changes in FTP over time. It also highlights that FTP and goal orientation have no lasting effect on job crafting or goal progress when autoregressive factors are considered. From the viewpoint the control theory, these null relationships do not imply that FTP, goal orientation, self-leadership and perceived workplace support do not have any influence on job crafting and goal progress, rather, it means over time, the associations observed in the study 1 are complicated as FTP, goals and self-leadership and workplace support obtain stability (equilibrium).

Based on these findings, the present research concludes that while FTP may have an indirect effect on job crafting, job crafting directly influences employees' FTP over time. The study also shows that FTP is not limited to long-term future goals but is also relevant to immediate and short-term objectives. Therefore, future research should explore time perspectives in relation to goals with varying timelines, to determine whether employees can hold different time perspectives simultaneously. Additionally, this research proposes a model suggesting that employees may shift from an extended FTP to a limited FTP through goal orientation, job crafting, and self-leadership. It is recommended that future studies investigate whether extended time perspective encourages the adoption of approach goals, which in turn promote approach crafting and positive goal progress. Future research may also explore whether when goal progress is hindered, employees may use self-leadership to adopt avoidance goals and avoidance crafting, leading to a limited time perspective. The present research also encourages researchers to use diverse methods to explore the complex relationships between time perspective, job crafting, goal orientation, and self-leadership.

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Appendices

Appendix 1 Study Questionnaire

Participants' Privacy Notice and Informed Consent

Overview of the research

I am Samuel Doku Tetteh, a PhD student at Norwich Business School of the University of East Anglia, researching academics' future orientation, goal setting and self-regulation at work. Specifically, the study seeks to understand how academics' perception of remaining occupational time influences their goal-setting behaviour and their self-regulation actions at work overtime. This research has received ethical approval from the University of Ghana Ethics Committee for Humanities and the Norwich Business School Ethics Committee.

You are invited to take part in the study by completing the attached short questionnaire, which will take only 10 minutes. In about a month, with your permission, you will be invited again to fill a similar questionnaire. Participating in the study is completely voluntary. Deciding not to take part now, or later, will not affect your relationship with any of the researchers or institutions where the study is being conducted.

This research is supervised by Prof Kevin Daniels (kevin.daniels@uea.ac.uk), Dr Rachel Nayani, (r.nayani@uea.ac.uk), all of Norwich Business School and Dr Dana Unger (dana.unger@uit.no), of UiT, the Arctic University of Norway.

How data will be used

The data you will provide will be used for academic purposes only. The research team will ensure the confidentiality of your responses, as well as your organisation's anonymity in all output materials. Data shall be collected in line with the Ghana Data Protection Act 2012, and the UK Data Protection Act 2018. Data management will follow the Data Protection Act 2018 (DPA 2018) and UK General Data Protection Regulation (UK GDPR), and the University of East Anglia's Research Data Management Policy.

Consent to participate

By signing below, you indicate your consent to participate in the research. You are free to withdraw your consent and cease participation at any time. Further information on your data rights is available at: https://bit.ly/2SLDlHP

I have read and understood the study and use of information and consent to take part and for the data I provide to be anonymously used in research outputs. ☐

I permit the anonymised information I provide to be archived, so that it may be made available for future research and learning. ☐

Respondent's Signature: *Date:*

Researcher's Signature *Date:*

Please read the following statements carefully and respond to them appropriately.

1. Which of the following best describes your gender?

   [ ] Male [ ] Female [ ] Prefer not-to-answer

2. Which of the following best describes your age?
   [ ] 20 – 29 years [ ] 30 – 39 years [ ] 40 – 49 years
   [ ] 50 – 59 years [ ] 60+ years [ ] prefer not to answer

3. What is your highest educational qualification?
   [ ] First Degree [ ] Masters [ ] PhD [ ] Post-doc
   [ ] prefer not to answer

4. What is your main academic job requirement?

   [ ] Teaching [ ] Research [ ] Teaching and research
   [ ] Management (Administration) [ ] prefer not to answer

5. What is your current Academic Position?

   [ ] Teaching/Research Assistant [ ] Assistant Lecturer
   [ ] Lecturer [ ] Senior Lecturer [ ] Associate Professor
   [ ] Professor [ ] prefer not to answer

6. How long have you been working as a lecturer/researcher?
   [ ] 0 – 4 years [ ] 5 – 9 years [ ] 10 -14 years
   [ ] 15 – 19 years [ ] 20 + years

7. How long have you been working at your current university?
   [ ] 0 – 4 years [ ] 5 – 9 years [ ] 10 -14 years

   [ ] 15 – 19 years [ ] 20 + years

8. Which sector does your institution fall?

   [ ] Public [ ] Private

Future Time Perspective

Please indicate the extent to which you ***disagree or agree*** that the following statements have applied to you in the past month. The response is arranged in a five (5) point Likert scale ranging from 1 to 5 corresponding to **1= strongly disagree, 2= somewhat disagree, 3= neutral, 4= somewhat agree, and 5= strongly agree.**

Please note that each statement starts with **"over the past month ..."**

S/N	Over the past month ….	Strongly disagree	Somewhat disagree	Neutral	Somewhat agree	Strongly agree
1	I have felt many opportunities await me in my occupational future	1	2	3	4	5
2	I have expected that I will set many new goals in my occupational future	1	2	3	4	5
3	I have felt my occupational future is filled with possibilities	1	2	3	4	5
4	I have felt I could do anything I want in my occupational future	1	2	3	4	5
5	I have felt that there are only limited possibilities in my occupational future	1	2	3	4	5
6	I have felt there is plenty of time left in my occupational life to make new plans	1	2	3	4	5
7	I have felt that most of my occupational life lies ahead of me	1	2	3	4	5
8	I have felt that my occupational future seems infinite to me	1	2	3	4	5
9	I have had the sense that my occupational time is running out	1	2	3	4	5
10	I have begun to experience time in my occupational future as limited	1	2	3	4	5

Self-leadership

Please indicate the extent to which the following statements have applied to you in the past month. The response is arranged in a five (5) point Likert scale ranging from 1 to 5 corresponding to **1= Not at all, 2= To a little extent, 3= To a moderate extent, 4= To a large extent, and 5= To a very large extent.**

Please note that each statement starts with **"over the past month..."**

S/N	**Over the past month ….**	**Not at all**	**To a little extent**	**To a moderate extent**	**To a large extent**	**To a very large extent**
1.	I have established specific goals for my own performance	**1**	**2**	**3**	**4**	**5**
2.	I made a point to keep track of how well I'm doing at work	**1**	**2**	**3**	**4**	**5**
3.	I worked toward specific goals I have set for myself	**1**	**2**	**3**	**4**	**5**
4.	I visualized myself successfully performing a task before I do it	**1**	**2**	**3**	**4**	**5**
5.	I sometimes pictured in my mind successful performance before I did a task	**1**	**2**	**3**	**4**	**5**
6.	When I completed a task, I often rewarded myself with something I like	**1**	**2**	**3**	**4**	**5**
7.	I talked to myself sometimes (out loud or in my head) to work through difficult situations	**1**	**2**	**3**	**4**	**5**
8.	I tried to evaluate mentally the accuracy of my own beliefs about situations I am having problems with	**1**	**2**	**3**	**4**	**5**
9.	I thought about my own beliefs and assumptions whenever I encountered a difficult situation	**1**	**2**	**3**	**4**	**5**

Job crafting

Please indicate the extent to which you have engaged in the following behaviours in the **past month**. The response is arranged in a five (5) point Likert scale ranging from 1 to 5 corresponding to **1 = Not at all, 2 = Not very often, 3 = Often, 4 = Very often, and 5 = All the time.**

Please note that each statement starts with **"over the past month..."**

S/N	Over the past month ….	Not at all	Not very often	Often	Very often	All the time
1	I actively sought to meet new people at work	1	2	3	4	5
2	I made efforts to get to know other people at work better	1	2	3	4	5
3	I sought to interact with other people at work, regardless of how well I knew them.	1	2	3	4	5
4	I tried to spend more time with a wide variety of people at work.	1	2	3	4	5
5	I actively tried to develop wider capabilities in my job	1	2	3	4	5
6	I tried to learn new things at work that went beyond my core skills.	1	2	3	4	5
7	I actively explored new skills to do my overall job	1	2	3	4	5
8	I sought out opportunities for extending my overall skills at work.	1	2	3	4	5
9	I actively took on more tasks in my work.	1	2	3	4	5
10	I added complexity to my tasks by changing their structure or sequence.	1	2	3	4	5
11	I changed my tasks so that they were more challenging.	1	2	3	4	5
12	I increased the number of difficult decisions I made in my work	1	2	3	4	5
13	I tried to think of my job as a whole, rather than as separate tasks.	1	2	3	4	5
14	I thought about how my job contributed to the organization's goals.	1	2	3	4	5
15	I thought about new ways of viewing my overall job.	1	2	3	4	5
16	I thought about ways in which my job as a whole contributed to society.	1	2	3	4	5
17	I minimized my interactions with people at work that I did not get along with	1	2	3	4	5

Job crafting continued

Please indicate the extent to which you have engaged in the following behaviours in the **past month**. The response is arranged in a five (5) point Likert scale ranging from 1 to 5 corresponding to **1 = Not at all, 2 = Not very often, 3 = Often, 4 = Very often, and 5 = All the time.**

Please note that each statement starts with **"over the past month..."**

	Over the past month	Not at all	Not very often	Often	Very often	All the time
18.	I changed my work so that I only interacted with people that I felt good about working with	1	2	3	4	5
19.	I tried to avoid situations at work where I had to meet new people.	1	2	3	4	5
20.	I channelled my efforts at work towards maintaining a specific area of expertise	1	2	3	4	5
21.	I sought to develop those skills in my job that helped prevent negative work outcomes	1	2	3	4	5
22.	I made sure I stayed on top of knowledge in the core areas of my job.	1	2	3	4	5
23.	I actively reduced the scope of tasks I worked on.	1	2	3	4	5
24.	I tried to simplify some of the tasks that I worked on	1	2	3	4	5
25.	I sought to make some of my work mentally less intense	1	2	3	4	5
26.	I focused my mind on the best parts of my job while trying to ignore those parts I did not like	1	2	3	4	5
27.	I assessed the different elements of my job to determine which parts were most meaningful.	1	2	3	4	5
28.	I tried to think of my job as a set of separate tasks, rather than as a 'whole.'	1	2	3	4	5

Teaching and research goals

Please indicate the extent to which you **disagree or agree** that the following statements have applied to you in the **past month**. The response is arranged in a five (5) point Likert scale ranging from 1 to 5 corresponding to **1 = strongly disagree, 2 = somewhat disagree, 3 = Neutral, 4 = somewhat agree, and 5 = strongly agree.**
Please note that each statement starts with **'In the past month …'**

	Over the past month ….	Strongly disagree	Somewhat disagree	Neutral	Somewhat agree	Strongly agree
1	I wanted to fulfil the different requirements of my job very well	1	2	3	4	5
2	My main concern was to conduct my teaching and research tasks as well as possible	1	2	3	4	5
3	My goal was to expand my professional and methodological knowledge as much as possible	1	2	3	4	5
4	I wanted to develop my competencies further as much as possible	1	2	3	4	5
5	I wanted other people to notice how good I am as an lecturer/ teacher	1	2	3	4	5
6	I wanted to be perceived as competent in what I do	1	2	3	4	5
7	I wanted to be a more competent instructor compared to others	1	2	3	4	5
8	My goal was to teach and publish more papers than my colleagues	1	2	3	4	5
9	It was important for me to achieve a personal connection with students and colleagues	1	2	3	4	5
10	One of my main goals was to develop a cooperative relationship with my colleagues	1	2	3	4	5
11	I wanted to avoid unproductive relationships at work	1	2	3	4	5
12	I wanted to avoid having other people think that I am a bad lecturer or researcher	1	2	3	4	5
13	I wanted to avoid being perceived as incompetent	1	2	3	4	5
14	I didn't want to be a less competent instructor when compared to others	1	2	3	4	5
15	My goal was to NOT teach/research worse than my colleagues	1	2	3	4	5
16	I wanted to have as little to do as possible	1	2	3	4	5
17	It was my goal to have the least amount of work as possible	1	2	3	4	5

Support at work

Please indicate the extent to which you **disagree or agree** that the following statements have applied to you in the **past month**. The response is arranged in a five (5) point Likert scale ranging from 1 to 5 corresponding to **1 = strongly disagree, 2 = somewhat disagree, 3 = neutral, 4 = somewhat agree, and 5 = strongly agree.**

Please note that each statement starts with **"over the past month..."**

	Over the past month ….	Strongly disagree	Somewhat disagree	Neutral	Somewhat agree	Strongly agree
1	My immediate supervisor (i.e., head of department/line manager) would go all out to do things to make my work life easier for me	1	2	3	4	5
2	My colleagues at work did everything they could to make my work easier	1	2	3	4	5
3	I could easily talk with my immediate supervisor	1	2	3	4	5
4	I could easily talk with my colleagues at work about a variety of issues.	1	2	3	4	5
5	My immediate supervisor was willing to listen to my personal problems.	1	2	3	4	5
6	My colleagues at work were willing to listen to my personal problems.	1	2	3	4	5
7	I could rely on my immediate supervisor when things get tough.	1	2	3	4	5
8	I could rely on others at work when things get tough.	1	2	3	4	5

Goal progress

Please indicate the extent to which you agree with the following statements. The response is arranged in a five (5) point Likert scale ranging from 1 to 5 corresponding to **1 = strongly disagree, 2 = somewhat disagree, 3 = neutral, 4 = somewhat agree, and 5 = strongly agree.**

Please note that each statement starts with **"over the past month..."**

	Over the past month ….	**Strongly disagree**	**Somewhat disagree**	**Neutral**	**Somewhat agree**	**Strongly agree**
1	I have made a lot of progress toward the goals I set for myself	1	2	3	4	5
2	I felt like I am on track with my plans	1	2	3	4	5
3	I felt like I have achieved the goals I set last month	1	2	3	4	5

On a scale of 0 (no progress) to 100 (excellent progress), please rate your overall goal progress (a rough aggregated estimate) last month.

……

Future Research

Would you like to be contacted for future research?

[ ] Yes [ ] No

If yes, please provide a valid email address or a WhatsApp number for the link to the next questionnaire to be sent to you automatically. Your email address will be used for the purpose of this research only and will be deleted from our records as soon as data collection is complete.

Appendix 2.1 Ethics Approval Letter from Norwich Business School

University of East Anglia

Study title: The Influence of Future Time Perspective and Achievement Goal Orientation on Job Crafting: A Study of Academic Employees in Ghana and the UK.
Application ID: ETH2122-1900 (significant amendments)

Dear Samuel,

Your application was considered on 15th May 2022 by the NBS S-REC (Norwich Business School Research Ethics Subcommittee).
The decision is: **approved**.

You are therefore able to start your project subject to any other necessary approvals being given.
This approval will expire on **30th November 2022**.

Please note that your project is granted ethics approval only for the length of time identified above. Any extension to a project must obtain ethics approval by the NBS S-REC (Norwich Business School Research Ethics Subcommittee) before continuing.
It is a requirement of this ethics approval that you should report any adverse events which occur during your project to the NBS S-REC (Norwich Business School Research Ethics Subcommittee) as soon as possible. An adverse event is one which was not anticipated in the research design, and which could potentially cause risk or harm to the participants or the researcher, or which reveals potential risks in the treatment under evaluation. For research involving animals, it may be the unintended death of an animal after trapping or carrying out a procedure.
Any amendments to your submitted project in terms of design, sample, data collection, focus etc. should be notified to the NBS S-REC (Norwich Business School Research Ethics Subcommittee) in advance to ensure ethical compliance. If the amendments are substantial a new application may be required.
Approval by the NBS S-REC (Norwich Business School Research Ethics Subcommittee) should not be taken as evidence that your study is compliant with the UK General Data Protection Regulation (UK GDPR) and the Data Protection Act 2018. If you need guidance

on how to make your study UK GDPR compliant, please contact the UEA Data Protection Officer (dataprotection@uea.ac.uk).
I would like to wish you every success with your project.

On behalf of the NBS S-REC (Norwich Business School Research Ethics Subcommittee)

Yours sincerely,

Zografia Bika

Ethics ETH2122-1900: Mr Samuel Tetteh

Appendix 2.2 Ethics Approval Letter from University of Ghana

UNIVERSITY OF GHANA
ETHICS COMMITTEE FOR THE HUMANITIES (ECH)

P. O. Box LG 74, Legon, Accra, Ghana

My Ref. No…ECH 306/ 21-22 …

June 16, 2022.
Samuel Doku Tetteh
Norwich Business School
University of East Anglia
United Kingdom

ETHICAL CLEARANCE
(ECH 306/ 21-22)

The protocol title below has been reviewed and approved by the ECH Committee.

TITLE OF PROTOCOL: THE INFLUENCE OF FUTURE TIME PERSPECTIVE AND ACHIEVEMENT GOAL MOTIVATION ON JOB CRAFTING: A STUDY OF ACADEMIC EMPLOYEES IN GHANA

PRINCIPAL INVESTIGATOR: SAMUEL DOKU TETTEH

Please note that the final review report must be submitted to the Committee at the completion of the study. Your research records may be audited at any time during or after the implementation. Any modification of this research project must be submitted to ECH for review and approval prior to implementation.

Please report all serious adverse events related to this study to ECH within seven (7) days verbally and in writing within fourteen (14) days.

This certificate is valid till June 15, 2023. You are to submit annual reports for continuing review.

Please accept my congratulations.

Yours Sincerely,

Professor C. Charles Mate-Kole
ECH Chair

Cc: Dr. Adote Anum, Department of Psychology, UG
Professor Kevin Daniels, University of East Anglia, UK

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