Illegitimate Tasks, Personal Resources and Job Resources as Antecedents of Job Crafting

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PLAGIARISM DECLARATION

I, the undersigned, hereby declare that the work contained in this thesis is my own and that all contributions from any source have been cited. I have not previously, in its entirety or in part, submitted this thesis to obtain any qualification.

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Date: December 2014
ABSTRACT

In the modern world of work, there has been growing concern regarding the adequacy of traditional job redesign approaches in serving the changing nature of work. It has specifically been argued by Frese and Fay (2001) that in the modern world of work, jobs require a higher degree of initiative due to factors such as global competition, faster rate of innovation, new production concepts, and changes in the job concept. The modern world of work poses a number of challenges which include increased levels of initiative by employees in order to develop their knowledge and skills in order to remain ‘current’, creative ideas, and an increased need for employees to make more and more decisions on their own. In order to survive in today’s challenging market place, employees thus should show high levels of proactivity and initiative.

Job crafting is the process by which individuals make physical and cognitive changes to the task or relational boundaries of their work (Wrzesniewski & Dutton, 2001). It is proactive behaviour requiring adaptation to challenges and constraints presented by the working environment. It thus would be useful to be aware of the most important factors that contribute to the occurrence of such proactive behaviours. The objective of this research study therefore was to test whether salient job and personal resources, and job demands as depicted by the Job Demands-Resources model account for the variance in job crafting for a sample of employees working within the financial services industry.

A literature review was conducted and hypotheses were formulated, and tested by means of an ex post facto correlation design. Data was collected from a sample of 236 employees employed by a company within the financial services industry. A self-administered web-based survey was used for the purpose of collecting the data and participation in the study was voluntary. The data collected was strictly confidential and anonymous. A number of separate measurement instruments to measure the specific latent variables were carefully selected for inclusion in the survey based on their reliability and validity.

The research findings specifically illustrate that employees who receive feedback on their performance as well as those who are engaged in their jobs, are more likely to
craft their jobs. The results also show that engagement mediates the relationship between autonomy and job crafting, as well as the relationship between feedback and job crafting (the latter being mediated only partially by engagement). Finally, it was found that proactive personality was positively related to job crafting. The research findings therefore illustrate the importance of specific job- and personal resources in fostering job crafting behaviours. The results, together with the managerial implications and practical interventions suggested, provide South African managers and industrial psychologists with valuable insight into managing and encouraging job crafting within the workplace.

This research study commenced only once ethical clearance was received from the Research Ethics Committee of Stellenbosch University.
In die moderne wêreld van werk is daar toenemende kommer oor die geskiktheid van die tradisionele herontwerp van werk en hoe dit gepaard gaan met die veranderende aard van werk. Frese en Fay (2001) het spesifiek aangedui dat in die moderne wêreld van werk, 'n hoër mate van inisiatief vereis word as gevolg van faktore soos wêreldwyse mededinging, vinniger tempo van innovering, nuwe produksie konsepte, en veranderinge in die konsep van werk. Die moderne wêreld van werk verg baie meer van individue, wat onder andere insluit hoër vlakke van inisiatief deur werknemers om hul kennis en vaardighede te ontwikkel om sodoende op datum te bly met tegnologiese veranderinge, kreatiewe idees, en 'n verhoogde behoefte vir werknemers om meer en meer besluite op hul eie te neem. Om dus in vandag se uitdagende wereld van werk te oorleef, word dit van werknemers verwag om hoë vlakke van pro-aktiwiteit en inisiatief te toon.

'Job crafting' is die proses waardeur individue fisiese en kognitiewe veranderinge in hul werks take en -verhoudinge aanbring (Wrzesniewski & Dutton, 2001). Dit is pro-aktiewe gedrag wat werknemers help om aan te pas by die uitdagings wat deur die moderne werksomgewing daargestel word. Dit sal dus voordelig wees om bewus te wees van die belangrikste faktore wat bydra tot hierdie pro-aktiewe gedrag in die werksplek. Die doel van hierdie navorsing was dus om te toets of belangrike werks- en persoonlike hulpbronne, en werks-vereistes soos deur die ‘Job Demands-Resources’ model voorgestel, 'n waardevolle verduideliking is vir verskillende vlakke van 'job crafting' vir 'n groep in die finansiele bedryf.

'n Literatuuroorsig is uitgevoer en hipoteses geformuleer wat deur middel van 'n ex post facto-korrelasie-ontwerp getoets is. Data is ingesamel vanuit 'n streekproef van 236 werknemers van 'n maatskappy in die finansiële bedryf. 'n Self-toegepaste web-gebaseerde vraelys is vir die versameling van data gebruik en deelname aan die studie was vrywillig. Die dataversameling was strenge vertroulik and anoniem. 'n Aantal afsonderlike metingsinstrumente om die spesifieke latente veranderlikes te meet, is
noukeurig op grond van geldigheid en betroubaarheid gekies en ingesluit in die opname ingesluit.

Die navorsings resultate illustreer dat wanneer werknemers terugvoering ontvang oor hul prestatie sowel as diegene wat betrokke is in hul werk, meer geneig is om hul werk te ‘craft’. Die resultate toon ook dat betrokkenheid die verhouding tussen autonomie en ‘job crafting’ bemiddel, sowel as die verhouding tussen terugvoering en job crafting (laasgenoemde word net gedeeltelik deur betrokkenheid bemiddel). Ten slotte, is daar gevind dat ‘n pro-aktiewe persoonlikheid n positiewe verwantskap met ‘job crafting’ het.

Die navorsing illustreer dus die belangrikheid van spesifieke werks- en persoonlike hulpbronne in die bevordering van ‘job crafting’. Die resultate, tesame met die bestuursimplikasies en praktiese ingrypings wat voorgestel word, bied Suid-Afrikaanse bestuurders en bedryfsielkundiges met waardevolle insigte in die bestuur en aanmoediging van ‘job crafting’ binne die werkplek.

Hierdie navorsingstudie was voortgesit toe etiese klaring ontvang is van die Etiekkomitee van die Universiteit van Stellenbosch.
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CHAPTER 1
INTRODUCTORY ARGUMENT

1.1 BACKGROUND
The health of an economy is greatly dependent upon the success of businesses. The success of a business is dependent upon its profitability, and the profitability of an organisation depends on the quality of its outputs, i.e. products and services produced. As a number of organisations specialise in producing the same or similar products and services, it is of the utmost importance that they ensure that their products and services have the best quality in comparison to others. One of the elements or factors that contributes to the quality of the products or services provided is the human factor. As human capital is the carrier of labour, it plays a significant role in the success of any organisation (Gibson, Ivancevich & Donnelly, 1997). In order for an organisation to compete in a highly competitive market and thus achieve a competitive advantage, its human resources need to be managed in a way that will add value.

The basic premise of human resource management (HRM) is the belief that the success with which the organisation combines and transforms scarce resources into products and services with maximum economic utility is highly dependent on the performance, quality and management of human capital. The human capital of an organisation can be managed by means of a number of human resource (HR) interventions, including recruitment and selection. Such interventions ensure that the right individual with the necessary qualities and competencies is in the right position in order to contribute to the ultimate goals of increased profitability and achievement of a competitive advantage (Nel et al., 2001). In addition, to contribute to this, jobs are analysed and designed in order to ensure that the most appropriate individual is placed in a position where he/she will be able to add the most value through maximum utilisation of his/her skills. In order to ensure maximum utilisation of employees' skills and ultimately their value-adding performance, it is vital that the characteristics of the person assuming a specific role within the organisation are aligned with the characteristics of the job. In order to ensure
a person-job fit, jobs are analysed and designed based on the competencies necessary to perform a specific role. Job analysis provides management with the necessary information to determine which employee is the best fit for a specific job (Garg & Rastogi, 2006). Based on this, jobs are designed to describe how jobs, tasks, and roles are structured, enacted, and modified, as well as the impact of these structures, enactments, and modifications on individual, group, and organisational outcomes (Grant & Parker, 2009; Bakker & Demerouti, 2014).

As a key HR activity, job design, specifically well-designed jobs, can have a positive impact on both employee satisfaction and the quality of performance as a result of its motivational properties (Garg & Rastogi, 2006) and also because of effective and proficient utilisation of employee skills. A model of how job design affects employee reactions and work behaviour is the Job Characteristics Model (JCM) of Hackman and Oldman, which includes the five core job characteristics of skill variety, task identity, task significance, autonomy and feedback (as cited in Garg & Rastogi, 2006). These characteristics promote three critical psychological states, namely experienced meaningfulness, experienced responsibility and knowledge of results, which in turn increase work satisfaction, internal work motivation and performance, and decrease absenteeism and employee turnover (Oldham & Hackman, 2010).

The JCM focuses on aspects of designing the job according to certain characteristics. As a consequence, these characteristics increase the meaningfulness of jobs and thus the motivational potential thereof. As mentioned, HRM is faced with the challenge of increasing the performance of working man. One such way is by redesigning jobs through job enrichment. Job enrichment is a strategy used to enhance the fit between person characteristics and the characteristics of the job. It is the process through which the organisation changes aspects in the job, tasks or conditions of the employee (Tims & Bakker, 2010; Bakker & Demerouti, 2014). Job enrichment entails enhancing the five job characteristics as indicated by the JCM, for example giving employees more autonomy or including a greater variety of work content. A basic premise with job enrichment (redesign) is that stimulating jobs foster motivating psychological states that contribute to favourable attitudinal and behavioural work outcomes. In other words, an
increase in the job characteristics will result in workers experiencing a higher level of psychological states and the outcomes of increased work satisfaction, internal work motivation, performance, as well as reduced absenteeism and employee turnover will thus be more significant.

Empirical results confirm these relationships - it has been found that job enrichment causes significant increases in employee job satisfaction, job involvement as well as internal motivation. Furthermore, job enrichment decreases absenteeism and turnover which in turn reduces the costs associated with the occurrence of such phenomena (Orpen, 1979). Satisfied and involved employees are more likely to foster positive attitudes towards the organisation and do not always complain when things at work do not go well. One thus can say that such employees will be more likely to engage in organisational citizenship behaviour (OCB). OCB is defined as behaviours displayed by employees that are above and beyond the call of duty (Bolino & Turnley, 2003). Such behaviour is highly valued by the organisation. Satisfied and involved employees are more likely to give something back to the organisation to compensate for their positive experiences. Employees who are highly satisfied and involved within the organisation will refrain from behaviours that may harm the organisation or anyone within the organisation. Satisfied and involved workers are what any organisation desires, and job enrichment is one way in which such satisfaction can be fostered.

Job enrichment gives employees the opportunity to utilise their abilities and exert control over their work environment (Chung & Ross, 1977). Employees want to feel that they make a valuable contribution to the organisation. When faced with the opportunity to use their abilities, employees will feel that they are indeed making a significant contribution and will in turn also feel more valued. Employees also have an internal need for growth and, by being given the opportunity to use their abilities or utilise more skills, employees will feel that they are personally growing and developing within their careers. By being given the opportunity to have control over the work environment, they will be able to make decisions on their own which, in a sense, empowers them and increases their confidence.
In essence, job enrichment entails redesigning jobs by giving employees more autonomy or increasing the amount of work content for a specific employee. Redesigning jobs through enrichment is vital, because the motivational property associated with this concept leads to various positive outcomes for both the employee and the organisation. The importance of job enrichment lies in the fact that it increases the person-job fit, employee job satisfaction, job involvement and internal motivation. By enriching jobs, absenteeism and employee turnover decrease, which ultimately results in a decrease in the costs of the organisation (Chung & Ross, 1977). Thus, through job enrichment, HRM can add value to the organisation and enhance the performance of working man.

Despite these positive outcomes of redesigning jobs through enrichment, the advantages of job redesign have also revealed some mixed results. Fried (1991) argued that, although research supports the hypothesised relationships between stimulating job characteristics and attitudinal outcomes such as internal motivation and job satisfaction, the magnitude of the association between the core job characteristics and these attitudinal outcomes appears to be moderate rather than high. Furthermore, although a positive relationship is suggested between employee motivation and job performance, this relationship tends to be relatively weak (Demerouti & Bakker, as cited in Bakker & Demerouti, 2014). Dissatisfaction, low work motivation, absenteeism, and turnover thus are prevalent within organisations (Oldham & Hackman, 2010). These findings indicate that there may be other characteristics, such as the context or characteristics of the employee, which play a role in moderating employee reactions. Moreover, job redesign approaches have also been criticised for no longer reflecting and integrating the dramatic changes in the work contexts that have occurred during the past few decades, e.g. the growth in globalisation, teleworking, and the growing use of innovative technologies and flexible work methods such as virtual teams. New approaches to job redesign have started to integrate such changes which more actively involve the employee in the job redesign process.

A newly developed concept similar to job enrichment and job (re)design has made its way into the Industrial Psychology literature, namely job crafting. Job crafting is
acknowledged as a promising new approach to organisational behaviour and emphasises the more active role of employees in addition to the traditional job design perspectives (Grant & Parker, 2009; Oldham & Hackman, 2010; Petrou, Demerouti, Peeters, Schaufeli & Hetland, 2012). Job crafting is defined as the self-initiated changes that employees make to their jobs in order to align their jobs with their own preferences, skills, abilities, motives and passions (Tims, Bakker & Derks, 2012). It is the physical and cognitive changes individuals make in their task or relational boundaries (Demerouti & Bakker, 2011). Tims, Bakker and Derks (2013a) referred to job crafting as a concept that explicitly focuses on employee job redesign, where the job boundaries, the meaning of work, and work identities are not fully determined by a formal job design, but individuals have latitude to define and make changes to these job designs. It puts employees in a position where they are able to create a work environment that enables them to achieve both work and personal goals (Tims et al., 2013a). Job crafting thus can be viewed as an implied part of job enrichment in the sense that job crafting can be described as spontaneous job enrichment. With job enrichment, management makes the changes, but with job crafting, employees may initiate these changes on their own.

Seeing that job crafting can be considered as spontaneous job enrichment, the importance and benefits thereof can be aligned with some of the benefits of job enrichment. This includes, amongst others, job satisfaction, job involvement, utilisation of abilities, and decreased absenteeism and turnover. It thus can be argued that the traditional work design systems should be complemented with job crafting initiatives where the employee is in the driving seat and granted the opportunity to take control over certain aspects of his or her job. By engaging in job crafting, individuals in essence create work with which they are more satisfied and which ultimately improves the fit between person characteristics and the characteristics of the job. When individuals perceive a higher fit between their own personal preferences and the work they do, higher levels of motivation will be experienced. Wrzesniewski and Dutton (2001) argue that job crafting affects both the meaning of work as well as one’s work identity. By experiencing an increase in the meaning of work, individuals’ understanding of the purpose of their work, or what they believe is achieved in the work, will be more significant. Individuals performing a job want to see the significance of their work as part
of a whole. Besides just doing the job for the sake of doing it, individuals will feel that they are making a valuable contribution for the greater good of the organisation. Crafting a job also has a positive effect on how an employee perceives him/herself. In other words, by changing certain aspects of the job according to his/her own preferences, skills, abilities and knowledge, an employee would feel more capable of performing the job. This consequently will have a positive impact on the employees' self-efficacy beliefs (Wrzesniewski & Dutton, 2001).

Based on these benefits, job crafting seems extremely attractive and worth fostering within organisations. Moreover, and as already mentioned, there is growing concern about the adequacy of traditional job redesign approaches in serving the changing nature of work, which includes more cognitive tasks, new technologies, and employees with changing needs and competencies. There are fundamental changes in the relationships among people, the work they do, and organisations (Oldham & Hackman, 2010). Frese and Fay (2001) argue that, in the modern world of work, jobs will require a higher degree of initiative due to global competition, the faster rate of innovation, new production concepts, and changes in the job concept. It is argued that global competition reigns more and more on both the organisational and individual level, indicating that employees continuously have to take initiative to develop their knowledge and skills in order to remain competitive in the work market. The rate of innovation indicates that creative ideas have to be implemented quickly and effectively, which requires initiative on the side of employees. With new production concepts there is an increasing need to take responsibility for production, service, and quality issues, indicating that employees have to make more decisions on their own, which ultimately implies taking initiative (Frese & Fay, 2001). All of this indicates that being proactive and showing initiative are important prerequisites for the modernised world of work, thus making job crafting a valuable process within any organisation.

In his review of leadership in the financial services industry (FSI), Reichbach (2010) specifically mentions that the FSI is becoming increasingly complex due to the rapidly changing marketplace, a tightening regulatory environment, evolving consumer demands and profound demographic shifts. He refers to this as 'chronic complexity' that
is reshaping the FSI and introducing additional demands on both leadership and employees on all levels. Some of the complexities identified by Reichbach (2010) involve accelerating financial innovation, increased volatility (unpredictability), globalisation of capital markets, technology, and the rapid pace of change. Parker (2000) suggests that, for organisations to be able to compete globally, to satisfy customer needs, and to fully take advantage of the opportunities offered by technologies, performance of a fixed set of prescribed tasks is no longer sufficient. Furthermore, in his review of the complexity of the FSI, Reichbach (2010) mentions that the workforce is one element that poses a huge challenge to leadership in the financial industry. This is due to the increasingly diverse and global workforce, retiring baby boomers and the rise of Generations X and Y, which ultimately give rise to changes in the expectations of employees. Moreover, having to lead and manage four generations within the workforce is a major challenge in the modern world of work. For this reason, the ‘one-size-fits-all’ approach may not be as sufficient in the modern world of work and specifically in the FSI due to it being fundamentally so different and more complex than it was many years ago.

Reichbach (2010, p.3) argues that ‘the complexity of the FSI requires organisations to create within themselves the capability to adapt to an increasingly sophisticated environment’. Parker (2000) suggested that organisations expect of their employees to go from passively carrying out narrowly defined tasks to proactively engaging in broader roles. The passiveness associated with traditional work design therefore is not sufficient in meeting the demands and challenges of the FSI. According to Tims et al. (2012), job crafting is related to proactive work behaviours and can be seen as a specific form of proactive behaviour. Organisations in the FSI have a lot to gain from such proactive behaviours. Management interventions are costly and time-consuming, and may not address each individual’s unique needs. An employee-driven approach to job redesign may be better able to meet these personal needs and the preferences of each individual employee (Tims, et al., 2013a). By allowing employees to craft their jobs, management empowers them to become ‘job entrepreneurs’. Wrzesniewski, Berg and Dutton (2010) additionally argued that, especially when pay resources are limited and opportunities for promotions are impossible, job crafting may provide organisations with an alternative as
to how to motivate and retain the most talented employees. Well-designed jobs and optimal working conditions facilitate employee motivation and performance, but what if these favourable working conditions are not available? Job crafting thus presents an opportunity for employees to actively make changes in order to ultimately experience meaningfulness in their jobs. Job crafting can also be a useful strategy during economic downturns, when organisations suffer financially and struggle to fulfil remuneration responsibilities.

Job crafting, as argued by Tims et al. (2013a), therefore puts employees in the position where they are able to adapt to whatever changes and challenges are posed by the working environment. Moreover, because leaders and managers are traditionally expected to come up with solutions in dealing with the challenges and complexities of the FSI work environment, job crafting presents one way of relieving this pressure. Oldham and Hackman (2010) argue that the presence of dissatisfaction, low work motivation, absenteeism and turnover can be attributed to those who design work rather than to those who actually do the work. It therefore is important to recognise the role of the individual employees as active agents in forming and changing certain aspects of their jobs (Bakker & Demerouti, 2014) and thus adapting to an ever-changing environment.

Bakker and Demerouti (2014) formulated the Job Demands – Resources (JD-R) theory, which specifically states the antecedents and consequences of specific job crafting behaviours. Based on this, the changes employees can make to their job design can involve changing their levels of job resources and job demands, which consequently can lead to a number of positive outcomes for the organisation. In other words, as depicted in Figure 1.1, job and personal resources, as well as job demands, serve as important antecedents and consequences of job crafting, but the changes employees make to their work design involve changes in the levels of these exact resources and demands\(^1\).

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\(^1\) The Conservation of Resources (COR) theory states that employees not only want to protect their resources, but also continuously try to accumulate or increase them (Xanthopoulou, Bakker, Demerouti & Schaufeli, 2009). The process as illustrated by the JD-R model therefore is circular. Job and personal resources, and job demands, leads
The JD-R model indicates that job and personal resources, moderated by job demands, lead to work engagement, which in turn leads to increased job performance. Research suggests that management can influence employees’ job demands and resources and thus indirectly influence employee engagement and performance (Nielsen, Randall, Yarker & Brenner, 2008). Nevertheless, employees can organise their own resources by means of job crafting, especially when managers are not available for feedback and when organisations face economic turmoil and need to prioritise accordingly (Demerouti & Bakker, 2011). Proactive behaviours under these circumstances are vital for the organisation.

The increase of job resources, personal resources and job demands, and the decrease of hindering job demands (i.e. job crafting), can have numerous positive outcomes for both the employee and the organisation. Bakker and Demerouti (2007) propose that job crafting leads to a process of job crafting, but job crafting as a process in itself involves increasing job and personal resources, increasing challenging demands, and decreasing hindering demands.
resources have motivational potential and lead to increased levels of work engagement, low cynicism and higher performance.

Job resources also have motivating potential, which can either be of an intrinsic or extrinsic nature. Intrinsically, job resources foster employee growth, learning and development. Extrinsicly, job resources act as a means of achieving work goals. By engaging in job crafting, individuals also decrease hindering job demands that may be mentally, emotionally, and physically draining. In the process of decreasing hindering demands, employees avoid the state of exhaustion and strain that might interfere with the productive execution and completion of their work (Bakker, 2011; Bakker & Demerouti, 2007). The interaction of demands and resources influences the levels of strain and motivation experienced by an employee. When resources are high and demands are low, high motivation is experienced with lower strain. When resources are low and demands are high, employees experience high strain and low motivation. In cases where both resources and demands are high, employees experience both high strain and high motivation. Low resources and low demands cause low motivation as well as higher levels of strain (Bakker & Demerouti, 2007). From this it is evident that resources play a pivotal role in employees’ experience of stress and burnout. According to the JD-R model, excessive job demands and the lack of resources to cope with these demands cause strain and, ultimately, burnout (Bakker & Demerouti, 2007).

‘The nature of work is changing at whirlwind speed. Perhaps now more than ever before, job stress poses a threat to the health of workers and, in turn, to the health of organisations’ (Harnois & Gabriel, 2002).

The amount of stress caused by the modern world of work is increasing at a fast pace and is responsible for a wide range of individual and organisational harms. Briner, Harris and Daniels (2004) argue that stressors are typically described and measured in terms of job characteristics, viz. workload, control, social support, etc. In other words, these are factors related to the design of the job, which are largely outside the control of the employee, seeing that management is solely in control of how jobs are structured and designed according to the traditional job redesign theory. Furthermore, specifically in the FSI, which is characterised by complexity, continuous change and a vast number of challenges, the well-being of employees is becoming increasingly important.
Employees have to cope with increasing demands and challenges, often with limited resources, hence the need for organisations to focus more and more on employee health and well-being, as this can have a considerable effect on organisational efficiency and effectiveness. The above quote specifically refers to the changing nature of work and the stress associated with this, which ultimately threatens the health of workers and, most importantly, that of organisations. The challenges as well as constant and continuous rate of change within the FSI serve as motivation for employers to address the health of employees (Harnois & Gabriel, 2002). Harnois and Gabriel (2002) specifically mention that there is increasing concern in developing countries regarding the impact of job stress on employee health and well-being. By increasing resources through job crafting, employees will be able to cope with the demands of their environments. Initially, the work environment had a negative impact on the employee, but with job crafting the employee is in a position to affect the work environment itself.

In essence, job crafting thus can be considered a coping mechanism used during extremely stressful circumstances, ultimately to combat the harmful effects of a stressful environment on the overall health and well-being of employees in the FSI. The conservation of resources (COR) theory (Hobfoll, 2002) states that people with sufficient resources are less likely to encounter stressful circumstances that negatively influence their physical and psychological well-being. This theory furthermore states that people are not only trying to protect their resources, but also to accumulate or increase their resources (Xanthopoulou, Bakker, Demerouti & Schaufeli, 2009). Employees therefore want more resources in order to deal and cope with the stress associated with their daily jobs.

Bakker, Hakanen, Demerouti and Xanthopoulou (2007) conducted a study in which it was confirmed that job resources are especially important and relevant under highly stressful circumstances. Hobfoll (2002) argues that resources (gain) become especially important during times of resource loss. This was confirmed in a study conducted by Billings, Folkman, Acree and Moskowitz (2000), which indicated that employees who used social support to cope maintained their positive emotional states under highly stressful circumstances, as well as in a study by Riolli and Savicki (2003), which
indicated that employees’ personal resources such as optimism were especially beneficial when job resources were low. In addition, COR theory proposes that individuals with greater resources are more capable of solving problems and less likely to be affected by the depletion of resources that occurs during stressful situations. Job crafting thus better equips employees to cope during stressful situations and, in essence, avoids the negative effects associated with such situations.

Tims et al. (2013a) conducted a study to examine the extent to which employees can have an effect on their own well-being by means of job crafting, i.e. increasing job resources and decreasing hindering demands. Engagement, job satisfaction and burnout were used as indicators of employee well-being. The results of this study indicated that employees who engaged in crafting, especially crafting more challenging demands, showed increased engagement and decreased burnout. It thus can be concluded that employees who engage in job crafting, more specifically those who create more challenging jobs for themselves, influence their own well-being to a certain extent. According to the JD-R model, engagement is an important outcome of the interaction between job and personal resources, and job demands. Engagement is defined by Schaufeli and Bakker (2004) as an active, positive, work-related state that is characterised by vigour, dedication and absorption. Engaged employees have high levels of energy, are enthusiastic about their work, and are often fully immersed in their work so that time goes by quickly (Bakker & Demerouti, 2008). Bakker and Demerouti (2008) argue that engaged workers perform better than non-engaged workers as they experience more positive emotions and better health, create their own job and personal resources, and usually transfer their engagement to others. By engaging in job crafting, based on the process depicted in the JD-R model, the effects on work engagement will thus be more significant and, based on the above argument, employees therefore influence their own well-being in the long run.

Work engagement is furthermore related to a number of important outcomes, including job satisfaction, affective commitment and turnover intentions (McNall, Nicklin & Masuda, 2010). The JD-R model illustrated in particular that job performance is a consequence of employees being more engaged (Bakker, 2011). Furthermore, Bakker
and Demerouti (2007) also argue that job resources initiate a motivational process that leads to high levels of work engagement and performance. Thus increased resources via job crafting mean higher work engagement and, ultimately, improvement in job performance. It therefore is evident that an increase in job- and personal resources, a decrease in hindering demands, and an increase in challenging demands, play a significant role in determining the motivational levels of employees, as well as, and especially, their level of performance (Xanthopoulou et al., 2009). For this reason, the JD-R model would be of great value to employers in understanding the underlying process of job crafting. However, only being aware of the fact that certain resources and demands are conducive to the process of job crafting may not be as valuable as one would want it to be. What would be of even more value is being aware of and understanding what these resources and demands are, and consequently being able to encourage workers to use these resources within the workplace.

The changing and uncertain situations faced by organisations in the FSI require an active approach to work in order to be able to be successful and healthy in the long run (Frese & Fay, 2001). One way of adapting to these changing labour requirements is by means of increased resources, a decrease in hindering demands, and an increase in challenging demands. This is supported by Bakker and Demerouti (2014), who suggest that proactive actions that are useful during organisational change include increasing the job resources that assist employees in dealing or coping with change, keeping the work pressure associated with change at an optimal level (decreasing job demands), and seeking challenges that will transform change to an engaging and efficacious experience (increasing challenging job demands). By engaging in job crafting, employees are able to change their work environment to complete their day-to-day activities and to improve their current circumstances in such a way as to deal with the demands of the changing environment. Job crafting can assist employees to cope with the changes of the FSI work environment and therefore can be considered a strategic advantage during times of change (Bakker & Demerouti, 2014; Petrou et al., 2012).

It is for this reason, and based on the theoretical findings and arguments on the important impact of job crafting, that HRM is faced with the obligation to influence and
encourage job crafting within the FSI and elsewhere. This can be possible if employers are aware of the most important resources and demands that facilitate job crafting in the workplace. It also would be valuable to ask whether all employees engage in job crafting. Are certain environments more conducive to job crafting than others? Do certain personality traits count as resources that make it easier for employees to engage in job crafting? Why do certain employees engage in job crafting more than others? What are the resources and demands likely to be increased or decreased when employees engage in job crafting? Although the JD-R model has yielded value for employers and employees in understanding significant demands and resources as drivers of job crafting, the current study raises the question of why there is variance in job crafting between different employees in different workplaces. The effects of salient resources and demands on job crafting will consequently be tested.

1.2 THE NEED FOR A STRUCTURAL MODEL

Job crafting indeed has various positive outcomes for the organisation, of which the most important is that it leads to increased levels of engagement and, ultimately, increased performance. This level of performance is not a random event, but is rather the result of a complex nomological network of latent variables characterising the employee and his/her work environment. As can be seen from the JD-R model, a number of resources and demands can have an impact on job crafting behaviours. HRM is in the position to influence and affect the performance of working man to the extent to which the identity of these resources and demands are known, as well as the manner in which these demands and resources can be manipulated to affect performance. From the JD-R model as framework, salient resources and demands will be depicted in a structural model to illustrate exactly which resources and demands account for the variance in the extent to which individuals engage in job crafting.

1.3 RESEARCH OBJECTIVE

The objective of the proposed research is to develop and test whether salient job and personal resources, and job demands as depicted by the JD-R model and based on the available literature, account for the variance in job crafting for a sample of employees working within the financial sector.
1.4 OVERVIEW OF THE STUDY

Following the argument to illustrate the necessity of identifying the factors underlying job crafting and thus the research objective, a literature study was conducted with the purpose of providing a systematic reasoned argument through theorising that presents a convincing answer to why there is variance in job crafting and whether this variance is due to the presence of salient job and personal resources, and job demands. A novel contribution that the study makes is the inclusion of illegitimate tasks as a job demand in the proposed structural model, and proactive personality as a personal resource. Following the literature study, the research methodology indicates how the hypotheses, which were formulated based on the literature study, were tested empirically. The results of the study, as well as conclusions, recommendations, and suggestions for future research derived from the results, are also discussed.
2.1 INTRODUCTION
In this section, current literature will be reviewed in order to provide already established evidence for how various resources and demands are related to job crafting. Each construct will be defined and its relation to job crafting will be discussed in detail, in other words the logic behind adding each construct to the structural model will be explained and substantiated. Before this is put forward, a brief explanation of the history and the definition of job crafting will be provided.

2.2 HISTORY OF JOB CRAFTING: BOTTOM-UP VS. TOP-DOWN APPROACHES TO JOB DESIGN
The history of job crafting can be traced back to the traditional job design perspective of Hackman and Oldham. Traditional job design approaches seek to create good jobs by satisfying general psychological needs or by promoting job characteristics conducive to such critical psychological states as a sense of meaningfulness and responsibility (Kira, Van Eijnatten & Balkin, 2010).

The job characteristics approach to job design was developed by Hackman and Oldham (1976). The five core job characteristics included in the job characteristics model (JCM) are skill variety, task variety, task significance, autonomy and feedback. The first three core job characteristics would contribute to the experienced meaningfulness of the work. Having autonomy would contribute to the felt responsibility for work outcomes, and feedback would provide direct knowledge of the results of the work. Jobs thus are designed to include these characteristics and ultimately will lead to high internal motivation, high quality work performance, and high satisfaction with work (Oldham & Hackman, 2010).

Within this traditional job design perspective, managers design and re-design jobs according to the five core job characteristics in the JCM. Job design interventions are thus management-led and the authority for the structure of the job lies with top
management. This is known as the top-down approach to job design (Hornung, Rousseau, Glaser, Angerer & Weigl, 2010). As argued by Frese and Fay (2001), through the traditional approach to job design, employees are socialised into the job, with the job or task first being analysed and the appropriate individual then being placed in the specific role. Tasks are developed and goals are set by the organisation. Managers thus are viewed as having the primary responsibility for assessing the content of jobs and then, based on their assessment, introduce changes in job characteristics to foster internal motivation and psychological well-being (Oldham & Hackman, 2010). Traditional approaches to job design recognise only managers as being able to make changes to an employee’s job design. Managers are responsible for designing tasks and, ultimately, for altering or influencing the motivation and satisfaction of employees by changing certain aspects or characteristics of the job. Job motivation is thus tied to objective features (skill variety, task identity and significance, autonomy, and feedback) of the job (Wrzesniewski & Dutton, 2001). However, the nature of work is changing, as information, communication and transportation technologies have developed rapidly (Barley & Kunda, 2001) and, as mentioned in Section 1.1, the FSI is specifically faced with continuous change as well as a great deal of complexities and challenges. Therefore, the perspective of managers as being solely responsible for the design of work is slowly changing and the need for more active employees – taking initiative, taking charge, actively seeking feedback and redefining their work is increasing (Frese & Fay, 2001).

According to Frese and Fay (2001), two assumptions are often made by the traditional passive view of job design and the completion of work. The first assumption is that the pathway from starting a task to successfully completing it is ‘direct and not problematic’ (p. 5), in other words, tasks are assumed to be simple and easy to complete. However, this may not be the case in the FSI. The nature of work is changing rapidly, and employees’ needs and expectations are different. Managers are faced with the challenge of dealing with four different generations in the workplace. This assumption therefore may not be as valid in the FSI as it was many years ago, as the challenges and complexities of this environment require more adaptability and proactivity. Employees with different needs may redefine their work tasks, which ultimately would
modify what he/she perceives it to be. In addition, when faced with challenging tasks, workers may seek ways to complete them successfully, thus making them active job incumbents. The second assumption is that the influence of the employee on the work environment or specific task at hand is minimal and that the work situation is not modified appreciably by the employee’s actions (Frese & Fay, 2001). It therefore is assumed that a task or goal is given and simply accepted by the employee. However, from a more active point of view, employees can go beyond these assigned tasks by developing their own goals and taking initiative to achieve these goals (Frese & Fay, 2001), especially in the modern world of work and in the FSI, where millennials with high expectations of themselves and a hunger for challenges are entering the workplace. Furthermore, traditional job design typically assumes that the design of work leads to changes in the jobholder or, stated differently, that job design produces certain feelings or attitudes within the individual. However, from an active approach, the jobholder himself does not change, but rather makes changes to certain aspects of the job that possibly elicit negative feelings or attitudes, such as low motivation or dissatisfaction (Frese & Fay, 2001).

More specifically, Wrzesniewski and Dutton (2001) suggested that, in the traditional job design theory, it is assumed that employee responses are developed from the motivating potential of the job that stems from objective features such as skill variety. However, from a more active approach, employees create this motivating potential themselves by shaping certain aspects that traditionally form part of the design of the job. Traditional top-down job design perspectives view changes in employee attitudes as reactions to the job itself, whereas the bottom-up approaches, such as job crafting, state that responses to a job begin the process by which employees make self-initiated changes to their jobs, ultimately to increase the subjective meaning experienced (Briner et al., 2004). Traditional approaches to job design therefore are concerned mainly with how employees interpret objective characteristics in their job settings and how this leads to attitudinal and motivational responses. Job crafting flips this relationship by assuming that employees would make changes to their jobs to create work with which they are more satisfied, rather than taking on more tasks if they experience satisfaction within
their jobs (Wrzesniewski & Dutton, 2001). In other words, how employees perceive or react to their jobs is the start of the job crafting process.

Wrzesniewski and Dutton (2001) introduced the job crafting concept, which acknowledges and recognises employees as competent designers of their work, with considerable latitude to customise, modify and thus craft their jobs. This is known as the bottom-up approach to job design. Employees are effectively placed in the position traditionally held by managers and are viewed as competent and active architects of their job. According to Hornung et al. (2010), traditional top-down approaches to job design limit individualisation by emphasising the best possible arrangement of tasks for the ‘average’ job incumbent. In other words, the individual capacities and needs of the individual employee are not always taken into account. Employees have certain preferences, needs and skills, and by crafting their jobs they are able to make their job better fit their unique preferences, needs and skills (Lyons, 2008), instead of reactively and passively performing the job designed by the organisation (Berg & Dutton, 2008). The job crafting perspective depicts employees as more agentic and active, rather than passive, as typically depicted in traditional top-down job design theories. Wrzesniewski and Dutton (2001) thus suggest that employees are capable of altering their jobs and using the feedback from these alterations to further motivate the extent to which they craft their jobs.

Employees are all different and unique and with the rapid economic and technological changes, organisations are finding it challenging to create the best possible job designs for each individual employee according to their own preferences. Although job crafting can be considered an alternative to job design perspectives, and although some may view it as being completely different to traditional job design, valuable foundations on which job crafting can be offered as a useful complement, are provided by job design perspectives. With the opportunity to engage in job crafting, as argued by Berg, Dutton and Wrzesniewski (2007), job designs are not fixed but can be changed and adapted over time and on a continuous basis in order to fit the employees’ unique preferences, skills, motives and backgrounds. Therefore, employees who engage in job crafting most likely feel that their unique needs are not met by the way their jobs currently are
designed. Goodman (as cited in Hornung et al., 2010) argues that job redesign interventions targeting classes of jobs require massive company resources. This is supported by Dugdill and Springett (1994), who suggested that management interventions aimed at redesigning jobs are both time-consuming and costly. Allowing employees to take initiative in crafting their jobs on a continuous basis can assist companies in saving costs, especially in difficult economic conditions. Organisations fostering change that requires active employees would benefit from such behaviours over the long term (Frese & Fay, 2001).

2.3 DEFINITION OF JOB CRAFTING

Job crafting is defined as an everyday, continuous process in which individuals make physical and cognitive changes in the task or relational boundaries of their work (Wrzesniewski & Dutton, 2001). These changes are spontaneous and usually not supervised by management (Lyons, 2008), and enables employees to fit their jobs to their personal knowledge, skills, abilities, preferences and needs (Bakker, 2011). It is proactive behaviour requiring adaptation to challenges and constraints presented or created by the working environment (Berg, Wrzesniewski & Dutton, 2010). In the current circumstances, in which the world of work undergoes continuous change, job crafting calls employees to anticipate and create changes in the way of work which ultimately will equip them to cope with ongoing change (Grant & Parker, 2009).

There are two main conceptualisations of job crafting that explain what changes employees can make and how this is done. The first conceptualisation is offered by Wrzesniewski and Dutton (2001). According to this conceptualisation, there are three forms of job crafting in which employees can engage. The first form involves changing or shaping the job’s task boundaries. This form of job crafting involves changing the number, scope or type of tasks. Berg and Dutton (2008) proposed three ways in which employees can change the task boundaries of their jobs, namely adding more tasks, emphasising tasks by allocating more time, energy or attention, and redesigning tasks. An example of this type of crafting would involve an employee asking to be assigned to different tasks at work as he/she might feel that the current job, as it is designed, is becoming monotonous (Tims et al., 2013a).
The second form, according to Wrzesniewski and Dutton (2001), entails changing the relational boundaries of the job or crafting the interpersonal relationships experienced when performing the job. This can involve changing either the quality or amount of interaction with others, or both. Relationships can be a key source of meaningfulness that can be unlocked through job crafting (Berg & Dutton, 2008). Berg and Dutton (2008) proposed three pathways through which crafting relationships can facilitate meaningfulness at work, namely building relationships, reframing relationships, and adapting relationships by providing others with valuable help and support in carrying out their tasks. An employee who meets with an inspiring colleague on a regular basis would be considered a way of crafting the relational boundaries of his/her job.

The third and final form proposed by Wrzesniewski and Dutton (2001) involves changing the cognitive boundaries of the job. This involves altering how employees think about the tasks, relationships or the job as a whole. Employees can view their job either as a set of discrete work tasks or as an integrated whole (Wrzesniewski & Dutton, 2001). Berg and Dutton (2008) again proposed three pathways in which employees can change the way they think about their job, namely expanding their perceptions by thinking about their job as a whole, focusing their perceptions by narrowing their mental scope on specific tasks and relationships that are significant or valuable to them, and linking their perceptions by making mental connections between specific tasks or relationships. An example of this form of job crafting within the working environment would be when an employee starts to think of a boring or routine job as one that is important for the organisation to sustain profitability. The task itself does not change, but by engaging in this form of job crafting, employees positively reframe the manner in which they think about the job (Tims et al., 2013a).

Based on this definition, job crafters are seen as individuals who actively create what their job is physically, by changing the task boundaries of the job; what the job is cognitively, by changing the manner in which they think about how job tasks are related to each other; and what the job is relationally, by changing the interactions and relationships with others at work (Wrzesniewski & Dutton, 2001). This definition of job crafting conceptualises it as a psychological, social and physical act in which job
Crafters perceive and respond to the tasks and relational boundaries of the job and ultimately change their work identity as well as the meaning of work. By engaging in job crafting, employees create different jobs for themselves within the boundaries of a defined job design. This can especially be beneficial in the modern world of work, where managers have to deal with the needs and expectations of four different generations. Wrzesniewski and Dutton (2001) described job crafting as ‘a creative and improvised process that captures how individuals locally adjust their jobs in ways that create and sustain a viable definition of the work they do and who they are at work’ (p. 180). Based on this conceptualisation, not only does the job change as a result of job crafting, but also the job’s meaning, and the identity of the employee as shaped by his/her job.

The second conceptualisation of job crafting is framed within the JD-R model, as depicted in Figure 1.1. A basic assumption of the JD-R model is that each work environment has its own unique characteristics that can be captured in one overall model (Tims & Bakker, 2010). The model specifies how employee well-being and effectiveness can be derived from two sets of working conditions, namely job and personal resources, and job demands. Tims and Bakker (2010) argue that employees may change their levels of job demands and resources to align them with their own abilities and preferences. Based on the JD-R model, an employee may increase the level of job resources, increase the level of challenging job demands, and decrease the level of hindering job demands at work.

Bakker, Demerouti and Euwema (2005) argue that job resources, the first form of job crafting in terms of the JD-R model, are important predictors of positive work outcomes such as engagement, commitment and satisfaction. The JD-R model assumes two psychological processes. The first underlying psychological process involves a motivational process. Based on this process it is assumed that job resources have motivating potential and can lead to higher levels of engagement, low cynicism, and ultimately increased performance (Demerouti & Bakker, 2011; Tims & Bakker, 2010). Hu, Schaufeli and Taris (2011) conducted a study in which it was confirmed that exposure to resources is indeed associated with a motivational process. This is in line with the JCM of Hackman and Oldham (1976) which also emphasises the motivational
potential of job resources, including autonomy, feedback, task significance and identity, and skill variety.

In line with the above, COR theory states that human motivation is directed mainly towards the maintenance and accumulation of resources (Hobfoll, 2001). In some work situations, job resources may be low and in such circumstances it would be good for the employee to gather more resources in order to deal with the demands posed by his/her day-to-day job. COR theory furthermore holds that one can only deal successfully with high job demands if the necessary resources are available (Hobfoll, 1989). Employees with more resources will thus experience less strain than those who have fewer resources (Salanova, Schaufeli, Xanthopoulou & Bakker, as cited in Tims & Bakker 2010). Job resources therefore also can act as a buffer to negative work outcomes such as burnout. This notion was confirmed in the study by Hu et al. (2011), who conclude that job resources are negatively associated with burnout. Tims et al. (2013) conducted a study to investigate whether employees can influence their job resources. Empirical results indicated that employees who engaged in job crafting initiatives reported higher levels of job resources after two months. It therefore is evident that an increase in job resources leads to resource gain over the long run. An example of employees engaging in job crafting by increasing the level of job resources or seeking more resources, is asking advice from colleagues or supervisors when faced with a difficult task or situation in the workplace.

The second form of job crafting as conceptualised in terms of the JD-R model involves increasing challenging job demands. This is especially the case when employees feel that their job is not offering enough opportunities to utilise the full spectrum of their skills. Jobs that are not stimulating enough may cause boredom and consequently lead to absenteeism and job dissatisfaction (Tims, et al., 2012). An adequate level of challenging demands plays an important role in the motivation of employees and it stimulates employees to develop their knowledge and skills, as well as to attain more difficult goals (LePine, Podsakoff & LePine, 2005). An example of this would involve an

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2 This is in line with COR theory, stating that employees want to maintain as well as accumulate resources (Hobfoll, 1989).
employee volunteering for more interesting and stimulating project groups, or looking for new and more tasks when his/her own tasks were completed (Petrou, *et al.*, 2012; Tims & Bakker, 2010).

The third and final form of job crafting, according to the JD-R model, involves decreasing hindering job demands. The second psychological process underlying the JD-R model is called the health impairment process, in which it is assumed that poorly designed jobs or excessive job demands drain employees’ mental and physical resources, which could lead to the depletion of energy and, ultimately, to health problems over the long term (Bakker, Demerouti & Schaufeli, 2003; Demerouti & Bakker, 2011; Tims & Bakker, 2010). Therefore, in order to prevent a state of exhaustion, employees engage in the process of decreasing job demands that cause additional strain. Employees usually engage in this type of job crafting when the level of demands exceeds their capabilities, for example asking colleagues to help them with difficult tasks (Tims & Bakker, 2010).

This second conceptualisation is especially important for the present study, as it divides all work characteristics into job demands and job resources, it shows that resources and demands play a significant role in the process of job crafting, and thus allows for the investigation of which job characteristics (resources and demands) influence the extent to which employees craft their jobs.

**2.4 ANTECEDENTS OF JOB CRAFTING**

In this section, the focus will be on the most prominent antecedents of crafting as reported in the literature. Factors (job resources, personal resources, and job demands) accounting for the variance in job crafting will be explored. Each factor will be defined and the rationale for its relation to job crafting will be discussed and substantiated in detail.

**2.4.1 Job Resources**

Job resources can be defined as those physical, social or organisational aspects of the job or the environment that are functional or useful in achieving goals, reducing job demands, or stimulating personal growth, learning and development (Bakker &
Demerouti, 2007; Bakker et al., 2005; Llorens, Bakker, Schaufeli & Salanova, 2006; Xanthopoulou et al., 2007). As has been mentioned, job resources evoke a motivational process that leads to higher commitment and increased levels of work engagement, which ultimately encourage employees to meet their work goals. In other words, job resources contribute to a process in which employees become more committed as they derive a sense of fulfilment from their everyday work activities (Xanthopoulou et al., 2007). In the face of challenges and hardship, and during times when demands are high, employees will be able to cope effectively with these due to the availability of resources. A study conducted by Bakker et al. (2007) showed that job resources are particularly relevant under highly stressful conditions. Therefore, despite the fact that resources may serve as important antecedents of job crafting, the circular process of increasing them have numerous benefits for both the employee and the organisation in the long run. For this reason, the following section will focus specifically on a number of salient resources related to the process of job crafting as reported in the literature.

2.4.1.1 Autonomy

Hackman and Oldham (1976) define autonomy as the extent to which a job allows an employee the freedom to schedule work, make decisions at work, and select the methods used to perform their everyday tasks and activities. By having the freedom to decide how to perform their jobs, employees with more autonomy will thus be more likely to engage in job crafting, whereas those with less freedom and discretion will be less likely to attempt to change certain aspects of their job (Berg & Dutton, 2008; Clegg & Spencer, 2007; Tims & Bakker, 2010). Berg et al. (2010) conducted a study on the extent to which employees at different ranks craft their jobs. It was found that those with lower autonomy described their formal job designs as focusing on the ends as well as the means on how to perform their work. These job designs specifically prescribe how employees should be spending their time and energy, thus limiting the opportunity to engage in job crafting.

Furthermore, Bakker et al. (2005) indicated that autonomy also meant independence from other workers while carrying out work tasks. Ghitulescu (2006) suggests that employees working under increased interdependence have more constraints and less
freedom to make changes to their tasks and relationships at work, as they need to take into consideration the work and actions of others. Employees therefore depend to a great extent on fellow employees to achieve certain goals. Changes in work thus might disrupt the work of others and decrease their sense of control over their work and opportunities for individually exploring new ways of carrying it out (Wrzesniewski & Dutton, 2001). With higher levels of task independence, employees do not have to rely on other employees and it therefore will be easier to make changes to their jobs, as these changes will not in any way impact on the work of fellow employees. Parker (1998) suggested that high levels of autonomy are also associated with acquiring new skills and experiencing more responsibility for solving problems at work.

Morgeson, Delaney-Klinger and Hemingway (2005) conducted a study to investigate the extent to which autonomy is related to role breadth. They argued that greater discretion in the job enables individuals to integrate more job aspects into their role if they so choose. Discretion in this case refers to job autonomy. More specifically, it was argued that increased autonomy will allow individuals more flexibility in how they define their role, as they will have more discretion in deciding how to perform their work. Parker (1998) explained that employees with enhanced autonomy recognise a wider range of skills and knowledge as important for their roles and therefore will engage in activities to gain these skills and knowledge. Higher control over the work environment motivates workers to try out and master new tasks. Employees therefore are likely to add more responsibilities or engage in additional tasks when their own work is done (which in actual fact are examples of job crafting behaviour). Although role breadth is different to job crafting, it can be seen that the logic behind the relationship between autonomy and role breadth is also plausible for this study.

Frese and Fay (2001, p. 117) furthermore proposed that job control or autonomy can be considered ‘environmental supports’ that increase the levels of personal initiative employees will take in their jobs. Autonomy therefore can be viewed as a vehicle for providing employees with the opportunity to craft their work environment based on their own preferences, skills and needs (Grawitch & Barber, 2009). Parker (2000) also suggested that challenging and enriched jobs, in which employees have a number of
resources, can create higher levels of motivation that have an impact on employees’ tendency to engage in proactive behaviours, defined as ‘taking initiative in improving current circumstances or creating new ones whereby employees take an active self-starting approach to work’ (Salanova & Schaufeli, 2008, p. 116). These resources can include, amongst others, the level of autonomy or control an employee has, as well as the feedback employees receive. Based on the self-determination theory (Deci & Ryan, 1985), resources increase the intrinsic motivation and ultimately the well-being of employees. As already mentioned, this motivational potential of job resources is also recognised by the Job Characteristics Theory of Hackman and Oldham, which states that the five job characteristics, which include autonomy, will lead, amongst others, to higher levels of internal motivation and ultimately more pro-activity from employees (Oldham & Hackman, 2010). The following therefore is proposed:

Hypothesis 1: Autonomy has a significant positive effect on job crafting.

2.4.1.2 Feedback

According to Hackman and Oldham (1976), feedback would provide direct knowledge to employees on the results of their work. Such feedback would help employees to do their work more effectively as well as improve communication between the supervisor and the employee (Bakker et al., 2005). The existing literature on feedback suggests that direct performance feedback results in later performance changes (Peterson & Behfar, 2003). More specifically, Cummings, Schwab and Rosen (1971) found that maximal performance can only be achieved when employees are provided with accurate feedback based on clear standards. Kim and Hamner (1976) furthermore argued that feedback can serve two purposes: firstly, it can act as a directive to keep goal-directed behaviour on course, and secondly, it can act as an incentive to stimulate greater effort amongst employees. The latter is especially relevant in this case. Deci (1972) found that praise from a significant other enhanced effort. With specific and accurate information from supervisors, employees have knowledge of how and where they can improve and change their performance, thus exerting effort in terms of finding ways in which to perform better. Feedback from supervisors thus can provide valuable information to employees in terms of how and where they can change aspects of their job through
crafting in order to improve their performance. Kim and Hamner (1976) also illustrated that goal setting enhances performance, but when combined with feedback, performance is even more enhanced than goal setting alone. This supports the notion that feedback provides valuable information about where employees can improve and change their performance to ultimately achieve individual as well as organisational goals. Through feedback, employees are informed in a constructive way of possible problems or developmental areas and consequently become aware of gaps for crafting their jobs.

As already mentioned in Section 2.5.1.1, enriched jobs in which employees have a number of resources, increase the level of intrinsic motivation, which ultimately has an impact on employees’ tendency to engage in proactive behaviour (Parker, 2000). This motivational potential of job resources is also recognised by the self-determination theory, as well as by the job characteristics theory (Deci & Ryan, 1985; Oldham & Hackman, 2010).

**Hypothesis 2:** Feedback has a significant positive effect on job crafting.

The aforementioned two job resources, autonomy and feedback, can also have an indirect impact on job crafting through engagement as depicted in Figure 1.1. Engagement is defined as a positive, fulfilling, work-related state of mind characterised by vigour, dedication and absorption (Bakker & Demerouti, 2008). These sub-dimensions are defined as follows: vigour is characterised by high levels of energy and persistence, and the willingness to invest effort in one’s work; dedication is characterised by a sense of significance, inspiration and pride in one’s work; and absorption refers to a sense of being fully concentrated and involved in one’s work (Hakanen, Perhoniemi & Toppinen- Tanner, 2008). Engaged employees therefore are fully connected with their work roles, have high levels of energy, are excited and dedicated to their work, and are immersed in their work activities (Bakker, 2011). Kahn (1990), one of the first authors to draw attention to engagement, described engaged employees as those employees who are fully physically, cognitively and emotionally connected with their work roles. Engaged employees’ energy is directed toward the achievement of organisational goals.
Based on the broaden-and-build theory (Frederickson, 2000), positive emotions ‘broaden people’s momentary thought-action repertoires and build their enduring personal resources’ (p. 80). In the same way, Parker, Bindl and Strauss (2010) proposed that activated positive affect (including the energy and enthusiasm emotions characteristic of vigour and dedication) promotes an active approach. People who are feeling good are more willing to try things out and experiment with new ideas or actions. Employees who are engaged and who experience positive affect thus are more likely to display proactive behaviour because they are better able to see possibilities and think innovatively (Bakker, Tims & Derks, 2012). Frederikson (2000) pointed out that this type of initiative and creative activity promote inventive solutions and optimal functioning, both in the short and long term. Therefore, those employees who experience a positive state of emotional and motivational fulfilment at work or, stated differently, those who are fully engaged in their work, are likely to take more initiative than those who are not experiencing such fulfilment (Schaufeli, Taris, Le-Blanc, Peeters, Bakker & de Jonge, 2001; Sonnentag, 2003). As engagement involves energy and persistence, it can be expected that engaged employees will be more proactive and show higher levels of personal initiative than those who are disengaged (Schaufeli & Bakker, 2004).

According to Bakker (2011), engaged employees are not passive actors in their work environment, but rather active agents in changing their work environment if needed. They are more likely to work harder through increased levels of discretionary effort as opposed to disengaged employees (Bakker, 2011). Furthermore, Engelbrecht (2006) found that engaged employees have a positive attitude and high activity level which makes them more likely to engage in proactive behaviours such as job crafting. According to Bakker and Demerouti (2008) engaged employees are capable of creating their own job and personal resources. Xanthopoulou et al. (2009) suggested that engagement facilitates the mobilisation of resources; in other words, employees who are fully immersed in their jobs will activate, create and increase their job resources. By mobilising, activating, and creating job resources, engaged employees are in actual fact crafting their jobs.
Previous studies have indicated that job resources, such as feedback and autonomy are positively associated with engagement (Bakker & Demerouti, 2008). Demerouti and Cropanzano (2010) revealed that employees performed the best in challenging, resourceful work environments, as such environments facilitate their work engagement. Hakanen et al. (2008) found that job resources, including positive feedback, predicted engagement, which in turn predicted personal initiative and innovativeness. Similarly, Schaufeli, Bakker and Van Rhenen (2009) showed that autonomy and feedback, amongst others, positively predicted work engagement. In a study conducted by Bakker et al. (2007) it was found that pupil misconduct (job demand) was not as damaging for teachers’ engagement when they received support and appreciation from their supervisor and colleagues (job resource). The effect of demands on work engagement therefore is not so significant when job resources are present. Based on these findings it is thus evident that job resources play a pivotal role in engagement.

Salanova and Schaufeli (2008) argued that work engagement covers the basic dimensions of intrinsic motivation. Intrinsic motivation involves goal-oriented behaviour, high levels of activation, as well as persistence in achieving objectives, which is similar to vigour. Employees who are intrinsically motivated also feel enthusiastic, can identify with their jobs, and feel proud of the job they are doing. This is similar to dedication. As already mentioned, and as indicated by the JD-R model (Tims & Bakker, 2010) and the JCM of Hackman and Oldham (1976), job resources facilitate a motivational process, as they fulfil basic human needs, foster growth and development, and assist in the achievement of goals. This motivational potential of job resources, in this case autonomy and feedback, therefore has an indirect impact on proactive behaviours, i.e. job crafting through engagement. Based on this the following are proposed:

**Hypothesis 3:** Engagement has a significant positive effect on job crafting.

**Hypothesis 4:** Engagement has a significant mediating effect on the relationship between autonomy and job crafting

**Hypothesis 5:** Engagement has a significant mediating effect on the relationship between feedback and job crafting.
2.4.1.3 Trusting relationships

Mayer, Davis and Schoorman (1995) suggested that the need for trusting relationships in the organisation is extremely important. Areas in which the importance of trust is emphasised include communication (Giffen, 1967), leadership (Atwater, 1988), management by objectives, performance appraisal, and self-managed teams (Scott, 1980). Seeing that the importance of trust has been studied in the context of leadership, trusting relationships in this study focuses specifically on the trust between managers/supervisors and their direct subordinates. Mayer et al (1995) and Huff and Kelley (2003) argued that, in the modern of world with current trends in both the workforce composition and the organisation of the workplace, trusting relationships play a crucial role. It was mentioned especially that, with the increase in diversity, the development of trust provides a mechanism for working together more effectively. This is especially applicable in the case where the leader and subordinate come from different cultures. This may pose additional challenges within the relationship and therefore trust is a vital requirement to work together successfully towards a common goal.

Furthermore, Huff and Kelley (2003) suggested that participative management styles and the implementation of work teams also call for high levels of trust. Self-directed teams and reliance on empowered workers increase the need for trusting relationships. Trust is important in self-directed teams, as it takes the place of supervision due to the direct observation of employees being impossible (Mayer et al., 1995). In addition, trusting relationships play a crucial role in the competitiveness of an organisation, as argued by Huff and Kelley (2003). To be able to compete effectively in a global market it is important that trust exists within relationships with external parties, as well as with internal employees. The latter is especially important, as it lays the foundation on which external relationships are built. Trust has to start from the inside (between managers and subordinates) for it to extend to external relationships.

A trusting relationship between a manager and his/her direct subordinates is also important in the context of job design, in particular job crafting. Clegg and Spencer (2007) proposed that trusting relationships have an influence on role adjustment, which
includes job crafting behaviour amongst others. Trust in this case is derived from good job performance, which is interpreted as evidence of competence. This trust ultimately enables adjustments in the role of the jobholder in the form of job crafting due to the fact that the manager can see that the employee is capable of performing the job and therefore can trust him/her to complete the requirements of the job successfully. The same argument holds for colleagues who will be more likely to approve of, and encourage, adjustments when the employee is performing well, is perceived as competent, and is trusted (Clegg & Spencer, 2007). Clegg and Spencer (2007) also indicated that trust involves risk taking. Good performance also is an indication to the employee that he/she is competent in performing the job, which ultimately leads to trust in oneself. Thus, the employee is more prepared to take the risk of having or taking on more and new responsibilities, i.e. crafting his/her job. Employees’ good performance, recognition of their competence and, most importantly, knowing that they are trusted by their managers or leaders, increase the scope they have to enlarge their own roles (Wrzesniewski & Dutton, 2001). When trust exists between managers and subordinates, managers are more likely to turn a blind eye to adjustments initiated by the employee, because the environment is characterised by a sense of ‘safety’.

Trust is defined by Mayer et al (1995) as the ‘willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party’ (p. 712). It is furthermore argued that being vulnerable involves taking a risk or, more specifically, the willingness to take a risk. Therefore, as already mentioned above, the employee will be more likely to take the risk of making adjustments to his/her job. However, the manager is also vulnerable to the actions of the employee. Mayer et al (1995) argued that being vulnerable means that something of importance is at stake and might be lost. By trusting the employee and ‘indirectly’ allowing him/her to engage in job crafting, the manager/supervisor (trustor) is open to the actions of the employee (trustee), as long as these actions contribute positively to the performance of both the employee and the organisation (and nothing is ‘lost’ in the long run). Based on this it is hypothesised that:
Hypothesis 6: Trusting relationships between supervisor/manager and employee have a significant positive effect on job crafting.

2.4.1.4 Task complexity

Task complexity refers to the difficulty or ease with which a task can be completed (Ghitulescu, 2006). Complex tasks place increased demands on the knowledge, skills, and resources of employees. It is however important to make a distinction between how the job incumbent perceive the complexity of the task and the actual complexity thereof. For the purpose of this study task complexity refers to the individual's own perception of the complexity or difficulty of the task, i.e. subjective task complexity. If the employee perceives the task as being complex, it can be assumed that he/she will require and thus seek additional resources to successfully complete these tasks. Such resources can for example include help from colleagues or increased feedback from supervisors so that employees can know where they need to improve in order to complete their work requirements. Morgeson and Humphrey (2006) argued that complex tasks requires the use of high-level skills and is mentally more demanding and challenging and is therefore more likely to have positive motivational outcomes. Frese and Fay (2001) additionally concluded that task complexity can be considered environmental supports that add to the levels of initiative taken by employees. Based on this, it is proposed:

Hypothesis 7: Task complexity has a significant positive effect on job crafting.

2.4.2 Personal Resources

Personal resources refer to those aspects of the self that are generally linked to resiliency and refer to individuals' sense of their ability to control and impact upon their environment successfully (Hobfoll, Johnson, Ennis & Jackson, 2003). Personal resources are therefore functional in achieving goals, it protects from threats and associated physiological and psychological costs, and it stimulates personal growth and development (Xanthopoulou et al., 2009). Xanthopoulou, Bakker, Demerouti and Schaufeli (2007) indicated that personal resources may function either as moderators or mediators in the relationship between environmental factors and organisational outcomes or it may determine the way people make sense of the environment, formulate it, and react to it. It was also furthermore argued that job and personal
resources are reciprocal in the sense that individuals can form stronger positive evaluations about themselves through their learning experiences and consequently create more resourceful work environments. Therefore, personal resources may also determine the way people perceive or create their work environment as well as how they react to it due to the fact that individuals have more positive self-regard (Xanthopoulou et al., 2007).

2.4.2.1 Proactive personality

A proactive personality can be defined as a behavioural syndrome that causes an individual to take initiative and to adopt an active orientation that goes beyond actual work requirements (Dikkers, Jansen, De Lange, Vinkenburg & Kooij, 2010). Besides only taking initiative in improving current circumstances or creating new ones (Morrison & Phelps, 1999), a proactive personality also involves searching for learning opportunities and engaging in learning activities (Dikkers et al, 2010). Crant and Bateman (2000) argue that this personality type involves challenging the status quo instead of passively accepting and adapting to present conditions. Therefore, proactive employees are not passive performers of their prescribed job, but rather active shapers of their work environment, work content and developmental opportunities, as argued by Van Bloois, De Pater and Nauta (2010). According to Buss (1987), employees are not ‘passive recipients of environmental presses’, but actively influence their own environment (p. 1220). Individuals with a proactive personality change their circumstances and physical environment intentionally. They identify opportunities, take action, and persevere until they bring about meaningful change. Individuals who are more passive only react to, adapt to and are shaped by their environment, as opposed to proactive individuals who take initiative to ultimately have an impact on the world around them (Bakker et al., 2012).

Van Bloois et al. (2010) furthermore argue that employees with a proactive personality may stretch the boundaries of their job, enabling them to learn broader skills compared to those employees who routinely do their job. Frese and Fay (2001) indicated that proactivity refers to having a long-term focus instead of waiting until one must respond to a demand, thus implying that problems and opportunities are anticipated and the
employee prepares to deal with them immediately. It thus is assumed that a proactive personality is a necessary precursor for job crafting behaviours to occur, as these involve taking initiative and action, rather than passively accepting the status quo. Tims and Bakker (2010) argue that proactive employees strive for a fit between the environment and their own needs and abilities. In other words, employees shape their environment in such a way that their job demands and job resources better fit their needs, abilities and preferences. Based on this it is proposed:

Hypothesis 8: A proactive personality has a significant positive effect on job crafting.

2.4.2.2 Self-efficacy

Tims and Bakker (2010) propose that self-efficacy is an important individual factor for employees to engage in job crafting. Bandura (1977a) defined self-efficacy as ‘personal judgments of one’s capabilities to organise and execute courses of action to attain designated goals’ (p. 83). It is also defined as a person’s belief in his/her ‘capabilities to mobilise the motivation, cognitive resources, and courses of action needed to meet given situational demands’ (Wood & Bandura, 1989, p. 408). It is a belief about what a person can do and not so much judgments about one’s attributes (Skaalvik & Skaalvik, 2007). Such people are more motivated to perform a given task because they believe their current skills are sufficient to achieve the necessary outcomes (Hu, Huhmann & Hyman, 2007). Individuals with high self-efficacy set in motion sufficient effort that produces successful outcomes if well executed, as opposed to those individuals with low self-efficacy, who give up easily and therefore fail to complete the task (Stajkovic & Luthans, 1998). Judge and Bono (2001) argued that generalised self-efficacy should affect job satisfaction through its association with practical success on the job. It was furthermore argued that individuals with high levels of self-efficacy deal more effectively with difficulties and persist in the face of failure, and therefore are more likely to attain valued outcomes and ultimately to derive satisfaction from their jobs. Self-efficacy therefore can be considered an important resource.

Self-efficacy is grounded in the theoretical framework of social cognitive theory, which emphasises the idea that people can exercise some influence over what they do (Skaalvik & Skaalvik, 2007). Based on this framework, people are self-organising, self-
regulating, self-reflecting and, most importantly, they are proactive. Skaalvik and Skaalvik (2007) suggest that efficacy beliefs determine how environmental opportunities and obstacles are perceived. They argue that those with low self-efficacy tend to dwell on their deficiencies and magnify the severity of possible threats. Based on this it also was argued that the judgment of situations as threatening may lead to increased anxiety, which can be consuming and ultimately leads to burnout. A similar stance was taken by Brouwers and Tomic (2000), who conducted a study of teacher burnout and self-efficacy. It was argued that people who doubt their abilities are quick to consider this doubt as threatening and thus avoid such situations. A number of studies have also demonstrated that self-efficacy (or the lack thereof) in itself can trigger the burnout process (Chwalisz, Altmayer & Russell, 1992; Friedman & Farber, 1992; Greenglass & Burke, 1988). Skaalvik and Skaalvik (2007) confirmed a strong correlation between teacher self-efficacy and teacher burnout.

As already mentioned, two psychological processes underlie the JD-R model. The first process involves excessive job demands combined with a lack of job resources, which exert an energy-draining effect on employees and ultimately lead to burnout. The second process involves a motivational process in the presence of high levels of job resources, which contribute positively to the health and well-being of employees and ultimately motivates them to change certain aspects of their jobs (Hu et al., 2011). Based on the above argument, that a lack of self-efficacy can lead to burnout, it can be argued that self-efficacy can be considered an important resource that encourages a motivational process, as depicted by the JD-R model. In addition, Avey, Luthans and Jensen (2009) argue that psychological capital (PsyCap), of which self-efficacy is one component, may be one of the most critical resources needed to cope with stressful work conditions. Similarly, Avey, Luthans, Smith and Palmer (2010) conducted a study on employee well-being and found that PsyCap was a positive resource in enhancing the well-being of employees. Therefore, self-efficacy is an important resource in the motivation and well-being of employees and thus can be considered valuable in the process of job crafting.
Parker (2000) conducted a study in which the relationship between role-breadth self-efficacy and proactivity was investigated. Role-breadth self-efficacy involves the ‘extent to which people feel confident that they are able to carry out a broader and more proactive role, beyond traditional prescribed technical requirements’ (Parker, 1998, p. 835). Role-breadth self-efficacy differs from generalised self-efficacy in that role-breadth self-efficacy inherently recognises ‘proactivity’. Lawler (1994) and Parker (2000) argued that organisations need employees who use their knowledge actively and display personal initiative. For this to be effective, it is required that employees are sufficiently confident in their abilities. Role-breadth self-efficacy emphasises the idea of employees’ belief in their capability to perform an array of tasks that involve more proactivity. Although generalised self-efficacy differs somewhat from role-breadth self-efficacy, the same logic can be applied in this study. Employees with higher levels of self-efficacy will believe more in their capabilities to make effective and goal-directed changes to their jobs.

People with a high level of self-efficacy therefore believe in their abilities and will be more confident in the changes they make in their job content or environment, whereas those with low levels of self-efficacy will be more likely to doubt their abilities as well as the success with which they change their job or environment. Employees with high self-efficacy beliefs set higher goals for themselves and tend to exceed these goals whereas those with lower self-efficacy beliefs set lower goals and tend to underachieve (Krueger & Dickson, 1996). Xanthopoulou et al. (2009) furthermore argue that employees who have confidence in their capabilities may create more aspects in their environment that ultimately facilitate goal attainment, especially in the case of higher and more challenging goals. Individuals with high levels of self-efficacy are also likely to experience high levels of accordance between the goals they set and their capabilities. Self-efficacy and the extent to which employees believe in their capabilities influence the challenges people pursue, the amount of effort they expend, as well as their perseverance in the face of obstacles (Xanthopoulou et al., 2009). It therefore is proposed:

**Hypothesis 9:** Self-efficacy has a significant positive effect on job crafting.
Self-efficacy can also have a mediating effect on job crafting. As can be seen from Figure 1.1, personal and job resources interact and can influence one another continuously. This indicates that personal and job resources are reciprocally related to one another. This notion is also supported by COR theory, which holds that employees want to accumulate their resources, thus creating resource caravans (Hobfoll, 2002). Personal resources especially may influence employees’ evaluations of themselves and the manner in which they create more resourceful environments (Xanthopoulou et al., 2007). This may also be the case in the present study. Task complexity especially, which places additional demands on the knowledge and skills of employees, may have an impact on how employees perceive their capabilities, especially when these tasks are completed successfully. When employees perceive that they are capable of performing a complex task they form stronger positive evaluations about themselves and therefore believe more in their capabilities, thereby increasing their self-efficacy beliefs (Xanthopoulou et al., 2007). Continuous completion of complex tasks contributes to the accumulation of successes and constant positive experiences, which ultimately enhance general self-efficacy beliefs. The employees’ judgment about their capabilities is thus influenced positively. Frese and Fay (2001) argued that task complexity makes it possible to have a mastery experience, which is one source of self-efficacy beliefs, and according to Bandura (1977b), mastery experiences are regarded as the most influential source of self-efficacy and ultimately lead to higher self-efficacy. It therefore is hypothesised:

**Hypothesis 10**: Self-efficacy has a significant mediating effect on the relationship between task complexity and job crafting.

Furthermore, Xanthopoulou et al. (2007) proposed that sufficient job resources will make employees feel efficacious. Feedback, as a job resource, provides employees with valuable information on their performance (Bakker et al., 2005). Through feedback employees become aware of what they are good at and whether they are doing their jobs well. This positive feedback can contribute to employees’ perception of their capabilities, and ultimately their self-efficacy beliefs. In addition, Skaalvik and Skaalvik
(2007) suggest that outcomes interpreted as successful increase self-efficacy beliefs, whereas those interpreted as failures weaken them.

**Hypothesis 11:** Self-efficacy has a significant mediating effect on the relationship between feedback and job crafting.

### 2.4.3 Job Demands

Job demands are defined as those physical, social or organisational aspects of the job that require persistent physical or mental effort and thus are associated with certain physiological and psychological costs (Bakker et al., 2005; Salanova & Schaufeli, 2008; Xanthopoulou et al., 2009). High job demands exhaust the mental and physical resources of employees and ultimately lead to a state of exhaustion (Bakker et al., 2005). Based on the definition of job crafting as conceptualised by the JD-R model, a distinction is made between challenging and hindering demands. Challenging demands are those that, although experienced as difficult or stressful, contribute to positive outcomes such as better skills and personal growth. Van den Broeck, De Cuyper, De Witte and Vansteenkiste (2010) argue that these demands may be energy depleting as well as stimulating. Even though these demands require energy, they also contain potential gains by appealing to employees’ curiosity, competence and thoroughness. They elicit a problem-focused coping style and therefore are likely to contribute to the achievement of goals. Hindering demands are defined as those demands that interfere with the achievement of goals and are associated with lower well-being and performance (Tims, Bakker, Derks & Van Rhenen, 2013b). These demands are considered to be threatening obstacles that drain employees’ energy. When confronted with such demands, employees experience a lack of control and negative emotions, and ultimately adopt an emotion-focused coping style, as argued by Van den Broeck et al. (2010). It is especially the hindering demands that bring about a health impairment process, which ultimately leads to burnout in employees. For this reason, the focus in this section will primarily be on one specific job demand causing stress in employees and how this is related to job crafting.
2.4.3.1 **Illegitimate tasks**

Illegitimate tasks refer to those tasks that violate the norms of what can reasonably be expected of a person. They can be divided into unreasonable and unnecessary tasks (Semmer, Tschan, Meier, Facchin & Jacobshagen, 2010). This notion of illegitimate tasks can be derived from the perception that a task does not conform to an employee’s professional role (unreasonable), or involves work that makes no contribution to the achievement of a goal (unnecessary) (Kottwitz et al., 2012). Semmer et al. (2010) argued that a job may become part of an employee’s identity, something he/she values and is proud of. Tasks therefore affirm the professional identity of employees if they are in line with role expectations. This implies that unreasonable or unnecessary tasks may threaten and offend the professional identity of employees. Employees may not passively accept this, but rather attempt to restore their professional identity by engaging in job crafting.

As the role identity of employees is an important source of pride, any threat to it is likely to induce stress and therefore illegitimate tasks may be described as a form of stressor (Kottwitz et al., 2012) or, stated differently, a form of hindering demand causing additional strain on the employee. This is supported by research conducted by Semmer et al. (2010) showing that employees with higher levels of illegitimate tasks reported lower levels of subjective well-being, such as lower job satisfaction and more feelings of resentment towards the organisation. Kottwitz et al. (2012) conducted a study to determine the amount of stress caused by illegitimate tasks. This was performed by examining cortisol release by employees, as this is often used as a biological stress indicator. High levels of cortisol release have been shown to be a response to acute stress in laboratory settings. It was found in this study that illegitimate tasks predicted cortisol only when the participants rated their own health as being low. This indicates that a depletion of energy in the form of low health as perceived by the employee and as caused by illegitimate demands, leads to higher levels of stress (Kottwitz et al., 2012). It therefore is reasonable to argue that employees ultimately will engage in job crafting to cope with the stress associated with these illegitimate demands. It therefore is proposed that:
**Hypothesis 12:** Illegitimate tasks have a significant positive effect on job crafting.

### 2.4.4 Moderating Effects

The proactive personality has been defined and explored in Section 2.4.2.1 as an important personal resource that may influence the extent to which employees engage in job crafting behaviours. Van Bloois et al. (2010) argue that employees with a proactive personality are not passive performers of their prescribed job, but rather active shapers of their work environment, work content, and developmental opportunities. Wrzesniewski and Dutton (2001) defined job crafting as a process in which individuals make physical and cognitive changes in the task or relational boundaries of their work. Furthermore, based on the JD-R model, job crafting is defined in terms of the changes employees make in their levels of job- and personal resources, and job demands (Tims & Bakker, 2010). According to Berg et al. (2010), job crafting involves proactive behaviour requiring adaptation to challenges and constraints presented by the work environment. It thus can be seen that job crafting involves a lot of proactivity and initiative on the side of the employee. It therefore would be useful to explore proactive personality as a moderator between all the aforementioned job- and personal resources, job demands, and job crafting.

**Hypotheses 13 to 19:** A proactive personality moderates the relationship between the following variables and job crafting: engagement, illegitimate tasks, autonomy, feedback, task complexity, trusting relationships between manager and employee, and self-efficacy.

Lyons (2008) suggested that some types of jobs, some job venues, and some organisations will provide the opportunity or even the incentive for employees to craft their jobs. Wrzesniewski and Dutton (2001), however, mentioned that job crafting can occur across a range of different jobs. These included hospital cleaners integrating themselves into care delivery systems, hairdressers crafting a more enjoyable job, engineers creating jobs to enable the success of projects, nurses creating a pocket of care around patients, information technicians supporting the computer workplace, and restaurant kitchen employees. This gives an indication that job crafting is not just common to specific type of jobs, but that it possibly can occur in any occupation. A
valuable aspect to consider is the role of gender in job crafting. All the above-mentioned jobs could be filled by either men or women. One could say that hairdressers or nurses would more likely be women, or information technicians more likely men, but this would only be based on assumption. A valuable contribution of this study would thus be to test whether job crafting is a common phenomenon amongst both men and women and whether it moderates the relationship between all the above-mentioned job- and personal resources, job demands and job crafting. It therefore is hypothesised that:

_Hypotheses 20 to 27:_ Gender moderates the relationship between the following variables and job crafting: engagement, illegitimate tasks, autonomy, feedback, task complexity, trusting relationships between manager and employee, and self-efficacy.

**2.5 PROPOSED CONCEPTUAL MODEL**

Based on the above literature review it is evident that job crafting is not a random event, but rather the result of a complex nomological network of latent variables (resources and demands) characterising the employee and his/her work environment. HRM can affect the extent to which employees engage in job crafting only when the identity of these latent variables is known. As can be seen in Figure 1.1, the JD-R model provides a valuable illustration of the process underlying job crafting, with specific reference to job and personal resources, job demands, and engagement. The research initiating question therefore accumulates to the conceptual model as depicted by Figure 2.1.
Figure 2.1 The Proposed Conceptual Model of the Hypothesised Relationships
CHAPTER 3
RESEARCH METHODOLOGY

3.1 INTRODUCTION
In an attempt to answer the research initiating question, a structural model was developed by conducting a literature review that identified the resources and demands that account for the variance in job crafting. This structural model will have value in assisting HRM to influence job crafting behaviours in the workplace successfully only to the extent to which it provides a valid account of the psychological process underlying job crafting. The structural model can be considered valid or permissible to the extent to which it closely fits the empirical data (Babbie & Mouton, 2001). This fit depends on the methodology used, which is meant to serve the epistemic ideal of science. The methodology used to test the structural model therefore needs to maximise the probability of valid explanations and findings. A detailed description and motivation of the methodology used therefore is necessary in order to evaluate the permissibility of the research findings.

In this chapter, the substantive hypotheses, research design, statistical hypotheses, measuring instruments, sampling design and the statistical analysis techniques according to, which the structural model will be tested empirically will be discussed.

3.2 SUBSTANTIVE RESEARCH HYPOTHESES
The objective of this study was to test the relationship and interaction between various job- and personal resources and illegitimate tasks as job demand, and job crafting. The JD-R model was used as framework to explain how resources and demands possibly can account for the variance in job crafting. From this, specific job- and personal resources and illegitimate tasks were identified and their relationship with job crafting is reflected in Figure 2.1. Consequently, the following substantive hypotheses were formulated:

Hypothesis 1: Autonomy has a significant positive effect on job crafting.

Hypothesis 2: Feedback has a significant positive effect on job crafting.

Hypothesis 3: Engagement has a significant positive effect on job crafting.
**Hypothesis 4:** Engagement has a significant mediating effect on the relationship between autonomy and job crafting.

**Hypothesis 5:** Engagement has a significant mediating effect on the relationship between feedback and job crafting.

**Hypothesis 6:** Trusting relationships between supervisor/manager and employee have a significant positive effect on job crafting.

**Hypothesis 7:** Task complexity has a significant positive effect on job crafting.

**Hypothesis 8:** A proactive personality has a significant positive effect on job crafting.

**Hypothesis 9:** Self-efficacy has a significant positive effect on job crafting.

**Hypothesis 10:** Self-efficacy has a significant mediating effect on the relationship between task complexity and job crafting.

**Hypothesis 11:** Self-efficacy has a significant mediating effect on the relationship between feedback and job crafting.

**Hypothesis 12:** Illegitimate tasks have a significant positive effect on job crafting.

**Hypotheses 13 to 19:** A proactive personality moderates the relationship between the following variables and job crafting: engagement, illegitimate tasks, autonomy, feedback, task complexity, trusting relationships between manager and employee, and self-efficacy.

**Hypotheses 20 to 27:** Gender moderates the relationship between the following variables and job crafting: engagement, illegitimate tasks, autonomy, feedback, task complexity, trusting relationships between manager and employee, and self-efficacy.

### 3.3 RESEARCH DESIGN

The substantive research hypotheses were developed in order to determine whether the structural model provides a valid and credible account of the salient job- and personal resources and job demands that explains variance in the extent to which individuals engage in job crafting. The validity of the hypothesised paths needs to be investigated empirically by means of a plan or a method that will provide unambiguous empirical evidence. This is known as the research design. Research
design is defined by Babbie and Mouton (2001) as the plan or structured framework of how the researcher intends to conduct the research process in order to solve the research problem. The main function of the research design is to control variance and consequently to obtain empirical findings that can be interpreted unambiguously for or against the stated hypotheses (Kerlinger, 1973). The research design that was used to solve the research problem and ultimately control variance in this study was an ex post facto correlation design.

An ex post facto correlation design is a systematic empirical inquiry in which the researcher does not have direct control over the variables. This is due to the fact that the manifestation of the variables has already occurred or they cannot be manipulated (Kerlinger & Lee, 2000). The aim of this research was to discover what happens to one variable (job crafting) when another variable changes. The researcher thus sought correlations between variables. However, correlations do not imply causation. The ex post facto correlation design therefore only allows for inferences to be made, in other words, to establish relationships between variables. It therefore cannot be said that one causes the other (Kerlinger & Lee, 2000).

There is a specific logic underlying the ex post facto correlation design. Measures of the observed variables are obtained and from this the observed covariance matrix is calculated. Estimates for the freed structural and measurement model parameters are obtained in an iterative fashion in order to reproduce the observed covariance matrix as closely as possible (Diamantopoulos & Siguaw, 2000). If the fitted model fails to accurately reproduce the observed covariance matrix it does not necessarily mean that the fitted model is not providing an acceptable explanation for the observed covariance matrix. It only means that the structural relationships hypothesised by the model do not provide an accurate portrayal of the process underlying job crafting. However, the opposite is not true. If the covariance matrix derived from the estimated structural and measurement model parameters closely agrees with the observed covariance matrix it would not mean that the psychological dynamics postulated by the structural model necessarily produced the observed covariance matrix. It therefore cannot be concluded that the psychological process depicted in the model necessarily must have produced the levels of job crafting observed in the employees sampled for the study. A high degree of fit between the observed and estimated covariance matrices would only imply that the processes
portrayed in the structural model provide one possible explanation for the observed covariance matrix (Diamantopoulos & Siguaw, 2000).

In choosing a specific research design it is important to consider the limitations associated with such a research design. The ex post facto correlation design has three major limitations, namely the inability to manipulate independent variables, the lack of power to randomise, and the risk of improper interpretation (Kerlinger, 1973). Despite these limitations, the value of an ex post facto correlation design lies in the fact that most of the variables in research conducted in Industrial Psychology and various other social sciences cannot be manipulated, consequently making an ex post facto design more preferable than an experimental one (Kerlinger, 1973).

3.4 MEASURING INSTRUMENTS

The various exogenous variables and endogenous variables in the structural model need to be measured and thus operationalised in order to provide empirical evidence to support or reject the proposed hypotheses. To be able to draw valid and reliable conclusions, the instruments used need to be psychometrically sound. Evidence in the existing literature on the psychometric properties, namely the reliability and validity of the measuring instruments, will be provided to justify the choice of the specific measuring instrument. In some cases the entire questionnaire will be used, whereas in other cases only a section of the questionnaire will be utilised. One questionnaire was developed and sent to the participants for completion. Each individual questionnaire will now be discussed in detail.

3.4.1 Job Crafting

Job crafting was measured using the Job Crafting Scale (JCS) developed by Tims et al. (2012). The psychometric properties of the JCS were examined in three separate studies. In Study 1 and 2 the scale was developed and tested for its factor structure, reliability and convergent validity. The criterion validity was examined in a third study and the results indicated that there were four independent job crafting dimensions, namely increasing structural job resources, increasing social job resources, increasing challenging job demands, and decreasing hindering job demands. These dimensions could be reliably measured with 21 items. The Cronbach alphas for the subscales were as follows: increasing structural job resources = .82, decreasing hindering job demands = .79, increasing social job resources = .77, and increasing
challenging job demands = .75 (Tims et al., 2012, p. 177). An example item of each of the subscales includes ‘I try to develop my capabilities’, ‘I try to ensure that my work is emotionally less intense’, ‘I ask others for feedback on my performance’, and ‘When an interesting project comes along, I offer myself proactively as project co-worker’.

3.4.2 Autonomy
Autonomy was measured with the Work Design Questionnaire (WDQ) of Morgeson and Humphrey (2006). In this questionnaire, autonomy consists of three subscales, namely work-scheduling autonomy, decision-making autonomy, and work methods autonomy, each consisting of three items. For the purpose of this study, all three dimensions were used as a composite to reflect the degree of autonomy. Morgeson and Humphrey (2006) reported internal consistencies of .85, .85 and .88 for the three dimensions respectively (p. 1327). The respondent was required to indicate the extent to which he/she agrees/disagrees with a statement. An example of an item included in the scale would be ‘The job gives me a chance to use my personal initiative or judgement in carrying out the work’.

3.4.3 Feedback
Feedback was also measured by means of the WDQ (Morgeson & Humphrey, 2006). The feedback from others subscale was used for the purpose of this study. The subscale consists of three items and respondents are required to indicate the extent to which they agree or disagree with a statement. An example of an item in the subscale includes ‘I receive a great deal of information from my manager and co-workers about my job performance’. Morgeson and Humphrey reported an internal consistency of .88 (p.1327).

3.4.4 Engagement
Work engagement was measured by using Schaufeli and Bakker’s (2003) nine-item version of the Utrecht Work Engagement Scale (UWES-9). The scale consists of three subscales, namely vigour, dedication and absorption, and each of these scales is measured with 3 items. An example of an item included in this scale would be ‘At my work, I feel bursting with energy’ (vigour), ‘When I get up in the morning, I feel like going to work’ (dedication), and ‘I get carried away when I am working’ (absorption). The following internal consistencies were reported by Seppala et al.
(2009): vigour = .81 to .85, dedication = .83 to .87 and absorption = .75 to .83 (p. 467). The internal consistency of the total UWES-9 scale ranges from .85 to .92 (Schaufeli, Bakker & Salanova, 2006).

3.4.5 Trusting Relationships
Trust in supervisor was measured by using a subscale of a Trust Scale developed by Ellis and Shockley-Zalabak (2001) called Trust in Immediate Supervisor. The subscale consists of 14 items with a reliability coefficient (Cronbach alpha) of .95 and factor loadings ranging between .56 and .86 (p.389). An example of an item measuring trusting relationships includes ‘I can tell my immediate supervisor when things are going wrong’. Respondents are required to indicate the extent to which a statement describes their immediate supervisor on a five-point Likert-type scale.

3.4.6 Task Complexity
Task complexity was measured with the Job Complexity subscale of the WDQ of Morgeson and Humphrey (2006). The subscale consists of four items (‘The tasks on the job are simple and uncomplicated’), with an internal consistency of .87 (Morgeson & Humphrey, 2006, p.1327).

3.4.7 Proactive Personality
Proactive personality was measured by using the Proactive Personality Scale of Bateman and Crant (1993). The scale consists of 17 items and respondents are required to indicate their level of agreement with a statement on a seven-point scale. A ten-item shortened version was used for the purpose of this study. An example of an item included in this version includes ‘I am constantly in the lookout for new ways to improve my life’. Seibet, Kraimer and Crant (2001) reported a Cronbach alpha of .85 for this shortened version (p.857).

3.4.8 Self-efficacy
Self-efficacy was measured using a newer version of the general self-efficacy scale developed by Chen, Gully and Eden (2001). The scale consists of eight items (‘I am confident that I can perform effectively on many different tasks’) and respondents are required to indicate whether they agree with a statement in Likert format. Chen et al. (2001) conducted three studies and reported internal consistencies ranging from .85 to .88, .86 to .90 and .85 to .88 for the three studies respectively (pp.69, 71, 76).
3.4.9 Illegitimate Tasks

Illegitimate tasks were measured by means of the Bern Illegitimate Tasks Scale (BITS). BITS was used by Semmer et al. (2010) in two studies conducted on counterproductive work behaviour. The scale consists of eight items, with four measuring unnecessary tasks and four measuring unreasonable tasks. Example items of the two subscales include: ‘Do you have work tasks to take care of which keep you wondering if they have to be done at all?’ and ‘Do you have work tasks to take care of, which you believe are going too far and should not be expected from you?’ Respondents are required to indicate their answers in Likert-type format, ranging from never to frequently. The Cronbach alphas for the BITS in the two studies were as follows: Study 1 = .83 and Study 2 = .88 (Semmer et al., 2010, p.79).

3.5 PARTICIPANTS AND SAMPLING

For the purpose of this study, data was collected from participants within the financial sector. The extent to which the findings from the sample can be generalised to the overall population depends on the representativeness and the statistical power of the sample (Theron, 2012). Theron (2012) furthermore emphasises the importance of a sufficient sample size. Various scholars agree on the notion that larger sample sizes have a higher probability of producing stable correlations between variables and thus are more reliable in making appropriate generalisations (Worthington & Whittaker, 2006). A few important aspects should also be taken into account when deciding on the sample size. These include the following: the ratio of the sample size to the number of parameters to be estimated, the statistical power associated with the test of the hypothesis of close fit against an alternative hypothesis of mediocre fit, and the practical and logical considerations for aspects such as cost and the availability of suitable respondents (Coyne, 1997; Devers & Frankel, 2000). For most structural equation modelling (SEM) applications, a sample size of 200 observations or more is considered satisfactory (Kelloway, 1998). Partial least squares (PLS) analysis is more applicable to use with smaller sample sizes (Monecke & Leisch, 2012).

The procedure that was used to select the sample is non-probability purposive (judgement) sampling. Devers and Frankel (2000) have indicated that purposive sampling is designed to increase the understanding of a certain group of people or for developing theories and concepts. Individuals with the greatest insight into the
research question therefore are chosen as part of the sample (Marshall, 1996; Ritchie, Lewis & El-am, 2003). Although this method might seem somewhat biased, Coyne (1997) suggested that the inherent bias contributes to its efficiency. The sample group selected consisted of approximately 800 employees on different levels within the specific company. A total of 236 individuals completed the survey. The sample size was acceptable but posed some challenges during the statistical analyses (hence the use of partial least squares analysis as discussed later). The profile of the sample population, in terms of age, gender, home language, educational level, organisational tenure and level of work, is reflected in Table 3.1.

3.6 MISSING VALUES
Before the data analysis it must first be established whether there are any missing values. Missing values occur due to non-responses or to the absence of participants, and may have a negative impact on the efficiency of the indicator variables (Mels, as cited in Swart, 2013). A number of methods can be used to solve the problem of missing values. These include:

1. List-wise deletion
2. Pair-wise deletion
3. Multiple imputations
4. Full information maximum likelihood (Burger 2011)

In this research study, missing values were not a concern, as the participants were required to respond to all the items included in the web-based survey. This consequently assisted in avoiding missing values.

3.7 STATISTICAL ANALYSES
Item analysis, confirmatory factor analysis and path least square (PLS) analysis were used to analyse the data obtained from the questionnaire and to test the structural model depicted in Figure 2.1.

3.7.1 Item Analysis
The various scales that were used to operationalise the variables comprising the structural model in Figure 2.1 were developed to measure a specific construct or
Table 3.1
Profile of Sample

<table>
<thead>
<tr>
<th>Age</th>
<th>Minimum and maximum age</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1, 40</td>
<td>17.83</td>
<td>10.58</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female</td>
<td>144</td>
<td>61%</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>92</td>
<td>39%</td>
</tr>
</tbody>
</table>

| Home language             | English                 | 165       | 70%        |
|                           | Afrikaans               | 61        | 26%        |
|                           | isiXhosa                | 3         | 1%         |
|                           | isiZulu                 | 3         | 1%         |
|                           | Other (not specified)   | 4         | 2%         |

| Educational level         | Matric                  | 70        | 30%        |
|                           | Diploma                 | 55        | 23%        |
|                           | Degree                  | 44        | 19%        |
|                           | Honours degree          | 38        | 16%        |
|                           | Master’s degree         | 19        | 8%         |
|                           | Doctoral                | 1         | 0%         |
|                           | Other (not specified)   | 9         | 4%         |

| Organisational tenure     | 1-2 years               | 29        | 12%        |
|                           | 3-5 years               | 48        | 20%        |
|                           | 6-8 years               | 52        | 22%        |
|                           | 10-15 years             | 47        | 20%        |
|                           | longer                  | 60        | 25%        |

| Level of work             | Manager of self         | 158       | 67%        |
|                           | Manager of others       | 59        | 25%        |
|                           | Manager of managers     | 19        | 7%         |
dimension of a construct carrying a specific definition. Items were developed and served as an indication of individuals’ standing on the specific variables in the structural model, and functioned as stimuli to which test takers responded with behaviour that reflected the specific underlying variable. If these design intentions were successful they should reflect in a number of item statistics.

An item analysis was performed to determine whether the items used in the measuring instruments were a consistent representation of the latent variables so as to consequently determine an individual’s standing on these variables. The objective of the item analysis therefore was to identify poor items that do not successfully represent the latent variable. Poor items are those items that fail to discriminate between different states of the latent variable, in other words, everyone taking the test will get the same standing on the specific variable, and also those items that do not reflect a common latent variable in combination with all the other items (Henning, Theron & Spangenberg, 2004). Item analysis was conducted on each of the measurement scales and the Cronbach’s alpha values were evaluated to determine the reliability of the items, and consequently the overall reliability of the scale. Reliability scores of ≥ .70 were considered satisfactorily high (Nunnally, 1978).

3.7.2 Confirmatory factor analysis

Before fitting the structural model, evidence is required on whether the indicator variables successfully operationalise the variables under question (Diamantopoulos & Siguaw, 2000). This implies that the fit of the measurement model first needs to be evaluated. The measurement model describes the manner in which the latent variables express themselves in indicator variables.

The following hypotheses will be used to test the fit of the measurement model:

\[ H_{01}: \text{RMSEA} = 0 \]
\[ H_{a1}: \text{RMSEA} > 0 \]

The above null hypotheses test for exact fit. This implies that the measurement model provides a perfect explanation of the way in which the latent variables manifest themselves in the indicator variables.
If the measurement model provides only an approximate account of the way in which the latent variables are represented by the indicator variables, the following close fit hypotheses will be tested:

\[ H_{02}: \text{RMSEA} \leq .05 \]
\[ H_{a2}: \text{RMSEA} > .05 \]

### 3.7.3 Partial Least Squares Analysis

Partial least squares (PLS) analysis is an alternative approach to covariance-based SEM and is referred to as a soft-modelling technique (Monecke & Leisch, 2012). PLS is focused more on predictions than on covariance and is also more applicable for smaller sample sizes. PLS models consist of an inner model and outer model. The inner model, which is similar to the structural model in covariance SEM, specifies the relationships between latent variables, and the outer model, which is similar to the measurement model in covariance SEM, specifies the relationships between a latent variable and its observed variables (Henseler, Ringle & Sinkovics, 2009). Although CFA was used to evaluate the measurement model\(^3\), PLS was utilised to further evaluate the relationships between the latent variables and their observed variables (measurement model), as well as the relationships between the latent variables (structural model).

### 3.8 SUMMARY

Chapter 3 has provided a detailed overview of the methodology used to ultimately answer the research initiating question. An ex post facto research design was used to empirically investigate the hypothesised paths. An appropriate sample was selected by means of purposive sampling and data was collected from one company within the FSI. A number of measuring instruments were used to compile the self-administered web-based survey. The instruments were carefully selected based on their reliability and validity. Item analysis, CFA and PLS were used to analyse the data and test the hypothesised relationships.

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\(^3\) CFA did not provide satisfactory results.
CHAPTER 4
RESULTS

4.1 INTRODUCTION
This chapter is aimed at presenting and discussing the statistical results of the analyses as discussed in Chapter 3. Item analysis was conducted to investigate and establish the reliability of the various latent variable measures used. A CFA was then performed to determine the fit of the measurement model. After the CFA confirmed less satisfactory fit, PLS path analysis was conducted to further investigate the inner and outer measurement fit of the structural model.

4.2 VALIDATING THE MEASUREMENT MODEL

4.2.1 Item Analysis
Item analysis evaluates the consistency between items in a particular subscale. Good items will have high internal consistency and poor items will generally be inconsistent with the rest of the items. Cronbach’s alpha was used to measure internal consistency reliability. Reliability scores of ≥.70 were considered satisfactorily high (Nunnally, 1978). Item correlations, which are a subtype of internal consistency reliability, were used to evaluate the consistency between items. Values between .5 and 1 indicate high internal consistency reliability, while values between 0 and .5 indicate acceptable reliability.

Table 4.1 presents a summary of the item analysis results for each of the measurement scales. As can be seen in Table 4.1, the Cronbach’s alphas of internal consistency were acceptable for all the scales (> .70). This was supported by satisfactorily high average inter-item correlations.

4.2.1.1 Job crafting
The job crafting scale consists of four subscales. The first subscale, ‘increasing structural resources’ (JC_1), obtained a Cronbach’s alpha of .78, indicating high internal consistency reliability. The average inter-item correlations for this subscale was .44, which supports the Cronbach’s alpha and thus indicates acceptable reliability. Item JC-5 of this subscale obtained an inter-item correlation of below .50. The internal consistency reliability of this subscale would increase to .83 if this item was to be deleted. However, the Cronbach’s alpha for this subscale was .78 before
Table 4.1

Means, Standard Deviations and Internal Consistency Reliabilities

<table>
<thead>
<tr>
<th>Scale</th>
<th>Sample size</th>
<th>Number of items</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Cronbach’s alpha</th>
<th>Average inter-item correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>JC_1</td>
<td>236</td>
<td>5</td>
<td>21.64</td>
<td>2.44</td>
<td>.78</td>
<td>.44</td>
</tr>
<tr>
<td>JC_2</td>
<td>236</td>
<td>6</td>
<td>16.65</td>
<td>4.29</td>
<td>.82</td>
<td>.44</td>
</tr>
<tr>
<td>JC_3</td>
<td>236</td>
<td>5</td>
<td>15.25</td>
<td>3.89</td>
<td>.82</td>
<td>.48</td>
</tr>
<tr>
<td>JC_4</td>
<td>236</td>
<td>5</td>
<td>18.30</td>
<td>3.50</td>
<td>.82</td>
<td>.49</td>
</tr>
<tr>
<td>ENGAGE</td>
<td>236</td>
<td>9</td>
<td>39.17</td>
<td>8.12</td>
<td>.93</td>
<td>.61</td>
</tr>
<tr>
<td>IT</td>
<td>236</td>
<td>8</td>
<td>22.12</td>
<td>5.39</td>
<td>.86</td>
<td>.44</td>
</tr>
<tr>
<td>AUTON</td>
<td>236</td>
<td>9</td>
<td>35.06</td>
<td>6.50</td>
<td>.95</td>
<td>.68</td>
</tr>
<tr>
<td>FEED</td>
<td>236</td>
<td>3</td>
<td>10.53</td>
<td>2.55</td>
<td>.92</td>
<td>.79</td>
</tr>
<tr>
<td>TC</td>
<td>236</td>
<td>4</td>
<td>7.99</td>
<td>3.29</td>
<td>.89</td>
<td>.72</td>
</tr>
<tr>
<td>PP</td>
<td>236</td>
<td>10</td>
<td>54.69</td>
<td>8.10</td>
<td>.92</td>
<td>.53</td>
</tr>
<tr>
<td>TRUST</td>
<td>236</td>
<td>14</td>
<td>52.62</td>
<td>11.31</td>
<td>.97</td>
<td>.72</td>
</tr>
<tr>
<td>SE</td>
<td>236</td>
<td>8</td>
<td>33.00</td>
<td>3.88</td>
<td>.92</td>
<td>.62</td>
</tr>
</tbody>
</table>

JC = Job crafting; ENGAGE = Engagement; IT = Illegitimate tasks; AUTON = Autonomy; FEED = Feedback; TC = Task complexity; PP = Proactive personality; TRUST = Trusting relationships; SE = Self-efficacy

deletion, which is still satisfactorily high (> .70) reliability. Deletion of this item was therefore not warranted.

The second subscale, ‘decreasing hindering demands’ (JC_2), obtained a Cronbach’s alpha of .82, indicating excellent reliability. This was corroborated by an average inter-item correlation of .44, which indicates acceptable reliability. All the items had inter-item correlations > .50, with JC-11 obtaining a reliability of exactly .50.

The third subscale, ‘increasing social resources’ (JC_3), obtained a Cronbach’s alpha of .82, which indicates excellent reliability. An average inter-item correlation of .48 was obtained, which furthermore supports the satisfactory internal consistency of
the subscale. Inter-item correlations of all the items ranged from .49 to .68. Although JC-16 showed an inter-item correlation of .49, this was only slightly below .50 and therefore still acceptable. Furthermore, deletion of this item would not result in an increase in the reliability of the scale, and its deletion was therefore not warranted.

The fourth subscale, ‘increasing challenging demands’ (JC_4), obtained a reliability of .82, indicating excellent internal consistency. This was further corroborated by an average inter-item correlation of .49. JC-19 obtained the highest inter-item correlation of .69, while JC-17 obtained an inter-item correlation of .48. Again, this item was not deleted as it was only slightly below .50 and its deletion would only result in a slight increase in the reliability of the scale.

4.2.1.2 Employee engagement
The UWES-9, measuring employee engagement, obtained a Cronbach’s alpha of .93, indicating high internal consistency reliability. This was supported by an average inter-item correlation of .61. Inter-item correlations of all the items were above .50, with item 9 being the lowest (.55) and item 3 the highest (.86). No items were considered for deletion, as this would only result in a decrease in the overall reliability of the scale.

4.2.1.3 Illegitimate tasks
The illegitimate tasks scale obtained a Cronbach’s alpha of .86, indicating high internal consistency reliability. The average inter-item correlation reported acceptable reliability, with a coefficient of .44. Inter-item correlations for all items were > .50. Item 8 reported the highest inter-item correlation of .67. None of the inter-item correlations of the items included in the scale were below .50, and therefore no items were considered for deletion.

4.2.1.4 Autonomy
The autonomy scale obtained a Cronbach’s alpha of .95, indicating high internal consistency reliability. This was substantiated by an average inter-item correlation of .68. Inter-item correlations for all the items were well above .50, with item 8 having

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4 Deletion of this item would have resulted in a Cronbach’s alpha of .82, which is no different to the reported reliability of the subscale.

5 Deletion of this item would have resulted in a Cronbach’s alpha of .83, which is only a slight increase in the reliability of the scale. Due to this small increase in reliability, its deletion was not considered.
the highest inter-item correlation of .85. Deletion of any one item would not increase the reported reliability of the scale and, therefore the deletion of items was not warranted.

4.2.1.5 Feedback
The feedback scale obtained a Cronbach’s alpha of .92, indicating high internal consistency reliability. An average inter-item correlation of .79 confirmed this reported reliability of the scale. Inter-item correlations of all the items ranged from .82 to .85. Deletion of items would have resulted in a decrease in the reliability of the scale and therefore the deletion of any one item was not warranted.

4.2.1.6 Task complexity
The task complexity scale obtained a Cronbach’s alpha of .89, indicating high internal consistency reliability. This was corroborated by an average inter-item correlation of .72. Item 1 is the only item with an inter-item correlation of below .50 (.48). However, this was only marginal and therefore still acceptable. The remaining items obtained inter-item correlations of higher than .85. None of the items was considered for deletion.

4.2.1.7 Proactive personality
The proactive personality scale obtained a Cronbach’s alpha of .92, which indicates high internal consistency reliability. The average inter-item correlation of .53 supports the reported reliability. None of the items was considered for deletion, as the deletion of any one item would only result in a decrease in the reliability of the scale. Inter-item correlations of all the items were above .50, with item 9 having the highest inter-item correlation of .75.

4.2.1.8 Trusting relationships
The trust scale obtained a Cronbach’s alpha of .97, indicating very high internal consistency reliability. The average inter-item correlations confirmed this with a coefficient of .72. Deletion of items was not warranted as this would result in a decrease in the reliability of the scale. All items obtained inter-item correlations above .50. Item 3 obtained the lowest inter-item correlation of .73, and item 7 obtained the highest inter-item correlation of .88.
4.2.1.9 Self-efficacy
The self-efficacy scale obtained a Cronbach’s alpha of .92, which indicates very high internal consistency reliability. An average inter-item correlation of .62 corroborates the reported reliability. Deletion of items would not result in a substantial increase in the reliability of the scale and therefore no item was considered for deletion. Inter-item correlations of all the items were above .50, with item 1 having the lowest inter-item correlation of .62, and items 2 and 6 having the highest inter-item correlation of .81.

The item analysis was conducted to provide evidence of the functioning of the latent variable scales. Each scale was found to be internally consistent and reliable, with Cronbach’s alphas of > .70. No deletions were made as this would not have caused a substantial increase in the reported reliability of the scales. These results were supported by the satisfactorily high average inter-item correlations obtained for each latent variable scale. These results thus confirmed the reliability of each latent variable scale, as well as the reliability of the indicator variables assigned to represent each latent variable.

4.2.2 Evaluating Measurement Model Fit
CFA was conducted to evaluate the measurement model fit. For this purpose, four separate measurement models were fitted, as opposed to testing all the model parameters in one single measurement model. This was done due to the large number of model parameters and a limited sample size. The four separate measurement models are the job crafting measurement model, the employee engagement and illegitimate tasks measurement model, the autonomy, feedback, task complexity and proactive personality measurement model, and the trusting relationships and self-efficacy measurement model. Each measurement model will be discussed below with its respective fit statistics.

4.2.2.1 Job crafting measurement model
The goodness-of-fit statistics reported a Satorra-Bentler Chi-square of 1731.42 (p<0.01). The null hypothesis for exact model fit (RMSEA = 0.00) = 0.186 therefore was rejected. This implies that the measurement model was unable to accurately reproduce the observed covariance matrix. In other words, the measurement model could not provide a perfect explanation of the way in which the latent variables
manifested themselves in the indicator variables. The p-value for the test of close fit (RMSEA ≤ 0.05) reported a value of p = 0.0. The null hypothesis for close fit therefore also was rejected. The measurement model thus failed to provide an approximate account of the way in which the latent variables were represented by the indicator variables. The RMSEA value obtained indicated poor measurement model fit.

Figure 4.1 provides a graphic representation of the fitted measurement model.

**Figure 4.1 Fitted job crafting measurement model**

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6 RMSEA values of < 0.05 indicate good model fit, values between 0.05 and 0.08 indicate reasonable fit, values > 0.08 but < 0.10 indicate mediocre fit, and values > 0.10 indicate poor fit (Diamantopoulos & Siguaw, 2000).
4.2.2.2 Employee engagement and illegitimate tasks measurement model

The goodness-of-fit statistics reported a Satorra-Bentler Chi-square of 638.37 (p<0.01). The null hypothesis for exact model fit (RMSEA = 0.00) = 0.137 therefore was rejected. This implies that the measurement model was unable to accurately reproduce the observed covariance matrix. In other words, the measurement model could not provide a perfect explanation of the way in which the latent variables manifested themselves in the indicator variables. The p-value for the test of close fit (RMSEA ≤ 0.05) reported a value of p = 0.00. The null hypothesis for close fit therefore also was rejected. The measurement model thus failed to even provide an approximate account of the way in which the latent variables were represented by the indicator variables. The RMSEA value obtained indicated poor fit.

Figure 4.2 provides a graphic representation of the fitted model.

4.2.2.3 Autonomy, feedback, task complexity, and proactive personality measurement model

The goodness-of-fit statistics reported a Satorra-Bentler Chi-square of 555.42 (p<0.01). The null hypothesis for exact model fit (RMSEA = 0.00) = 0.062 therefore was rejected. This implies that the measurement model was unable to accurately reproduce the observed covariance matrix. The p-value for the test of close fit (RMSEA ≤ 0.05) reported a value of p = 0.0079. The null hypothesis for close fit therefore was also rejected. The measurement model thus failed to even provide an approximate account of the way in which the latent variables were represented by the indicator variables. The construct reliability of all the latent variable scales in the measurement model was excellent (> .70), with autonomy having the highest construct reliability of .97. Figure 4.3 provides a graphic representation of the fitted model.

4.2.2.4 Trusting relationships and self-efficacy measurement model

The goodness-of-fit statistics reported a Satorra-Bentler Chi-square of 258.71 (p<0.01). The null hypothesis for exact model fit (RMSEA = 0.00) = 0.032 therefore was rejected. This implies that the measurement model was unable to accurately reproduce the observed covariance matrix. The p-value for the test of close fit (RMSEA ≤ 0.05) reported a value of p = 0.99. The null hypothesis for close fit therefore was not rejected.
Figure 4.2 Fitted employee engagement and illegitimate tasks measurement model
Figure 4.3 Fitted autonomy, feedback, task complexity and proactive personality measurement model
The measurement model therefore was able to provide an approximate account of the way in which the latent variables were represented by the indicator variables. The RMSEA value obtained indicated good fit. The construct reliability of the latent variable scales included in the measurement model was excellent (trusting relationships = .98 and self-efficacy = .97). Figure 4.4 presents a graphical representation of the fitted model.

Figure 4.4 Fitted trusting relationships and self-efficacy measurement model
4.3 PARTIAL LEAST SQUARES ANALYSIS

CFA was used to evaluate the measurement component (outer model) of the proposed structural model. Based on the above analyses, only the trusting relationships and self-efficacy measurement model of the four separate measurement models fitted the empirical data reasonably well. The operationalisation of the latent variables comprising the structural model therefore was not as successful as one would want it to be. For this reason, PLS was used to further evaluate the reliability of the items included in the latent variable scales, as well as to examine inner (measurement) model fit. The significance of the paths (inner model) as indicated by the structural model also was evaluated. The results of these analyses are discussed below.

4.3.1 Reliability Analysis

A reliability analysis was conducted as part of the PLS path analysis to examine the outer-model measurement fit\(^7\) and the reliability of the latent variable scales. The composite reliability and average variance extracted were interpreted for this purpose. The composite reliability value measures the reliability of the latent variable scales, and values equal to and higher than .70 are deemed satisfactory. The average variance extracted (AVE) measures the amount of variance in the indicator variables accounted for by the latent variable of interest (Diamantopoulos & Siguaw, 2000). Values higher than .5 indicate that the latent variable scales do not measure theoretically unrelated constructs. R square values were also interpreted for this purpose. The results are captured in Table 4.2.

In Table 4.2 it can be seen that the composite reliability of each scale was exceptionally good, with all values being > .70. The Illegitimate Tasks Scale had the lowest composite reliability, of .77, and the Trusting Relationships Scale had the highest composite reliability, of .97. The reported AVE values were satisfactorily, except for the Illegitimate Tasks Scale (.36) and the Job Crafting Scale (.24). This is well below the cut-off value of .50 and therefore poses some concern. This may indicate that illegitimate tasks and job crafting correlate with indicator variables that are theoretically unrelated.

\(^7\) Outer model is similar to the measurement model and indicates the relationships between latent variables and manifest variables (Henseler et al., 2009).
Table 4.2

Reliability Statistics of the PLS Model

<table>
<thead>
<tr>
<th>Scale</th>
<th>Average variance extracted (AVE)</th>
<th>Composite reliability (outer model)</th>
<th>R square (inner model)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTON</td>
<td>.71</td>
<td>.96</td>
<td></td>
</tr>
<tr>
<td>ENGAGE</td>
<td>.64</td>
<td>.94</td>
<td>.25</td>
</tr>
<tr>
<td>FEED</td>
<td>.86</td>
<td>.95</td>
<td></td>
</tr>
<tr>
<td>IT</td>
<td>.36</td>
<td>.77</td>
<td></td>
</tr>
<tr>
<td>JC</td>
<td>.24</td>
<td>.83</td>
<td>.52</td>
</tr>
<tr>
<td>PP</td>
<td>.57</td>
<td>.93</td>
<td></td>
</tr>
<tr>
<td>SE</td>
<td>.67</td>
<td>.94</td>
<td>.07</td>
</tr>
<tr>
<td>TC</td>
<td>.75</td>
<td>.92</td>
<td></td>
</tr>
<tr>
<td>TR</td>
<td>.73</td>
<td>.97</td>
<td></td>
</tr>
</tbody>
</table>

AUTON = Autonomy; ENGAGE = Employee engagement; FEED = Feedback; IT = Illegitimate tasks; JC = Job crafting; PP = Proactive personality; SE = Self-efficacy; TC = Task complexity; TR = Trusting relationships

The feedback scale extracted the highest amount of variance, with a value of .86. The R square values, which refer to the amount of variance in the endogenous latent variables explained by the total model, showed that the total model accounted for a sufficient amount of variance in the latent variables of interest. From Table 4.2 it can be seen that the Self-efficacy Scale obtained the lowest R square value, of .07, indicating that the total model accounted for seven percent of the observed variance in self-efficacy. The Job Crafting Scale obtained the highest R square value, of .52, indicating that the total model accounted for 52 percent of the variance observed in job crafting. The UWES-9 obtained an R square value of .25, which indicates that the total model accounted for 25 percent of the variance observed in employee engagement. The remaining variables are exogenous variables and therefore obtained an R square value equal to zero.

Bootstrap analysis was also conducted to further evaluate the reliability of the items included in the latent variable scales and to examine the correlation between the items and the latent variable of interest. Factor loadings were evaluated for this
purpose by evaluating whether zero falls within the 95 percent confidence interval. All the reported factor loadings were statistically significant and positive, and zero did not fall within the 95 percent confidence interval. This confirms the reliability of each item included in the latent variable scales. However, this was not the case for the Illegitimate Tasks Scale and the Job Crafting Scale. For these two scales, zero did fall within the 95 percent confidence interval, indicating that all of the factor loadings for the Illegitimate Tasks Scale, and some of the factor loadings (six items) for the Job Crafting Scale, did not differ significantly from zero. The reliability of these items therefore is questionable. It thus is difficult to say that these items or indicators are really very good measures of illegitimate tasks and job crafting. Stated differently, the set of items forming part of these particular measurement scales do not measure one thing in common. This may be a possible reason why illegitimate tasks and job crafting were not measured as well as the other latent variables.

Furthermore, analysis was done to establish the construct validity of the latent variables included in the model. More specifically, divergent validity was determined to establish whether the constructs of interest differed from each other. The results indicated that all the constructs showed divergent validity, except for job crafting. This indicates that job crafting may be part of some of the other constructs. It may also be an additional reason why job crafting was not measured as well as the other latent variables.

From these results it can be seen that each latent variable scale was found to be internally consistent and reliable. The composite reliability scores for all the scales were satisfactory high (> .70). This confirms the reliability of all the scales included in the survey. Satisfactorily high average inter-item correlations were obtained, which confirmed the internal consistency reliability of the latent variable scales. The R square values furthermore showed that the total model accounted for a satisfactorily high amount of variance in the latent variables of interest. Factor loadings were positive and zero did not fall within the 95 percent confidence interval, except for the Illegitimate Tasks Scale and the Job Crafting Scale. The Illegitimate Tasks Scale is of more concern, as all the factor loadings were not statistically significant.

It thus can be concluded that the outer (measurement) model fit was not as high as one would wanted it to be, but it still was adequate. Each latent variable scale
measured the constructs it was supposed to measure, except the Job Crafting Scale which showed lack of divergent validity. Each item included in the scales represents the latent variable to which it was assigned, except for all the items in the Illegitimate Tasks Scale and six items in the Job Crafting Scale. These findings thus raise some concern in subsequent analyses.

4.3.2 Evaluating and interpreting path coefficients and proposed hypotheses

Path coefficients were investigated to determine the strength and significance of the hypothesised paths as proposed in the structural model. The significance of a path was determined by examining whether zero falls within the 95 percent confidence interval. In the case where zero is included in the confidence interval, the coefficient, and thus path, are not significant. Table 4.3 and 4.4 presents a summary of the findings.

**Hypothesis 1:** Autonomy has a significant positive effect on job crafting

The hypothesised positive correlation between autonomy and job crafting was not found to be statistically significant (PLS path coefficient = 0.01), with zero falling within the 95 percent confidence interval. These results deviate from previous findings and propositions that the opportunity to decide for oneself what to do and how to do the job serves as an important precondition for job crafting behaviour (Lyons, 2008; Tims & Bakker, 2010; Wrzesniewski & Dutton, 2001). Sman (2011) conducted a similar study in which it was investigated why some people engage more in job crafting than others. The results of this study indicated that autonomy was positively correlated with only two dimensions of job crafting, namely increasing structural resources and decreasing hindering job demands. The present study, however, did not investigate the impact of autonomy on the individual dimensions of job crafting. Similar results to that of Sman (2011) might have been obtained if the focus was more on the different dimensions of job crafting. Based on the results, autonomy is not an important prerequisite and resource for employees to engage in job crafting. Although it could be ‘expected’ that those with more freedom in carrying out their day-to-day jobs would have more opportunity to craft their jobs, it does not necessarily impact on the extent to which they craft their jobs.
Table 4.3
*Path Coefficients of the PLS Path Model*

<table>
<thead>
<tr>
<th>Path</th>
<th>Path coefficient</th>
<th>Bootstrap mean</th>
<th>95 % lower</th>
<th>95% upper</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: AUTON → JC</td>
<td>0.01</td>
<td>0</td>
<td>-0.12</td>
<td>0.11</td>
<td>Not significant</td>
</tr>
<tr>
<td>H2: FEED → JC</td>
<td>0.15</td>
<td>0.14</td>
<td>0.01</td>
<td>0.27</td>
<td>Significant</td>
</tr>
<tr>
<td>H3: ENG → JC</td>
<td>0.35</td>
<td>0.34</td>
<td>0.2</td>
<td>0.48</td>
<td>Significant</td>
</tr>
<tr>
<td>H6: TR → JC</td>
<td>0.07</td>
<td>0.06</td>
<td>-0.08</td>
<td>0.19</td>
<td>Not Significant</td>
</tr>
<tr>
<td>H7: TC → JC</td>
<td>0.02</td>
<td>0.03</td>
<td>-0.11</td>
<td>0.19</td>
<td>Not Significant</td>
</tr>
<tr>
<td>H8: PP → JC</td>
<td>0.35</td>
<td>0.37</td>
<td>0.2</td>
<td>0.52</td>
<td>Significant</td>
</tr>
<tr>
<td>H9: SE → JC</td>
<td>0.03</td>
<td>0.02</td>
<td>-0.12</td>
<td>0.15</td>
<td>Not significant</td>
</tr>
<tr>
<td>H12: IT → JC</td>
<td>0.21</td>
<td>0.17</td>
<td>-0.16</td>
<td>0.37</td>
<td>Not Significant</td>
</tr>
</tbody>
</table>

AUTON = Autonomy; ENG = Employee engagement; JC = Job crafting; FEED = Feedback; SE = Self-efficacy; IT = Illegitimate tasks; PP = Proactive personality; TC = Task complexity; TR = Trusting relationships.

Table 4.4
*Mediating effects of engagement and self-efficacy*

<table>
<thead>
<tr>
<th>Path</th>
<th>IV → Mediator</th>
<th>IV → DV</th>
<th>Mediator → DV</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>H4:</td>
<td>AUTON→ENG:</td>
<td>AUTON→JC:</td>
<td>ENG→JC:</td>
<td>Full mediation</td>
</tr>
<tr>
<td></td>
<td>Significant</td>
<td>Not Significant</td>
<td>Significant</td>
<td></td>
</tr>
<tr>
<td>H5:</td>
<td>FEED→ENG:</td>
<td>FEED→JC:</td>
<td>ENG→JC:</td>
<td>Partial Mediation</td>
</tr>
<tr>
<td></td>
<td>Significant</td>
<td>Significant</td>
<td>Significant</td>
<td></td>
</tr>
<tr>
<td>H10:</td>
<td>TC→SE:</td>
<td>TC→JC:</td>
<td>SE→JC:</td>
<td>No Mediation</td>
</tr>
<tr>
<td></td>
<td>Significant</td>
<td>Not Significant</td>
<td>Not Significant</td>
<td></td>
</tr>
<tr>
<td>H11:</td>
<td>FEED→SE:</td>
<td>FEED→JC:</td>
<td>SE→JC:</td>
<td>No Mediation</td>
</tr>
<tr>
<td></td>
<td>Significant</td>
<td>Significant</td>
<td>Not Significant</td>
<td></td>
</tr>
</tbody>
</table>

IV = Independent variable; DV = Dependent Variable; AUTON = Autonomy; ENG = Employee engagement; JC = Job crafting; FEED = Feedback; SE = Self-efficacy; TC = Task complexity.

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8 In establishing the significance of a mediating effect, three sub-hypotheses is tested, i.e. the coefficient of the direct path as well the coefficients of the paths through the mediator. A decision on the mediating effect is then determined by evaluating the significance of the three sub-hypotheses. Appendix A provides a summary of the different cases that can occur.
**Hypothesis 2**: Feedback has a significant positive effect on job crafting

The hypothesised positive correlation between feedback and job crafting **was found to be statistically significant** (PLS path coefficient = 0.15), with zero not falling within the 95 percent confidence interval. It thus is evident that employees who receive feedback on their job performance are more likely to engage in job crafting. It thus can be said that, with specific and accurate feedback from supervisors or managers, employees gain knowledge of how and where they can improve and change their performance. Feedback therefore provides valuable information to employees in terms of how and where they can change aspects of their job by means of crafting, with the ultimate aim of improving their performance.

**Hypothesis 3**: Engagement has a significant positive effect on job crafting

The hypothesised positive impact of engagement on job crafting **was found to be statistically significant** (PLS coefficient = 0.35), with zero not falling within the 95 percent confidence interval. This corresponds with previous research that studied this relationship (Demerouti & Bakker, 2011; Hakanen et al., 2008; Salanova & Schaufeli, 2008; Sman, 2011). It thus is evident that employees who are engaged in their jobs are also more likely to craft their jobs proactively.

**Hypothesis 4**: Engagement has a significant mediating effect on the relationship between autonomy and job crafting

**Hypothesis 5**: Engagement has a significant mediating effect on the relationship between feedback and job crafting

As can be seen from Table 4.4, the hypothesised mediating effect of engagement on the relationship between autonomy and job crafting **was found to be statistically significant**. Employee engagement fully mediated the relationship between autonomy and job crafting. The hypothesised mediating effect of engagement on the relationship between feedback and job crafting **was also found to be statistically significant**. In this case, employee engagement only partially mediated the relationship between feedback and the extent to which employees engaged in job crafting. This corroborates previous research findings in which employee engagement was found to mediate the impact of job resources, specifically autonomy and feedback, on job crafting (Hakanen et al., 2008; Salanova &
Schaufeli, 2008). Autonomy does not have a direct impact on job crafting, but rather an indirect impact if such employees are also fully engaged in their jobs. Furthermore, engagement only partially mediates the impact of feedback on job crafting, indicating that employee engagement only accounts for some of the relationship between feedback and job crafting. This could be because of the direct significant relationship between feedback and job crafting.

**Hypothesis 6:** Trusting relationships between supervisor/manager and employee have a significant positive effect on job crafting

The hypothesised impact of trust between manager and employee on job crafting was not found to be statistically significant (PLS path coefficient = 0.07, with zero falling within the 95 percent confidence interval). This deviates from previous research proposing that trusting relationships positively influences role adjustment which includes job crafting behaviour (Clegg & Spencer, 2007). The results of the present study indicate that even though trust exists between employee and manager, this does not have an influence on the extent to which employees craft their jobs. It could however possibly be that employees within the sample group do not perceive their relationship with their direct manager as a trusting one and therefore the environment is not perceived as ‘safe’ enough to craft their jobs.

**Hypothesis 7:** Task complexity has a significant positive effect on job crafting

The hypothesised relationship between task complexity and job crafting was not found to be statistically significant (PLS coefficient = 0.02, with zero falling within the 95 percent confidence interval). This deviates from Frese and Fay’s (2001) research study, which concluded that task complexity can be considered an environmental support that adds to the levels of initiative taken by employees. Based on the results of the current study, task complexity does not have an impact on crafting behaviours. It could possibly be that employees within the sample group do not necessarily perceive their jobs as being complex, or that they already have the required support and resources to successfully complete complex tasks.

**Hypothesis 8:** A proactive personality has a significant positive effect on job crafting
The hypothesised relationship between proactive personality and job crafting was found to be significant (PLS path coefficient = 0.35, with zero not falling within the 95 percent confidence interval). This corroborates previous research conducted by Van Bloois et al. (2010). It therefore can be concluded that individuals with a proactive personality are more likely to take initiative and to adopt an active orientation that goes beyond actual work requirements, and thus craft their jobs more than those who do not have a proactive personality.

**Hypothesis 9:** Self-efficacy has a significant positive effect on job crafting

The hypothesised relationship of the impact of self-efficacy beliefs on job crafting was not found to be significant (PLS path coefficient = 0.03, with zero falling within the 95 percent confidence interval). This deviates from previous research and propositions (Tims & Bakker, 2010). Previous research confirming a relationship between self-efficacy beliefs and proactivity focused on role-breadth self-efficacy, which differs from generalised self-efficacy (Parker, 1998) - the focus in the current research. Role-breadth self-efficacy inherently recognises proactivity and focuses more on the person’s belief in his/her capability to perform an array of tasks that involve more proactivity (Parker, 1998). Proactivity, however, does not necessarily form a fundamental part of generalised self-efficacy.

**Hypothesis 10:** Self-efficacy has a significant mediating effect on the relationship between task complexity and job crafting

**Hypothesis 11:** Self-efficacy has a significant mediating effect on the relationship between feedback and job crafting

As can be seen from Table 4.4, the hypothesised mediating effect of self-efficacy on the relationship between task complexity and job crafting, and the relationship between feedback and job crafting, was not found to be significant. Task complexity does not have an impact on job crafting behaviours, even if employees faced with such complex tasks have high self-efficacy beliefs. Furthermore, although feedback was found to be statistically related to job crafting, this does not necessarily mean that self-efficacy facilitates this relationship. From the results obtained it was evident, however, that both task complexity and feedback have an impact on employees’ self-efficacy beliefs. Previous research has shown that a lack
of self-efficacy can trigger the burnout process (Chwalisz et al., 1992; Friedman & Farber, 1992; Greenglass & Burke, 1988). This could thus be valuable to organisations that wish to emphasise and focus more on promoting the well-being of their employees.

**Hypothesis 12:** Illegitimate tasks have a significant positive effect on job crafting

The hypothesised impact of illegitimate tasks on job crafting was not found to be significant (PLS path coefficient = 0.21, with zero falling within the 95 percent confidence interval). This indicates that tasks perceived as unreasonable or unnecessary do not necessarily threaten employees’ professional identity and therefore that there might not be a need to restore their professional identity by means of job crafting. Possible reasons for this not being statistically significant may be that employees do not experience additional tasks as ‘illegitimate’ or unnecessary, but rather well within the boundaries of their normal job tasks. It might also be that if employees are faced with such tasks, it does not necessarily induce additional stress that cause strain over a period of time. A final reason for this may be due to all the factor loadings of the illegitimate task scale being insignificant. The items in the scale therefore are not very ‘good’ measures of illegitimate tasks and do not measure a common underlying factor.

**Hypotheses 13 to 19:** A proactive personality moderates the relationship between the following variables and job crafting: engagement, illegitimate tasks, autonomy, feedback, task complexity, trusting relationships between manager and employee, and self-efficacy.

The hypothesised moderating effect of proactive personality on the relationship between engagement and job crafting, illegitimate tasks and job crafting, autonomy and job crafting, feedback and job crafting, task complexity and job crafting, trusting relationships and job crafting, and self-efficacy and job crafting was not found to be statistically significant (p > .05). As can be seen from Table 4.5, hypotheses 15, 17, and 19 show some tendency for a moderation effect to occur, with p-values being quite close to .05. It thus can be said that there is an inclination for proactive personality to moderate the relationship between engagement and job crafting, illegitimate tasks and job crafting, and task complexity and job crafting. However, this
Table 4.5

<table>
<thead>
<tr>
<th>Path</th>
<th>Interaction coefficient</th>
<th>$R^2$ change</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>H13: PP*AUTON $\rightarrow$ JC</td>
<td>0.02</td>
<td>-0.00</td>
<td>0.78</td>
</tr>
<tr>
<td>H14: PP*FEED $\rightarrow$ JC</td>
<td>-0.06</td>
<td>-0.00</td>
<td>0.37</td>
</tr>
<tr>
<td>H15: PP*ENG $\rightarrow$ JC</td>
<td>-0.09</td>
<td>-0.00</td>
<td>0.15</td>
</tr>
<tr>
<td>H16: PP*TR $\rightarrow$ JC</td>
<td>0.04</td>
<td>-0.00</td>
<td>0.58</td>
</tr>
<tr>
<td>H17: PP*TC $\rightarrow$ JC</td>
<td>-0.10</td>
<td>-0.01</td>
<td>0.12</td>
</tr>
<tr>
<td>H18: PP*SE $\rightarrow$ JC</td>
<td>-0.00</td>
<td>-0.00</td>
<td>0.99</td>
</tr>
<tr>
<td>H19: PP*IT $\rightarrow$ JC</td>
<td>-0.10</td>
<td>-0.01</td>
<td>0.12</td>
</tr>
</tbody>
</table>

AUTON = Autonomy; ENG = Employee engagement; JC = Job crafting; FEED = Feedback; SE = Self-efficacy; IT = Illegitimate tasks; PP = Proactive personality; TC = Task complexity; TR = Trusting relationships

is not statistically significant. The data therefore shows no evidence of proactive personality as a moderator, but only a tendency for the mentioned relationships to occur. Future research endeavours could explore this phenomenon further.

**Hypotheses 20 to 27:** Gender moderates the relationship between the following variables and job crafting: engagement, illegitimate tasks, autonomy, feedback, task complexity, trusting relationships between manager and employee, and self-efficacy.

The hypothesised moderating effect of gender on the relationship between engagement and job crafting, illegitimate tasks and job crafting, autonomy and job crafting, feedback and job crafting, task complexity and job crafting, trusting relationships and job crafting, and self-efficacy and job crafting **was not found to be statistically significant** ($p > .05$). As can be seen from Table 4.6, however, there is some tendency for gender to moderate the relationship between illegitimate tasks, task complexity, self-efficacy and job crafting, with $p$-values quite close to .05. Figures 4.5 to 4.7 present a graphical representation of these findings. Figure 4.5 indicates a likelihood for illegitimate tasks to have an impact on job crafting, especially amongst male employees.
Table 4.6

*P*-values for Gender as Moderating Effect

<table>
<thead>
<tr>
<th>Path</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>H20: GENDER*AUTON→JC</td>
<td>0.86</td>
</tr>
<tr>
<td>H21: GENDER*FEED → JC</td>
<td>0.92</td>
</tr>
<tr>
<td>H22: GENDER*ENG → JC</td>
<td>0.89</td>
</tr>
<tr>
<td>H23: GENDER*TR → JC</td>
<td>0.83</td>
</tr>
<tr>
<td>H24: GENDER*TC → JC</td>
<td>0.16</td>
</tr>
<tr>
<td>H25: GENDER*SE → JC</td>
<td>0.19</td>
</tr>
<tr>
<td>H26: GENDER*IT → JC</td>
<td>0.14</td>
</tr>
<tr>
<td>H27: GENDER*PP → JC</td>
<td>0.43</td>
</tr>
</tbody>
</table>

AUTON = Autonomy; ENG = Employee engagement; JC = Job crafting; FEED = Feedback; SE = Self-efficacy; IT = Illegitimate tasks; PP = Proactive personality; TC = Task complexity; TR = Trusting relationships

Figure 4.5 Moderating effect of gender on the relationship between illegitimate tasks and job crafting
It therefore is more likely that male employees will craft their jobs should they be faced with unnecessary or unreasonable tasks that pose a threat to their professional identity. A similar tendency was also found for the relationship between task complexity and job crafting as can be seen in Figure 4.6.

![Figure 4.6 Moderating effect of gender on the relationship between task complexity and job crafting](scatterplot.png)

Task complexity is more likely to have an impact on job crafting amongst male employees. There thus is more of a tendency for male employees to engage in job crafting if their tasks are experienced as more complex. Figure 4.7 indicates that the probability for self-efficacy to have an impact on job crafting is more likely for female employees. There is also a slight tendency for this to occur amongst male employees, but the likelihood of such a relationship is much higher for female employees. These results, however, only indicate a tendency and are not statistically significant, but are worth exploring in the future.
Figure 4.7 Moderating effect of gender on the relationship between self-efficacy and job crafting

4.4 SUMMARY

The purpose of this chapter was to present and discuss the results of the statistical analyses that were performed. The measurement model was validated by conducting item analyses on each subscale in order to establish the reliability of each item used in the questionnaire. CFA was used to evaluate measurement model fit by fitting four separate measurement models, due to the large number of model parameters and a limited sample size. These were the job crafting measurement model; the employee engagement and illegitimate tasks measurement model; the autonomy, feedback, task complexity, and proactive personality measurement model; and the trusting relationships and self-efficacy measurement model. Only the latter fitted the empirical data reasonably well. PLS was then used to further evaluate the reliability of the items included in the latent variable scales, as well as to examine inner (measurement) model fit. The reliability analysis confirmed the reliability of each item included in the latent variable scales. However, the reliability of all of the items in the Illegitimate Tasks Scale and some of the items in the Job Crafting Scale were questionable, and it therefore is difficult to say whether these items are very good measures of illegitimate tasks and job crafting. The researcher therefore has
reservations about these scales, and consequently the results should be interpreted with caution. PLS was also used to evaluate the significance of the paths as indicated by the structural model. Based on the PLS analysis, hypotheses 2, 3, 4, 5 and 8 were found to be statistically significant. Some valuable tendencies in terms of proactive personality and gender as possible moderators that are worth further exploring in future were also found.
CHAPTER 5
IMPLICATIONS, LIMITATIONS AND RECOMMENDATIONS

5.1 INTRODUCTION
The purpose of the current study was to investigate whether salient job- and personal resources, as well as illegitimate tasks as a job demand, account for the variance in job crafting for a sample of employees within the financial sector. Job crafting has become increasingly important, especially in the modern world of work, which requires employees to be proactive and to take action in a fast moving environment. Being aware of the factors that encourage such behaviour can assist industrial psychologists and managers in South Africa to create and support environments conducive to the occurrence of job crafting. This chapter thus aims to outline the managerial implications of the research findings and consequently recommend practical interventions that can be utilised by South African industrial psychologists and managers. The limitations of the study and recommendations for future research will also be discussed.

5.2 MANAGERIAL IMPLICATIONS
The findings of the current study provide valuable ways in which job crafting can be fostered within organisations, with specific reference to the financial sector. The PLS path analysis reported a total R square value of .52. This indicated that the total model accounted for more than half of the variance observed in job crafting. It therefore can be concluded that the theoretical model and the latent variables included provide valuable avenues for enhancing job crafting behaviours.

5.2.1 Proactive personality
The hypothesised relationship between proactive personality and job crafting was found to be significant in the PLS path analysis. This indicates that managers who want to encourage job crafting behaviours within organisations should employ individuals who display proactive personality characteristics. This could be done by ensuring that a proper and thorough selection process is followed (Unsworth & Parker, 2003). According to Schmidt and Hunter (1998), structured interviews have a predictive power of .51, and personality questionnaires used for selection purposes have a predictive power of .40 (p. 270). Competency-based first and second
interviews, supplemented by psychometric assessments of personality that focus on behaviours such as initiating action, risk taking and the need for achievement, amongst others, therefore will be useful in aiding decisions regarding the selection of individuals who specifically demonstrate these behaviours linked to proactivity. Managers can also assess the extent to which individuals show initiative, whether they are willing and able to take action, and whether they persevere until they bring about meaningful change. This can also be done by means of simulation exercises or role-plays.

Unsworth and Parker (2003) suggested that employee knowledge, skills and abilities are some of the most important factors that contribute to proactivity. In other words, employees who thoroughly comprehend the system of which they form part and how their roles and responsibilities are linked to this are more likely to respond proactively (Unsworth & Parker, 2003). Managers can ensure that employees are aware of this by ensuring that employees’ contributions to the achievement of organisational goals are thoroughly communicated and understood during induction programmes, and that this is discussed on a regular basis between the employee and his/her line manager. By understanding how their job fits into the broader system in which the organisation operates (e.g. vision, mission, objectives), employees will be more likely to show proactive behaviours in order to achieve personal and job-related goals. Furthermore, in order to build on employee knowledge, skills and abilities, training initiatives could be utilised to continuously upskill employees.

Hornung and Rousseau (2007) indicated that the degree of autonomy offered by a job promotes the development of proactive, self-starting behaviour. This is supported by Bakker et al. (2012), who argued that it is important to assign these employees to jobs in which they feel they have a considerable degree of freedom to determine how they do their job. Active work tasks offering high levels of employee discretion and control therefore are crucial to developing proactive employees (Hornung & Rousseau, 2007). This could be achieved by allowing employees the freedom to take initiative without having to seek approval, and also to refrain from micromanaging employees (Dikkers et al., 2010). Furthermore, Dikkers et al. (2010) suggested that, in resourceful environments, proactive employees experience increased efficacy to employ their proactive personality to optimise or improve their
work situation. Autonomy is one such resource with which managers can ensure that employees will engage in proactive behaviours.

5.2.2 Engagement

The PLS path analysis indicated that the path from engagement to job crafting was statistically significant. This is in line with previous research studies examining the relationship between engagement and job crafting (Bakker, 2011; Bakker & Demerouti, 2008). It therefore can be concluded that managers who wish to encourage job crafting behaviours within organisations should ensure that their employees are fully engaged in their jobs.

There are a number of ways in which managers can increase employee engagement. Maslach, Schaufeli and Leiter (2001) suggested that, in order for employees to be engaged in their jobs, the following are important: a sustainable workload, feelings of choice and control, appropriate recognition and reward, a supportive work environment, fairness and justice, and meaningful and valued work. A sustainable workload is important for employees to be engaged in their jobs, as excessive work demands are likely to cause stress and burnout. Employees want to feel that they are able to manage their workloads without feeling tired and consequently suffering from burnout. Managers therefore should try to ensure that the tasks allocated to employees are manageable and that appropriate resources and support are available during challenging times.

Social Exchange Theory (SET) presents the notion that relationships evolve over time into trusting, loyal and mutual commitments as long as the parties abide by certain ‘rules’ of exchange (Cropanzano & Mitchell, 2005). In other words, when employees receive economic and socio-emotional resources from their organisations, they will feel obliged to respond in kind and repay the organisation. One way for employees to repay their organisation is by being fully engaged in their jobs. In other words, employees’ engagement depends on the resources they receive from their organisation. These can include appropriate rewards and recognition for work well done so that employees can feel appreciated and thus exchange this with high levels of engagement. Very important, these should be perceived as fair, as employees who have high perceptions of justice feel more
obliged to also be fair in how they perform their roles by giving more of themselves by means of greater levels of engagement (Saks, 2006).

More specifically, and as presented by the findings of this study, autonomy and feedback are important resources for employees to be engaged. The results of the study also indicate that autonomy and feedback (only partially) can have an indirect impact on job crafting through engagement. Managers therefore should consider these job characteristics and their importance in fostering employee engagement as, based on SET, employees are likely to reciprocate what they receive (Cropanzano & Mitchell, 2005). Managers thus should provide employees with the necessary resources that will assist them to be more engaged in their work roles. In the light of SET, it is important that managers live up to their end of the psychological contract. Saks (2006) suggested that employees are more likely to engage themselves when their psychological contract has been fulfilled. In other words, when the organisation fulfils the expectations of employees as set out in the psychological contract (whether verbally or in writing), employees are more likely to give something in return, which may be increased engagement.

The provision of resources as important motivators for employees to be more engaged was corroborated by Gruman and Saks (2011), who suggested the importance of coaching and social support, leadership and training. For increased employee engagement, coaching should be an ongoing process and not limited to quarterly or annual performance evaluations. Schaufeli and Salanova (2007) indicated that coaching employees and helping them with planning their work, highlighting potential difficulties, and offering advice and emotional support help to promote employee engagement. Supervisory coaching and support have been shown by numerous other researchers to be positively related to employee engagement (Schaufeli & Bakker, 2004; Xantopoulou et al., 2009). Leaders play an important role in the extent to which employees are engaged in their jobs. Leaders should provide the necessary support and inspire their followers with a vision that appeals to them. Lastly, training is a means by which employees can continue to develop throughout their careers. By means of training programmes, employees are being prepared to cope with high job demands and thus avoid burnout.
Perceived organisational support is another factor that creates a sense of obligation on the part of employees. Saks (2006) suggested that managers should focus on employees’ perceptions of the support they receive from their organisations. Organisations should address employees’ needs and concerns, and demonstrate care and support for these needs and concerns. Ways in which employees’ needs and concerns can be identified are through surveys or suggestion programmes, and one way in which organisations can provide the necessary support for employee needs is through flexible work arrangements, for example, and an emphasis on the importance of work-life balance as an integral part of the culture of the organisation.

Another way in which employee engagement can be increased is by means of the performance management system. Pulakos (2009) argued that less than a third of employees believe that their company’s performance management process assists them in improving their performance. Gruman and Saks (2011) therefore proposed that the performance management system should be oriented towards promoting employee engagement. Firstly, when setting goals, managers and employees should try to align individual goals with organisational goals. This will ensure that employees engage themselves in tasks that are important for the achievement of the organisation’s goals and objectives. It is important that employees are made aware of and understand the goals of the organisation so that they can use these to formulate their own goals.

With goal setting it is also important to allow employees to be involved in setting their own goals. This will take into account employees’ values and interests, which represent their true selves, as opposed to goals that are imposed on them. Sheldon and Kasser (1998) argued that goals that are not integrated with the self do not promote well-being and thus are not likely to promote engagement. They furthermore suggested that achieving goals in which one is personally invested does promote employee engagement. Schaufeli and Salanova (2007) emphasised the importance of personal goals and integrating this with the performance management process. Managers therefore should inquire about the values, preferences, and goals of employees, provide the necessary resources, and monitor the achievement of these goals.
Dikkers et al. (2010) conducted a study in which it was shown that proactive employees reported increased levels of engagement 18 months later. Managers therefore should focus on interventions aimed at selecting and developing proactive individuals and fostering environments conducive to such behaviours. The more detailed approaches to enhancing proactive behaviours are discussed in subsection 5.2.1.

Feedback is an important part of the performance management process and also plays an important role in fostering engagement. The results of the present study also indicate that feedback is positively related to employee engagement. Managers should incorporate 360 degree or multisource feedback. Multisource feedback ensures trust, support, being sensitive to individual differences, and boosting self-efficacy. These conditions promote psychological safety and ultimately will enhance employee engagement (Atwater, Brett & Cherise-Charles, 1988).

5.2.3 Feedback

The hypothesised relationship between feedback and job crafting was found to be significant. This indicates that managers who wish to encourage job crafting behaviour within organisations should ensure that employees receive regular feedback on their performance in a way that will lead to change and improvement. DeNise and Kluger (2000) suggested that feedback interventions should be focused specifically on the level of task performance, as this is generally considered to be more useful. Furthermore, it is important that managers provide feedback in such a way that employees can formulate theories about what needs to be changed in order to effectively perform tasks. In providing feedback on performance, managers should focus on reinforcing positive performance or behaviour, and be clear and specific on areas where the required standard of performance was not achieved. Feedback should be positive and constructive and be provided on a regular basis, after each project, and during annual performance appraisals (Oien, 2012). In addition to only managers providing feedback, 360-degree feedback could be incorporated, as this will provide employees with even more information on their performance and possible areas for improvement and development (Atwater et al., 2007).
5.2.4 Trusting Relationships

Although the hypothesised impact of a trusting relationship between managers and employees on job crafting was not found to be significant, it would still be useful to provide suggestions on how this can be improved within organisations. Mayer and Davis (1999) suggested that the performance appraisal system plays an important role in developing trusting relationships. It is specifically important that the system used to evaluate performance is perceived as fair by the employee, especially when employee contributions are rewarded by means of salary increases or bonuses. Employees want to feel that the effort exerted to achieve job-related goals will be defined and measured appropriately by managers, and that rewards will be fairly based on the successful achievement of work goals. Of particular importance is that, managers should ensure that performance results are fed back to employees and that areas for improvement are communicated openly and constructively (Pulakos, 2009). In addition, managers should stay abreast of any extra effort made by employees. Mayer and Davis (1999) argued that employees make themselves vulnerable to the organisation when exerting (extra) effort and therefore rely on the performance appraisal system to acknowledge these contributions. In fostering trusting relationships it therefore is crucial for managers to monitor employees’ goal progression and to stay abreast of extra efforts (e.g. additional projects), ultimately to evaluate and reward their performance accordingly. Performance goals should be agreed on by both employee and manager, and progress on the achievement of these goals should be evaluated on a regular basis.

In developing trusting relationships, managers should ensure that a culture of trust is fostered within the organisation. Whitener, Brodt, Korsgaard and Werner (1998) suggested five categories of behaviour that influence the development of trusting relationships and thus contribute to a culture of trust. These are behavioural consistency, behavioural integrity, sharing and delegation of control, communication, and demonstration of concern. Behavioural consistency involves managers behaving consistently over time and across situations so that employees can better predict future behaviour. Predictable, positive behaviour displayed by managers reinforces the level of trust in the manager-employee relationship. Behavioural integrity involves managers being consistent in what they say and what they do. Open and accurate communication by managers therefore is another critical factor in developing trusting
relationships. It is important for managers to be honest in their communication, and to provide adequate explanations and timely feedback on decisions (Whitener et al., 1998). The demonstration of concern involves managers showing consideration and sensitivity for employees’ needs and interests, acting in a way that protects employees’ interests, and refraining from exploiting others for the benefit of their own interest. Such behaviours displayed by managers may lead to employees perceiving them as loyal and trustworthy.

5.2.5 Self-efficacy

Although the hypothesised relationship between self-efficacy and job crafting was not found to be significant, it would still be beneficial for managers to be aware of how this can be improved and developed within organisations. Bandura and Locke (2003) suggested that it is important for employees to set goals and targets that are realistic. The achievement of these goals is likely to reinforce employees’ self-efficacy beliefs. It therefore is important for managers to formalise the performance appraisal process in such a way that employees get to set goals for themselves (in line with their job description) that they feel are achievable, as opposed to managers setting the standards. It also is important for managers to ensure that proper and thorough feedback on the achievement of these goals is provided to employees. Although not found to be significant, the current study hypothesised that feedback on performance may have a positive impact on employee self-efficacy. Managers should focus specifically on reinforcing behaviours that lead to the achievement of set goals. Demerouti and Bakker (2014) presented individual feedback as a strength-based intervention in terms of which managers should provide feedback to employees that focuses specifically on their most important strengths.

Lunenberg (2011) further emphasised the role of past performance in developing employee self-efficacy. It has specifically been argued that employees who have succeeded in their work tasks and who have achieved the set goals are likely to feel more confident when having to complete a similar task in the future. Providing challenging tasks, professional development and coaching, supportive leadership, rewards for improvement, and specifically goal setting, are some of the ways in which managers can boost self-efficacy (Lunenberg, 2011).
Nielsen, Yarker, Randall and Munir (2009) emphasised the importance of transformational leadership in fostering self-efficacy within the work environment. These authors argued that, in order to develop employees’ self-efficacy beliefs, managers should adopt a transformational or ‘inspiring’ leadership style. Leaders with a transformational style ‘provide personal attention, promote development through individualised consideration, enable new ways of working, encourage novel problem solving, and provide coaching and encouragement of specific behaviours through intellectual stimulation’ (Nielsen et al., 2009, p. 1237). Bandura (2000) furthermore emphasised the importance of supportive relationships in enhancing self-efficacy and how managers should model behaviours, attitudes and strategies for coping with problems. Consequently, through observational learning, employees will learn how to manage problem situations and thus feel more confident when faced with such situations.

As was hypothesised by the current study, the successful completion of complex tasks is likely to have a positive impact on employees’ self-efficacy beliefs. Stajkovic and Luthans (1998) suggested that managers should be clear and concise on employees’ tasks and responsibilities so that the employees are able to fully assess the complexity of tasks and thus control their effort. Unclear and superficial information on employees’ tasks and responsibilities may lead to inaccurate assumptions on the complexity thereof, and thus a faulty perception of their self-efficacy. In addition, managers can provide training that focuses on developing effective behavioural and cognitive strategies for coping with complex tasks. Demerouti and Bakker (2014) suggested that improved knowledge and skills may facilitate personal resources such as self-efficacy. Finally, Chen, Casper and Cortina (2001) suggested that employees with high cognitive ability are more likely to gain positive task-related experiences, which will have an impact on the extent to which they complete complex tasks successfully. Cognitive ability therefore is an important aspect to consider when recruiting and selecting employees.

5.3 LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

The following section gives a brief outline of the limitations of the study, as well as recommendations for future research that will contribute to fruitful research within the industrial psychology fraternity.
The first major limitation of the study was the limited sample size of 236 participants. Although this was still satisfactorily high, a sample of 500 or more would have been more appropriate. Marshall (1996) argued that researchers should aim to draw a representative sample to be able to generalise the results obtained back to the population. The limited sample size therefore may cause some concern regarding the generalisability and validity of the inferences to be made about the population. It was quite a challenge to get participants to respond to the survey due to time constraints. Although challenging, future researchers should consider using a number of companies within a specific sector as opposed to only one. What would also be useful is to include incentives that may serve as motivation for employees to participate.

Another limitation involves the fact that self-report data was collected. Self-report data is often influenced by social desirability, with individuals responding in such a way as to portray themselves in a more favourable light. This might have a negative impact on the reliability and validity of the responses and, consequently, on the results obtained. Furthermore, all the factor loadings of the illegitimate tasks scale did not differ significantly from zero, indicating that there is no common factor underlying this specific scale. The responses obtained for this part of the survey should thus be interpreted with caution. Although good reliability scores have been reported for this scale previously, future research should attempt to further develop and validate this scale so as to further explore illegitimate tasks and their relation to job crafting within organisations. This would also be of use because no extensive research has been conducted on illegitimate tasks. Finally, items 6 to 11 of the ‘decrease hindering demands’ subscale of the job crafting scale also did not differ significantly from zero. Responses to this section of the scale should thus also be interpreted with caution.

This study used an ex post facto research design, which posed another limitation. Kerlinger (1973) suggested that, with the use of an ex post facto research design, researchers are unable to manipulate independent variables and there ultimately is the risk of improper interpretation. All the findings of the study therefore should be treated with caution.
The hypotheses of the present study were tested using the JD-R model (Bakker, 2011) as framework to illustrate how salient job-, and personal resources, and job demands, have an impact on the occurrence of job crafting behaviours. More recently, and also as already mentioned, Bakker and Demerouti (2014) presented JD-R theory, which represents an extension of the JD-R model. According to Bakker and Demerouti (2014), JD-R theory allows researchers to understand, explain, and make predictions about employee phenomena within the working environment. The theory is flexible and can be applied to all work environments, and can be tailored to the specific occupation under consideration (Bakker & Demerouti, 2014). Future research could focus on testing the job- and personal resources, and job demands presented by the current study within the framework of JD-R theory to be able to contribute to heathier, more engaging and productive working environments. Finally, this study focused on specific job- and personal resources, and illegitimate tasks as a job demand. However, it could be that totally different resources and demands prevail within the specific company from which data was collected. Future research could possibly focus on testing additional resources and demands and their relationship to job crafting behaviour.

5.4 SUMMARY

This study focused on exploring the most salient job- and personal resources and illegitimate tasks as a job demand that account for variance in job crafting. The research findings illustrate the importance of engagement, feedback and proactive personality in fostering job crafting. The important mediating effect of job resources, namely autonomy and feedback on job crafting, was also proven to be important. These results, together with the managerial implications and practical interventions suggested, provide South African managers and industrial psychologists with valuable insight into managing and encouraging job crafting within the workplace.
REFERENCE LIST


## APPENDIX A

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