



From Decent Work to Decent Lives: An Empirical Test of the Outcomes of Decent Work in the Psychology of Working Theory

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Abstract

The psychology of working theory (PWT) postulates that certain contextual and structural factors determine if individuals are able to obtain decent work, and that decent work, in turn, leads to work fulfilment and general well-being. The theory assumes that this is the case, as decent work satisfies three fundamental human needs: survival and power, social connection, and self-determination (as per the self-determination theory [SDT]). Only recently has a measure been developed to assess the satisfaction of these needs (Autin et al., under review), which means that the proposed role of need satisfaction as mediator in the link between decent work and work fulfilment/general well-being has not yet been tested empirically. This formed the objective of this study. The study employed a descriptive research design with a correlational approach. Working individuals residing in South Africa's Western Cape province ($N = 150$) rated their work experiences on the decent work scale (DWS), work need satisfaction scale (WNSS), index of job satisfaction (IoJS) scale, and satisfaction with life scale (SWLS). In this sample, adequate healthcare did not fall within the decent work concept. This might be because it is common for working South Africans, especially in lower income brackets, not to receive healthcare benefits, which would thus not be expected. The autonomy and relationship aspects of the SDT self-determination need formed one instead of two separate components. This may be a reflection of low levels of trust in low-income workers, which means that autonomy is only provided if there is a positive relationship. Decent work predicted work fulfilment and individuals' well-being and, as expected, this relationship was mediated by the fulfilment of the hypothesised needs (survival and power, social connection, SDT relationship + autonomy, and SDT competence). The study thus indicates the applicability of the PWT in the South African context. Organisations should thus be encouraged to provide employees with decent work, as this, in turn, will likely increase employees' work fulfilment and general well-being.

Keywords: psychology of working theory; decent work; need satisfaction; well-being; work fulfilment

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List of Abbreviations

APA	American Psychological Association
DV	dependent variable
DWS	decent work scale
ILO	International Labor Organization
IoJS	index of job satisfaction
IV	independent variable
KMO	Kaiser-Meyer-Olkin
NDP	National Development Plan
Nedlac	National Economic Development and Labour Council
NHI	National Health Insurance
PAF	principal axis factoring
PWF	psychology of working framework
PWT	psychology of working theory
SD	standard deviation
SDG	Sustainable Development Goal
SDT	self-determination theory
SWLS	satisfaction with life scale
WEF	World Economic Forum
WNS	work need satisfaction
WNSS	work need satisfaction scale
VIF	variance inflation factor

Chapter 1: Introduction

According to Duffy, Blustein, Diemer, and Autin (2016), understanding the role work plays in people's lives has been a focal point of counselling psychology since its inception in the early 1900s. There are a number of theories which attempt to explain how individuals make career decisions and what makes them satisfied with work. These include, for example, Dawis's (2002) theory of work adjustment, Holland's (1985) theory of vocational personalities in work environments, Super's (1969) developmental self-concept theory, Gottfredson's (1981) theory of circumscription and compromise, and social cognitive career theory (Lent, Brown, & Hackett, 2002). These theories emphasise the role of internal and individual-level factors, such as personality, motivation, and self-efficacy, but neglect the role played by contextual and structural factors such as monetary resources and access to job opportunities. Duffy et al. (2016) argue that such contextual and structural factors are theoretically implied but lack empirical verification. Furthermore, these theories have focused on explaining the work experiences of the middle class, but fail to explain or even attempt to explain the work experiences of the poor and working class.

In an attempt to address this imbalance and to complement existing vocational theories, Blustein (2001; 2006; 2008; 2013) and colleagues constructed the psychology of working framework (PWF). The PWF proposes that contextual and structural factors (social class, privilege, choice) should be placed at the forefront when attempting to understand career decisions and work experiences, particularly among the poor and the working class, disenfranchised and marginalised populations who are often employed under conditions that do not meet the standards of decent work (Duffy et al., 2016).

An extensive definition of decent work includes the following elements:

promoting employment via sustainable institutional and economic contexts; defining, developing, and enriching social protection for workers, including social security and labor protection, which are constructed in accordance with the cultures of given societies; promoting social dialog via international connections among governments, worker organizations and employees; affirming, advancing, and fulfilling the fundamental rights that define a dignified and just workplace. (ILO, 2008, p. 1)

The International Labor Organization (ILO) (ILO, 2008) deems decent work to be a right of all individuals around the world who desire to work, as having decent work can enable

a decent life. The ILO (2010) also considers decent work as central to efforts to reduce poverty and as a way to achieve fair, inclusive, and sustainable development.

In 2010, South Africa's National Economic Development and Labour Council (Nedlac) committed itself to the international decent work initiative driven by the ILO. It forms part of the United Nations (UN) Sustainable Development Goals (SDGs), among which Goal 8 captures a set of aspirational statements about people and their working lives (UN, 2018):

opportunities for work that is productive and delivers a fair income, security in the workplace and social protection for families, better prospects for personal development and social integration, freedom for people to express concerns, organize and participate in the decisions that affect their lives and equality of opportunity and treatment for all women and men. (ILO, 2008, p.1)

These aspirational statements have been used to describe decent work internationally for all who work and desire to work. As the ILO (2008) views decent work as central to having a decent life, and as having a decent life is a human right according to Articles 16–30 of the UN Declaration of Universal Human Rights (UN, 1948), it is essential to establish if and how decent work contributes to a decent life in order to inform policies regarding job creation and working conditions.

The PWF outlines specific barriers that exist in attaining decent work and considers how securing decent work leads to the satisfaction of survival and power needs, social connection needs, and self-determination needs, which in turn influences work fulfilment and general work-related well-being. Based on the PWF, Duffy et al. (2016) constructed the psychology of working theory (PWT), with the central aim of explaining important factors by empirically testing the PWF. Currently, only the relationships between certain elements in the PWT have been empirically tested. To date, the link between work being perceived as decent and the satisfaction of survival and power, social connection, and self-determination needs has not been tested empirically. This study addresses this gap through data collected in a South African sample.

The research question guiding this dissertation is thus whether or not the theoretically derived outcomes of decent work in the PWT – the needs for survival and power, social connection needs, and self-determination needs – can be empirically supported and whether achieving these outcomes leads to general well-being and fulfilment at work. Figure 1 depicts the conceptual framework for this study.

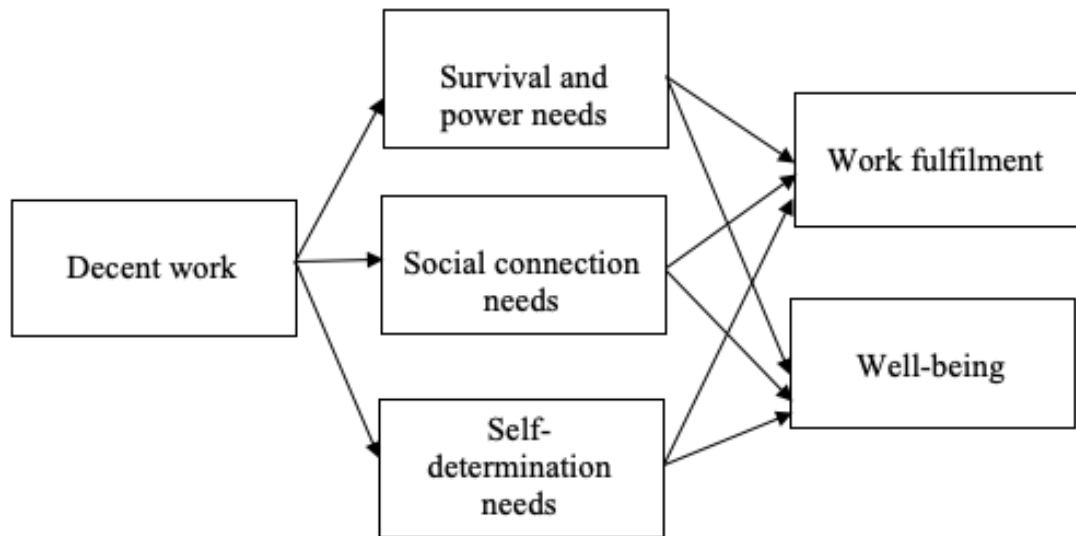


Figure 1. Conceptual framework for the research presented in this dissertation

In order to address the research question, the current literature on decent work is reviewed in the following chapter. A more detailed outline of the PWT and definitions of its elements are also provided. Chapter 3 provides an overview of the methods employed in this study, including the research design, procedure, sampling process, and sample, as well as the instruments and ethical considerations. In Chapter 4 the study results are presented, starting with an overview of the psychometric properties of the scales and descriptive results. The main part of Chapter 4 reports the results related to the hypotheses. Finally, the results are compared to the literature and interpreted in Chapter 5, which concludes with a review of the study limitations and recommendations for future research.

Chapter 2: Literature Review

The following literature review provides a general overview of the history of the decent work concept. This is followed by an in-depth outline of the PWF by Blustein, Kenna, Gill, and Devoy (2008) and related research, and the PWT by Duffy et al. (2016), with a specific focus on the outcomes of decent work. The chapter concludes with a discussion of the relevance of the literature in the current South African work climate.

2.1 A Brief History of the Decent Work Concept

As decent work forms the centrepiece of the PWT, it is essential to understand the concept of decent work in order to gain a holistic understanding of the theory.

Internationally, the Decent Work Agenda is driven by the ILO. Established in 1919 after the end of World War I and in a context of high worker exploitation, the ILO was founded on the understanding that lasting peace required social justice, and similar working conditions in countries competing for markets. It was formed to unite governments, employers, and workers, and became the first specialised agency for the UN in 1946.

In 2008, the ILO's 187 member countries adopted its third major statement of principles and policies, the Declaration on Social Justice for a Fair Globalization, which expresses the ILO's current vision. The Declaration promotes decent work through four integrated strategic objectives: employment, social protection, social dialogue, and fundamental principles and rights at work. It seeks to set labour standards, develop policies, and devise programmes promoting decent work for all working individuals (ILO, 2018). The concept of decent work had been introduced into the ILO's agenda in 1999 already, but the 2008 declaration placed it at the core of the ILO's work. Through its inclusion in SDG 8, decent work and the four pillars of the Decent Work Agenda – employment creation, social protection, rights at work, and social dialogue – became an integral part of the UN 2030 Agenda for Sustainable Development, which consists of 17 SDGs. Goal 8 of the 2030 Agenda “calls for the promotion of sustained, inclusive and sustainable economic growth, full and productive employment” (UN, 2018, para. 1). To ensure that these goals are implemented, commitment at country level by means of policy and institutional intervention is needed.

In South Africa, the Decent Work Agenda is driven by Nedlac. Nedlac was established in 1994 to allow government, labour, business, and community organisations to cooperate,

through problem-solving and negotiation, on economic, labour, and development issues and related challenges facing the country. Nedlac adopted the ILO's Decent Work Agenda in September 2010. The aim of committing to a decent work programme is to alleviate poverty and to achieve unbiased, inclusive, and sustainable development in the country. Furthermore, it involves promoting opportunities for work that is productive and compensated fairly, providing a safe workplace and social protection for workers and their families, as well as giving people the choice to express their concerns, to organise, and to participate in decisions that affect their lives. Currently, Nedlac is responsible, through negotiation, for helping to achieve the employment and decent work goals that have been set in the National Development Plan (NDP) (Government of South Africa, 2011). The NDP, in turn, aligns South Africa's development priorities with the UN SDGs.

Decent work provides the cornerstone of the PWF, which will be outlined in the next section.

2.2 An Overview of the PWF

Blustein et al. (2008) have pointed out that the majority of people working for pay spend one-third of their life at work, yet little research has been conducted on how work and the context in which it functions shape human lives. For most people, work is a central part of life, plays a substantial role in their overall well-being, and can be used as a key to understand complex human behaviour. For some individuals, work promotes overall health, as it is a way to express and actualise themselves. For others, work is a source of distress and strain – especially if work is precarious in nature. Precarious work is seen as unstable working conditions where workers are unprotected and receive poor pay.

Although thoughtful bodies of literature in the field of career counselling have been generated and provide insight into career-related processes and work-based experiences, Blustein et al. (2008) argued that existing career choice and career development theories do not apply to the majority of people around the world, namely to those who lack access to jobs, or at least access to jobs that accommodate an individual's interests, hopes, and values. Blustein et al. (2008) thus advocated a broader, more inclusive conceptual framework of vocational theory, one which accommodates those for whom work serves as a means of survival rather than an expression of aptitude and character. Blustein (2001; 2006; 2008; 2013) and colleagues thus developed the PWF to address shortfalls in existing vocational theories. The PWF complements current vocational theories by emphasising the role that social class, privilege,

and freedom of choice play in career selection and fulfilment. The framework can primarily be used to inform and promote socially just and potentially decent work environments for all people, regardless of their background.

The PWF suggests that sociocultural factors must be used as the primary concept in understanding the career decisions and experiences of all people, particularly of individuals from poor and working-class backgrounds and from marginalised groups. Blustein (2013, pp. 7–8) presents the core assumptions of the PWF as follows:

- Work is an essential aspect of life and an essential component of mental health.
- No one epistemology should be privileged over another in the explication of the psychological nature of working.
- The psychological study of working should be inclusive, embracing everyone who works and who wants to work around the globe.
- In many cases and situations, work and non-work experiences are closely intertwined.
- Work includes efforts within the marketplace as well as caregiving work, which is often not sanctioned socially and economically.
- Working has the potential to fulfil three fundamental human needs—the need for survival and power; the need for social connection; and the need for self-determination.
- To more fully understand the psychological nature of working, careful considerations are needed of relevant social, economic, political, and historical forces, which shape, constrain, and facilitate many aspects of contemporary working.

The second last assumption is assumed to be met through decent work. Thus, decent work is seen as fulfilling three fundamental human needs: survival and power (having sufficient food and shelter), social connection (having meaningful relationships with others), and self-determination (having the opportunity for self-regulation so that activities requiring extrinsic motivation might become more self-determined).

2.2.1 Working as a Means for Survival and Power

According to Blustein (2006), work provides a means for survival and power. Through the process of working and earning money, people are able to meet their most basic human

subsistence needs, namely food, water, clothing, physical safety, and shelter. Blustein proposed, in line with Maslow's (1943) theory of human motivation, that only once these basic needs are met can an individual aspire to meet higher needs. Blustein (2008) also found that most research on working has focused on the grand career narrative as proposed by Super, Savickas, and Super (1996). It assumes that people have the opportunity to secure jobs which are in line with their personal interests and that this work will serve as an expression of their self-concept. Unfortunately, this is not the reality for the majority of the world's working population, for whom work primarily serves as a means for survival.

Closely tied to the need for survival is the need for psychological, economic, and social power, which decent work can fulfil. Work provides access to tangible resources such as money and intangible social resources such as status, prestige, and privilege. These resources make it easier to obtain the basic material resources of food, water, clothing, physical safety, and shelter. Unfortunately, the accumulation of power through work is not always a fair process, as many people are faced with unequal opportunities or access to education and training. According to Helms, Jernigan, and Mascher (2005), as well as Devaraj, Quigley, and Patel (2018), access to these resources is often based on the skin colour or gender of a person, rather than on skill and merit. There are thus various structural barriers (e.g. race, gender, age etc.) which have an impact on individuals. It is therefore essential for career counsellors to be fully cognisant of how structural and contextual barriers affect individuals in order to provide effective interventions (Blustein et al., 2008).

2.2.2 Working as a Means for Social Connection

According to Blustein et al. (2008), human beings have a strong inherent desire for social connection, healthy attachments, and secure interpersonal relationships. The psychology of working perspective emphasises the importance of relationships in the experience of working. Work provides a platform through which individuals can interact and connect with others in their social and cultural environment (Blustein, 2006). When work relationships are supportive and nurturing, work provides a valuable support structure for individuals and can help them cope with work-related challenges and demands. Furthermore, work can play an essential part in the construction and expression of identity. However, if these relationships are not formed, it may lead to isolation or alienation at work, potentially compromising an individual's performance and adversely affecting his or her psychological well-being (Blustein

et al., 2008). Apart from work possibly providing a platform for social connections, work also enables individuals to partake in the larger economic structure of society, which can ultimately offer them a sense of belonging or connection to the broader social world.

2.2.3 Working as a Means for Self-Determination

Blustein (2006) believes that work provides an opportunity for self-determination. However, just as many people around the globe do not have the luxury of choosing a job which fulfils their personal interests, they also cannot choose a job that allows them to share their thoughts and ideas. Most people must therefore find it within themselves to stay motivated to continue in jobs which are potentially painful, tedious, and at times demeaning. It is within this reality that Blustein et al. (2008) sought to understand the psychology of working. Systematic and institutional changes that create better and more dignified work environments would ideally need to take place first, but such changes take time. Thus, a more immediate approach would be to enhance existing work environments by helping individuals achieve greater self-determination, which would make extrinsically motivated activities become more self-determined, as proposed in Ryan and Deci's (2000) self-determination theory (SDT).

SDT is centred on the belief that people are more likely to take on activities that they find intrinsically interesting. Ryan and Deci (2000) acknowledge that many human activities are not inherently interesting, and they therefore accommodate tasks and jobs that are extrinsically motivating in their theory. Intrinsically motivating jobs are motivating due to the inherent nature of the job, for example the enjoyability of the job or having a choice. Extrinsically motivating jobs are motivating due to work conditions, such as payment, co-workers, and supervisor support. Ryan and Deci (2000) proposed three contextual factors that can function to facilitate the internalisation of extrinsically motivating activities to help make these activities less tedious and perhaps even meaningful. These are autonomy, relatedness, and competence.

Autonomy refers to an individual's need to act freely and with a feeling of ownership and control over choices that are made. This is considered a crucial element for motivation (e.g., Sheldon, Osin, Gordeeva, Suchkov, & Sychev, 2017). Competence refers to having the relevant skills and/or a feeling of mastery in one's environment (Van den Broeck, Ferris, Chang, & Rosen, 2016). Relatedness refers to the need to have close, affectionate relationships with others (Ryan & Deci, 2017). According to the PWF, work can fulfil the need for relatedness through two paths (Blustein, 2008). It provides a venue for direct interpersonal interaction, for example with co-workers, clients, supervisors, and supervisees. Secondly, work

can provide a positive climate which helps workers to foster social connections, which in turn can provide an opportunity to connect with the broader society. Van den Broeck et al. (2016) suggest that autonomy, competence, and relatedness should be satisfied in conjunction for general growth and well-being to be achieved.

Blustein (2006) proposed two further factors, namely value congruence and access to opportunity structure, as these might also promote internalisation and self-determination at work. Value congruence refers to the degree of overlap between individuals' personal values and goals, and organisations' or employers' values and goals. Access to the opportunity structure reflects the ability of individuals to find and utilise resources and support that would promote positive work experiences and assist with important work-related tasks (Blustein, 2006). While these elements might not turn an inherently terrible job into a spring of joy and satisfaction, considering them in conjunction with a careful understanding of how individuals make meaning of their jobs can provide insights into how to improve working conditions and experiences for individuals who simply need to accept any available job as a means to an end.

Based on the core assumptions – specifically the last assumption – of the PWF, Duffy et al. (2016) proposed the PWT as the logical next step in advancing the PWF, whilst potentially adding to the current body of literature which seeks to describe the challenges that exist in obtaining decent work. The next section will provide an overview of the PWT.

2.3 An Overview of the PWT

By using the core assumptions of the PWF as well as research in vocational psychology, multicultural psychology, intersectionality, and the sociology of work, Duffy et al. (2016) developed their empirically testable PWT. The PWT is primarily based on the last assumption of the PWF – “To more fully understand the psychological nature of working, careful considerations are needed of relevant social, economic, political, and historical forces, which shape, constrain, and facilitate many aspects of contemporary working” (Blustein, 2013, p 8) – and places the concept of decent work as its central variable. The theory presents a series of propositions concerning (a) contextual predictors of securing decent work, (b) psychological and economic mediators and moderators of these relations, and (c) consequences of decent work for the individual.

Duffy et al.'s (2016) main goal was to provide a theory of working which would be applicable to all working individuals and in which elements and interrelationships were clearly defined. The theory's underlying assumption is that the context surrounding work is the main

influence on how an individual experiences work. The relevant context variables are economic constraints and marginalisation. Mediated by work volition (i.e. an individual's perception of choice in job selection) and career adaptability (i.e. an individual's ability to cope with career changes), economic constraints and marginalisation decrease the chances of securing decent work. These relationships are indicated in the “Predictors” section in Figure 2. The model further suggests that performing decent work leads to the satisfaction of three fundamental needs: survival, social connection, and self-determination. When these needs are met through work, work fulfilment and general well-being result, as shown under “Outcomes” in Figure 2. The next sections provide an overview of the different elements included in the PWT, starting with the definition of decent work in the PWT.

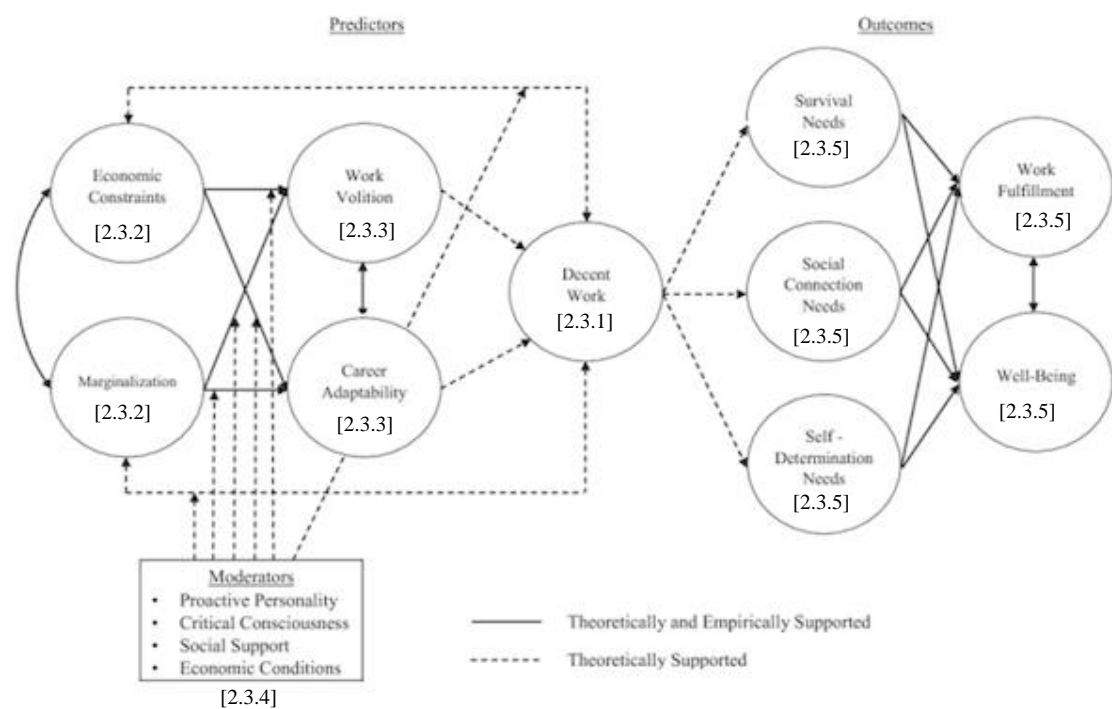


Figure 2. The conceptual framework of the PWT, indicating theoretically supported and theoretically and empirically supported relationships (Duffy et al., 2016, p. 129) [Numbers in brackets indicate the section in the literature review describing the element]

2.3.1 The Definition of Decent Work in the PWT

The definition of decent work in the PWT is derived from the ILO (2008) and is aligned with the definition of decent work presented in the PWF. According to the ILO (2008, p. 1), decent work “sums up the aspirations of people in their working lives” and requires four

interrelated features. Firstly, governments and policy makers have to work collaboratively in order to create jobs, as this ensures that there are sufficient work opportunities available for people who desire to work. Secondly, decent work requires the support of employees' rights at work, such as freedom of association. Thirdly, decent work allows for social dialogue between governments, organisations, and workers, ultimately facilitating community between these parties. Lastly, decent work provides safe working conditions, adequate free time and rest, and adequate compensation in case of lost or reduced income; considers family and social values; and enables access to adequate healthcare. Thus the individual worker's perception of decent work informs the conceptualisation of decent work in the PWT (Duffy et al., 2016).

Measuring the extent to which work is decent is not an easy task. In an attempt to guide the assessment and measurement of decent work, the ILO developed 10 statistical indicators for general characteristics of work that individuals around the world would consider important elements of decent work (ILO, 2013). The indicators are:

1. employment opportunities;
2. adequate earnings and productive work;
3. decent working time;
4. combining work, family, and personal life;
5. work that should be abolished;
6. stability and security of work;
7. equal opportunity and treatment in employment;
8. safe working environments;
9. social security; and
10. social dialogue, and employer's and workers' representation.

In keeping with these indicators, Duffy et al. (2016) proposed that within the PWT, decent work consists of (a) physical and interpersonally safe working conditions (e.g. the absence of physical, mental, or emotional abuse), (b) hours that allow for free time and adequate rest, (c) organisational values that complement family and social values, (d) adequate compensation, and (e) access to adequate healthcare. Thus, decent work exists when all these components are present.

2.3.2 Marginalisation and Economic Constraints as Barriers to Securing Decent Work

According to Duffy et al. (2016), two primary barriers exist in the process of securing decent work, namely marginalisation and economic constraints. Marginalisation is the process of making a group or class of people less important or relegating them to a secondary position. In general, people are marginalised based on their social class, which is normally intertwined with other sorts of marginalisation, such as gender discrimination, as indicated in the gender pay gap (Lips, 2013). In addition to women, the disabled, immigrants, and the poor are groups exposed to greater levels of marginalisation (Blustein, 2008; Crooks, 2007). According to Cole (2009), social marginalisation and oppression reduce equal access to resources and to decent work, and as the level of marginalisation increases, the ability to secure decent work decreases (Duffy et al., 2016). In South Africa, race is an additional category of marginalisation which plays an important role in the ability to secure decent work. For example, the effects of apartheid left the majority of various black and coloured people in non-decent and precarious jobs, with no option to progress to better work.

A second barrier to securing decent work is economic constraints. According to Duffy et al. (2016), the ability to secure decent work is based on having access to opportunities to work. Economic constraints such as limited economic resources can be measured through, for example, household income or family wealth. Limited economic resources – that is, living in or on the boundary of the poverty line – decrease access to education and quality of education. This is linked to lower levels of academic achievement, which in turn adversely affect job opportunities and career progression options (Ngalo-Morrison, 2017). Economic constraints are linked to social class which, in turn, is linked to cultural and social capital, which facilitates academic achievement, career development, and occupational attainment (Diemer & Rasheed Ali, 2009). The poor or working class are also in general negatively affected by class-based discrimination and social exclusion, further limiting their access to decent work (Blustein, 2008).

For these reasons, Duffy et al. (2016) proposed that individuals with greater economic constraints and greater social marginalisation would be less likely to secure decent work. The attainment of decent work, on the other hand, is assumed to reduce economic constraints and, in turn, experiences of marginalisation.

2.3.3 Work Volition and Career Adaptability as Mediator Variables in the PWT

Duffy et al. (2016) suggested that two psychological characteristics mediate the relationships between contextual factors and the securing of decent work, namely work volition and career adaptability. Work volition is an individual's perception of choice in career decision making. Work volition is an attitude that develops from structural, environmental, and personal characteristics (Duffy et al., 2016). It has been linked to various positive outcomes, such as career maturity, sense of control, and academic satisfaction among college students (Duffy, Bott, Allan, & Autin, 2014; Duffy, Diemer, & Jadidian, 2012; Duffy, Douglass, Autin, & Allan, 2015; Jadidian & Duffy, 2011); and increased work meaning, person–environment fit, job satisfaction, and life satisfaction (Duffy, Autin, & Bott, 2015; Duffy, Bott, Allan, & Torrey, 2013; Duffy, Bott, Torrey, & Webster, 2013; Duffy, Diemer, & Jadidian, 2012). Therefore, Duffy et al. (2016) proposed that individuals with higher work volition have a greater chance of securing decent work. Marginalisation and economic constraints, on the other hand, are both assumed to be negatively related to work volition. Work volition is thus assumed to function as a mediator in the relationship between economic constraints and marginalisation on the one hand and securing decent work on the other.

The second mediator variable is career adaptability. It is defined as an individual's readiness to respond to change and the coping resources which allow the individual to cope with change through planning, exploring, and guiding career decisions (Savickas, 2002). Career adaptability consists of four resources – concern, control, curiosity, and confidence – which support an individual's self-regulation strategies (Savickas & Porfeli, 2012). Concern allows individuals to look ahead and prepare for things that might happen in the future. Control enables individuals to shape themselves and their environment to be in line with what they want in the future. Curiosity allows individuals to think about themselves in various roles and situations. Lastly, confidence is gained through having concern, control, and curiosity, and allows individuals to believe that they can actualise choices to implement their life design (Savickas & Porfeli, 2012). These all relate to how individuals feel about their particular practical skill set, which affects their ability to adapt in their careers.

Greater career adaptability has been related to higher levels of career maturity and career decision self-efficacy among college students. Those who were more adaptable tended to have better established vocational identities and were more comfortable when career decisions needed to be made (Gadassi, Gati, & Dayan, 2012). Similarly, career adaptability has been linked to increased work fulfilment for those who are employed and greater self-efficacy

for those looking for work (Duffy, Autin, & Bott, 2015). Based on these findings linking career adaptability to positive work-related outcomes, Duffy et al. (2016) proposed that individuals with greater levels of career adaptability would be more likely to source decent work. Marginalisation and economic constraints, on the other hand, are expected to lower the level of career adaptability and are negatively related to career adaptability. Due to this, Duffy et al. (2016) assume that career adaptability would partially explain the effect of the two contextual variables on securing decent work.

2.3.4 Proactive Personality, Critical Consciousness, Social Support, and Economic Conditions as Moderator Variables in the PWT

In the PWT, three psychological variables and one economic variable are assumed to moderate the relationship between contextual factors and the mediating variables. The four moderator variables are thought to potentially buffer the impact of economic constraints and marginalisation on work volition and career adaptability, and thus, ultimately, on the potential to secure decent work. These are proactive personality, critical consciousness, social support, and economic conditions.

A proactive personality is defined as having the ability to take initiative to influence one's environment (Li, Liang, & Crant, 2010). According to Li et al. (2010), individuals with more proactive personalities tend to have higher subjective career success (such as perceived success and job satisfaction) and objective career success (for example salaries and promotions) as well as exhibiting proactive work behaviour, job performance, work motivation, and overall well-being. Furthermore, Bakker, Tims, and Derks (2012) and Li et al. (2010) found that having a proactive personality was related to higher job search behaviours among unemployed individuals and greater organisational citizenship behaviours and work engagement among the employed. Thus, Duffy et al. (2016) assumed that a proactive personality would buffer the effects of marginalisation and economic constraints on feelings of work volition and career adaptability and, through those two variables, on the ability to secure decent work.

A second moderator in the PWT is critical consciousness. Critical consciousness, as defined by Freire (1993, p.51), is "reflection and action upon the world in order to transform it". Critical consciousness is composed of critical reflection, political efficacy, and critical action. Critical reflection refers to the critical analysis of social inequalities as well as the endorsement of equality between groups in a society (Diemer & Blustein, 2006). Political

efficacy is the capacity to effect social and political change through individual or collective actions (Watts, Diemer, & Voight, 2011). Lastly, critical action refers to an individual's participation in actions to produce social change (Godfrey & Grayman, 2014). Each of these subcomponents are believed to influence each other. According to Duffy et al. (2016), various meta-analyses show that critical consciousness can help marginalised people to engage with pathways to social mobility despite the constraints that they may face. For example, Westheimer and Kahne (2004) found that critically conscious adolescents exhibiting critical reflection were more inclined to activism than to conventional political action. Similarly, Diemer and Li (2011) found that marginalised youth with greater levels of critical action were more likely to participate in voting. They therefore argue that critical consciousness alleviates the effects that experiences of marginalisation and economic constraints have on individuals' feelings of work volition and career adaptability.

The third moderator suggested by Duffy et al. (2016) is the degree to which individuals perceive social support from family, friends, the broader community, and significant others in order to cope with the stress and adversity brought about by marginalisation and economic constraints. Social support plays an essential role in how individuals manage contextual stressors (Duffy et al., 2016). Various studies have found that social support, as defined above, is related to positive academic and vocational outcomes among the marginalised. For example, Ahmed, Minnaert, Van der Werf, and Kuyper (2008) found a positive relationship between social support and academic performance. Similarly, Iglesia, Stover, and Liporace (2014) found that a higher perception of social support was associated with better academic achievement among females. Marcinkus, Whelan-Berry, and Gordon (2007) indicated that work-based social support was positively associated with career accomplishment, organisational commitment, and job satisfaction among women.

Possessing these three psychological attributes would not necessarily enable all individuals to overcome the challenges associated with social oppression or a lack of access to opportunity. Duffy et al. (2016) therefore included economic conditions – a situation which is beyond the individual's personal control but is critical in determining access to decent work – as the fourth moderator, as they argued that current economic conditions cannot be ignored. This moderator therefore accommodates macro-level factors, such as unemployment levels, the accessibility of living wages in a particular society, and job advancement opportunities in a particular organisation. Thus, good economic conditions, such as low unemployment levels, are expected to lessen the effects that experiences of marginalisation and economic constraints have on individuals' feelings of work volition and career adaptability.

The next section presents the hypothesised outcomes of performing decent work.

2.3.5 Fulfilment and Well-Being as Outcomes of Decent Work in the PWT

Central to the PWT is the premise that working should promote overall psychological health and well-being. Various studies have shown that work has the potential to provide people with meaning, fulfilment, and happiness, which in turn has the potential to buffer negative psychological outcomes. Meyers (2007) suggested that work is central to people's existence and plays a primary role in shaping their identities. According to Cameron, Dutton, and Quinn (2003), work provides a setting for individuals to engage in goal-directed activities and provides meaning. When there is a work-role fit – that is, a perceived fit between the individual's self-concept and his or her role – the individual is more likely to find meaning in the work, since he or she will be able to express beliefs, values, and principles (Van Zyl, Deacon, & Rothmann, 2010). However, many people do not have access to work which provides meaning, fulfilment, and happiness. Instead, for many, work often serves as a platform for oppression, marginalisation, and exploitation (Duffy et al., 2016). According to Wage Indicator (2018), approximately 12.3 million people are being exploited globally, with people from Africa, Asia, and Latin America being most affected. In such cases, work is likely to have adverse effects on an individual's health and well-being (Blustein, 2008). Chukwu (2012) showed that labour exploitation had negative effects on individuals' psychological, physiological, and emotional states and health.

In keeping with Blustein's (2008) PWF (see Section 2.2), the PWT assumes that decent work allows individuals to satisfy their survival needs, social connection needs, and self-determination needs. The satisfaction of these three needs, in turn, leads to fulfilment at work and well-being. Research has shown that there is a clear link between meeting survival needs through work and being fulfilled at work (Duffy, Allan, Autin, & Bott, 2013; Duffy & Autin, 2013). When people cannot meet their survival needs, they are less likely to be satisfied with their jobs (Clark & Oswald, 1996). Through this Duffy et al. (2016) explain the hypothesised link between the satisfaction of survival needs and work fulfilment. Similarly, social connection needs also have an impact on work fulfilment, as having positive connections and social support has been shown to relate to greater fulfilment at work (Geldenhuys, Laba, & Venter, 2014). Furthermore, satisfying relational needs often involves improving the lives of others, either at work or by providing work to others. According to Allan, Autin, and Duffy (2014) and Grant and Berry (2011), when individuals positively influence the lives of others at work and see the outcomes of their efforts, they tend to experience greater job satisfaction and

a greater sense of meaningfulness and show higher performance. Thus, Duffy et al. (2016) propose that meeting social connection needs – via interpersonal connection and prosocial activity at work – predicts work fulfilment. Lastly, empirical studies have consistently shown that the more people internalise their work and perceive it as self-motivating, the more likely they are to experience that work as meaningful (Allan, Autin, & Duffy, 2016; Geldenhuys et al. 2014). Therefore, Duffy et al. (2016) propose that meeting self-determination needs is related to work fulfilment.

In addition to need satisfaction relating to work fulfilment, Duffy et al. (2016) propose that satisfying these needs can also be related to overall well-being, as clear links have been found between economical resources (income), which satisfy survival needs, and happiness, which predicts well-being (Deaton, 2008; Sacks, Stevenson, and Wolfers, 2010). Rojas (2014) created a model (see Figure 3) depicting paths between well-being/life satisfaction and income.

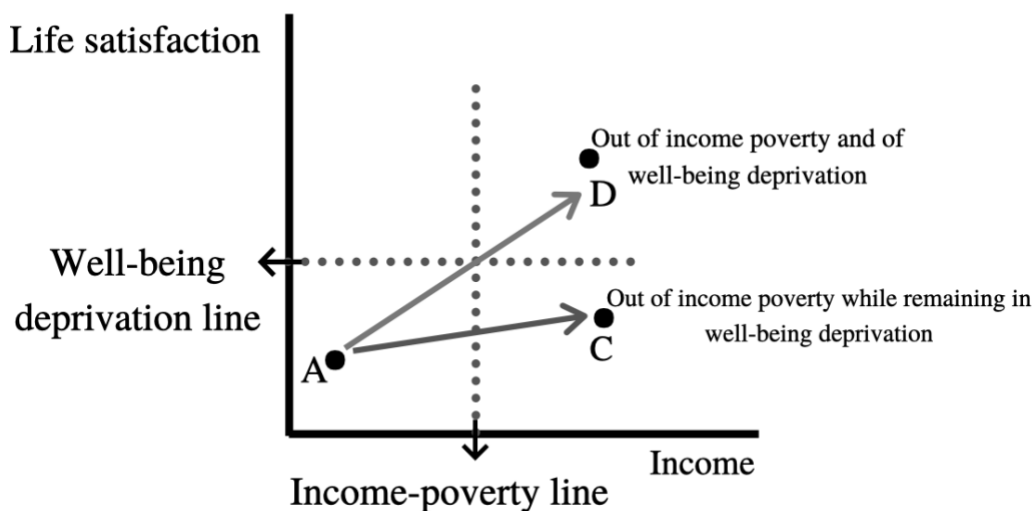


Figure 3. Well-being deprivation and income poverty (Rojas, 2014, p. 48)

The model suggests a well-being deprivation line and an income poverty line (Path AD). At the point of interception, an individual is likely to have an adequate income, which allows him or her to break through well-being deprivation. Having more money increases well-being and, conversely, not having an income that is sufficient for sustaining basic needs will place an individual in well-being deprivation. This is supported by Diener, Oishi, and Lucas (2015), who argue that, while having more money does not make people exponentially happier, a lack of money leads to compromised survival needs. Not being able to provide food for one's family leads to unhappiness which, in turn, compromises well-being.

Similarly, the fulfilment of social connection needs at work is linked to various indicators of well-being (Patrick, Knee, Canvello, & Lonsbary, 2007). Evidence suggest that when people benefit the work lives of others and have meaningful relationships at work, they experience higher job satisfaction, which, in turn, is connected to well-being (Aazami, Shamsuddin, Akmal, & Azami, 2015).

Finally, the fulfilment of self-determination needs at work is connected to a variety of well-being outcomes. Evidence suggests that the pursuit of intrinsic goals is positively related to self-esteem and self-actualisation, and is negatively related to depression and anxiety (Deci & Ryan, 2008). Likewise, people with a higher degree of satisfaction of their autonomy, competence, and relatedness needs tend to experience higher life satisfaction and vitality (Adie, Duda, & Ntoumanis, 2008) as well as lower levels of exhaustion (Fernet, Austin, & Vallerand, 2012).

It is thus assumed that survival needs, social connection needs, and self-determination needs are fulfilled through decent work, which increases work fulfilment and well-being. Furthermore, it is important to note that work fulfilment and well-being do not function in isolation from each other (Duffy et al., 2016). For example, Bono and Judge (2003) found that non-work-related factors such as self-esteem, self-efficacy, and emotional stability influence work fulfilment. Similarly, literature by Amstad, Meier, Fasel, Elfering, & Semmer (2011) suggests that an individual's work life has an impact on his or her family life and vice versa. Thus, work fulfilment and well-being can be deemed interrelated in nature.

2.3.6 Empirical Substantiation of the PWT: What We Know and What There Still Is to Know

The PWT was developed from a North American perspective – that is, a society characterised by free-market capitalism where achieving individual fulfilment at work is valued (Duffy et al., 2016). According to Hofstede's national cultural dimensions (Hofstede, 2011), Americans score extremely high on the individualistic spectrum. However, Duffy et al. (2016) are of the opinion that the theory may hold for other cultures too – specifically in diverse countries in which economic resources are distributed particularly unequally – as the theory was designed to better understand the majority of the working force. Furthermore, understanding how a country with different societies and cultures perceive decent work and the outcomes thereof may be highly informative, as work encapsulates one-third of people's lives.

Currently, Duffy et al.'s (2016) theory is characterised by a predominantly individualistic perspective (variables affecting an individual's ability to secure decent work and fulfil individual needs); however, it does contain some elements of a collectivist perspective, for example experiences of marginalisation as a predictor of decent work and social connection needs as the outcome of decent work. The theory may thus also be relevant in collectivist societies. Moreover, testing the theory in societies which are more collectivistic may aid in the understanding of individual and collectivist factors which may shape work-related behaviours and experiences (Duffy et al., 2016). South Africa is known for its ethnic and cultural diversity. The population of South Africa is one of the most complex and diverse in the world, and is often referred to as the Rainbow Nation (Booyesen, 2007). Therefore, testing the PWT in a culturally diverse society in which individualism and collectivism are valued to varying degrees by different cultures may add to the PWT scholarship, and potentially contribute to improving existing policies aimed at advancing the working lives of people, especially of those whose work is precarious.

Section 2.3.2 have outlined the empirical evidence supporting the assumed relationships between economic constraints and marginalisation for work volition and career adaptability. Work volition and career adaptability, section 2.3.3, as predictors of decent work have been theoretically supported, but not yet been tested empirically. The same applies to the relationships between decent work and the three fundamental needs (survival and power, social connection, and self-determination needs).

The previous sections have provided the theoretical and – where available - empirical support for the hypothesised relationships in the PWT. One of the assumptions not yet tested empirically was the mediating role of the three fundamental needs (survival and power, social connection and self-determination) in the decent work and work fulfilment/general wellbeing relationships. The reason for this was that a measure to assess the satisfaction of these needs had only recently been developed by Autin et al. (under review). In order to substantiate or refute the PWT's theoretically founded propositions about to the outcomes of decent work empirical evidence was thus required. For this reason, the current study focused specifically on the outcome variables of decent work, depicted on the right of Figure 2, and reproduced on their own in Figure 4.

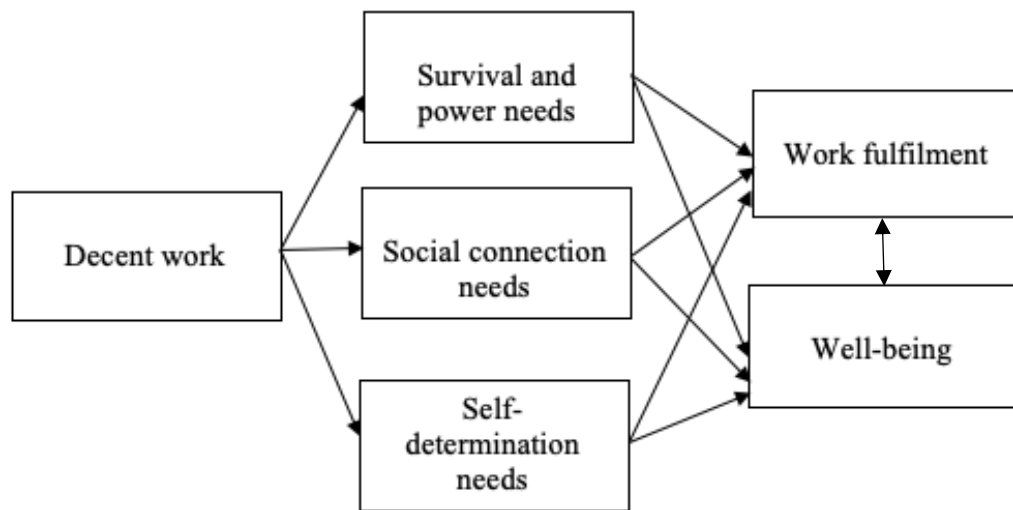


Figure 4. The study's conceptual framework: Work fulfilment and well-being as outcomes of decent work via its relationship with the three fundamental needs specified in the PWT

Thus, from the assumptions of the PWT, provided earlier in this chapter, the following hypotheses were derived:

- H1: The more a person perceives his or her work as decent, the greater the fulfilment of survival needs, social connection needs, and self-determination needs, which in turn predicts work fulfilment.
- H2: The more a person perceives his or her work as decent, the greater the fulfilment of survival needs, social connection needs, and self-determination needs, which in turn predicts general well-being.

Chapter 2 looked at the literature surrounding the barriers, predictors, mediators, moderators and outcomes of decent work within the PWT framework. The specific focus of the study is to look at the outcomes of decent work within South Africa. Chapter 3 intends to discuss the methods followed in testing the two aforementioned hypotheses.

Chapter 3: Methods

This chapter describes the research process undertaken in this study, including the research design, sampling procedure, participants, measures, and statistical procedures used in the analysis of the collected data.

3.1 Research Design

In order to address the research question, this study adopted a descriptive research design with a correlational approach. This type of design describes the variables and the relationships that occur naturally between and among them (Walker, 2005). A correlational design was followed to examine if perceptions of decent work can be linked to work fulfilment and general well-being when mediated by survival needs, social connection needs, competence needs, and autonomy/relatedness needs among a sample of workers residing in the Western Cape, South Africa.

For the purpose of this research, a quantitative approach was adopted. Thus, the sample was selected based on the characteristics of a population and the objective of the study. This type of research allows the researcher to generalise results by measuring the views and responses of a sample and relating them to those of a similar population. As this study aimed to quantify and empirically verify the theoretically proposed outcomes of decent work, this approach was considered most suitable.

3.2 Sampling and Sample

Purposive, non-random sampling was used in this study. This type of sampling was appropriate, as the researcher was interested in the experiences of a specific cohort of the South African population, namely working individuals. Participants were thus selected based on two eligibility criteria: being South African and being employed. Of specific interest were those employed individuals at the lower end of the income spectrum, as these individuals might be more exposed to precarious/marginalised work – that is, work that would be considered not decent. However, as the criteria only stated that participants should be employed, both employed individuals at the lower end of the income spectrum and those earning higher incomes were recruited. This was important due to the study's correlational approach and the fact that correlational analyses require sufficient variation in the data. Low-income individuals

also make up the majority of people working in South Africa and, unlike other theories of work, the PWT has been specifically designed to apply to low-income individuals, as outlined in Chapter 2. It also allows for a better understanding of a cohort of working individuals which has been under-researched, as organisational psychology has been mainly concerned with professionals.

The researcher aimed to recruit a diverse sample, one which is representative of the South African working population. However, as a snowball sampling approach was used (the researcher shared the online link on Facebook, Twitter, and Instagram and asked online friends to share the link with their friends), the researcher could not control who shared the link and to whom it was shared. Consequently, the participants were not fully representative of the South African population. Ideally, the sample should have included a greater number of black and Coloured participants and less white participants. However, as it would be unethical to exclude participants based on racial group, all completed responses from employed participants residing in South Africa were included in the sample.

A total of 195 participants were sampled. Of those, 40 participants were removed, as the data were incomplete. These participants had answered less than 25% of the items in each scale in the survey and therefore warranted exclusion (Field, 2013). A further five participants were removed, as they were not employed at the time of data collection. The final sample consisted of 150 participants.

The final sample was made up of 59 male and 90 female employees, and one participant who preferred not to specify their gender. The mean age was 34.75, with participants' ages ranging from 16 to 67 years ($SD = 10.23$, $N = 150$). Table 1 shows that the sample obtained was not representative of the South African working population. The majority of the participants (60.7%) were white, had either a diploma or degree, and earned above R10 000 per month. Furthermore, the majority of the participants were also female. According to StatsSA (2017), the South African working population is made up of 73% black, 13% white, 11% Coloured, and 3% Indian/Asian workers.

Table 1

Demographic sample statistics (N= 150)

Variable	Frequency	Percentage
Gender		
Male	59	39.3%
Female	90	60%
Prefer not to answer	1	0.7%
Racial group		
African	24	16%
Asian	1	0.7%
Coloured	32	21.3%
White	91	60.7%
Prefer not to answer	2	1.3%
Salary		
< R2 000	8	5.3%
R2 000 – R5 000	35	23.3%
R5 000 – R7 000	1	0.7%
R7 000 – R10 000	12	8%
> R10 000	87	58%
Prefer not to answer	7	4.7%
Education		
Below Grade 9	9	6%
Grade 9	6	4%
Grade 10	9	6%
Grade 11	7	4.7%
Matric	26	17.3%
Diploma/degree	54	36%
Postgraduate	39	26%

3.3 Measuring Instruments

A survey instrument, both online and a paper-and-pencil version, including close-ended items was developed to collect data. A brief description of the study was provided on the survey cover page. This was followed by a demographic section, which required participants to indicate their gender, age, racial group, education, employment status, type of employment, and monthly income. This specific demographic information was necessary in order to determine whether the individuals included in the study were a representative sample of the target population, as outlined above. The original survey items are provided in Appendix D.

3.3.1 Survey Development

In order to assess whether the instrument would be easily understood by the target population, four individuals of different socio-economic statuses, genders, racial groups, and education levels were requested to complete the survey and provide thorough feedback on the survey. The four participants selected were:

1. a Coloured female; highest education: Grade 10; domestic worker in two different households
2. a Coloured female; highest education: Grade 9; paralegal
3. a white male; highest education: undergraduate degree; manager in a corporate setting
4. a Coloured female; highest education level: Master's student; part-time university tutor.

Based on their feedback and the researcher's prior knowledge of working with diverse cultural groups in previous research settings, the wording of certain items in the survey was changed. Appendices A, B and C provide details of the changes made.

3.3.2 Final Scales

The four scales described in the sections below were included in the questionnaire. All scales made use of a 5-item Likert scale response format, ranging from "1: strongly disagree" to "5: strongly agree". For all scales, a higher score indicated a higher level of the measured construct. Example items for each scale and subscale are provided in Table 2, as well as measures of internal consistency which found sound scale reliability in a number of studies, albeit all of these had been conducted with North American samples.

3.3.2.1 The decent work scale. The decent work scale (DWS), developed by Duffy, Velez, et al. (2017), is a 15-item instrument comprising five factors with three items each. It measures the degree to which participants' jobs fulfil five components of decent work: (a) physically and interpersonally safe working conditions, (b) access to adequate healthcare, (c) adequate compensation, (d) hours that allow for free time and rest, and (e) organisational values which complement family and social values (see also Section 2.2 providing an overview of the PWF). The rationale for choosing this scale is that it measures the exact construct of interest, namely decent work as defined by the PWT. To date, no other instrument exists which assesses all five psychological components of decent work.

3.3.2.2 The work need satisfaction scale. The work need satisfaction scale (WNSS), developed by Autin et al. (under review), is a 20-item scale used to measure the degree to which survival, social connectedness, and self-determination needs are fulfilled. Self-determination needs are made up of three components: competence, relatedness, and autonomy. The instrument thus comprises five factors, each measured with four items. This instrument was chosen as it was specifically developed for measuring the outcomes of decent work as proposed in the PWT.

3.3.2.3 The index of job satisfaction (work fulfilment). The index of job satisfaction (IoJS), developed by Brayfield and Rothe (1951), is a 5-item measure which measures the degree to which participants are satisfied with their jobs. It was used as a measure of work fulfilment, as job satisfaction is a feeling of fulfilment which is derived from doing a job. In the original scale, two items required reverse coding. Their wording was changed from 'each day of work seems like it will never end' to 'time passes quickly when I am at work' and 'I consider my job rather unpleasant to I consider my job pleasant', as research has shown that reverse-coded or negatively worded items can cause confusion (Van Sonderen, Sanderman, & Coyne, 2013). This scale has shown strong internal consistency and correlates with other measures of job satisfaction (Judge, Locke, Durham, & Kluger, 1998). It has also shown a high correlation with decent work (Duffy et al., 2017) and a good internal consistency reliability scale score of .87 in Autin et al.'s (under review) study.

3.3.2.4 The satisfaction with life scale (well-being). The satisfaction with life scale (SWLS), developed by Diener, Emmons, Larsen, and Griffin (1985), is a 5-item instrument used to measure the degree to which participants are satisfied with their lives in general. This

scale was chosen, as it was recommended by Duffy et al. (2016) as being the one that best captures their conceptualisation of well-being in the PWT.

Table 2

Summary of scales included in the study's survey instrument: Name of scale, subscales, number (no) of items per scale, example items and reliabilities found in prior studies.

Name of scale	Dimensions measured	No of items	Examples of items	Reliabilities
The decent work scale	Safe working conditions	3	I feel emotionally safe interacting with people at work.	.86 < α < .97 ^{1, 2}
	Adequate healthcare	3	I get good healthcare benefits from my job.	
	Adequate compensation	3	I am paid enough for my work.	
	Free time and rest	3	I have free time during the work week.	
	Organisational values	3	The standards/beliefs of my work match my family standards/beliefs.	
The work need satisfaction scales ³	Survival needs	4	My income allows me to have the resources to provide nutritious food for myself and my family.	.95 ²
	Social connectedness needs	4	My work allows me to feel like I am making a difference.	.94 ³
	Self-determination needs (competence)	4	I feel like I am good at my job.	.93 ³
	Self-determination needs (relatedness)	4	I feel like I fit in.	.93 ³
	Self-determination needs (autonomy)	4	Choose whether or not I have to do certain tasks.	.82 ³
The index of job satisfaction ⁴	Work fulfilment	5	I find real enjoyment in my work.	.87 ³
The satisfaction with life scales	Well-being	5	In most ways my life is close to my ideal.	.87 ⁶ ; .91 ³

¹ Duffy, Velez, et al. (2017); ² Douglass, Velez, Conlin, Duffy, & England (2017); Duffy, Allan, et al. (2017); ³ Autin et al. (under review); ⁴ Brayfield and Rothe (1951); ⁵ Diener, Emmons, Larsen, & Griffin (1985); ⁶ Pavot & Diener (2009)

3.4 Ethical Considerations

Before this study was carried out, ethical clearance from the Faculty of Commerce's Ethics in Research Committee was obtained. The approval letter is provided in Appendix G. The ethical research guidelines for conducting research with human participants (Sommers & Miller, 2013) of the American Psychological Association (APA) were adhered to in all aspects of the research. These aspects included obtaining informed consent from each participant, doing no harm to participants, ensuring anonymity and confidentiality, and respecting participants' privacy.

3.5 Procedure

After revising the scale items based on the feedback received (see Section 3.3.1), the amended questionnaire was administered to a sample of working individuals residing in the Western Cape, South Africa. The questionnaire was provided in English and took two forms: an online questionnaire set up in Qualtrics and a paper-and-pencil questionnaire. An electronic link was shared with potential participants via the researcher's social media platforms – Facebook, Twitter, and WhatsApp. The participants were able to access and complete the questionnaire using this link. Hard-copy questionnaires were distributed at locations at which the majority of people are known to be from lower income groups. In order to recruit participants, the researcher collected data at public places frequented by low-income individuals, such as taxi ranks and other public places. The researcher approached individuals while they were waiting in line for the next available taxi, and randomly asked individuals in public if they would be interested in participating in the study. A questionnaire and pencil were given to those who were willing to participate. The researcher waited while the participant completed the questionnaire, and assisted where clarification was required. Upon completion, the researcher collected the questionnaire and placed all data in a private file. Data collection was carried out over eight weeks. In total, 165 online responses and 30 hard-copy responses were collected.

3.6 Data Capturing and Statistical Analysis

The collected data were captured, cleaned, and analysed using IBM's Statistical Package for Social Sciences (SPSS) version 25. The data obtained via the online questionnaires

were exported from Qualtrics into SPSS, and hard-copy responses were manually entered into SPSS. Once all data had been captured on SPSS, the data were cleaned by removing incomplete data, outliers, and coding data, and reliability and validity analyses were run for each scale. Scale scores were formed to run descriptive statistics and analyse the study hypotheses. A number of correlation and regression analyses were run to test the hypotheses.

In summary, Chapter 3 discussed the research process undertaken in this study, which included the study's research design, sampling procedures, the sample, the instruments used to measure the different variables of interest, ethical considerations, the procedure which was followed and how data were captured, cleaned and analysed. In chapter 4 the study's finding and statistical data are discussed.

Chapter 4: Results

In this chapter the study's main findings and their associated statistical data are provided. These findings are presented in the following order: validity analyses, reliability analyses, descriptive analysis, and results related to the hypotheses.

A preliminary analysis was conducted to inspect for outliers and normality. All variables had a kurtosis value ranging between 0 and 3, indicating that the variables were normally distributed and were unlikely to include outlier scores.

4.1 Scale Validity

A scale can be deemed valid when appropriate inferences can be made about the results of an assessment. Thus, having valid scales is crucial to ensure that the scores actually represent the variable they are intended to and to ensure accurate interpretation of the results (Field, 2013). The validity of the scales was assessed using principal axis factoring (PAF) with direct oblimin rotation. PAF is an analysis that attempts to simplify common variance amongst a set of different variables (Field, 2013). Direct oblimin rotation is an oblique rotation used to simplify interpretations of the factor structure, whilst allowing factors to be correlated. A direct oblimin rotation was preferred, as the factor correlation matrix revealed values over $\pm .32$, indicating correlation between factors (Brown, 2009). The Kaiser-Meyer-Olkin (KMO) measure and Bartlett's test of sphericity were used to determine if the data was appropriate for PAF to be conducted. The KMO is the measure of sampling adequacy, which can vary between 0 and 1. A KMO value of $> .50$ is deemed adequate (Kaiser, 1970). Bartlett's test of sphericity tests the null hypothesis that the correlation matrix has an identity matrix, which indicates that variables are unrelated and therefore unsuitable for structure detection. Bartlett's test of sphericity should be significant, as this indicates that the items in the scale correlate with one another (Field, 2013). These tests provide the minimum standard to be met in the dataset in order to proceed with PAF.

Kaiser's (1970) criterion was used to determine how many components to retain. Factors with eigenvalues > 1 were considered relevant. In order to determine which items belong to the factor, factor loadings were considered. According to Field (2013), loadings $> .40$ can be considered significant. Table 2 summarises the validity analyses for all scales. Tables 8E to 17E in Appendix E show the complete validity results: eigenvalues, explained variance, and factor loadings of each variable.

Separate PAFs were run across each scale's items, as the sample size did not allow for one PAF to be run across all items together (Browner & Newman, 1989).

Table 3

KMO values and Bartlett's test results, eigenvalues of retained factors (> 1), and range of rotated loadings for the DWS, WNSS, work fulfilment scale, and general well-being scale

Variable	KMO	Bartlett's test of sphericity	Eigenvalues > 1	Rotated solution:	
				Explained variance %	Factor loadings
Decent work	.83	$X_{2105} = 1710.14^*$	6.10	40.6	.79 < r > .92
			2.61	17.4	.84 < r > .97
			1.58	10.52	-.81 < r > -.94
			1.20	7.72	.57 < r > .98
			1.10	7.22	.66 < r > .81
Work fulfilment	.83	$X_{210} = 464.55^*$	3.47	69.41	.55 < r > .90
General well-being	.87	$X_{210} = 413.02^*$	3.49	69.78	.73 < r > .90

* Bartlett's test of sphericity is significant at $p < .001$

4.1.1 Validity of the Work Fulfilment and General Well-Being Scales

The factor structures for the well-being, work fulfilment, and decent work scales were as expected. The well-being and work fulfilment items loaded as expected, each on one factor. The averages across the well-being items and work fulfilment items were taken to indicate participants' overall general well-being and work fulfilment, respectively. All items belonging to the DWS loaded as expected, on five factors.

4.1.2 Validity of the DWS

Each participant was allocated a score on each of these subscales by averaging his or her response to the items belonging to the subscale, resulting in five subscale scores. A second PAF was then run across the five subscale scores to see if they could be grouped into one overall decent work factor, after the KMO value (.78) and Bartlett's test of sphericity results ($X_{210} = 171.08$, $p < .001$) had indicated the data's suitability for factor analysis. A factor with

an eigenvalue of 2.5 explaining 49.99% of the subscale was the only factor with an eigenvalue above 1. Adequate compensation (.44), free time and rest (.20), safe working conditions (.23), and beliefs and values (.25) loaded significantly on this factor, but adequate healthcare (.04) did not. For this reason, adequate healthcare had to be assumed as not contributing to the DWS in this sample.

To confirm that the remaining four aspects of decent work still loaded together after removing the health subscale, another PAF was conducted (KMO = .78, Bartlett's test of sphericity: $X_{26}^2 = 163.51, p < .001$). The results showed that one factor explained 61.08% of the variance in the four subscale scores (eigenvalue: 2.44) and all subscales loaded significantly on this overall factor ($.64 < r < .79$) (see Table 10E in Appendix E), which was then assumed to indicate decent work. Participants were thus allocated the average across the four subscale scores as the degree to which their work was decent.

4.1.3 The WNSS

The WNSS, by Autin et al. (under review), assumed a five-factor solution indicating survival needs, social connection needs, SDT competence needs, SDT relatedness needs, and SDT autonomy needs. In this sample, the PAF revealed a four-factor structure with a KMO value (.90) and Bartlett's test of sphericity ($X_{2190}^2 = 2082.29, p < .001$) deeming the data suitable for factor analysis. Four factors had eigenvalues > 1 . The first factor explained 47.22% of the variance (eigenvalue: 9.45), the second factor explained 9.29% of the variance (eigenvalue: 9.29), the third factor explained 8.26% of the variance (eigenvalue: 1.65), and the fourth factor explained 7.32% of the variance (eigenvalue: 1.47) in the scale. To interpret the factor structure, the rotated factor loadings were considered. As seen in Table 3, the factors were made up of eight, four, four, and five items.

Table 4

Four-factor solution and item factor loadings for the WNSS

Items	Factors			
	SDT relationship + autonomy	SDT competence	Survival needs	Social connection needs
<i>My work allows me to:</i>				
Choose whether or not I have to do certain tasks.	.82			
Feel free to do things my way.	.82			
Feel like I belong.	.71			
Do tasks the way I want.	.64			
Feel like I fit in.	.63			
Feel supported by others.	.60			
Feel understood by others.	.56			
Take actions that promote my real needs.	<u>.44</u>			<u>.43</u>
Feel like I know what I am doing.		.87		
Feel like I am good at what I do.		.76		
Feel like I am good at my job.		.66		
Feel competent.		.65		
Feel a part of something greater by helping to sustain the world.			.87	
Feel like I am doing something important for my community.			.85	
Give to the greater social good.			.73	
Feel like I am making a difference.			.53	
<i>My income allows me to:</i>				
Pay for utilities, such as water and electricity, on time.				.79
Provide nutritious food for myself and my family.				.73
Maintain the health of myself and my family.				.68
Pay for adequate housing for my family.				.55

Furthermore, one item, WNSS item 4 “My work allows me to take action to promote my real needs” cross-loaded on two factors (See Appendix E, validity table 13E). According to Beavers et al. (2013), a complex variable, or a variable that loads on more than one factor, should be removed if the difference in loadings is smaller than .20. Thus, item 4 was removed and a new PAF was run, presenting a refined solution with no cross-loadings. In this sample, the PAF revealed a four-factor structure with a KMO value (.90) and Bartlett’s test of sphericity ($X_{2171} = 1992.13, p < .001$) deeming the data suitable for factor analysis. Four factors had eigenvalues > 1 . The first factor explained 47.37% of the variance (eigenvalue: 9), the second factor explained 9.62% of the variance (eigenvalue: 1.83), the third factor explained 8.24% of the variance (eigenvalue: 1.57) and the fourth factor explained 7.62% of the variance (eigenvalue: 1.45) in the scale. To interpret the factor structure, the rotated factor loadings were considered. As seen in Table 4, the factors were made up of seven, four, four, and four items. The four factors indicated SDT relationship + autonomy needs, SDT competence needs, survival needs, and social connection needs. Thus, in this sample SDT autonomy and SDT relatedness needs formed one and not two separate factors. The averages across the survival need items, social connection items, SDT competence items, and SDT relationship + autonomy items were taken to indicate participants’ overall general survival needs, social connection needs, SDT competence needs, and SDT relationship + autonomy needs, respectively.

Table 5

Four-factor solution and item factor loadings for WNSS after removing cross-loaded item

Items	Factors			
	SDT relationship + autonomy needs	SDT competence needs	Social connection needs	Survival needs
<i>My work allows me to:</i>				
Feel free to do things my own way.	.83			
Choose whether or not I have to do certain tasks.	.81			
Feel like I belong.	.72			
Feel like I fit in.	.65			
Do tasks the way I want.	.64			
Feel supported by others.	.60			
Feel understood by others.	.56			

Feel like I know what I am doing.	.86	
Feel like I am good at what I do.	.76	
Feel like I am good at my job.	.65	
Feel competent.	.64	
Feel a part of something greater by helping to sustain our world.		-.87
Feel like I am doing something important for my community.		-.85
Give to the greater social good.		-.74
Feel like I am making a difference.		-.54
<i>My income allows me to:</i>		
Pay for utilities, such as water and electricity, on time.		.79
Provide nutritious food for myself and my family.		.72
Maintain the health of myself and my family.		.68
Pay for adequate housing for my family.		.55

4.2 Reliability

An instrument can be deemed reliable when it can be interpreted consistently across different situations. Thus, a reliable instrument reflects stability and accuracy (Field, 2013). Cronbach's alpha and the corrected item correlations were used to determine the reliability of the scales used in this study. A Cronbach value of .70 is generally considered acceptable (Tavakol & Dennick, 2011). A corrected item-total correlation $< .3$ is regarded as non-significant and suggests that the item should be omitted from the scale, as it does not correlate significantly with the scale overall (Field, 2013). Table 5 shows the Cronbach alpha coefficients and ranges of corrected item-total correlations of each scale. All scales indicated an alpha value of above .70 and can be accepted as reliable. See Appendix E for all corrected item-total correlations in Reliability Table 18E-24E).

Table 6

Cronbach's alpha and corrected item-total correlation for the DWS, WNSS, work fulfilment scale and general well-being scale

Variable	No of scale items	Cronbach's alpha	Range of corrected item-total correlations
Decent work			
Adequate compensation	3	.92	.81 < <i>r</i> > .87
Free time and rest	3	.92	.80 < <i>r</i> > .85
Safe working conditions	3	.81	.64 < <i>r</i> > .70
Values and beliefs	3	.86	.62 < <i>r</i> > .84
Work need satisfaction			
SDT relationship + autonomy	7	.92	.72 < <i>r</i> > .80
SDT competence	4	.88	.71 < <i>r</i> > .78
Survival	4	.87	.69 < <i>r</i> > .80
Social connection	4	.89	.72 < <i>r</i> > .83
Work fulfilment	5	.89	.52 < <i>r</i> > .83
General well-being	5	.89	.68 < <i>r</i> > .83

Note: Appendix E, Tables 18E to 24E provide all corrected item-total correlation values.

4.3 Descriptive Analysis

Descriptive statistics were used to determine the mean, standard deviation, minimum and maximum for all variables of interest in the study. The results are shown in Table 6 and indicate that the participants, on average, experienced decent work, work need satisfaction, work fulfilment, and well-being, as all scales had a mean score above 3.

Table 7

Mean (M), minimum (Min), and maximum (Max) scores and standard deviations (SD) for the scales used in this study (N = 150)

Variable	M	Min	Max	SD
Decent work	3.55	1	5	.75
Work need satisfaction				
Survival needs	3.89	1	5	.82

Social connection needs	3.55	1	5	.90
SDT competence needs	4.05	1	5	.64
SDT relationship + autonomy needs	3.56	1	1	.83
Work fulfilment	3.65	1	5	.78
Well-being	3.33	1	5	.87

The bivariate correlations between all study variables are shown in the intercorrelation matrix in Table 7. All correlations were positive, indicating a significant relationship between decent work, WNS SDT competence needs, WNS SDT relationship + autonomy needs, WNS survival needs, WNS social connection needs, work fulfilment, and general well-being.

Table 8

Correlations matrix for decent work, work need satisfaction, work fulfilment, and well-being

Variable	1	2	3	4	5	6	7
1. Decent work	—						
2. WNS: SDT Competence needs	.42**	—					
3. WNS: SDT relationship + autonomy needs	.73**	.57**	—				
4. WNS: Survival needs	.55**	.49**	.65**	—			
5. WNS: Social connection needs	.55**	.52**	.65**	.55**	—		
6. Work fulfilment	.69**	.46**	.71**	.49**	.59**	—	
7. General well-being	.61**	.38*	.71**	.57**	.56**	.67**	—

* Correlation is significant at $p < .05$ ** Correlation is significant at $p < .001$

Considering Cohen's (1988) conventions, the effect size between decent work, WNS SDT relationship + autonomy, work fulfilment, and general well-being was particularly high. All other relationships had a medium to large effect size. These results suggest that work need satisfaction could be a mediator between decent work and work fulfilment/general well-being.

4.4 Results related to the study hypotheses

To test the two hypotheses – decent work predicts (a) work fulfilment and (b) general well-being via its relationship with needs fulfilment – regression analyses were conducted using Hayes' (2013) PROCESS model for mediation analysis (Figures 5 and 6). According to Green (1991), the minimally sufficient sample size for multiple regression to reveal meaningful results can be determined by using the following equation: $N > 50 + 8(m)$, where m represents the number of independent variables in a regression equation. In this case, there were four independent variables (decent work, fulfilment of survival needs, social connection needs, two social determination variables). Thus, a minimum sample of $N = 82$ ($N > 50 + 8(4)$) would have been required, indicating that the obtained sample size of $N = 150$ was an adequate size.

The results have been outlined separately for each of the two hypotheses.

4.4.1 Hypothesis 1

The more a person perceives his or her work as decent, the greater the fulfilment of survival needs, social connection needs, and self-determination needs, which in turn predicts work fulfilment.

Survival needs (M₁), social connection needs (M₂), SDT competence needs (M₃), and SDT relationship + autonomy needs (M₄) were entered as mediators in the regression model. Decent work served as the independent variable and work fulfilment as the dependent variable. To ensure that the results produced by the analysis were not biased and thus appropriate, a number of assumptions were assessed and found to be met (see Appendix F for multiple regression assumptions). Approximately 48% of the variance in work fulfilment was accounted for by the independent and mediator variables (adjusted $R^2 = .48$, $F_{1,146} = 132.78$, $p = .001$).

The results in Figure 5 show that decent work was significantly related to all four mediators (a-paths). Thus, decent work was a significant predictor of survival needs ($b = .60$, $SE = .07$, $t = 8.02$, $p < .001$), social connection needs ($b = .67$, $SE = .08$, $t = 8.05$, $p < .001$), SDT competence needs ($b = .35$, $SE = .06$, $t = 5.48$, $p < .001$), and SDT relationship + autonomy needs ($b = .81$, $SE = .06$, $t = 13.12$, $p < .001$). Furthermore, the results demonstrated that social connection needs ($b = .14$, $SE = .07$, $t = 2.19$, $p < .05$) and SDT relationship + autonomy needs ($b = .35$, $SE = .09$, $t = 3.79$, $p < .002$) were significant predictors of work fulfilment (b-path). However, the results showed that survival needs ($b = -.04$, $SE = .07$, $t = -.60$, $p = .55$) had nearly no effect on work fulfilment. Similarly, competence needs ($b = .06$, $SE = .08$, $t = .68$, $p = .50$) did not predict work fulfilment.

As seen in Figure 5 (path c), the results showed that decent work was significantly related to work fulfilment. The indirect effect was tested using a bootstrap estimation approach with 1 000 samples ($b = .72$, $SE = .06$, $t = 11.53$, 95% CI [.60, .84]). The results also indicated that the direct effect (path c') of decent work on work fulfilment was significant ($b = .35$, $SE = .08$, $t = 4.14$, 95% CI [.18, .52]). That is, the effect of decent work on work fulfilment, when controlled for the effect of the mediators, was reduced but still significant. This result is consistent with partial mediation, as all three paths are statistically significant (Baron & Kenny, 1986).

It can thus be concluded that the results for social connection needs and SDT relationship + autonomy needs support the mediation hypothesis. This implies that the greater a person's perception of decent work, the greater the fulfilment of social connection needs and SDT relationship + autonomy needs, which in turn predicts work fulfilment.

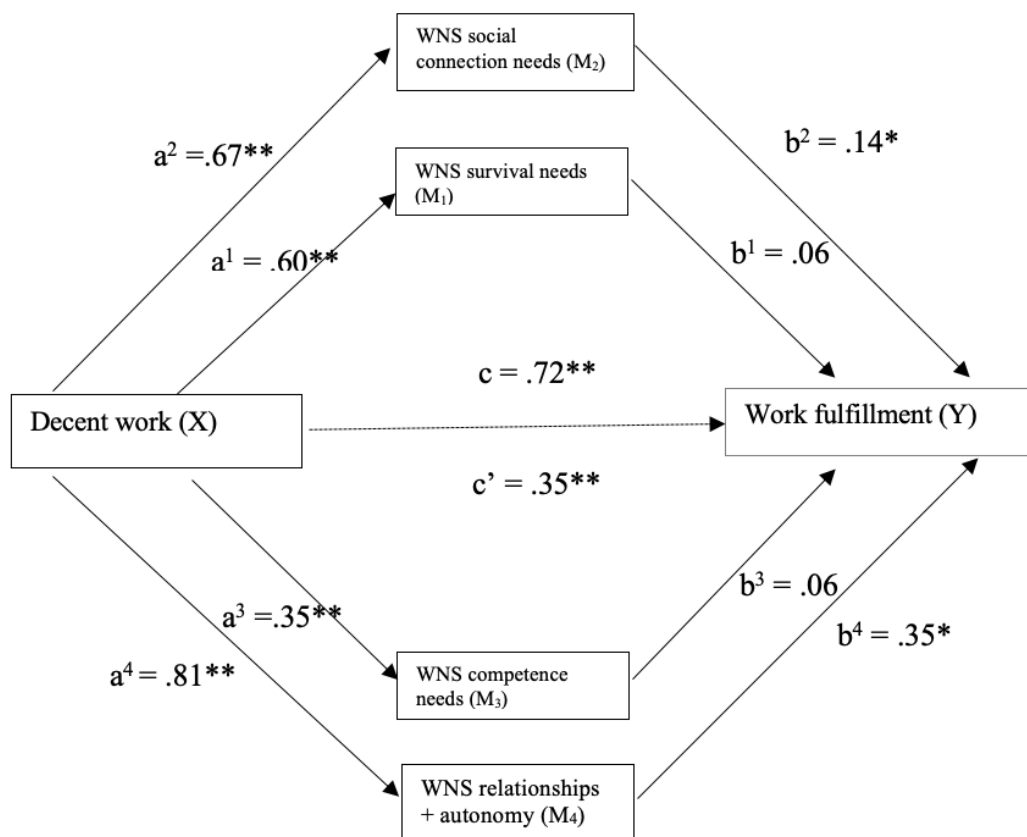


Figure 5. Results of mediation analysis between decent work and work fulfillment, mediated by survival needs, social connection needs, SDT competence needs, and SDT relationship + autonomy needs

* Correlations significant at $p < .05$ ** Correlations significant at $p < .001$

4.4.2 Hypothesis 2

The more a person perceives his or her work as decent, the greater the fulfillment of survival needs, social connection needs, and self-determination needs, which in turn predicts general well-being.

A second regression analysis was run to investigate if survival needs (M₁), social connection needs (M₂), SDT competence needs (M₃), and SDT relationship + autonomy needs (M₄) mediate the effect of decent work on well-being (DV) among workers in the Western Cape. Regression assumptions were checked and found to be met (see Appendix F for regression assumptions). Associations of decent work with the possible mediators (survival, social connection, SDT competence, and SDT relationship + autonomy needs) were examined.

The results in Figure 6 show that decent work was significantly related to all four mediators: survival needs ($b = .60, SE = .07, t = 8.02, p < .001$), social connection needs ($b = .67, SE = .08, t = 8.05, p < .001$), SDT competence needs ($b = .35, SE = .06, t = 5.48, p < .001$), and SDT relationship + autonomy needs ($b = .81, SE = .06, t = 13.12, p < .001$) all indicated significant a-paths.

The regression analyses of social connection needs ($b = .15, SE = .08, t = 2.04, p < .05$), SDT relationship + autonomy needs ($b = .49, SE = .11, t = 4.6, p < .001$), and survival needs ($b = .16, SE = .08, t = 1.97, p < .05$) demonstrated a significant relationship with general well-being. However, SDT competence needs did not have a significant relationship with well-being ($b = -.14, SE = .10, t = -1.48, p = .14$). Thus, the results for survival needs, social connection needs, and SDT relationship + autonomy needs support the mediation hypothesis. Furthermore, as seen in Figure 6 (path c), the results showed that decent work was significantly related to work fulfilment ($b = .71, SE = .08, t = 9.36, p < .001, 95\% CI [.56, .86]$). However, the results also demonstrated that the direct effect (path c') of decent work on work fulfilment was not significant ($b = .17, SE = .10, t = 1.69, p = .09$). That is, the effect of decent work on work fulfilment, when controlled for the effect of the mediators, was considerably reduced and no longer significant. The fact that the influence of decent work was not significant once it was adjusted for the set of mediators indicated that the mediators completely mediated the effect of decent work on work fulfilment (Baron & Kenny, 1986).

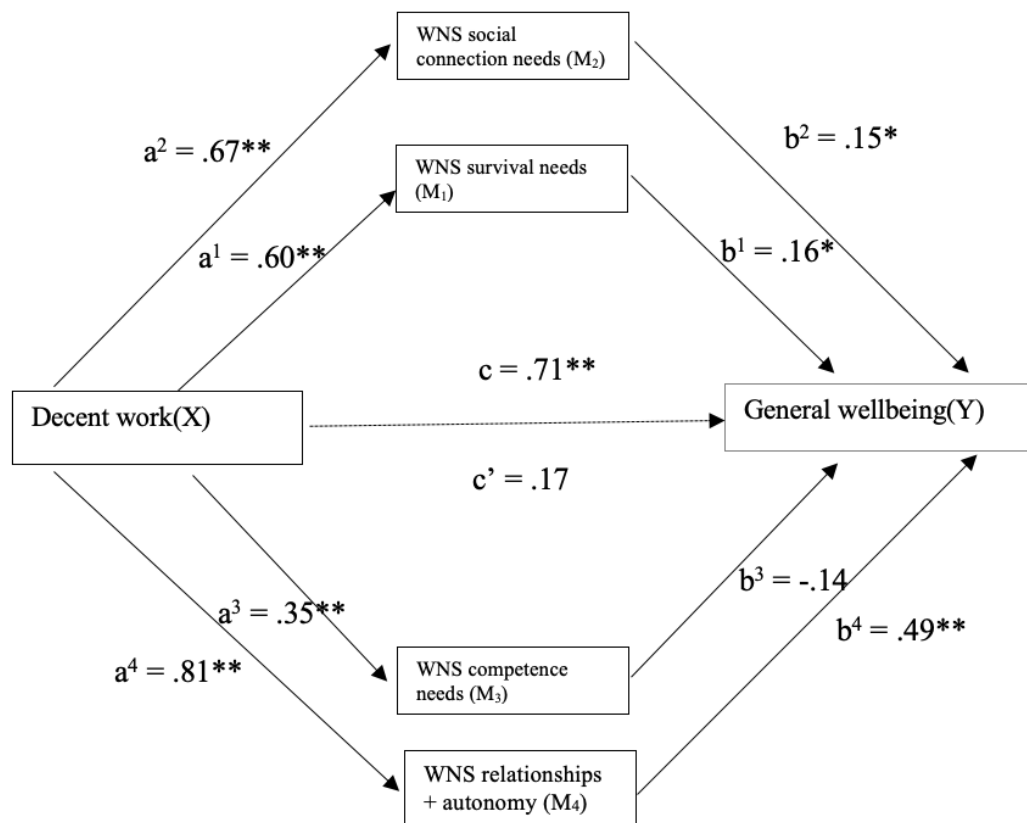


Figure 6. Regression coefficients for the relationship between decent work and work fulfilment, mediated by survival needs, social connection needs, SDT competence needs, and SDT relationship + autonomy needs

* Correlations significant at $p < .05$ ** Correlations significant at $p < .001$

As the first part of both hypotheses analysed whether decent work are related to the four needs (mediators), the results are identical. These results were also in line with figure 2, providing theoretical support for the relationship between decent work and need satisfaction (Duffy et al., 2016). As for the second part of the model not all relationship were significantly related, which also differed from the expected theoretically and empirically supported relationships in figure 2. The relationship between social connection needs and work fulfilment and general well-being showed to be significantly related. Similarly, the relationship between SDT relationship + autonomy and work fulfilment and general well-being were significantly related. In hypotheses one, social connection needs was not significantly related to work fulfilment, whereas in hypothesis two social connection needs was significantly related to general well-being. In both hypothesis one and two SDT competence needs and work fulfilment and general well-being were not significantly related.

Chapter 4 discussed the results of all analyses. The following chapter provides an interpretation of the results as viewed against prior literature, and provides possible reasons for the results obtained.

Chapter 5: Discussion

This study attempted to determine whether having decent work can be linked to work fulfilment and general well-being due to its link to the satisfaction of survival needs, social connection needs, and self-determination needs. It was hypothesised that the more individuals perceive their work as decent, the greater their fulfilment of need satisfaction, which in turn predicts their work fulfilment and general well-being. The particular needs considered were WNS survival needs (reflecting the ability to access food and adequate housing through work), WNS social connection needs (reflecting the basic desire to connect to others and broader society), WNS SDT competence needs (the need to have control in navigating one's environment and experience mastery), WNS SDT autonomy needs (the need to be the causal agent in one's life), and WNS SDT relatedness needs (the nature of relationships with others). The results indicated that relatedness and autonomy did not emerge as different needs, but as one. Decent work, as expected, was made up of safe working conditions, hours that allow for free time and adequate rest, organisational values that complement family and social values, adequate compensation, and access to adequate healthcare; however, adequate healthcare did not fall under the concept of decent work for the South African sample used.

The results provided empirical support for the main hypotheses. The findings suggested that the satisfaction of (a) survival needs, (b) social connection needs, (c) SDT competence needs, and (d) SDT relationship + autonomy needs mediates the relationship between decent work and work fulfilment as well as the relationship between decent work and general well-being.

This chapter provides an interpretation of the results as viewed against prior literature, and provides possible reasons for the results obtained. Limitations of the research and recommendations are outlined and implications for stakeholders are highlighted in the concluding section.

5.1 Interpretation of Findings

5.1.1 The Concept of Decent Work (Specifically Adequate Healthcare) in South Africa

Contrary to what one would expect, adequate healthcare did not emerge as a component of decent work in this study. Duffy, Allen, et al. (2017) developed the DWS within a US context and during a time when many employees received healthcare support from their employers

(any organisation in the USA with 50 or more employees is obliged to provide their employees with health insurance). According to Collective Health (2018), 151 million Americans receive healthcare coverage through an employer-sponsored health benefit plan. Notwithstanding some controversy and potential changes in policies under President Donald Trump, the Patient Protection and Affordable Care Act (PPACA), otherwise known as Obamacare, is a law enacted to ensure that all Americans had access to affordable health insurance.

In South Africa, on the other hand, it is not mandatory for employers to provide healthcare (leave days for illness are compulsory, however). South African companies who do offer healthcare benefits generally only contribute 50% of an employee's monthly healthcare costs, and this is normally reserved for higher income permanent workers (Du Preez, 2015). Furthermore, healthcare options provided by employers generally mean provision of private healthcare. Public healthcare is affordable to everyone, as it is charged on a sliding scale depending on income. It is thus free for those with minimal means, although the quality of healthcare provided is basic and can be substandard due to being chronically underfunded and understaffed (Nevhutalu, 2016).

In the middle of 2018, the state announced the potential implementation of a National Health Insurance (NHI) scheme, which is a financing system (funded by tax payers and the government) that will ensure that all citizens of South Africa are provided with essential quality healthcare, regardless of their employment status and socio-economic status (Government of South Africa, 2018) – a scheme similar to the PPACA. In theory, when implemented, this scheme should benefit the majority of South Africans currently excluded from adequate healthcare, even those not employed; however, when and how the plan will be rolled out has not been specified. If this plan is not followed through, the issue around adequate healthcare might fall back on employers.

It is a known fact that healthy employees are more productive and absent less often, which in turn is financially beneficial for organisations (O'Brien, 2003). It might not be in every South African company's capacity to provide healthcare or medical aid to their employees, but those who can should and those not able to should have health interventions in place, such as regular health checks. These checks should screen for HIV/AIDS, TB, diabetes, high or low blood pressure, and general mental health problems, such as depression, trauma, and anxiety. These screens can act as preventative measures or identify health-related problems which need immediate attention. In this way organisations can become more desirable to work for (O'Brien, 2003) and enjoy higher presenteeism.

The PWT, however, is interested in understanding the experiences of the majority of working individuals: those living close to the breadline, who experience discrimination and marginalisation. In South Africa, this encapsulates the majority of employed individuals. Precarious, part-time, temporary, and once-off jobs are the norm for more than 50% of the South African population. Casual labourers, such as domestic workers or gardeners, working in a one-on-one employer–employee relationship do not receive any healthcare options from their employers. They are reliant on state-provided healthcare, which is, as mentioned above, unreliable and at times unattainable. The NHI plan will allow for all individuals to have equity in access to health services, thus those who needs services will get them, and not only those who can pay for these services. Secondly, the NHI will ensure quality health services that is good enough to improve the health of those receiving services. Thirdly, the plan will protect individuals against financial risk, ensuring that the cost of using services does not put people at risk of financial harm (Daily Maverick, 2018). Ultimately, by implementing the NHI plan, South Africa’s healthcare would be in line with the World Health Organisations definition of universal health cover (a system that provides quality medical services to all citizens) (Amadeo, 2018).

However, until the majority of workers have access to this tripartite healthcare, the onus for providing adequate healthcare rest with the employer. Employers should not only reserve quality healthcare benefits for a selected few at the higher end of the income bracket. But rather implement healthcare support on a sliding scale based on monthly income. Those employees on the lower end of the income spectrum should receive more healthcare support and those at the higher end of the income spectrum should receive less, as these employees are more likely to meet their healthcare needs out of their income.

5.1.2 The Interrelatedness of SDT Autonomy and SDT Relatedness Needs among South African Low-Income Workers

Similarly, the factors of the WNSS (Autin et al., under review) differed from expectations, as the needs for SDT autonomy and SDT relatedness did not form separate needs, but fell into the same needs cluster (SDT relationship + autonomy). According to van Marle (2000, p. 353), autonomy means to be “governed by one’s own law”. Furthermore, she argues that one’s capacity to find “one’s own law can develop only in the context of relations with others who nurture this capacity” (van Marle, 2000, p. 353). Similarly, Black (2002) has explored the meaning of autonomy and emphasises autonomy as being reliant on mutual trust,

which informs the relationship between parties. Thus, in this study it can be argued that the relation between autonomy and relatedness is rooted in trust.

The World Competitiveness Report for 2017–2018, released by the World Economic Forum (WEF), revealed that South Africa is the country with the worst labour–employer relations in the world. This result is based on the prevalence of mistrust between employees and employers, a situation that has been cultivated over many years, specifically as an after-effect of apartheid (Cillié, 2018). In these low-trust relationships, employees are likely to be micromanaged by their employers, which negates any possibility of acting with autonomy. On the other hand, if a good employee–employer relationship is present – that is, a greater level of trust between the employee and the employer – employee autonomy is likely to increase. Thus, in this study, trust is the variable that makes autonomy and relatedness hang together. In the World Competitiveness Report, the WEF rated the United States in second place, based on their good labour–employer relations (Sala-i-Martin, 2017). The differences between the current South African sample and the American sample used by Autin et al. (under review) when developing the WNNS likely explain the different factor structures in both samples. Workers might experience higher levels of autonomy when they have good relationships with their employers, and vice versa: a bad relationship may lead to having less autonomy at work.

5.1.3 Decent Work, Work Need Satisfaction, and Work Fulfilment

In line with the PWT (Duffy et al., 2016), the study's first hypothesis stated that the more a person perceives his or her work as decent, the greater the fulfilment of their survival needs, social connection needs, and self-determination needs, which in turn is related to greater work fulfilment. It was found that there is a direct link between decent work and work fulfilment, indicating that changes in decent work result in changes in work fulfilment. However, it was also found that the relationship between decent work and work fulfilment is partially explained through the needs. Furthermore, the results revealed that decent work predicts the degree of fulfilment of all assumed work needs (survival, social connection, and autonomy + relatedness and competence needs as aspects of self-determination), but only the fulfilment of social connection needs and the fulfilment of autonomy + relatedness needs were predictors of work fulfilment. The following section discusses these results.

5.1.3.1 The relationship between decent work and work need satisfaction. In line with Anker, Chernyshev, Egger, Mehran, and Ritter's (2003) theoretical contribution, this

study provides empirical evidence that decent work helps individuals meet their survival needs, which reflect having sufficient resources for food and shelter. As one of the aspects of decent work is adequate compensation, it can be argued that not having adequate compensation affects the experience of decent work, which in turn affects the satisfaction of survival needs. Not having enough resources limits an individual's ability to satisfy his or her basic needs, such as food and shelter. In South Africa, approximately 5.5 million people form the working poor. These are people who are employed (in precarious settings), but who are still not making enough money to satisfy their basic survival needs for food, or for shelter (Craven, 2017). Thus, lacking this aspect of decent work affects how an individual perceives his or her work.

Similarly, the relationship between decent work and social connection needs has been empirically supported. According to Blustein (2006; 2011), work acts as a pathway for social connection. Individuals have an inherent need to connect to others, to share experiences, form attachments, and have a sense of belonging. Work has the potential to satisfy these inherent connection needs as, firstly, it provides a venue for social interaction and, secondly, workplaces with positive climates can provide workers with relationships that help to furnish a sense of meaning and connection in life (Blustein, 2011). Thus, the current study provides empirical support for the relationship between decent work and social connection needs. It follows that if an individual's work allows for positive interaction with others, he or she will experience greater fulfilment of social connection needs.

The relationship between decent work and SDT competence needs has been empirically supported. This result shows that as the experience of decent work increases, the fulfilment of an individual's competence needs increases. The different elements of decent work thus affect an individual's experience of competence needs. It can be argued that not having decent work – that is, having work that is unpredictable, uncertain, and undependable – makes it difficult for an individual to feel that he or she is effective in dealing with the work environment, as the work environment is ever-changing. The same can be argued for the relationship between decent work and SDT relationship + autonomy needs, which was found to be empirically supported. Again, if work is not decent – that is, unpredictable, uncertain, and undependable – it would be very difficult for an individual to form a good relationship or connection with his or her employer. This may result in low trust on the part of both the employer and employee, which in turn affects how autonomous an employee can be. This argument is supported by the ILO (2018), which states that without social dialogue between employees and employers, there can be no relationship and thus no trust. When work is experienced as decent, social dialogue is more likely.

5.1.3.2 The relationship between need satisfaction and work fulfilment.

According to Duffy et al. (2016), the relationships between survival needs, social connection needs, self-determination needs, and work fulfilment have been supported both theoretically and empirically. This section discusses similarities and differences between past studies and the current study and attempts to provide insight into these differences.

In 1996, Clark and Oswald found that individuals who have lower income levels are less likely to meet their survival needs, which is likely to cause dissatisfaction with their jobs. Similarly, Duffy, Allan, Autin, and Bott (2013) and Duffy and Autin (2013) found that individuals from higher income groups were more likely to live out their callings, which was reflected in their experience of fulfilment in their jobs. Contrary to these findings, the current study suggests that survival needs are not related to work fulfilment. Thus, receiving an income sufficient to access resources such as food and housing, to pay for utilities, and to maintain health did not result in greater levels of work fulfilment. It can be argued that work fulfilment is linked to an individual's intrinsic needs and that satisfying an extrinsic need, such as food and shelter, does not directly influence an individual's intrinsic needs.

Similarly, employees' belief in their work abilities (i.e., believing that they are good at their jobs and competent in what they are doing) was not related to work fulfilment. One study found that employee competence, conceptualised as an employee's personal ability, was positively associated with job satisfaction (work fulfilment) (Jeong, Aejoon, & Chen, 2014). This finding is contrary to the finding of the current study. A reason for the difference in findings could be that the current sample mainly comprised lower and middle income workers holding tedious and repetitive jobs, for example domestic work, basic administrative work, or security assistant jobs – that is, jobs which are not difficult to master – in which the simplicity of the nature of the job gave them a sense of competence. It is also the simple and repetitive nature of the job which likely determines the poor relationship between feelings of competence and fulfilment in their work. Eshaghi and Ghasemabadi (2013) looked at job satisfaction among domestic workers – lower income workers performing tedious and repetitive jobs in Mysore City – and found in their sample that this type of job was negatively associated with job satisfaction (work fulfilment).

The empirical evidence in this study shows that the fulfilment of social connection needs and work fulfilment are connected, in that those whose social connection needs are more fulfilled also have higher levels of general work fulfilment. This finding is in line with existing findings and literature, underscoring the fact that an increase in social connections increases

workplace satisfaction. Findings by Tumen and Zeydanli (2016) showed that positive social interactions increase employees' job satisfaction. Similarly, Lampinen, Viitanen, and Konu (2015) found that having close meaningful relationship at work is related to job satisfaction. A recent study by Pirmoradi, Foroghinejad, and Bedmeshki (2017) found a significant relationship between job satisfaction and social support. In the current study, this relationship demonstrates that an employee's ability to contribute to the greater social good or to feel like he or she is doing something good for others is associated with fulfilment at work. This may be as doing something good gives one a sense of purpose at work, which might contribute to the experience of satisfaction in the workplace.

Further, this study also shows that there is a connection between SDT relationship + autonomy needs and work fulfilment. Thus, if employees have good relationships with their employers, there is trust in the relationship, which allows the employees to feel that they have some autonomy, which is positively associated with being fulfilled at work. Chung (2017) explored the relationship between job autonomy and job satisfaction. She found that job autonomy significantly predicted job satisfaction in the workplace. Similarly, Bradley, Taylor, and Anh (2003) found that job autonomy was a highly significant predictor of job satisfaction. According to Kumar and Saha (2017), trust is fundamental to having good relationships at work and trust, in turn, is linked to job satisfaction. Furthermore, Nys (2015) argues that without trust, defined as relations between parties, autonomy is impossible. This is in line with the current study and explains why SDT relationship + autonomy needs are connected to work fulfilment. It can be argued that, when employees work in an environment where the relationship between the employee and the employer is based on trust, and employees feel that they are trusted to do things in their own way, they feel greater fulfilment at work.

5.1.3.3 Interpretation of the model in its entirety. To date, no study has tested the exact mediating relationship between decent work, need satisfaction, and work fulfilment. Looking at the model holistically provides empirical evidence that decent work is related to work fulfilment, with and without controlling for the needs. This means that there is a connection between decent work and work fulfilment. However, there is also a link between decent work and need satisfaction, as the satisfaction of those needs is related to work fulfilment. These results indicate partial mediation. Thus, survival needs, social connection needs, SDT competence needs, and SDT relationship + autonomy needs accounted for some, but not all, of the change in the relationship between decent work and work fulfilment.

5.1.4 Need Satisfaction and General Well-Being

The second hypothesis assumed that a person who perceives his or her work as decent experiences greater general well-being, as decent work fulfils survival needs, social connection needs, and self-determination needs. As with Hypothesis 1, the study data supported the hypothesis. Thus, greater fulfilment of any of the needs, except the need for SDT competence – that is, survival, social connection, and SDT relationship + autonomy needs – is associated with greater well-being. Thus, the fulfilment of competence needs creates neither greater work fulfilment nor greater well-being.

While the fulfilment of survival needs does not influence how fulfilled a person is at work, it is linked to the person's overall well-being. This may be because, while resources such as money do not increase the fulfilment of needs, without sufficient resources, a person may be incapable of looking after his or her needs. Not having food or shelter – thus, the conditions of a person's life – affects his or her health, which in turn affects a person's experience of general well-being. According to Rojas (2014), and as discussed in Section 2, income/resources contribute to raising life satisfaction, but is not a factor that determines it. He found that it is possible to have a satisfying life even if income is low, because there is more to life than one's resources. However, not having enough resources to even sustain survival affects well-being. Similarly, Diener, Oishi, and Lucas (2015) show that poverty-stricken nations have the lowest levels of subjective well-being.

Considering the demographics of the current study, 37.3% of the participants had a monthly income of less than R10 000 per month- with the majority of this percentage earning between R2000 and R10 000 per month. Although this is still seen as a low income (StatsSA, 2018), this amount is in line with South Africa's current living wage of R6 570 per month (Trading Economics, 2018). The remaining percentage of the sample earned more than R10 000. Therefore, findings indicated that the greater the fulfilment of survival needs- having sufficient resources, the greater a person's well-being.

The fulfilment of social connection needs at work is also related to greater well-being. This may be because social connection is a fundamental human need (Duffy et al., 2016). Not only close intimate relationships are deemed critical for social connection; other social ties, such as work relationships, influence the need for social connection. Thus, fostering positive social connections in the workplace leads to greater well-being. Individuals spend approximately a third of their lives at work, and thus the lack of a sense of connectedness and belonging at work will foster loneliness. Wright, Burt, and Strongman (2006) found that

loneliness at work is associated with lower levels of life satisfaction (well-being). In this study, it was also found that a higher fulfilment of social connection needs leads to a greater fulfilment of well-being.

The fulfilment of competence needs at work was not connected to an individual's well-being. Thus, well-being was not increased by the feeling that one is good at one's job. Considering the sample in the current study, most of the participants had jobs requiring lower level skills. The participants might have felt competent at these jobs, but being competent at, for example, cleaning, gardening, security work, or basic administration did not increase the participants' well-being because of the repetitive nature of the job. This finding follows logic, as being competent in one's work does not affect the conditions of one's life (well-being) but rather job satisfaction. However, in this study, competence was related to neither work fulfilment nor general well-being.

The fulfilment of SDT relationship + autonomy needs at work was strongly connected to general well-being. Thus, the greater a person's fulfilment of relationship + autonomy needs at work, the greater his or her well-being. As previously discussed, in South Africa having a good relationship with an employer is associated with trust, which allows employees to act with autonomy. Thus, good employee–employer relationships increase trust in the workplace, which can be argued to give the employee confidence to do things the way he or she prefers to do it (autonomy). This increased autonomy might decrease anxiety linked to not being trusted or being scared of making a mistake at work. This argument is supported by Helliwell (2008), who argues that workplace autonomy improves well-being by promoting an individual's sense of control, which acts as a buffer against stress and anxiety.

5.1.5 Interpretation of the Entire Mediation Model

Overall, it was found that decent work is related to general well-being, but not after controlling for the needs (survival, social connection, SDT competence, and SDT relationship + autonomy needs). This means that the relationship between decent work and general well-being is due to the link between decent work and need satisfaction, as the satisfaction of those needs is related to overall well-being. Thus, the effect of decent work on well-being was best explained by the mediation in the model. This finding is in line with what was hypothesised by Duffy et al. (2016), namely that basic need satisfaction is the primary mediator in the link between decent work and well-being.

Considering the findings and discussions made in the preceding chapters, the final chapter will provide an executive summary of study.

Chapter 6: Conclusion

The aim of this chapter is to provide a summary of the study, by specifically looking at; the intention of the study and how the study proceeded, what was found with its implications and applications, a critical reflection on the study in terms of strengths and weaknesses and lastly discuss future research opportunities.

6.1 Intention and Findings of Study

Given that there is an increase in the number of people holding precarious jobs in South Africa (Bhorat, Lilenstein, Oosthuizen, & Thornton, 2016), this study examined the relationship between decent work and work fulfilment and well-being, when mediated by survival needs, social connection needs, SDT competence needs, and SDT relationship + autonomy needs. Unlike in other countries, this study found that decent work was comprised of (a) adequate compensation, (b) a safe working environment, (c) reasonable working hours, and (d) organisational values supportive of family and social values. Similarly, within this sample, only four instead of five fundamental needs were found, namely (a) survival needs, (b) social connection needs, (c) SDT competence needs, and (d) SDT relationship + autonomy needs. Based on these findings, the variables for decent work and work need satisfaction were adjusted. Based on these adjustments, the relationship between decent work and work fulfilment, considering the four needs as stated above, was tested.

The findings showed that there was a relationship between decent work and work fulfilment, with and without accounting for need satisfaction. Further, it was found that decent work is related to general well-being, but not after controlling for the needs. This implies that the relationship between decent work and general well-being is due to the link between decent work and need satisfaction, as the satisfaction of those needs are related to overall well-being. Thus, the findings were in line with both hypotheses.

6.2 Study Limitations

These findings should however be considered in light of a number of limitations. It would be important to recruit a larger and more diverse sample which is more representative

of the South African population (lower income, employed workers). The current sample is demographically skewed, as the majority of the sample identified as white and Coloured. Although the model held up well in this sample, it would be of essence to test the model using a more diverse sample, as the primary notion of the PWT is based on the idea of inclusivity. Furthermore, data were collected via two means, a paper-and-pencil survey and an online survey. The online survey was deemed appropriate as a way to reach more working people in South Africa. However, out of the 125 online responses received, only 80 responses could be used, as either the data were more than 95% incomplete or the respondents did not meet the criterion of being employed. The low response rate of online surveys has been a concern for many years and is a well-known disadvantage of online surveys (Fan & Yan, 2010). However, this method is a commonly used method of data collection due to ease, the rapidity of responses, and low cost. The best way to account for this disadvantage is thus to employ multiple ways of data collection. In this study, online surveys were used as the primary method of data collection. Thus, an equal focus on both methods might have resulted in more responses. Having a greater sample size might **also** have address statistical analyses limitations, for example autonomy and relatedness loaded on one factor, which might not have happened in a larger sample of participants.

Purposive, non-random sampling techniques were employed. The results of the current study are based on data collected for workers residing in the Western Cape, South Africa, and thus care should be taken when generalising these results to broader working populations. Furthermore, this study also employed self-reported measures, which could have been influenced by social desirability bias (Caputo, 2017). This is a potential threat to the validity of the data obtained in the sample, especially as sensitive information about income level and adequate food and housing was requested. The participants had the option not to answer the question related to their monthly income, but people generally tend to inflate their income levels to avoid feeling embarrassed (Tourangeau & Yan, 2007). However, this method of data collection was considered the best option, from a practical point of view, to obtain data from a group of people in a limited time frame.

Although the results demonstrated validity for the DWS, subscales of decent work need to be specifically examined within South Africa to determine if the same subscales are found in different, more diverse samples. Similarly, although the results demonstrated validity for the WNSS, the subscales found in the current study differed from what Autin et al. (under review) found. It would therefore be beneficial in the future to explore the subscales of the WNSS and to see if SDT autonomy needs and SDT relatedness needs tap into the same underlying

construct. If similar subscales are found in future research with South African samples, it would suggest that adapted versions of the DWS and the WNSS are needed in South Africa. Also, due to time constraints it was impossible to conduct a post hoc qualitative analysis. A qualitative analysis would provide better insight as to why SDT autonomy and SDT relatedness needs tapped into the same underlying construct, and would allow one to explore if trust is truly the link between relationship and autonomy in the South African workplace.

6.3 Theoretical Contribution and Practical Implications

The findings of the current study make a significant contribution to the current literature and will be of value to policy makers and in counselling practice.

This study contributes to the literature on decent work and the PWT by examining the topic among workers in South Africa. Apart from small differences in the factor structure of the WNSS and the factor loadings on the DWS, which are explained by specific contextual factors in the society in which it was used, overall the PWT model functioned particularly well. Thus, this study served as the first study to empirically test the outcomes of decent work when mediated by survival needs, social connection needs, and self-determination needs, as positioned by Duffy et al. (2016). Likewise, this study was the first to test the predictive power of the WNSS (Autin et al., under review) in a relatively diverse South African setting.

The specific findings of the study – such as the finding that more decent work leads to greater fulfilment of needs, which in turn predicts work fulfilment and well-being – offer significant practical implications by emphasising the importance of having decent work in the first place. Therefore, it can be argued that these findings have great value for employers and the government. This study shows that decent work not only allows employees to meet their survival needs (food and housing), social connection needs (having the opportunity to connect with others), SDT competence needs (to feel that they are good at a job), and SDT relationship + autonomy needs (to have good, trusting relationships with their employers, which in turn allows for autonomy), but also increases work fulfilment and well-being. This study should serve as evidence to all employers – be they formal or informal – that better working environments (decent work) should be provided for employees, as this has an impact on their physical well-being.

Furthermore, these findings emphasise the growing need for social advocacy in the public policy arena with regards to decent work for the largest group of working individuals in South Africa. As stated by the ILO (2013), decent work is a right that should be afforded to all.

However, currently this is not a right enjoyed by all employed people. With changes in technology and skills required in the 21st century, precarious work is on the rise (Duffy et al., 2016). This study should serve as a reminder to policy makers to recommit to the decent work agenda (ILO, 2013) and to see where the process can be fast-tracked to accommodate those currently excluded from decent work. For the South African government in particular this should serve as evidence of the critical need for an NHI plan – a plan that attends to the needs of all people, regardless of their employment type and income status. Well-being and work fulfilment should not be reserved for the selected few, but should be available to all individuals. Lastly, these findings also have implications for counselling practice, by providing greater insight into the relationship between decent work, work fulfilment, and well-being. Understanding the impact decent work has on individuals can assist counsellors to identify self-destructive behaviour (guilt, shame, hopelessness) commonly associated with unemployment and underemployment (Duffy et al., 2016) and to redirect these thoughts to self-enhancing or resilient behaviour. Furthermore, counsellors also have the opportunity to provide insights that can assist policy makers to instil preventative measures, such as a continuously evaluating concept of decent work, in the ever-changing world of work.

6.4 Future Research Opportunities and Last Thoughts

This study hopes to stimulate further research on the experience of decent work and the outcomes thereof within the South African context, where the majority of the working population hold precarious jobs. Ultimately, it is hoped that these findings will emphasise the importance of decent work as a contributor to the improvement of the social fabric in South Africa by its ability to address inequality. Decent work is essential for well-being, which in turn is important in order for people to be resilient. This resilience could assist in countering social decay, such as high levels of violence and crime, lack of employment opportunities, poor healthcare, and poverty. In the future, it will be important to examine the relationship between decent work, well-being, and resilience in South Africa as a way counteract the impact of social decay on the majority of South Africans.

Decent work is a right that should be afforded to all who desire to work; however, to date this has not been the case, and meeting this objective should therefore be of primary importance.

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Appendices

Appendix A: Summary of changes made to items

Scale	Factor	Item	Changed to
DWS	Factor 1: Physically and interpersonally safe working conditions.	Item 1: I feel emotionally safe interacting with people at work.	I feel safe when I am around the people at work.
		Item 3: I feel physically safe interacting with people at work.	I feel safe from any kind of physical abuse at work.
	Factor 2: Access to healthcare	Item 4: I get good healthcare benefits from my job.	I get good healthcare/medical benefits from my job.
		Item 5: I have a good healthcare plan at work.	I have a good healthcare/medical plan at work.
		Factor 3: Adequate Compensation	Item 7: I am not properly paid for my work.
	Item 8: I do not feel I am paid enough based on my qualifications and experiences.		I am paid enough based on my qualifications and experiences.
	Item 9: I am rewarded adequately for my work.		I am rewarded decently for my work.
	Factor 5: Organizational values complement family and social values		Item 13: The values of my organization match my family values.
		Item 14: My organization's values align with my family values.	My work's beliefs are the same as my family beliefs.

		Item 15: The values of my organization match the values within my community.	The beliefs of my work match the beliefs in my community.
WNSS	Factor 1	Item 1: I have the resources to provide nutritious food for myself and my family.	My income allows me to provide nutritious food for myself and my family.
		Item 2: I have the resources to pay for adequate housing for my family.	My income allows me to pay for adequate housing for my family.
		Item 3: I have the resources to pay for utilities, such as water, heating, and electric, on time.	My income allows me to pay for utilities, such as water, heating and electric, on time.
		Item 4: I have the resources to maintain the health of myself and my family.	My income allows me to maintain the health of myself and my family.
IoJS	Factor 1	Item 1: I feel fairly well satisfied with my present job.	I am satisfied with my present job.
		Item 2: Most days I am enthusiastic about my work.	Most days I am excited about my work.
		Item 3: Each day of work seems like it will never end (reverse scored).	Time passes quickly when I am at work.
		Item 4: I consider my job rather	I consider my job pleasant.

unpleasant (reverse scored).

The updated survey is provided in Appendix B. The following changes were made to items found in Appendix B based on the outcomes of the instrument feasibility assessment:

Item 6: My employer provides *me with* acceptable options for healthcare.

Item 18: In most ways my life is close to *perfect*.

Item 19: I feel satisfied with my *current* job.

Item 26: *Give* to the greater social good.

Item 43: Pay for utilities such as water and *electricity* on time.

The final version of the survey items can be found in Appendix C.

Appendix B: Survey items**DWS****Factor 1: Physically and interpersonally safe working conditions**

1. I feel emotionally safe interacting with people at work.
2. At work, I feel safe from emotional or verbal abuse of any kind.
3. I feel physically safe interacting with people at work.

Factor 2: Access to healthcare

4. I get good healthcare benefits from my job.
5. I have a good healthcare plan at work.
6. My employer provides acceptable options for healthcare.

Factor 3: Adequate compensation

7. I am not properly paid for my work.
8. I do not feel I am paid enough based on my qualifications and experience.
9. I am rewarded adequately for my work.

Factor 4: Hours that allow for free time and rest

10. I do not have enough time for non-work activities.
11. I have no time to rest during the work week.
12. I have free time during the work week.

Factor 5: Organizational values complement family and social values

13. The values of my organization match my family values.
14. My organization's values align with my family values.
15. The values of my organization match the values within my community.

WNSS:**Factor 1: Survival needs**

My income allows me to:

1. Have the resources to provide nutritious food for myself and my family.
2. Have the resources to pay for adequate housing for my family.
3. Have the resources to pay for utilities, such as water, heating, and electric, on time.
4. Have the resources to maintain the health of myself and my family.

Factor 2: Social connection needs

My work allows me to:

5. Make a contribution to the greater social good.
6. Feel like I am doing something important for my community.
7. Feel a part of something greater by helping to sustain our world.
8. Feel like I am making a difference.

Factor 3: SDT competence needs

9. Feel like I am good at my job.
10. Feel like I am good at what I do.
11. Feel like I know what I'm doing.
12. Feel competent.

Factor 4: SDT relatedness needs

13. Feel like I fit in.
14. Feel like I belong.
15. Feel understood by others.
16. Feel supported by others.

Factor 5: SDT autonomy needs

17. Do tasks the way I want.
18. Feel free to do things my own way.
19. Take actions that promote my real needs.
20. Choose whether or not I have to do certain tasks.

IoJS (work fulfilment)

1. I feel fairly well satisfied with my present job.
2. Most days I am enthusiastic about my work.
3. Each day of work seems like it will never end (reverse scored).
4. I find real enjoyment in my work.
5. I consider my job rather unpleasant (reverse scored).

SWLS (well-being)

1. In most ways my life is close to my ideal.
2. The conditions of my life are excellent.
3. I am satisfied with my life.
4. So far I have gotten the important things I want in life.
5. If I could live my life over, I would change almost nothing.

Appendix C: Survey items – adapted wording

1. I feel safe when I am around the people at work.
2. I have a good healthcare/medical plan at work.
3. I feel safe from any kind of physical abuse at work.
4. I am rewarded decently for my work.
5. At work, I feel safe from emotional or verbal abuse of any kind.
6. My employer provides acceptable options for healthcare.
7. I am paid enough for my work.
8. I have time to rest during the work week.
9. My work's beliefs are the same as my family beliefs.
10. I have enough time for non-work activities.
11. I feel I am paid enough based on my qualifications and experience.
12. I have free time during the work week.
13. The standards/beliefs of my work match my family standards/beliefs.
14. I get good healthcare/medical benefits from my job.
15. The beliefs of my work match the beliefs in my community.
16. If I could live my life over, I would change almost nothing.
17. I consider my job pleasant.
18. In most ways my life is close to my ideal.
19. I feel satisfied with my present job.
20. So far I have gotten the important things I want in life.
21. Time passes quickly when I am at work.
22. The conditions of my life are excellent.
23. Most days I am excited about my work.
24. I find real enjoyment in my work.
25. I am satisfied with my life.

Please indicate how much you agree with each of the following statements by making a (X) in the appropriate box.

My work allows me to:

26. Make a contribution to the greater social good.
27. Feel like I am good at my job.

28. Feel a part of something greater by helping to sustain our world.
29. Take actions that promote my real needs.
30. Feel supported by others.
31. Feel like I know what I'm doing.
32. Feel like I am doing something important for my community.
33. Feel like I fit in.
34. Feel free to do things my own way.
35. Feel like I belong.
36. Choose whether or not I have to do certain tasks.
37. Feel like I am making a difference.
38. Feel like I am good at what I do.
39. Do tasks the way I want.
40. Feel understood by others.
41. Feel competent.

My income allows me to:

42. Provide nutritious food for myself and my family.
43. Pay for utilities, such as water, heating, and electric, on time.
44. Maintain the health of myself and my family.
45. Pay for adequate housing for my family.

Appendix D: Final version of survey

UNIVERSITY OF CAPE TOWN
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Dear Participant,

My name is Daniëlle and I am a Masters in Organisational Psychology student at the University of Cape Town. As part of my degree I am completing a research project looking at the outcomes of decent work among South Africans. I am inviting you to partake in my research project by completing the attached questionnaire. There are no right or wrong answers; I am merely interested in your personal opinion.

Please note that my research has been approved by the Commerce Faculty Ethics in Research Committee at the University of Cape Town. Any information you provide is anonymous and will remain confidential between me and my supervisor. We will not be able to identify you from the answers you provide. Your participation in this study is voluntary and you have the right to stop your participation, even if you started completing the questionnaire. The questionnaire will take about 15 minutes to complete.

Should you have any question or concerns regarding the study please contact me via sms on 079 174 6505 or my supervisor, A/Prof Ines Meyer at ines.meyer@uct.ac.za. Thank you for taking the time to assist me in my research. The data collected will provide useful information regarding the outcomes of decent work in South Africa.

Sincerely,

Daniëlle Malan

Signature Removed

Please Indicate:

- I have read the information above and agree to be part of this study.

About yourself

Please tick the appropriate box or fill in the line where supplied.

1. What is your gender?
 - Male**
 - Female**
 - Other**
 - Prefer not to answer**
2. What is your age?

3. What is your racial group?
 - African**
 - Asian**
 - Coloured**
 - White**
 - Other**
 - Prefer not to answer**
4. What is your highest education level?
 - Below Grade 9**
 - Grade 9**
 - Grade 10**
 - Grade 11**
 - Matric**
 - Diploma/Degree**
 - Postgraduate**
5. Are you currently employed?
 - Yes**
 - No**
6. What type of work do you have?

7. What is your monthly salary after deductions? (You may choose not to answer this question.)
 - Less than R2 000**
 - Between R2 000 to R5 000**
 - Between R5 000 to R7 000**
 - Between R7 000 to R10 000**
 - More than R10 000**

Please read through each statement below and mark the answer that best presents your opinion by placing an X.

	STRONGLY DISAGREE	DISAGREE	NEUTRAL	AGREE	STRONGLY AGREE
1. I feel safe when I am around the people at work.					
2. I have a good healthcare/medical plan at work.					
3. I feel safe from any kind of physical abuse at work.					
4. I am rewarded decently for my work.					
5. At work, I feel safe from emotional or verbal abuse of any kind.					
6. My employer provides me with acceptable options for healthcare.					
7. I am paid enough for my work.					
8. I have time to rest during the work week.					
9. My work's beliefs are the same as my family beliefs.					
10. I have enough time for non-work activities.					
11. I feel I am paid enough based on my qualifications and experience.					
12. I have free time during the work week.					
13. The standards/beliefs of my work match my family standards/beliefs.					

14. I get good healthcare/medical benefits from my job.

15. The beliefs of my work match the beliefs in my community.

16. If I could live my life over, I would change almost nothing.

17. I consider my job pleasant.

18. In most ways my life is close to my perfect.

19. I feel satisfied with my current job.

20. So far I have gotten the important things I want in life.

21. Time passes quickly when I am at work.

22. The conditions of my life are excellent.

23. Most days I am excited about my work.

24. I find real enjoyment in my work.

25. I am satisfied with my life.

Please indicate how much you agree with each of the following statements by making a (x) in the appropriate box.

My work allows me to:

26. give to the greater social good.

Strongly disagree

Disagree

Neutral

Agree

Strongly agree

27. feel like I am good at my job.

28. feel a part of something greater by helping to sustain our world.

29. take actions that promote my real needs.

30. feel supported by others.

31. feel like I know what I'm doing.

32. feel like I am doing something important for my community.

33. feel like I fit in.

34. feel free to do things my own way.

35. feel like I belong.

36. choose whether or not I have to do certain tasks.

37. feel like I am making a difference.

38. feel like I am good at what i do.

39. do tasks the way I want.

40. feel understood by others.

41. feel competent.

My income allows me:

42. provide nutritious food for myself and my family.

43. pay for utilities, such as water and electricity on time.
44. maintain the health of myself and my family.
45. pay for adequate housing for my family.

Thank you for completing this questionnaire! Your results are anonymous and the information that you have provided will be kept confidential.

Appendix E: Validity and reliability of scales**Validity**

Table 9E

Eigenvalues of the 15 decent work items

	Total	% of variance
1	6.09	40.60
2	2.61	17.39
3	1.58	10.52
4	1.16	7.72
5	1.08	7.22
6	.52	3.47
7	.42	2.82
8	.35	2.32
9	.27	1.81
10	.22	1.48
11	.20	1.34
12	.16	1.04
13	.14	.94
14	.13	.87
15	.07	.48

Table 10E

Summary of the PAF with direct oblimin rotation conducted on the DWS

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Decent work 7	.92				
Decent work 11	.88				
Decent work 4	.79				
Decent work 14		.97			
Decent work 6		.96			
Decent work 2		.84			
Decent work 12			-.94		
Decent work 10			-.82		

Decent work 8	-.81	
Decent work 13		.98
Decent work 9		.83
Decent work 15		.57
Decent work 1		.81
Decent work 3		.72
Decent work 5		.66

Note: Factor loadings < .4 are suppressed.

Table 11E

Summary of the PAF across five subscales of decent work

	Factor
	1
DW income	.80
DW values & beliefs	.68
DW safety	.66
DW free time	.63
DW healthcare	.0

Note: Factor loadings < .4 are suppressed.

Table 12E

Eigenvalues of the 20 work need satisfaction items

	Total	% of variance
WNS1	9.45	47.22
WNS2	1.86	9.29
WNS3	1.65	8.26
WNS4	1.47	7.32
WNS5	.86	4.27
WNS6	.64	3.21
WNS7	.57	2.84
WNS8	.46	2.30
WNS9	.42	2.09
WNS10	.40	2.02

WNS11	.35	1.75
WNS12	.31	1.53
WNS13	.27	1.35
WNS14	.26	1.31
WNS15	.23	1.15
WNS16	.21	1.07
WNS17	.19	.93
WNS18	.16	.78
WNS19	.15	.76
WNS20	.11	.57

Table 13E

Summary of the PAF with direct oblimin conducted on the WNSS

	Factor 1	Factor 2	Factor 3	Factor 4
WNS 11	.82			
WNS 9	.82			
WNS 10	.71			
WNS 14	.64			
WNS 8	.63			
WNS 5	.60			
WNS 15	.56			
WNS 4	.44			.43
WNS 6		.87		
WNS 13		.76		
WNS 2		.66		
WNS 16		.65		
WNS 18			.79	
WNS 17			.73	
WNS 19			.68	
WNS 20			.55	
WNS 3				.87
WNS 7				.85
WNS 1				.73

WNS 12 .53

Note. Factor loadings < .4 are suppressed.

Table 14E

Summary of the PAF with direct oblimin conducted on the WNSS rerun with item 4 (cross-loading) deleted

	Factor 1	Factor 2	Factor 3	Factor 4
WNS 11	.81			
WNS 9	.83			
WNS 10	.72			
WNS 14	.64			
WNS 8	.65			
WNS 5	.60			
WNS 15	.56			
WNS 6		.87		
WNS 13		.76		
WNS 2		.65		
WNS 16		.64		
WNS 18			.79	
WNS 17			.72	
WNS 19			.68	
WNS 20			.55	
WNS 3				-.87
WNS 7				-.85
WNS 1				-.74
WNS 12				-.54

Note: Factor loadings < .4 are suppressed.

Table 15E

Eigenvalues of the IoJS (work fulfilment) scale

	Total	% of variance
1	3.47	69.41

Table 16E

Summary of the PAF conducted on the IoJS (work fulfilment) scale

	Factor 1
Work fulfilment 1	.83
Work fulfilment 2	.78
Work fulfilment 3	.55
Work fulfilment 4	.90
Work fulfilment 5	.85

Table 17E

Eigenvalues of the SWLS (well-being)

	Total	% of variance
1	3.49	69.78

Table 18E

Summary of the PAF conducted on the SWLS (well-being)

	Factor 1
Well-being 1	.75
Well-being 2	.90
Well-being 3	.73
Well-being 4	.79
Well-being 5	.78

Reliability

Table 19E

Reliability item-total statistics for the items in the DWS

Item	Corrected item-total correlation
Decent work 1	.59
Decent work 3	.56
Decent work 4	.71
Decent work 5	.56
Decent work 7	.74
Decent work 8	.63
Decent work 9	.60
Decent work 10	.69
Decent work 11	.70
Decent work 12	.60
Decent work 13	.67
Decent work 15	.55

Table 20E

Reliability item-total statistics for the items in the work need satisfaction subscale (survival needs)

Item	Corrected item-total correlation
Survival needs 1	.69
Survival needs 2	.76
Survival needs 3	.80
Survival needs 4	.69

Table 21E

Reliability item-total statistics for the items in the work need satisfaction subscale (competence needs)

Item	Corrected item-total correlation
SDT competence need 1	.78
SDT competence need 2	.75

SDT competence need 3	.71
SDT competence need 4	.74

Table 22E

Reliability item-total statistics for the items in the work need satisfaction subscale (social connection needs)

Item	Corrected item-total correlation
Social connection needs 1	.83
Social connection needs 2	.78
Social connection needs 3	.73
Social connection needs 4	.72

Table 23E

Reliability item-total statistics for the items in the work need satisfaction subscale (relationship + autonomy needs)

Item	Corrected item-total correlation
SDT relationship + autonomy 1	.73
SDT relationship + autonomy 2	.80
SDT relationship + autonomy 3	.80
SDT relationship + autonomy 4	.73
SDT relationship + autonomy 5	.73
SDT relationship + autonomy 6	.72
SDT relationship + autonomy 7	.75

Table 24E

Reliability item-total statistics for the items in the IoJS scale (work fulfilment)

Item	Corrected item-total correlation
Work fulfilment 1	.79
Work fulfilment 2	.73
Work fulfilment 3	.52
Work fulfilment 4	.83
Work fulfilment 5	.79

Table 25E

Reliability item-total statistics for the items in the SWLS (well-being)

Item	Corrected item-total correlation
Well-being 1	.69
Well-being 2	.83
Well-being 3	.68
Well-being 4	.74
Well-being 5	.73

Appendix F: Multiple regression assumptions

Assumption 1: The relationship between the independent variables (IVs) and the dependent variable (DV) is linear.

The relationship between the IVs and the DV should be characterised by a linear line. This assumption was tested through the use of a scatterplot depicting the standardised residuals and the standardised predicted values. The standardised predicted values are the values on the dependent variable, as predicted through the regression equation from the IVs and transformed into z-scores.

- H₁: The more a person perceives his or her work as decent, the greater the fulfilment of needs satisfaction, which in turn predicts work fulfilment.

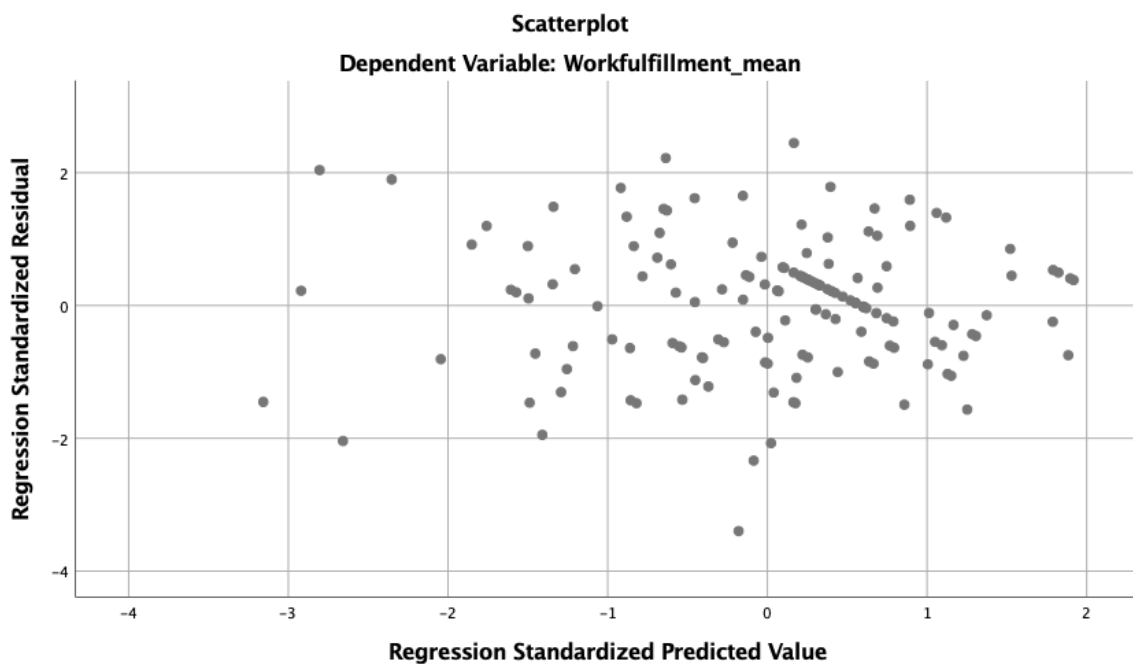


Figure 7F. Scatterplot showing the relationship between the standardised residuals and standardised predicted values for the regression model tested in Hypothesis 1

- H2: The more a person perceives his or her work as decent, the greater the fulfilment of needs satisfaction, which in turn predicts general well-being.

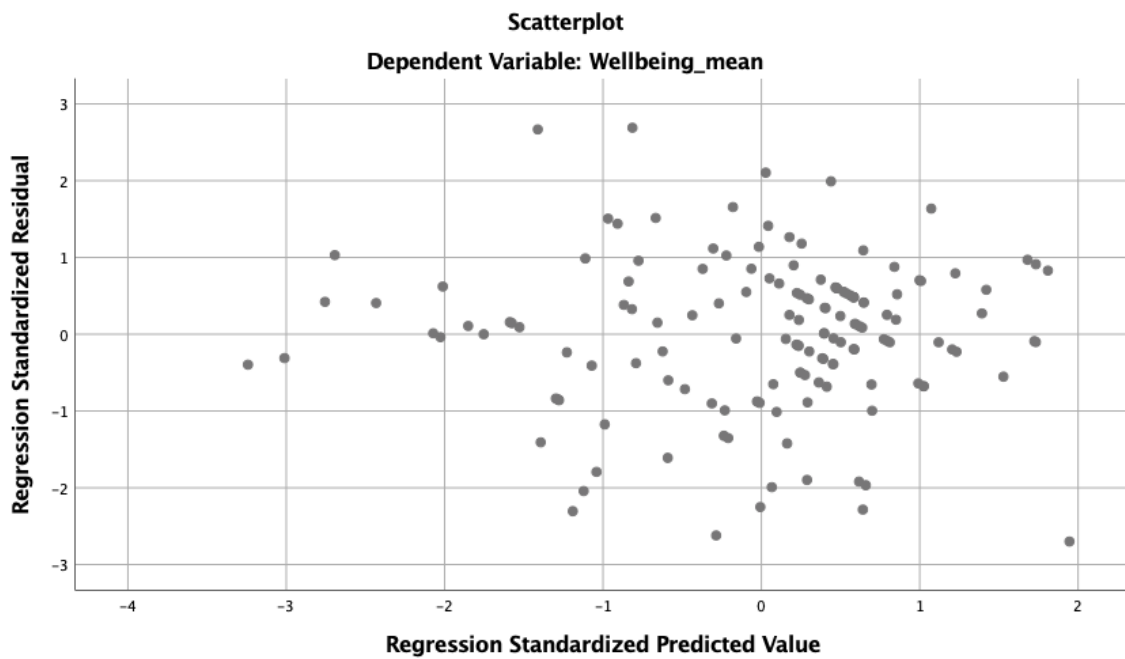


Figure 8F. Scatterplot showing the relationship between the standardised residuals and standardised predicted values for the regression model tested in Hypothesis 2

As can be seen from both scatterplot figures, the assumption for linearity has been met for all relationships between the separate hypotheses' IVs and DV, as none of the figures indicated a curved pattern. As linearity can be assumed, so can additivity. Additivity refers to combining the independent variables via addition and it allows for adequate prediction of the outcome variable. Thus, the assumption for linearity and additivity has been met for Hypothesis 1 and Hypothesis 2.

Assumption 2: The variance of the residuals is constant (homoscedasticity).

This assumption considers that the variation in the residuals (or amount of error in the model) is similar at each point across the model. Thus, the spread of the residuals should be fairly constant at each point of the predictor variables, or across the linear model. This assumption is tested by looking at the scatterplot (see scatterplots in Figures 7F and 8F for each hypothesis).

This assumption has been met for all hypotheses, as the residuals in each scatterplot is randomly scattered around the horizontal line, providing a relatively even distribution.

Assumption 3: The values of the residuals are independent.

This assumption tests the independence of errors. Thus, the observations (individual data points) need to be independent from one another (uncorrelated). This assumption can be tested by using the Durbin-Watson statistic. For this assumption to be met, the Durbin-Watson test should have a value greater than 1, but less than 3.

Hypothesis 1: 2.18

Hypothesis 2: 2.17

Thus, for both hypotheses the errors are random and independent from one another, hence meeting the assumption of independence.

Assumption 4: The values of the residuals are normally distributed.

This assumption can be tested by looking at the distribution of residuals in the normal probability plot. The x- and y-axes of the plot indicate probabilities, ranging from 0 to 1. The probability plot assesses how closely two data sets agree, which plots two cumulative distribution functions against each other (Field, 2013). The x-axis shows the probability of obtaining a particular residual value or lower based on the distribution of the actual residuals and the y-axis shows the probability of obtaining the same residual score or a lower score if the residuals were perfectly normally distributed (Field, 2013). The diagonal line indicates where each dot should fall if the actual distribution of residuals was the same as a standard normal distribution. Hence, the closer the dots are to the diagonal line, the closer the distribution of residuals to a standard normal distribution.

Hypothesis 1:

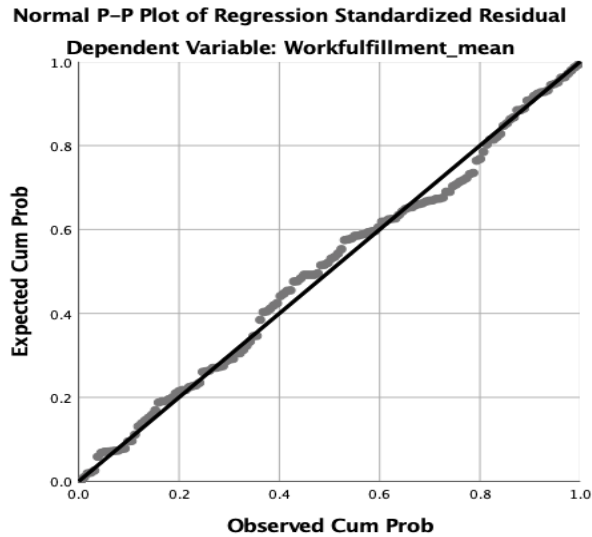


Figure 9F. Normal P-P plot showing normal distribution of residuals – work fulfilment

Hypothesis 2:

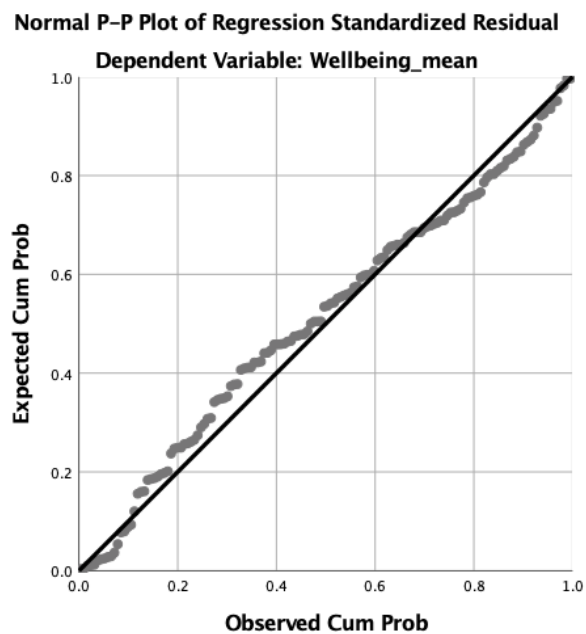


Figure 10F. Normal P-P plot showing normal distribution of residuals – well-being

Both P-P figures show that the dots snake very closely around the diagonal line. It can thus be assumed that the assumption of normality has been met.

Assumption 5: Predictor variables need to be categorical or interval.

The level of measurement for all predictors and outcome variables were interval (scale), which was suitable for multiple regression. The level of measurement assumption was thus met.

Assumption 6: There is no multicollinearity in the data.

This assumption essentially tests that the predictors are not too highly correlated with one another. In order to determine if this was the case for all the predictors of the separate hypotheses, the variance inflation factor (VIF) for each was considered. A VIF below 10 indicates the absence of multicollinearity. No multicollinearity was found, as the VIF for both hypotheses ranged between 1.62 and 3.23.

Assumption 7: Non-zero variance

The assumption of non-zero variance was met, as the dependent variable and the independent variables had standard deviations above zero. A standard deviation above zero shows that there is variance within the data. See table below for all standard deviations.

Table 26F

Mean and standard deviations for variables, check for non-zero variance

Variable	Mean	Standard deviation
Decent work	3.55	.75
WNS survival needs	3.89	.82
WNS social connection needs	3.56	.90
WNS SDT competence needs	4.05	.64
WNS SDT relationship+ autonomy needs	3.57	.83
Work fulfilment	3.65	.79
Well-being	3.34	.87

Note: Mean and standard deviations for variables (N = 150)

Assumption 8: Adequate sample size

In order to determine if the sample size was adequate for multiple regression analysis to be conducted, there should be 15 times more participants than IVs (Osborne & Waters, 2002). Or, According to Green (1991), $N > 50 + 8(m)$, where m is the number of IVs in a regression analysis. $N = 50 + 8(4)$, thus 82 participants would have been sufficient to run a regression

analysis. The sample consisted of 150 participants, which means that this assumption has been met.

Assumption 9: There are no influential cases biasing the models.

Cook's distance criteria can be applied to determine cases that have influence on the regression model (Field, 2013). Cook's distance criteria states that the distance cannot be greater than 1 (Cook, 1977). The maximum residual statistics for each regression analysis was < 1 , and thus this assumption was met for all regression analyses. See Table 26F.

Table 27F

Influential cases – Cook's distance criteria

Regression analysis	Cook's distance (max)
H1:	.18
H2:	.09

Assumption 10: Outliers

This assumption is tested by considering the outliers in each regression analysis. In order for outliers not to influence the data, 95% of all cases should have a standardised residual with 2 standard deviations from the mean (Field, 2013). In this study there were 150 cases; 5% would allow eight cases to fall beyond ± 2 standard deviations from the mean. Only one case in the regression analysis of Hypothesis 1 fell outside ± 2 standard deviations from the mean. The assumption was thus met for both regression analyses.

Appendix G: Ethical approval



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UCT Commerce Faculty Office

03 July 2018

Mr Danielle Malan
School Of Management Studies
University of Cape Town

REF: REC 2018/007/055

Dear Danielle Malan,

From Decent Work to Decent Lives: An empirical test of the outcomes of decent work in the Psychology of Working Theory

We are pleased to inform you that your ethics application has been approved. Unless otherwise specified this ethical clearance is valid for 1 year and may be renewed upon application.

Please be aware that you need to notify the Ethics Committee immediately should any aspect of your study regarding the engagement with participants as approved in this application, change. This may include aspects such as changes to the research design, questionnaires, or choice of participants. The ongoing ethical conduct throughout the duration of the study remains the responsibility of the principal investigator.

We wish you well for your research.

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