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The experiences and motivation of unemployed people in South Africa:

A person- and variable-centred perspective

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COMMENTS

The reader is reminded of the following:

- The editorial style in the first and last chapters of this thesis follows the format prescribed by the Programme in Industrial Psychology of the North-West University.

- The references and page numbers in this thesis follow the format prescribed by the Publication Manual (6th edition) of the American Psychological Association (APA). This practice is in line with the policy of the Programme in Industrial Psychology of the North-West University to use APA referencing style in all scientific documents.

- This thesis is submitted in the form of research articles. The editorial styles specified by the South African Journal of Psychology, Applied Psychology: International Review and Journal of Vocational Behavior are used in the third, fourth, and fifth chapters, respectively.

DECLARATION

I, Leoni van der Vaart, hereby declare that “The experiences and motivation of unemployed people in South Africa: A person- and variable-centred perspective” is my own work and that the views and opinions expressed in this thesis are my own and those of the authors as referenced both in the text and in the reference lists.

I further declare that this work will not be submitted to any other academic institution for qualification purposes.

LEONI VAN DER VAART **NOVEMBER 2017**

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ABSTRACT

Title: The experiences and motivation of unemployed people in South Africa: A person- and variable-centred perspective

Key terms: Unemployment, psychosocial typology, affective experiences, employment commitment, job search behaviour, motivational profiles, self-determination theory, psychological need satisfaction, psychological need frustration, latent profile analysis

The psychological impact of unemployment is well documented. Psychological well-being and (re)employment remains high on the agenda for professionals assisting the unemployed. Key in transitioning to employment are the well-being (i.e. affective experiences), the value one attaches to employment (i.e. employment commitment), and the effort that one invests into searching for a job (i.e. job search intensity). Furthermore, the reason(s) for searching for a job (i.e. the "why" of job search) are associated with these affective, attitudinal and behavioural outcomes. Psychological interventions are therefore both necessary and important for ensuring well-being, but also to ensure that the unemployed remain responsive to opportunities. Even more so in countries with a high unemployment rate – yet in South Africa, these interventions are lacking.

Before designing and implementing these interventions, it is essential to know whether the unemployed are one homogeneous group or rather a heterogeneous group consisting of several homogeneous subgroups. This knowledge will enable professionals to tailor interventions to the needs and expectations of the different groups, increasing the effectiveness of the interventions. Adopting a person-centred approach, the first two aims of this thesis were to explore whether different psychosocial and motivational profiles could be identified in specific communities in South Africa. It furthermore aimed to determine whether these profiles are associated with socio-demographic variables and whether different motivational profiles are associated with differences in affective, attitudinal and behavioural outcomes. The final aim of this thesis was to examine the pathways (i.e. psychological need satisfaction and frustration) through which job search motivation influences affective, attitudinal and behavioural outcomes over time. This variable-centred aim complemented the person-centred aims of the first two studies and facilitated further refinement of suggestions

for interventions. The thesis not only makes practical contributions, but also extends existing unemployment and self-determination theory literature.

To achieve these aims, participants were recruited from the North West and Gauteng Provinces. A quantitative survey design was used and data were collected with the Unemployment Experience, the Self-Regulation: Job Search questionnaires and the Basic Psychological Need Satisfaction and Need Frustration Scale. A total of 381 unemployed people participated in the first study. The final sample for the second study consisted of 867 unemployed people, 244 of whom participated in the third study. Results indicated that four psychosocial profiles and four motivational profiles could be identified in these respective samples. These profiles had small practically significant associations with the socio-demographic variables, and the motivational profiles differed in their associations with the affective, attitudinal and behavioural outcomes. The results also indicated that both amotivation and controlled motivation thwart the experience of basic psychological needs and that basic psychological need satisfaction was beneficial for experiential outcomes in unemployment six months later. The results support the notion that "the unemployed" are not one homogeneous group, that a lack of motivation and poor-quality motivation are detrimental for basic psychological needs, and that psychological need satisfaction plays an important role in the well-being of the unemployed.

Recommendations were made for organisations and further research.

CHAPTER 1

INTRODUCTION

The thesis investigates the affective experiences, attitudes toward employment, job search behaviour and job search motivation of unemployed people in South Africa. More specifically, from a person-centred perspective, it explores whether different (a) psychosocial and (b) motivational profiles can be identified. Complementing the person-centred approach, this PhD then combines both and examines from a variable-centred perspective the associations between the motivation of the unemployed and the consequences for affective experiences, attitudes towards employment, and job search behaviour.

The aim of this chapter is to provide a brief introduction and background to contextualise the study and to state the problem from which the general and specific research objectives flow. It also outlines the research design, data collection methods and data analysis strategies that were employed to investigate the problem, and concludes with an overview of the chapters.

1.1 Introduction and Background

The International Labour Organization (ILO) highlights concerning figures about unemployment. Globally, the unemployment rate will remain elevated in the medium term, with a slight increase expected in 2017, which may stabilise in 2018 (ILO, 2017). This stabilisation is a consequence of economic growth in developed countries; in contrast, economic growth in Africa is weak. Unemployment in sub-Saharan Africa is projected to increase between 2016 and 2018 (ILO, 2017). In South Africa, approximately one quarter of the working-age population is unemployed, according to the latest report published by Statistics South Africa (Stats SA). Making matters even worse is that 67% of the unemployed have been unemployed for more than one year, which is considered long-term unemployment (Stats SA, 2017). In fact, rising unemployment is one of the biggest challenges since the end of apartheid (Banerjee, Galiani, Levinsohn, McClaren, & Woolard, 2006).

“The unemployed” refers to people “who did not work”, “want to work and are available to start work”, “have taken active steps to look for work or to start some form of self-employment” (Stats SA, 1998, p. 1). Stats SA adopted the ILO’s definition in 1998 but added

a fourth criterion. According to their definition, people are also unemployed when they have not been looking for a job during the reference period (previous four weeks), but had a definite date on which they would commence with employment or start a business. These four criteria are typically referred to as the "narrow" (official) definition of unemployment (Stats SA, 2017).

This "narrow" definition of unemployed excludes the economically inactive population (referred to as not economically active – NEA), comprising the discouraged individuals. According to Stats SA (2017), these discouraged individuals have not been looking for a job during the reference period due to the perception that there are no job opportunities; there is a misalignment between their skills and the skills required by prospective employers, and these individuals have lost hope of finding employment. What distinguishes the discouraged individuals from the other NEA individuals is the fact that they would take up employment if the opportunity presented itself (Stats SA, 2017).

Based on an analysis of data collected in the National Income Dynamics Study, it is recommended that the non-searching unemployed be included in policymaking and interventions, as they are a legitimate part of the unemployed. In countries with a high unemployment rate, inclusion of the non-searching (discouraged) individuals can add 10% to the average unemployment rate (Posel, Casale, & Vermaak, 2014). In South Africa, the discouraged individuals currently account for an additional 9% of the unemployed (Stats SA, 2017). The non-searching unemployed also differ in attitude from the searching unemployed (Posel et al., 2014), and are psychologically worse off than both the searching unemployed (Kingdon & Knight, 2006) and the NEA individuals (Lloyd & Leibbrandt, 2014). The current study, therefore, used the expanded definition of unemployment and included the discouraged unemployed in studying unemployment in the context of South Africa.

The study focused on two provinces, namely Gauteng (narrow unemployment rate of 29.9%) and North West (unemployment rate of 27.2%), because both these provinces have unemployment rates greater than or equal to the national average (27.7%). In Gauteng alone, the metro (City of Johannesburg) and non-metro municipalities reported unemployment rates of 30.1% and 31.7%, respectively, which is higher than both the national and provincial average. The expanded unemployment rate (which includes the discouraged) of both the non-

metro municipalities in Gauteng (37.9%) and of North West (42.0%) are also higher than the national average (Stats SA, 2017).

Against the background of a continually increasing unemployment rate in South Africa and a grim economic outlook, it is important for policymakers and stakeholders to deal with unemployment. If they fail to do so, adverse economic, political, and social consequences may follow (Brand, 2015; Fourie, 2012). In line with this, the National Planning Commission drafted the National Development Plan (NDP) in 2011 to guide the government's vision to address poverty and inequality by 2030. The government plans to address this critical issue by introducing labour market policies and incentives to increase employment, expanding public service employment, and developing urban areas with the eventual aim of stimulating economic growth (National Planning Commission, 2011). Other initiatives commonly suggested to adress unemployment are, for instance, job reservation for locals, skills training programmes, job search assistance and matching, and support for entrepreneurs (see Altbeker & Bernstein, 2017 for an overview). Despite evidence of the psychological costs of unemployment (McKee-Ryan, Song, Wanberg, & Kinicki, 2005; Paul & Moser, 2009; Wanberg, 2012), suggested iniatives in SA usually do not focus on alleviating the psychological burden of unemployment.

1.2 Problem Statement

Alleviating the psychological burden of unemployment is also important in order to enhance the likelihood of transitioning from unemployment to employment (Wanberg, 2012). However, transitioning also depends on whether the unemployed are committed to employment and are searching for jobs (Kanfer, Wanberg, & Kantrowitz, 2001). Unemployment interventions, with a psychological focus, should thus address how the unemployed feel, what they think, and how they behave (Vleugels, Rothmann, Griep, & De Witte, 2013). De Witte (1992) argued that unemployment is a complex construct consisting of multiple facets and, based on this, unemployed individuals should be studied in terms of their availability for work (employment commitment) and their job application behaviour, but also in terms of their experiences of unemployment. The different dimensions cannot be separated – one's employment commitment (attitude) is positively related to one's search behaviour, and negatively related to one's experiences of unemployment (De Witte, 1992). Similarly, one would search more if one experiences unemployment negatively, and, if the

search is unsuccessful, negativity will increase (De Witte, 1992). Prior to designing these interventions, knowledge of whether the unemployed are one big heterogeneous group or whether they represent different homogeneous groups is key.

Identifying different subpopulations (i.e. profiles), and investigating the functioning of these different profile, not only allows for the design of effective interventions which consider the interplay between the variables under investigation, but also develops scientific knowledge (Howard, Gagné, Morin, & Van den Broeck, 2016). Consequently, De Witte initially investigated a sample of Belgian long-term unemployed in terms of their experiences of unemployment (feelings), the importance they attached to work (attitude), and their job search behaviour, and distinguished five types of unemployed people: the optimist, desperate, discouraged, adaptive and withdrawn (De Witte, 1992). This is in line with person-centred approaches, which argue that different (homogenous) subpopulations exist within a (heterogeneous) population based on a system of variables (Aldenderfer & Blashfield, 1984; Moran, Diefendorff, Kim, & Liu, 2012). Cluster analysis – as one method of person-centred analysis – was used to divide individuals into mutually exclusive groups. These respective groups have a high degree of within-group homogeneity as well as a high degree of between-group differences (Van den Broeck, Lens, De Witte, & Van Coillie, 2013). According to Muthén and Muthén (2000) and Wang and Wang (2012), the focus of this method is the similarity among individuals on a set of dimensions with the aim of categorising them into homogeneous groups or typologies. It has the major advantage of accounting for heterogeneity within the sample.

The psychosocial typology, with the aim of clustering homogeneous individuals, has not been investigated in a South African context. Such a study is nevertheless important as contextual differences may give rise to different clusters. According to De Witte, Rothmann, and Jackson (2012), for example, the experiences of unemployed individuals in South Africa may differ from those in Europe, e.g. due to the unavailability of a social security system in South Africa, making unemployment experiences more negative. Kanungo (1982) furthermore suggests that employment commitment develops from socialisation processes and is influenced by cultural dimensions. Subsequently, it is proposed that a more collectivistic culture could lead to a lower commitment to employment (De Witte et al., 2012). On the other hand, employment commitment may be higher in countries where people are more financially deprived and where the unemployment rate is higher (Wielers & Koster, 2011;

Wielers & Raven, 2009). Due to these proposed differences, this study first aimed to investigate whether the psychosocial typology can be generalised to the South African context. Due to criticism of cluster analysis, such as the absence of more objective criteria (i.e. statistical indices and tests) to guide decisions for the retention of clusters (Bergman & Magnusson, 1997; Steinley, 2003), latent profile analysis (LPA) is the preferred method (Wang & Wang, 2012) and was used in this study. In short, this study added to this line of work guided by previous European research. Specifically, in the first study we explored whether different types of unemployed can be identified in three communities in South Africa. Best practice guidelines for person-centred approaches recommend that typologies should not only be validated in other samples, but covariates should also be included to enable meaningful interpretation of types (Meyer & Morin, 2016). These may include socio-demographic characteristics such as the variables (e.g. age, unemployment duration, gender, family type, dependants, education, work experience, income) included by De Witte (1992). Therefore, cross-tabulations were used in this study to explore the complex associations between the different types and these characteristics.

Second, the current study builds on the idea of improving the effectiveness of policies from both a diagnostic and an intervention viewpoint; and the inclusion of motivation seems relevant. Motivation is a "set of energetic forces that initiate behaviour and determine its form, direction, intensity and duration" (Pinder, 1998, p. 11). Marie Jahoda (1981) notes that motivation is an important concept relating to understanding behaviour. More recently, Vansteenkiste and Van den Broeck (in press) argue that motivation is also important for understanding the experiences and attitudes of the unemployed. Specifically, the reasons or types of motivation for engaging in particular activities (e.g. job search) result in different outcomes in terms of experiences, commitment and search behaviour (Vansteenkiste & Van den Broeck, in press).

The Self-Determination Theory (SDT; Deci & Ryan, 2000) was used as motivational theory in this study. Motivational theories differ in foci: cognitive vs. experiences and affect (Vansteenkiste & Mouratidis, 2016). Due to the experiential and affective focus of the SDT, it is considered more applicable in the unemployment context than cognitively focused motivational theories. The theory also acknowledges that individuals differ in the quality as well as the quantity (or amount) of motivation, which is a core factor in explaining the different experiential, attitudinal and behavioural outcomes of motivation beyond the quantity

of motivation (Ryan & Deci, 2017; Vansteenkiste & Mouratidis, 2016). Quantity of motivation is reflected in having no motivation (i.e. amotivation) vs. having motivation (i.e. controlled and autonomous motivation). Quality of motivation is reflected in *controlled motivation* (i.e. engaging in an activity to comply with external or internal demands) and *autonomous motivation* (i.e. engaging in an activity because it is valuable or interesting). Amotivation falls on one side of the continuum, autonomous on the opposite side, and controlled somewhere in the middle (Ryan & Deci, 2017).

The development of SDT highlighted that the quality of motivation matters, but also that treating motivation as unidimensional, ranging on a continuum, does not capture the complexity of motivation. Individuals endorse both autonomous and controlled motivation, with high and/or low scores on both types, reflected by different motivational profiles (Vansteenkiste & Mouratidis, 2016). Studies in the domain of sports (Gillet, Berjot, Vallerand, Amoura, & Rosnet, 2012; Gillet, Vallerand, & Rosnet, 2009; Gillet, Vallerand, & Paty, 2013), physical education (Aelterman, Vansteenkiste, Soenens, & Haerens, 2016; Bioché, Sarrazin, Grouzet, Pelletier, & Chanal, 2008; Haerens, Kirk, Cardon, De Bourdeaudhuij, & Vansteenkiste, 2010), educational psychology (Hayenga & Corpus, 2010; Ratelle, Guay, Vallerand, Larose, & Senécal, 2007; Vansteenkiste, Sierens, Soenens, Luyckx, & Lens, 2009), and work psychology (Graves, Cullen, Lester, Ruderman, & Gentry, 2015; Howard et al., 2016; Moran et al., 2012; Van den Broeck et al., 2013) identified different motivational profiles based on the SDT. No study to date has investigated the motivational profiles of the unemployed or the outcomes associated with the profiles, which is unfortunate given the interplay between motivational regulations and differential outcomes for different motivational profiles.

The value of motivational profiles lies in the fact that they can illustrate that human behaviour is multi-determined and depends on the combination of different motivational regulations (Vansteenkiste & Mouratidis, 2016). This can be achieved by establishing the "external validity" of profiles when determining their association with individual outcomes (Meyer & Morin, 2016). Some studies support the proposition of SDT that more autonomous profiles lead to positive outcomes (e.g. Bioché et al., 2008; Hayenga & Corpus, 2010; Vansteenkiste et al., 2009). Others demonstrate that autonomous motivation combined with some level of controlled motivation leads to positive outcomes (e.g. Gillet et al., 2013; Graves et al., 2015; Van den Broeck et al., 2013). Given the unique nature of the

unemployment context, results of previous studies cannot be extrapolated and it is necessary to investigate profiles in this context. Due to the assumed importance of motivational dynamics in explaining experiences, attitudes, and behaviour the second study added to this line of work, guided by previous research in other domains. Specifically, we explored motivational profiles of the unemployed. We then tested the relations between motivational profiles and affective (i.e. experiences), attitudinal (commitment to employment), and behavioural (job search) outcomes with the aim of enhancing our understanding of the psychological processes of the unemployed, as recommended by Vansteenkiste, Lens, De Witte, and Feather (2005), and Vansteenkiste and Van den Broeck (in press).

Investigating the functioning of "the unemployed", by categorising them into different types (i.e. psychosocial profiling) and by investigating the interplay of motivational regulations (i.e. motivational profiling) and associated outcomes, has several benefits. From a diagnostic perspective, the identification of critical types allows for early identification and proactive or remedial intervention. From a developmental perspective, identification of resilient groups allows for interventions to optimise their well-being (Vansteenkiste & Mouratidis, 2016). However, a holistic picture of the unemployed is supported by a complementary variable-centred study, which was the final aim of this study. Taking a variable-centred approach, results can account for the underlying associations between job search motivation and affective experiences, employment commitment and job search behaviour. Understanding these associations may provide insight into how one can reduce negative experiences while enhancing employment commitment and job search behaviour.

In order to achieve this aim, the SDT and the psychosocial perspective (i.e. experiences, commitment, and job search) were combined. As a macro theory that seeks to explain human motivation, personality and emotion, SDT provides a comprehensive framework for motivational dynamics (Vansteenkiste & Van den Broeck, in press). As previously discussed, job search motivation induce differential experiential, attitudinal and behavioural outcomes. The further along the continuum towards autonomy, the more favourable these outcomes (Ryan & Deci, 2017; Deci, Olafsen, & Ryan, 2017). Another fundamental assumption of the SDT is that individuals should have their basic psychological needs satisfied for optimal psychological functioning (Ryan & Deci, 2017). Basic psychological needs are the "innate psychological nutriments that are essential for ongoing psychological growth, integrity, and well-being" (Deci & Ryan, 2000, p. 229). So, the extent to which these needs are satisfied (or

frustrated) have significant consequences for individual well-being, personal growth and integrity (Ryan & Deci, 2017). For example, if psychological needs are satisfied, the unemployed may have less negative experiences and may display positive attitudes towards employment while searching for jobs. The frustration of these needs has significant consequences, beyond only the satisfaction thereof (Bartholomew, Ntoumanis, Ryan, Bosch, & Thøgersen-Ntoumani, 2011; Cordeiro, Paixão, Lens, Lacante, & Sheldon, 2016), and the unemployed are especially prone to need frustration (Vansteenkiste and Van den Broeck, in press). For example, if psychological needs are frustrated, the unemployed may have more negative experiences and may attach no importance to employment and cease job search initiatives.

Both job search motivation and basic psychological needs have the potential to influence the experiences, attitudes and behaviour of the unemployed. What remains unknown is whether job search motivation exerts its influence via the basic psychological needs. SDT researchers previously theorised that basic psychological needs and the motivations are closely intertwined. Need satisfaction allows for the development of more optimal motivational types, but in turn it is also influenced by motivational types (Vansteenkiste & Ryan, 2013). Previous studies proved that psychological needs mediate the relationship between motives for engaging in particular activities such as ostracism and pro-social behaviour and the experiential, attitudinal, and behavioural consequences of that behaviour (Legate, DeHaan, & Ryan, 2015; Legate, DeHaan, Weinstein, & Ryan, 2013; Martella & Ryan, 2016; Weinstein & Ryan, 2010). This led to the belief that psychological need satisfaction (and frustration) may explain the impact of job search motivation. As such, the third study investigated the impact of motivation on the experiences, attitudes and behaviour of the unemployed over time through basic psychological need satisfaction (and frustration).

Limited international studies have previously tested the experiential, attitudinal, and behavioural outcomes of job search motivation in the context of unemployment (e.g. da Motta Veiga & Gabriel, 2016; Koen, Klehe, & Van Vianen, 2015; Koen, Van Vianen, Van Hooft, & Klehe, 2016; Vansteenkiste, Lens, De Witte, De Witte, & Deci, 2004; Vansteenkiste et al., 2005). The results of these studies, however, were not always in line with the propositions of SDT and/or results could not always be replicated. Several contextual arguments were presented to indicate that the context may play a role in whether more positive outcomes result from motivational regulations deemed superior, qualitatively

(Ryan & Deci, 2017; Vallerand, Pelletier, & Koestner, 2008). More research is necessary in developing countries such as SA. So, the current study investigated the impact of job search motivation in a challenging and discouraging environment. Empirical studies investigating the impact of psychological need satisfaction in the context of unemployment are scarce (e.g. Koen et al., 2016), and it neglects to investigate need frustration. The current study adds to research by exploring the role of both psychological need satisfaction and frustration. No unemployment studies were found in which psychological needs were tested as mediator. Also, limited SDT research investigated this proposition. The role of psychological need satisfaction (or frustration) as mediator may be instrumental in explaining how job search motivation relates to experiential, attitudinal and behavioural outcomes. The current study aimed to address the gaps in variable-centred unemployment literature, but also in motivational research in general, by exploring the relationships as depicted in Figure 1 as the aims of the third study. Specifically, the final study aimed to determine whether experiential, attitudinal and behavioural outcomes are associated with job search motivation through psychological needs at an earlier point in time.

The following research questions were set for the thesis:

- How are psychosocial typologies and associations with socio-demographic variables conceptualised in literature?
- How are motivational profiles and the associated outcomes for experiences, attitudes, and behaviour conceptualised in literature?
- How are the relationships between job search motivation, psychological need satisfaction and frustration, and experiences, attitudes, and behaviour conceptualised in literature?
- Based on the three-dimensional model (experiences, employment commitment and job search behaviour), which types of unemployed can be identified?
- Are socio-demographic characteristics associated with the three-dimensional psychosocial typology?
- Based on the self-determination theory, which motivational profiles can be identified in an unemployment context?
- Are motivational profiles associated with affective (i.e. experiences), attitudinal (commitment to employment), and behavioural (job search) outcomes?

- Does motivation to search relate to the experiences, attitudes and behaviour of the unemployed over time through basic need satisfaction and frustration?
- What recommendations can be made for future research and practice?

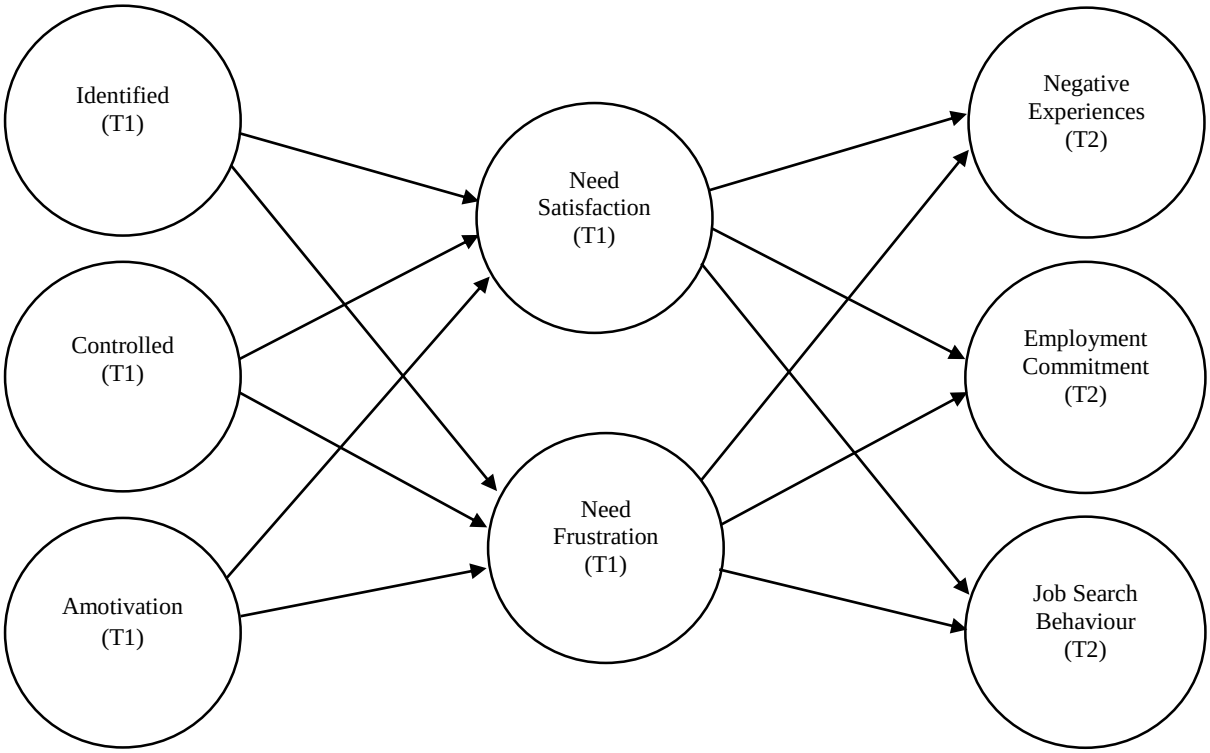

Figure 1. Hypothesised model of motivation, psychological need satisfaction and frustration, experiences, attitudes and behaviour. Note for simplicity purposes the direct paths between the motivational variables and the outcome variables were excluded in the figure.

1.3 Research Objectives

1.3.1 General Objectives

The general objectives of this thesis were to evaluate the generalisability of the psychosocial typology; to explore motivational profiles and their differential outcomes; and to determine whether motivation relates to the experiences, attitudes and behaviour of the unemployed over time through basic need satisfaction and frustration in selected communities.

1.3.2 Specific Objectives

The specific objectives of the study were to:

- Conceptualise psychosocial typologies and associations with socio-demographic variables, according to literature.
- Conceptualise motivational profiles and the associated outcomes for experiences, attitudes, and behaviour, according to literature.
- Conceptualise the relationships between job search motivation, psychological need satisfaction and frustration, experiences, attitudes, and behaviour according to literature.
- Determine the types of unemployed based on the three-dimensional psychosocial typology (experiences, employment commitment and job search behaviour).
- Explore whether socio-demographic characteristics can be associated with the different types of unemployed.
- Determine whether different motivational profiles, based on SDT, manifest in the unemployment context.
- Explore differences between motivational profiles in terms of experiential, attitudinal and behavioural outcomes.
- Investigate whether motivation relates to the experiences, attitudes and behaviour of the unemployed over time through basic need satisfaction and frustration.
- Make recommendations for future research and practice.

1.4 Research Design

1.4.1 Research Approach

Creswell (2013) states that the research design has three components: the philosophical worldview, the strategy of inquiry, and the research method(s). The worldview refers to the "set of beliefs that guide actions" (Guba, 1990, p. 17). The current study was guided by the postpositivist worldview because the researcher was of the opinion that (a) causes determine outcomes, (b) ideas can be translated to a small number of testable hypotheses, (c) careful measurement of the objective reality will provide answers to these hypotheses, and (d) theories can and should be verified to enhance our understanding of reality. These four elements characterise the postpositivistic worldview as explained by Cresswell (2013).

Studies 1 and 2

A quantitative, non-experimental, survey design was used as the strategy of inquiry to collect cross-sectional data. This design was used to investigate the psychosocial typology and the associations with background characteristics as well as motivational profiles and their associated outcomes. The objectives of these studies were descriptive and exploratory. Study 1 was driven by well-defined typologies and the aim was to describe the types of unemployed present in a South African context – therefore, descriptive in nature. Study 2 was fairly new in the context of unemployment and little information exists. Therefore, the objectives of the second study were more exploratory in nature. It is also important to note that the methods of analysis used in these two studies [LPA] were inherently exploratory.

Study 3

A quantitative, non-experimental, prospective survey design was used as the strategy of inquiry to collect longitudinal data. This design was used to determine whether motivation related to the experiences, attitudes and behaviour of the unemployed over time through basic need satisfaction and frustration. The objectives of the study were correlational to the extent that they sought to demonstrate the relationships between the underlying variables, and explanatory to the extent that they sought to "explain" the indirect effect of job search motivation via the psychological needs.

1.4.2 Participants

Study 1

The participants were sampled, in a pilot project, from three different areas in the North-West Province: Potchefstroom (white), Promosa (Coloured) and Ikageng (black). A total of 381 unemployed participated and the sample characteristics are reported in Tables 1 and 2.

Table 1

Sample Characteristics (Study 1)

Variable	Frequency	Percentage (%)
Gender		
Male	204	53.50
Female	174	45.70
Missing	3	0.80
Language		
Afrikaans	249	65.40
English	7	1.80
Sepedi	4	1.00
Sesotho	32	8.40
siSwati	4	1.00
Setswana	74	19.4
isiXhosa	6	1.60
isiZulu	3	0.80
Ndebele	1	0.30
Missing	1	0.30
Qualification		
Grade 8 and lower	87	22.80
Grade 9	45	11.80
Grade 10	76	19.90
Grade 11	37	9.70
Grade 12	101	26.50
3-year degree/diploma	17	4.50
4-year degree/diploma	7	1.80
5-7-year degree	1	0.30
Master's	4	1.00
Missing	6	1.60
Age		
17-30 years	218	57.30
31-40 years	95	24.90
41-50 years	44	11.60
51 years and older	24	6.20
Missing	0	0.00

Table 1 *(continues…)*

Variable	Frequency	Percentage (%)
Marital Status		
Unmarried	269	70.60
Engaged	18	4.70
Married	69	18.10
Separated	9	2.40
Widow	7	1.80
Widower	4	1.00
Missing	5	1.30
Employment history		
Almost always employed	92	24.10
Occasionally employed	95	24.90
As much employed as unemployed	30	7.90
Almost always unemployed	77	20.50
Unemployed most of the time	78	20.20
Missing	9	2.40
Time unemployed		
Less than one year	101	26.50
Two to three years	91	23.90
Four to five years	61	16.00
Six to seven years	39	10.20
Eight to nine years	25	6.60
10 to 11 years	21	5.50
12 to 13 years	9	2.40
14 to 15 years	6	1.60
16 to 17 years	7	1.80
18 to 19 years	1	0.30
More than 20 years	11	2.90
Missing	9	2.40

Table 2

Sample Characteristics (Study 1)

	Mean	Standard Deviation
Dependants	2.66	1.79

Study 2

The participants for Study 2 consisted of the unemployed in two geographical areas in the Gauteng Province, namely the Johannesburg and Vanderbijlpark districts. The final sample

consisted of 867 participants from Orange Farm (45.80%) and Boipatong (54.20%). These two areas are governed by the City of Johannesburg district municipality (metro) and the Sedibeng district municipality (non-metro). Within these two areas, two communities were specifically targeted: Orange Farm (Johannesburg) and Boipatong (Vanderbijlpark). These two communities also comprised black Africans. According to Stats SA (2017), this population group is the least employed population group compared to other races. In an article published online by the City of Johannesburg, titled "Beauty in the land of the poor", Orange Farm is described as a "land of dreamers", distinguished by several features. It is the largest and most populous informal settlement in South Africa, with the majority of its (unskilled) residents living in shacks with no real means of sustaining themselves. Orange Farm is also challenged by inadequate infrastructure in terms of access to the community, with the majority of the roads being gravel roads (City of Johannesburg, 2015). On the positive side, the community has one of the highest matric (secondary education) pass rates, is characterised by close-knit social bonds and proud inhabitants, and is targeted for development through funding from various sources. The article continues to explain that Orange Farm was developed by ex-farm workers who were given land by the former (apartheid) government. The township subsequently attracted many unemployed and homeless people, also laid-off farmworkers. Not being employable, according to the formal sector's standards, the majority of these individuals remained unemployed with informal activities being their only source of income (City of Johannesburg, 2015).

Boipatong, governed by the Emfuleni local municipality as a sub-section of the greater Sedibeng district municipality, differs quite significantly from Orange Farm. Translated from the Sesotho word, Boipatong means "the place of hiding or safety" (Simpson, 2012). The community was originally established to house people employed by ISCOR (Iron and Steel Corporation; I. Xaba, personal communication, March 25, 2015), now known as ArcelorMittal South Africa, the largest steel manufacturer on the African continent. Although this community had – in economic terms – a more lucrative history than Orange Farm, the picture changed dramatically with the turbulence in the world steel markets. ArcelorMittal decided to drastically reduce its labour force (Maloma, 2005), creating an unemployment challenge for Boipatong. Sample characteristics are reported in Tables 3 and 4.

Table 3

Sample Characteristics (Study 2)

	Frequency	Percentage
Gender		
Male	395	45.70
Female	470	54.30
Missing	2	0.20
Language		
Afrikaans	3	0.30
English	28	3.20
Sepedi	46	5.30
Sesotho	401	46.30
Setswana	33	3.80
Tshivenda	8	0.90
siSwati	3	0.30
isiZulu	244	28.10
isiNdebele	4	0.50
isiXhosa	69	8.00
Xitsonga	18	2.10
Missing	10	1.20
Race		
Black	851	98.20
White	1	.10
Coloured	5	.60
Other	1	.10
Missing	9	1.00
Education		
Grade 8 and lower	72	8.30
Grade 9	41	4.70
Grade 10	99	11.40
Grade 11	293	33.80
Grade 12	333	38.40
Three-year degree or diploma	18	2.10
Four-year degree or diploma	4	0.50
Five- to seven-year degree	1	0.10
Master's degree	0	0.00
PhD	0	0.00
Missing	6	0.70

Table 3 *(continues…)*

	Frequency	Percentage
Marital Status		
Single	683	78.80
Engaged	31	3.60
Married	107	12.30
Divorced	20	2.30
Widow	14	1.60
Widower	6	0.70
Missing	6	0.70
Living Situation		
Living with parents or grandparents (or other family members)	435	50.20
Living alone	80	9.20
Living with children (single parent)	116	13.40
Living with partner who is unemployed (with children)	87	10.00
Living with partner who is unemployed (without children)	21	2.40
Living with partner who is employed (with children)	77	8.90
Living with partner who is employed (without children)	14	1.60
Other	31	3.60
Missing	6	0.70
Unemployment Duration		
Less than three months	44	5.10
3-5 months	54	6.20
6-11 months	82	9.50
1-2 years	122	14.10
More than 2 years	559	64.50
Missing	6	0.70
Employment History		
Almost always employed	117	13.50
Employed most of the time, occasionally unemployed	91	10.50
As much employed as unemployed	83	9.60
Unemployed most of the time, occasionally employed	170	19.60
Almost always unemployed	389	44.90
Missing	17	2.00

Table 3 *(continues…)*

	Frequency	Percentage
Grant (Self)		
Yes	185	21.30
No	636	73.40
Missing	46	5.30

Table 4

Sample Characteristics (Study 2)

	Mean	Standard Deviation
Age	32.29	10.46
Grant (Other)	1.25	1.29
Income (Other)	0.77	1.09
Dependants	2.14	1.95

Study 3

A total of 461 unemployed from Boipatong participated at Time 1. Of these, 244 participated again at Time 2. Sample characteristics are reported in Tables 5 and 6.

Table 5

Sample Characteristics (Study 3)

	Frequency (Time 1)	Percentage (Time 1)	Frequency (Time 2)	Percentage (Time 2)
Gender				
Male	223	48.40	98	40.20
Female	237	51.40	146	59.80
Missing	1	0.20	0	0.00
Language				
Afrikaans	2	0.40	2	0.80
English	17	3.70	6	2.50
Sepedi	33	7.20	18	7.40
Sesotho	257	55.70	127	52.00
Setswana	17	3.70	13	5.30
Tshivenda	3	0.70	0	0.00
siSwati	1	0.20	3	1.20
isiZulu	73	15.80	40	16.40
isiNdebele	2	0.40	2	0.80
isiXhosa	47	10.20	27	11.10
Xitsonga	4	0.90	3	1.20
Missing	5	1.10	3	1.20
Race				
Black	454	98.50	243	99.60
Coloured	1	0.20	1	0.40
Missing	6	1.30	0	0.00
Education				
Grade 8 and lower	46	10.0	31	12.70
Grade 9	25	5.40	12	4.90
Grade 10	48	10.40	16	6.60
Grade 11	174	37.70	96	39.30
Grade 12	149	32.30	78	32.00
Three-year degree or diploma	13	2.80	7	2.90
Four-year degree or diploma	2	0.40	2	0.80
Five- to seven-year degree	1	0.20	0	0.00
Master’s degree	0	0.00	0	0.00
PhD	0	0.00	0	0.00
Missing	3	0.70	2	0.80

Table 5 *(continues…)*

	Frequency (Time 1)	Percentage (Time 1)	Frequency (Time 2)	Percentage (Time 2)
Marital Status				
Single	343	74.40	179	73.40
Engaged	26	5.60	12	4.90
Married	69	15.00	38	15.60
Divorced	13	2.80	9	3.70
Widow	6	1.30	5	2.00
Widower	1	0.20	1	0.40
Missing	3	0.70	0	
Living Situation				
Living with parents or grandparents (or other family members)	200	43.40	95	38.90
Living alone	43	9.30	18	7.40
Living with children (single parent)	67	14.50	42	17.20
Living with partner who is unemployed (with children)	47	10.20	26	10.70
Living with partner who is unemployed (without children)	13	2.80	11	4.50
Living with partner who is employed (with children)	53	11.50	31	12.70
Living with partner who is employed (without children)	12	2.60	7	2.90
Other	24	5.20	13	5.30
Missing	2	0.40	1	0.40
Unemployment Duration				
Less than three months	27	5.90	9	3.70
3-5 months	25	5.40	15	6.10
6-11 months	35	7.60	18	7.40
1-2 years	54	11.70	22	9.00
More than 2 years	319	69.20	180	73.80
Missing	1	0.20	0	0.00
Employment History				
Almost always employed	62	13.40	33	13.50
Employed most of the time, occasionally unemployed	54	11.70	30	12.30
As much employed as unemployed	44	9.50	19	7.80
Unemployed most of the time, occasionally employed	79	17.10	41	16.80
Almost always unemployed	216	46.90	117	48.00
Missing	6	1.30	4	1.60

Table 5 *(continues…)*

	Frequency (Time 1)	Percentage (Time 1)	Frequency (Time 2)	Percentage (Time 2)
Grant (Self)				
Yes	88	19.10	52	21.30
No	342	74.20	177	72.50
Missing	31	6.70	15	6.10

Table 6

Sample Characteristics (Study 3)

	Mean (Time 1)	Standard Deviation (Time 1)	Mean (Time 2)	Standard Deviation (Time 2)
Age	34.09	10.72	36.12	10.95
Grant (Other)	1.17	1.20	1.21	1.20
Income (Other)	0.67	1.01	0.55	0.85
Dependants	2.45	2.08	2.50	2.04

Chi-square tests revealed no significant differences, between participants who responded at Time 1 and those who responded at both times (Time 1 and Time 2), in terms of their level of education ($\chi^2 = 0.03$, $p = .99$), marital status ($\chi^2 = 0.01$, $p = .94$), living situation ($\chi^2 = 2.97$, $p = .56$), unemployment duration ($\chi^2 = 1.79$, $p = .41$), employment history ($\chi^2 = 0.59$, $p = .74$), grant (self) ($\chi^2 = .45$, $p = .50$), grant (others) ($\chi^2 = 1.04$, $p = .79$), and income (others) ($\chi^2 = 1.01$, $p = .32$). The two groups did differ in terms of age ($\chi^2 = 8.43$, $p = .04$), gender ($\chi^2 = 4.44$, $p = .04$) and the number of financial dependants ($\chi^2 = 10.64$, $p = .03$). Between the two time points, younger males with fewer financial dependants dropped out of the study.

1.4.3 Measuring Instruments

The research method included a questionnaire – of which the items measure the participants' experiences, attitudes, behaviour, motivation and psychological need satisfaction and frustration.

Biographical Questionnaire. A biographical questionnaire was used to determine the demographics of the research participants, to provide a detailed description of the sample and to include these characteristics as covariates in Studies 1 and 2. These characteristics included age, dependants, education, employment history, gender, marital status, unemployment

duration in Study 1. In Studies 2 and 3, several additional variables were included that are commonly associated with motivation and/or experiences, attitudes and behaviour in an unemployment context: living situation, township, social assistance (self or others) or another form of income earned by others in the household.

Experience of Unemployment Questionnaire (EUQ; De Witte, Hooge, & Vanbelle, 2010). An adapted version of the EUQ was utilised to measure participants' affective *experiences*, *attitudes* towards employment, and job search *behaviour*. Section 1, focusing on the affective experiences of the individual, was developed on the basis of Jahoda's (1982) theory and consists of 16 items. Example items include rating one's positive (e.g. relaxed) and negative (e.g. lonely) affective experiences on a three-point frequency scale ranging from 1 (*often*) to 3 (*never*). In Studies 2 and 3, the scale was reversed [1 (*never*) to 3 (*often*)] and recoded to 0 (*never*) to 2 (*often*) in the analysis. In the study conducted by De Witte et al. (2010) and De Witte et al. (2012), the negative experiences scale was found to be reliable (α = .85); however, the scale for positive experiences was found to be less reliable (α = .60 and .68 respectively).

Section 2 focuses on the importance of work measured by seven items based on the *Employment Commitment Scale* of Warr, Cook, and Wall (1979). Participants need to indicate to what extent they agree with a range of statements (e.g. "I find it important to have work") on a three-point scale ranging from 1 (*agree*) to 3 (*disagree*). De Witte et al. (2012) found the scale to be reliable (α = .73) in a South African context.

Section 3 focuses on job search behaviour. Behaviour is measured by asking how many times participants have performed any of the five (extended to seven in Studies 2 and 3) different behaviours [e.g. "Searched for advertisements on the internet (e.g. job or organisational websites) or social media (e.g. Facebook, LinkedIn)"], reflected on a five-point frequency scale ranging from 0 (*never*) to 4 (*10 times or more*). Through factor analysis, De Witte et al. (2010) established that all items loaded onto one latent factor, finding the scale to be reliable (α = .78) in a South African context.

Factor analysis indicated four dimensions: negative experiences with unemployment (ten items), positive experiences with unemployment (six items), importance of work (seven items), and application behaviour (five items). The two items measuring financial hardship

and one item measuring positive experiences had low communality with the other items (De Witte et al., 2012). Three additional retrospective questions asked participants to compare their current with their previous affective experiences, the importance of work, and job search behaviour (De Witte et al., 2010).

Self-Regulation Questionnaire – Job Searching (SRQ-JS; Vansteenkiste et al., 2004). The adapted SRQ-JS was used to measure individuals' motives to search and not to search, and consists of 26 items. Vansteenkiste et al. (2004) constructed the questionnaire as part of their study by asking participants why there were (or were not) searching for jobs. Initially, 44 items were developed, reflecting all types of motivational regulation, according to the SDT; and principal component analysis yielded seven factors. Two factors reflected autonomous motivation (intrinsic and identified regulation), two factors reflected controlled motivation (external and introjected regulation), and one factor reflected amotivation. For theoretical purposes, the intrinsic and identified regulation is combined into the autonomous-motivation-to-search subscale. The four subscales showed acceptable internal consistency (α = .75 to .85; Vansteenkiste et al., 2004, 2005).

The adapted version of the instrument contains 39 items. The adapted version should have the same factor structure as the original instrument: autonomous motivation (intrinsic and identified regulation), controlled motivation (external and introjected regulation), and amotivation (Vansteenkiste et al., 2004).

The instrument was slightly shortened through the elimination of items that are not relevant in South Africa, and some items were adapted. Respondents were asked to rate to which degree they agree (or disagree) with statements reflecting amotivation (e.g. "I do not look for a job because I do not know how to start searching for a job"), external (e.g. "I look for a job because I feel pressure from others to do so"), introjected (e.g. "I look for a job because I feel ashamed of being unemployed"), and identified regulation (e.g. "I look for a job because work is personally important to me") on a three-point Likert-type scale ranging from 1 (*disagree*) to 3 (*agree*). The amotivation items were developed guided by research on discouraged job seekers in which the barriers that unemployed people experience discourage them from seeking. Herein it is argued that unemployed people are mostly discouraged by poverty, high unemployment rates, own duration of unemployment, the cost of job search, and lack of education, to name a few (Kingdon & Knight, 2006). Also, following the practice

of engaged scholarship (Van de Ven & Johnson, 2006), these newly developed items were evaluated by advisors from the community for applicability in the South African context.

Basic Psychological Need Satisfaction and Need Frustration Scale (BPNSFS; Chen et al., 2015). The BPNSFS was used to measure the frustration and satisfaction of participants' basic psychological needs. Chen et al. (2015) developed and validated the instrument in a sample of participants from four different countries (USA, China, Belgium and Peru). Based on the eigenvalue criteria, two factors were retained for each of three needs respectively. All autonomy satisfaction items loaded on one latent factor and all autonomy frustration items loaded on another latent factor. The same two-factor structures were obtained for the competence and relatedness dimensions. An evaluation of the model fit through CFA demonstrated that a six-factor model fitted the data best. After a process of refinement, the final version of the instrument contains four items for each of the six scales. The model fit the data well, with SBS-$\chi^2(231) = 372.71$, CFI = .97, RMSEA = .03 and SRMR = .04 (Chen et al., 2015).

The internal consistency for each scale in the four countries ranged between .64 and .89. The six-factor model was cross-validated in the second half of the sample and also yielded a good fit, SBS-$\chi^2(231) = 441.99$, CFI = .95, RMSEA = .04 and SRMR = .04 (Chen et al., 2015). The scale was adapted based on the two criteria proposed by Chen et al. (2015): conciseness (i.e. shorter questionnaire) and suitability for SEM analyses (three indicators per latent construct). The final version contained 19 items, six items for each of the needs, except relatedness, which is measured with seven items. Items were excluded based on their lower factor loadings as obtained in the study by Chen et al. (2015). Respondents were asked to rate to which degree they agree (or disagree) with statements such as "Most of the things I do feel like I have to" (autonomy frustration) and "I feel that my decisions reflect what I really want" (autonomy satisfaction), on a three-point Likert-type scale ranging from 1 (*disagree*) to 3 (*agree*).

1.4.4 Data Collection Procedure

Study 1

The data of Study 1 were collected as part of a joint pilot project between KU Leuven and the North-West University (NWU) on the experiences of the unemployed in the North West

Province. Interviews and focus groups were conducted to develop the English version of the EUQ, after which it was translated into Afrikaans and Setswana by professional translators. A process of back-translation was used to ensure that words retained their meaning in the translation process (De Witte et al., 2012).

Questionnaires were presented to experts to evaluate face validity. Three trained fieldworkers, proficient in the three languages mentioned above, were subsequently used to administer the questionnaire. The fieldworkers – three students from previously disadvantaged backgrounds – were trained in research methodology, data collection methods and data analysis methods using statistical software programs (De Witte et al., 2012). Unemployed people were randomly selected using door-to-door selection in different areas in town as well as in the informal settlement. Structured interviews based on the questionnaires were conducted with most of the participants, due to their low levels of education (De Witte et al., 2012).

Study 2

Permission was obtained from the Humanities and Health Research Ethics Committee (HHREC) of the North-West University (NWU-HS-2016-0002) and the Social and Societal Ethics Committee (SMEC) of KU Leuven (G-2016 01 452). A back-translation judgmental design was employed to determine the equivalence of translated questionnaires (De Kock, Kanjee, & Foxcroft, 2013). First, the questionnaire was translated into the target languages, Sesotho and isiZulu, by one set of accredited translators, after which it was translated back into the source language, English, by a different set of translators. The principal investigator compared the original English with the back-translated version to evaluate accuracy of translation and retention of meaning of the constructs. Additionally, three bilingual fieldworkers compared the original English version with the target language versions to evaluate accuracy of translation. The target language versions were then administered and discussed with eight other fieldworkers to determine comprehension.

During the first visit, an information letter was given to prospective participants, in the language of their choice; the information was also explained verbally to the prospective participants to enhance understanding. The participants were allowed 24 hours to decide whether they wanted to participate, after which the fieldworker returned to their homes with

the consent letter and the questionnaire. Structured interviews based on the questionnaires were conducted with most of the participants, due to their low levels of education. This process took about 60 minutes per participant, with breaks provided as required. Refreshments were offered upon arrival. Unemployed individuals acted as fieldworkers. These volunteers received appropriate training in research methodology and practice before they commenced with data collection.

A dual process was followed to recruit participants: Fieldworkers entered the communities and engaged with unemployed individuals who were roaming the streets to inform them about the study, and the principal investigator engaged with community radio stations (e.g. Theta FM) and newspapers (e.g. Boa Sedibeng) to inform prospective participants about the study and requested them to provide their contact details to the research team. In this manner a variety of prospective participants were informed about the study, which ensured a more diverse sample.

Study 3

Participants were asked to provide contact details of their choice during Study 2. Six months after the completion of the questionnaire, all participants from Boipatong were contacted to participate again. A venue was identified in the community where participants completed the questionnaire in groups of approximately ten. Three sessions were scheduled daily, for five days. Three trained fieldworkers, with at least a degree in human resource management, industrial psychology or labour relations management, conducted the group sessions. These fieldworkers received appropriate training and practice before they commenced with data collection. One fieldworker read the items aloud, while the others assisted the participants to complete. If a participant was unable to read or write, one-on-one structured interviews were conducted at the venue. A unique code was assigned to participants at Time 1 to enable the researcher to match responses.

The responses from Study 2 was utilised as Time 1 data, and the same questionnaires were completed at Time 2, six months later. The duration between the two waves was determined by two factors, namely (a) pragmatism (challenges such as attrition, changes in employment status, and loss of contact); and (b) theory (the time needed to observe changes). In line with this, a previous longitudinal study on coping and mental health effects demonstrated that the adverse effects of coping strategies (such as job search) tend to wear off more quickly than

the positive effects (Lin & Leung, 2010). These researchers did not find significant results for the negative effects at Time 1. They attributed this difference in the duration of positive and negative effects to the fact that people actively attempt to reduce negative effects, whereas positive effects decline naturally, in line with the mobilisation-minimisation hypothesis (Taylor, 1991) – indicating adaptation. It is important to note, however, that Lin and Leung (2010) also explained that the positive effects could last longer due to the buffering effect of welfare benefits. As discussed earlier, the absence of sufficient social grants may be the reason why South African unemployed do not adapt to unemployment (Griep, Baillien, Vleugels, Rothmann, & De Witte, 2013), and it is expected that the negative effects may last longer in the current population. It is also possible that, due to the collectivistic nature of African cultures, social support buffers the initial negative effects, and negative effects only start later. Furthermore, scholars highlight the importance of the duration between waves when collecting data for longitudinal research; it may cause biased results. If the duration is too long, effects may subside, and if it is too short, the predictor variable may not have had enough time to exert an influence (De Lange, Taris, Kompier, Houtman, & Bongers, 2004; Taris, 2000). Therefore, the decision to allow six months between waves in this study was guided by pragmatic issues and the dynamic nature of the variables as applicable to the SA context.

1.4.5 Statistical Analysis

The research method also included statistical analysis and interpretation of the statistical results. Mplus 7.4 (Muthén & Muthén, 1998-2015) was used for Study 1's data analyses. For Studies 2 and 3, Mplus 8 (Muthén & Muthén, 1998-2017) was used. The reliabilities of the scales were calculated using the omega reliability coefficient (ω), which is appropriate for estimating the reliability of variables on an ordinal level (Gadermann, Guhn, & Zumbo, 2012). Wang and Wang's (2012) $\rho > .70$ guideline was used as a guideline for interpretation of the reliability coefficients.

Studies 1 and 2

To identify different types of unemployed, latent profile analysis (LPA) was performed. Muthén and Muthén (2000) describe the goal of LPA as "finding the smallest number of latent profile that describe the association among a set of observed continuous variables" (p. 890) in cross-sectional data. LPA is a model-based approach to cluster individuals or cases

into groups (i.e. latent profiles), based on their responses to continuous variables (Muthén & Muthén, 2000). Formal statistical procedures are used to determine the number of clusters (Wang & Wang, 2012). LPA was performed on the factor scores saved from preliminary measurement models, a practice which is more common in recent applications of mixture models (Meyer & Morin, 2016; Morin, Meyer, Creusier, & Biétry, 2016). This procedure controls partially for measurement error by giving less weight to items with higher levels of measurement error, thus reducing bias to which scale scores are more prone (Skrondal & Laake, 2001).

To estimate an LPA model, three steps are followed: (a) determining the optimal number of profiles; (b) examining profile classification; (c) labelling the profiles (Wang & Wang, 2012). To determine the optimal number of profiles, LPA models with increasing numbers of latent profiles are tested and a significant improvement on the model with less profiles means the model with more profiles is retained. This is the first step in LPA (Wang & Wang, 2012). To determine model fit with mixture models such as the LPA model, the following indices are used (Tofighi & Enders, 2008): (1) Information criterion indices such as the Akaike (AIC; Akaike, 1983), the consistent AIC (CAIC; Bozdogan, 1987), sample-size adjusted CAIC (ACAIC), Bayesian (BIC; Schwarz, 1978) and adjusted BIC (ABIC; Sclove, 1987); (2) Lo-Mendell-Rubin likelihood ratio (LMR LR) test (Lo, Mendell, & Rubin, 2001), and adjusted LMR LR (ALMR LR) test; and (3) bootstrap likelihood ratio test (BLRT; McLachlan, 1987; McLachlan & Peel, 2000). Mplus provides the AIC, BIC and ABIC values. The model with the lowest information criterion indices value (penalising model complexity and sample size) is the best-fitting model (Wang & Wang, 2012).

A significant *p*-value ($p < .05$) of the LMR LR test indicates a significant improvement in the (nested) model, while an insignificant *p*-value ($p > .05$) indicates that there is not a significant improvement in the model indicating the optimum number of profiles (Wang & Wang, 2012). With small sample sizes, the ALMR LR test (adjusting model degrees of freedom and sample size) is recommended to reduce Type I error (Lo et al., 2001). An alternative LR test based on non-χ^2 distribution is the BLRT (McLachlan, 1987; McLachlan & Peel, 2000). The BLRT *p*-value is interpreted in the same way as the LMR LR test (Wang & Wang, 2012).

The second step in LPA is to examine the quality of the profile membership. Once the best-fitting model has been identified, individuals are allocated to a specific latent profile. Based

on the individual's response pattern to the observed indicators, posterior profile membership probability is calculated, which indicates the probability of a person belonging to a specific profile. The largest posterior probability value indicates the extent to which classification would be correct (Wang & Wang, 2012). The lowest acceptable posterior probability value is .70 (Nagin, 2005). If we find, for example, that the best-fitting model has five profiles as hypothesised, the probability of a person belonging to one or more of these profiles is calculated. For example, if the highest probability value of person A is .80 for Profile 1, that individual is classified as representing Profile 1. Entropy (EN), or relative entropy (REN) in the case of Mplus, is the second criterion used for evaluating the quality of profile membership. These values range between .00 and 1.00 and a value closer to 1.00 indicates better classification (Wang & Wang, 2012). Clark (2010) suggests the following interpretations of REN: high (.80), medium (.60), and low (.40) entropy. Next, the number of individuals in each profile should be noted. Profile sizes should not be too small, and the latent profiles should be theoretically meaningful and interpretable (Wang & Wang, 2012).

The third step in LPA is to label the latent profiles. The LPA model is similar to the measurement model in exploratory factor analysis (Wang & Wang, 2012). The profiles (latent variables) that have been identified should be theoretically interpretable, similar to factors derived in factor analysis. These "labels" are then used to describe heterogeneity in the population. Lastly, we identified the "typical unemployed" within each profile regarding socio-demographic characteristics based on chi-square difference ($\chi 2$) test and Cramer's V, which provides a measure of the strength of the association between the categorical variables. Cohen's (1988) guidelines were used to determine the magnitude of the practical effect sizes: small (.10), medium (.30) and large (.50). In Study 2, we performed MANOVA, ANOVA and pairwise comparisons (using Tukey's honestly significant difference test) to compare the levels of negative experiences, positive experiences, employment commitment, and job search behaviour across the profiles. Once again, factor scores for the outcome variables were saved from the preliminary measurement model and used in subsequent difference testing.

Study 3

The factorial validity of the measures was evaluated by means of the measurement model and and used as basis to test the hypotheses by means of the structural model. Models were estimated using the mean- and variance-adjusted weighted least squares (WLSMV) estimator for categorical variables. The following indices were used to assess the model fit based on

recommendations by Kline (2016): chi-square (χ^2), degrees of freedom (*df*), root mean square error of approximation (RMSEA), the weighted root mean square residual (WRMR), and incremental fit indices, including the comparative fit index (CFI), and the Tucker-Lewis index (TLI). CFI and TLI values higher than .95 are considered acceptable (Hu & Bentler, 1999), but should be treated as guidelines in applied research (West, Taylor, & Wu, 2012). Wang and Wang (2012) consider .90 as appropriate cut-off values for these two fit indices. Further, RMSEA values lower than .08 and WRMR values closer to 1 indicate acceptable fit between the model and the data (Wang & Wang, 2012).

1.5 Ethical Considerations

Creswell (2013) and Theron and Khumalo (2015) caution against ethical dilemmas that may arise during each phase of a research project. Guided by their recommendations, the present study evaluated risks during each of the stages (i.e. selection of the research problem, data collection and analysis, and interpretation and dissemination of results), and attempted to mitigate these risks as far as possible.

Ethical Considerations in the Research Problem

The selection of a research problem and the motivation for conducting the particular study should be based on the fact that it is important to choose a problem that will benefit others besides the researcher(s) (Punch, 2005). Unemployment is currently a serious challenge for SA and is expected to remain so for years to come. The current study aimed to generate information that can inform interventions to alleviate the psychosocial burden of unemployment.

Ethical Issues in the Purpose and Questions

The intended objective of the research should be communicated clearly to all stakeholders involved (Sarantakos, 2005) to avoid deception (Creswell, 2013). Furthermore, sponsorships should be declared (Creswell, 2013). The intended purpose of the study was communicated to representatives of the community that serve on the advisory board as well as to the participants 24 hours prior to giving consent. Concerning sponsorships, the logos of the respective sponsors of the overall research project (VLIR-uos and Optentia) appeared in all communications.

Ethical Considerations in Data Collection

The following ethical considerations (Creswell, 2013; Sarantakos, 2005; Theron & Khumalo, 2015) guided data collection: (a) Participants were not put at risk unnecessarily (regardless of the type), they were also respected at all times; (b) participants were asked to complete an informed consent form covering aspects such as inclusion criteria, purpose of the research and the possible publication of anonymous results, benefits for the participants, the expectations or requirements from participants, possible risks and mitigation thereof where possible, guarantee of confidentiality, the right to withdraw from the study without foreseen negative consequences, and contact details of individuals in the event that the participant needs more details regarding the research (the principal researcher and the chairs of the ethics committee), or if the participant felt distressed (LifeLine's contact details were provided, but a counsellor was on standby for the duration of data collection); (c) care was taken to maintain the physical integrity of the research sites and to minimise disruption and intrusion; (d) participants were provided with direct benefits (e.g. employability-enhancing kit containing interview and CV writing tips, etc.) at Time 2; (e) competence of fieldworkers was ensured by means of training and practise; and (f) cross-cultural issues were addressed (e.g. language and other non-verbal aspects) in training and by using fieldworkers who were of the same ethnicity as the participants.

Ethical Considerations in Data Analysis and Interpretation

Care was taken to (a) separate identifying information on informed consent letters from responses (use of unique numeric codes on response sheets for longitudinal data analysis purposes); (b) safeguard information, both hard copies (cabinets with appropriate locks) and electronic data (password protection); (c) ensure competence of researcher analysing the data via training and supervision; and (e) interpret results accurately by means of peer review.

Ethical Considerations in Writing and Disseminating Results

Writing and dissemination of results was and will continue to be guided by the following considerations stipulated by Creswell (2013) and Theron and Khumalo (2015): (a) The use of unbiased language, the sensitive use of labels (i.e. "the participant's responses are typical of", instead of "the participant is…"), and participant acknowledgement in the manuscripts (i.e. "participant" instead of "subject"); (b) honest representation of findings by the researcher by not manipulating results to fit someone's needs; (c) consideration of possible unintended

(mis)use of data (providing feedback to participants directly instead of via third parties); (d) recognition of contributors; and (e) publication of findings in peer-reviewed journals.

1.6 Chapter Division

Chapter 1: Introduction, problem statement and objectives
Chapter 2: Literature review
Chapter 3: Article 1 – A psychosocial typology of the unemployed in South Africa
Chapter 4: Article 2 – Motivational profiles in unemployment: A self-determination perspective
Chapter 5: Article 3 – Experiences, attitudes and behaviour of the unemployed: The role of motivation and psychological needs
Chapter 6: Conclusions, contributions, limitations and recommendations

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CHAPTER 2

LITERATURE REVIEW

The aim of this chapter is to provide an overview of the literature in line with the first three objectives of the study formulated in Chapter 1. Specifically, the chapter starts with a conceptualisation of the dimensions underlying the psychosocial typology and then explains the different types of unemployed that were identified in Belgium and elsewhere. An overview of the associations between socio-demographic characteristics and the psychosocial types, in general, as well as with each of the dimensions of the typology, respectively, follows. Next, this chapter conceptualises job search motivation and provides an overview of studies on motivational profiles from other domains and reports previous associations with experiences, attitudes, and behaviour. Lastly, it conceptualises basic psychological needs, and the relationships between job search motivation, psychological need satisfaction (and frustration), experiences, attitudes, and behaviour.

2.1 Dimensions of the Unemployment Experience

The typology of the unemployed is based on affective experiences, commitment and job search. The affective experiences of the unemployed are best understood from the latent deprivation theory postulated by Jahoda (1982). According to this theory, employment serves two sets of functions – manifest (referring to monetary rewards) and latent. The latent functions include (a) establishing a daily time structure; (b) sharing contact and experience with others outside of the immediate family; (c) having a collective purpose; (d) forming a social identity through social status; and (e) engaging in regular activities (Jahoda, 1982). Individuals participate in employment to earn a living (manifest), but they also obtain added benefits in the form of the latent functions (Jahoda, 1982).

Studies have concluded that unemployment impacts negatively on the individual's psychological well-being (McKee-Ryan, Song, Wanberg, & Kinicki, 2005; Paul & Moser, 2009; Wanberg, 2012), which can be explained by a deprivation of these functions (Paul, Geithner, & Moser, 2009). If these functions are not satisfied, mental health declines.

Employment is the major, if not the only, source of satisfaction of these functions in modern societies (Jahoda, 1982).

Building on the work of Jahoda, De Witte (De Witte, 1992; De Witte & Hooge, 1995; De Witte & Wets, 1996) included negative experiences and financial hardship in his psychosocial typology. Although De Witte (1992) included items capturing positive experiences (i.e. having more time to spend with significant others or having more time to relax) in the measuring instrument, these items were not included in the typology. In line with the notion that some individuals have positive experiences (Herbert, Drebing, Mueller, & Van Ormer, 2006), the current study extends the original typology by including positive experiences. Research on mental illness and mental health consistently demonstrates that the presence of illness does not imply the absence of health (Keyes, 2005; Keyes, Shmotkin, & Ryff, 2002; Westerhof & Keyes, 2010), except in extreme cases (Simmons & Lehmann, 2013). At the extremes, unemployment can be negative or positive, but it can also be experienced as a mixture between negative and positive.

Attitude can be best described by the importance that the unemployed attach to employment (De Witte, Rothmann, & Jackson, 2012). In the unemployment literature, attitude has been studied as work (employment) commitment (De Witte et al., 2012; Jackson, Stafford, Banks, & Warr, 1983) and is also referred to as work-role centrality or work involvement (McKee-Ryan et al., 2005). Warr, Cook, and Wall (1979) define work involvement as "the extent to which an individual wants to be engaged in work" (p. 130). It may stem from a Protestant work ethic or simply from a belief that work is important and enhances life satisfaction (Kanungo, 1982).

Job search is a purposeful activity and is conducted with the aim of finding a job (Schwab, Rynes, & Aldag, 1987). It is operationalised in terms of the intensity with which unemployed individuals search for a job (De Witte, 1992) by means of different active and passive job search methods such as asking others if work is available, searching for advertisements, submitting applications, enquiring whether work is available, and spontaneously presenting themselves to potential employers (De Witte, Hooge, & Vanbelle, 2010). These methods correspond with the job finding strategies reported in the National Income Dynamics Study, frequently conducted in South Africa (SA) (see Posel, Casale, & Vermaak, 2014).

The interplay between the experiences, commitment and search behaviour can be understood as a way of 'adapting' to the role of unemployment (De Witte et al., 2010). When one scores high on employment commitment, unemployment becomes a frustrating experience that leads to psychological distress (Fryer & Payne, 1986). More negative experiences result from being unemployed because it is a reminder of the discrepancy between the current situation and what one desires to have, namely employment (De Witte et al., 2010). Together with a reduction in employment commitment, a decrease in active searching and application activities forms part of the psychological withdrawal process with the aim of coping with the negative experiences, especially in the event of long-term unemployment (De Witte, 1993; De Witte & Hooge, 1995). According to the Cognitive Dissonance Theory (Festinger, 1957), expectations or values that are not aligned with behaviour may trigger negative emotions that can only be resolved by a change in behaviour or a change in expectations and values. Consequently, if there is a discrepancy between the importance one attaches to work and one's job search behaviour, one will either alter search behaviour or change the value one attaches to work to maintain consensus and reduce negative experiences (Griep, Baillien, Vleugels, Rothmann, & De Witte, 2013). However, the opposite may be the case from the scarcity hypothesis perspective (Inglehart, 1990). According to Vleugels, Rothmann, Griep, and De Witte (2013), paid employment may be the only way out of financial hardship and this may be instrumental in enhancing the importance the unemployed attach to paid work. In this case the unemployed will attach higher importance to work and search more actively, because, in their mind, it will improve the likelihood of them finding employment that can provide financially (Vleugels et al., 2013). A psychosocial typology would enable the investigation of the interplay between the experiences, attitudes and behaviour.

2.2 Typology and Socio-Demographic Characteristics

Based on the experiences, the importance of work and search behaviour, five different psychosocial types can be distinguished in a Belgian sample (De Witte, 1992): *Optimists* have average scores on employment commitment, are searching for a job and experience unemployment as neither negative nor positive. *Desperate* seekers score very high on employment commitment, high on search behaviour, and experience unemployment as very negative. Unemployed people who are *discouraged* also score very high on employment commitment; they are, however, slightly less involved in searching for a job, and experience unemployment less negatively than the desperate type (De Witte, 1992). Unemployed people

of the *adapted* type score high on employment commitment, but they are no longer searching and it seems that they have adapted to being unemployed. They also experience unemployment as positive. Lastly, the *withdrawn* people are the opposite of the discouraged unemployed people, with a low commitment to work, absence of search behaviour and a positive experience of unemployment (De Witte, 1992). From an economic perspective, these last two groups are the least 'desirable' types of unemployed. Since psychosocial profiling has significant implications for both science and policy and because these profiles may be different depending on the country under investigation, cross-validation is necessary.

Examining different groups of unemployed based on their psychosocial functioning is a valuable addition to the literature. Previous research mostly focused on understanding the differences among the unemployed, in the South African context, based on their job search behaviour (see Kingdon & Knight, 2006; Lloyd & Leibbrandt, 2014; Posel et al., 2014). Although behaviour is relevant, it is unlikely to be sufficient to cluster unemployed individuals. In an international context, research adopts a broader perspective, with more scholars attempting to cluster individuals according to biographical or psychological variables. Table 1 provides an overview of these studies and the different types of unemployed found.

From the review of the international literature, four observations can be made. First, the type and the number of variables included in the typologies differed, leading to different findings on the number of types subsequently identified, ranging between two (Jones, 1989) and six (Engbersen & Timmer, 1993). Second, the approaches taken by the different researchers also varied from purely sociological (Engbersen & Timmer, 1993; Hoff & Van Echtelt, 2008), to psychological (Jones, 1989; Kilpatrick & Trew, 1985; Starrin & Larsson, 1987; Wanberg & Marchese, 1994) to psychosocial (De Witte, 1992; Jahoda et al., 1933, as cited in Jahoda, 1982). Third, aside from the typology developed by De Witte (1992), replicated in a study with short-term unemployed (De Witte & Hooge, 1995) and with females (De Witte & Wets, 1996), the other typologies have never been replicated. Fourth, regarding the methods employed for data analysis, latent profile analysis was applied in only one of these studies (see Hoff & Van Echtelt, 2008).

Table 1

A Review of the Literature on Typologies

Author/s	**Variables included in typology**	**Types of unemployed**
De Witte (1992)	Psychosocial: - Negative experiences of unemployment; - Attitude towards employment (employment commitment); and - Job search behaviour (past three months).	Five types of long-term unemployed: - Optimists - Desperate - Discouraged - Adapted - Withdrawn
Engbersen and Timmer (1993)	Sociological: - Desire to achieve a goal (i.e. work); and - Actions taken to achieve this goal (i.e. applications, skills improvement or projects) or alternative strategies to make a living (i.e. informal economy or social grants).	Six types of long-term unemployed: - Conformists - Ritualists - Retreatists - Enterprising - Calculating - Autonomous
Hoff and Van Echtelt (2008)	Sociological: - Perceptions regarding paid employment: work ethic (perception of moral obligation), weighing of the pros (money and social contacts) and cons (less leisure time and less self-determining regarding what to do and when) of having paid employment; - Search behaviour (past four weeks); and - Participation in society (volunteer, membership of societies or clubs or involvement in political activities).	Four types of longer-term unemployed (minimum six months): - Work-orientated - Social stakeholders - Alternative "meaningmakers" - Retreatist
Houssemand, Pignault, and Meyers (2014)	Psychological (variables chosen depending on validity in predicting re-employment): - Personality; - Self-esteem, self-efficacy and self-evaluation; - Employment commitment; - Perceived control over unemployment; - Social skills, social support and satisfaction with social support; - Coping; - Psychological distress, anxiety, perceived stress and depression; and - Cognitive ability.	Five types of short-term unemployed: - Integrated - Willing - Outsider - Anxious - Dispossessed
Jahoda, Lazarsfeld, and Zeisel (1933) as cited in Jahoda (1982)	Social-psychological: - Degree of household and child care; - Community involvement; - Plans for the future; - Job-search activities; and - Well-being.	Four types of families with individuals that have just lost their jobs: - Unbroken - Resigned - In despair - Apathetic
Jones (1989)	Psychological (coping): - Occupational status; - Socio-economic status; - Financial situation; - Work involvement; - Family structure; - Social network status; - Depressive symptoms; and - Found a job (or not).	Two main types with sub-types: - Low stress adaptation o Unaffected, blessing in disguise and cyclers - High stress adaptation o Anxious but coping and dysfunctional adaptations

Table 1 *(continues…)*

Author/s	Variables included in typology	Types of unemployed
Kilpatrick and Trew (1985)	Psychological (coping): Lifestyle based on time spent on certain activities such as – - Away from home (men who spent their time in the company of others); and - Home-centred (men who spent time at home with wife and children).	Four types of short- to long-term unemployed: - Active (away from home) - Social (away from home) - Domestic (home-centred) - Passive (home-centred)
Starrin and Larsson (1987)	Psychological (coping): - The individual's relationship to non-work activities (passive or active); and - The individual's relationship to wage labour (committed or non-committed).	Four types short- to long-term unemployed: - Giving up - Refocusing - Clenching to past lifestyle - Becoming ambivalent
Wanberg and Marchese (1994)	Psychological (coping): - Financial concerns; - Employment commitment; - Job-seeking confidence; and - Time structure.	Four types of unemployed: - Confident but concerned - Distressed - Unconcerned and indifferent - Optimistic and coping

The typology of De Witte is both theoretically and empirically superior to the other typologies. Theoretically, it corresponds with the criteria stipulated by the broad definition of unemployment (Griep et al., 2013) and it is based on sound psychological frameworks. Empirically, it has been validated in different samples. Notably, by examining the typology in the South African context, we also add to this line of research by determining the generalisability and, by implication, the construct validity of the typology that is relevant for use in career counselling, interventions and monitoring of different groups of unempoyed (Bimrose & Barnes, 2011; Crépon, Dejemeppe, & Gurgand, 2005; Henderson, Muller, & Helmes, 2013; Houssemand et al., 2014; Kluve, 2010; Noordzij, Van Hooft, Van Mierlo, Van Dam, & Born, 2013; Weber, 2011).

In line with best practice guidelines for person-centred approaches and to facilitate meaningful interpretation of types, covariates are included in typologies (Meyer & Morin, 2016). These may include socio-demographic characteristics such as the variables (e.g. age, unemployment duration, gender, family type, dependants, education, work experience, income) included by De Witte (1992). His study revealed that the *optimists* comprised more females; members were generally younger and more educated, and the duration of their unemployment to date was shorter compared to the other types (De Witte, 1992). In contrast to the optimists, the *desperate* were older and had been unemployed for longer; they were poorly educated, with less work experience, and struggled more financially. This group also

typically included more males (De Witte, 1992). People classified as *discouraged* were on average older than both the optimists and desperate – their unemployment duration being shorter than the desperate type. In general, the individuals were poorly educated and financial deprivation was also prevalent in this group (De Witte, 1992). The *adapted* group was on average older than all the other groups, comprising more married individuals with children, and whose unemployment duration was the longest. This type was also poorly educated and skilled. The *withdrawn* type included significantly more females than males and had the highest number of unemployed with (younger) children. Their level of financial deprivation was also slightly below average (De Witte, 1992).

Table 2 summarises previous findings highlighting trends between the respective dimensions of the typology and socio-demographic characteristics. From previous research, several conflicting findings exist for the associations between socio-demographic characteristics and the respective dimensions of the typology, perhaps because these associations may be highly dependent on context. Fourie (2012) also concluded in a review of unemployment literature in SA that several demographic characteristics influence issues such as job search in complex ways. Therefore, the complex associations between the different types and these characteristics should be explored and not simply extrapolated from other studies.

Table 2

Dimensions of the Typology and Associations with Socio-Demographics Characteristics

Dimension	Associations with background characteristic
Experience	*Age*: Youth and persons older than 50 experienced more distress from unemployment than middle-aged persons (Paul & Moser, 2009). Others assume that middle-aged individuals suffer more psychologically (Broomhall & Winefield, 1990; Jackson & Warr, 1984). *Gender*: Unemployed males have more negative experiences than unemployed females (Paul & Moser, 2009); however, others found that women have more negative experiences (McKee-Ryan et al., 2005). Kulik (2000; 2001) reported a non-significant difference between men and women. *Dependants*: McKee-Ryan et al. (2005) conclude that the more dependants one has, the more negative the outcome for mental health. *Relationship status*: One meta-analysis indicates the positive impact of having a spouse (McKee-Ryan et al., 2005), but another indicates that it has no impact (Paul & Moser, 2009). *Educational qualifications:* A weak association was reported by McKee-Ryan et al. (2005), but a negative association (less psychological distress among higher qualified unemployed) was reported by Price and Fang (2002). *Unemployment duration*: The longer the duration of unemployment, the worse their experiences of it with a possible adaptation phase, but this adaptation ceases to exist after 29 months (Paul & Moser, 2009). However, according to De Witte et al. (2010) and McKee-Ryan et al. (2005), the short-term unemployed experience more distress than the long-term unemployed. Kulik (2001) reported a non-significant association.
Attitude	*Age*: Warr and Jackson (1984) and Rowley and Feather (1987) established that commitment was the highest among the middle-aged. Nordenmark (1999) established that youth have a stronger association with employment commitment. De Coen, Forrier, De Cuyper, and Sels (2015) and Kulik (2001) found no significant association between age and employment commitment. *Gender*: Previous studies reported that men have significantly stronger work commitment than women do (Nordenmark, 1999; Kulik, 2001), while others found no significant differences (Creed, Lehmann, & Hood, 2009; Isaksson, Johansson, Bellaagh, & Sjöberg, 2004), or higher mean levels for women than men (Hammer & Russel, 2004). *Dependants*: Nordenmark (1999) found no significant association between dependants and employment commitment, but when split into different gender groups, single women with children and cohabiting men with children showed more commitment to employment. *Relationship status*: Warr (1982) found that single individuals are more committed to employment. *Educational qualifications*: Creed et al. (2009) reported a non-significant association. *Unemployment duration*: According to De Witte et al. (2010) and Kulik (2001), the short-term unemployed are more committed to finding employment than the long-term unemployed. Creed et al. (2009), Nordenmark (1999), and Warr and Jackson (1984) found no association.

Table 2 *(continues…)*

Dimension	Associations with background characteristic
Behaviour	*Age*: Kanfer, Wanberg, and Kantrowitz (2001) and Wanberg, Kanfer, Hamann, and Zhang (2016), determined that older individuals engage in less search behaviour than younger individuals. A study by Kulik (2000; 2001) indicated that middle-aged individuals display greater intensity levels than younger individuals. De Coen et al. (2015) found no significant association. *Gender*: According to Kanfer et al. (2001) and Kulik (2000), women engage in less search behaviour than men. On the other hand, studies conducted by Kulik (2001), Tziner, Vered, and Ophir (2004) and Vansteenkiste, Lens, De Witte, De Witte, & Deci (2004), found no significant difference between men and women. *Dependants*: Unemployed individuals with more dependants tend to search more intensely for a job (Wanberg, Glomb, Song, & Sorenson, 2005). *Relationship status*: Married men search more intensively than single men and the divorced/widowed (Kulik, 2000). *Educational qualifications*: Christensen, Schmidt, Kriegbaum, Hougaard, and Holstein (2006) conclude that low educational attainment is associated with low problem-solving coping, in this case, search behaviour. Kanfer et al. (2001) also reported higher levels of search behaviour as educational levels increased. *Unemployment duration*: Several studies report that the long-term unemployed reduce their job search efforts (De Witte et al., 2010; Kulik, 2001; Tziner et al., 2004), especially when confronted with repeated rejection (De Witte et al., 2010).

2.3 Job Search Motivation

Self-determination theory (SDT), with a multi-dimensional view, maintains that it is not only the amount of motivation that one has that explains one's experiences, attitudes and behaviour but also that these individual-level variables depend to a large extent on the reasons for engaging in certain behaviours (Deci & Ryan, 2000), i.e. the quality or "why" of motivation. This is reflected in two broad categories or reasons.

Autonomous versus controlled motivation and amotivation (Deci & Ryan, 2000). Autonomous motivation encompasses both intrinsic motivation (or intrinsic regulation) and extrinsic motivation in terms of identified regulation. People with intrinsic motivation engage in behaviours because the activity itself is enjoyable, satisfying or challenging (Ryan & Deci, 2000). In this instance, the locus of control resides fully within the individual (Deci & Ryan, 2000) and behaviour is intrinsically regulated (Ryan & Deci, 2000). Intrinsically motivated unemployed may derive a sense of enjoyment from exploring the job market (Vansteenkiste & Van den Broeck, in press). Others may experience exploration of the job market as unpleasant (Van Hooft, Wanberg, & Van Hoye, 2012), but despite not deriving satisfaction

from the activity itself, these individuals are still autonomously motivated (accepting the reason for doing something as their own) because they perceive the activity as being important or personally meaningful (identified regulation). Identified regulation is an autonomous type of extrinsic motivation. These individuals still commit actively rather than being controlled passively (Deci & Ryan, 2000; Ryan & Deci, 2000).

It is important to note that intrinsic regulation was excluded in the current study on the unemployed. Theoretically, the unemployed may, at most, see the job search task as instrumental in achieving valued outcomes – i.e. such as finding employment – but will not regard the search activity itself as fun or interesting. The social context, which is a significant antecedent of motivational regulation (Deci & Ryan, 2012), does not allow for the motives behind the activity to be intrinsically regulated. Similarly, Vansteenkiste and Sheldon (2006) argued that individuals' motives for behavioural change in therapeutic settings may be instrumental in coping or alleviating problems (identified regulation), so the person may not resist the behaviour, but will not experience it as fun or enjoyable (intrinsic regulation). Similar arguments were also maintained by Chandler and Connell (1987) for performing disliked behaviours. Following the recommendation of engaged scholarship (Van de Ven & Johnson, 2006), qualitative discussions with unemployed individuals in SA prior to this research confirmed this assumption. Empirically, research also warned against individuals completing intrinsic items from an external perspective if too far removed from reality, affecting the validity of these items (Ünlü & Dettweiler, 2015).

In contrast to autonomous motivation, controlled motivation means that the person participates in an activity purely because of pressure and the source of regulation is extrinsic (Deci & Ryan, 2000; Ryan & Deci, 2000). Unemployed people display controlled job search motivation, for instance, when they search for a job because others want them to search for a job (Vansteenkiste, Lens, De Witte, & Feather, 2005). In this case, people act to comply rather than to enjoy. Two subtypes can be distinguished, namely external regulation and introjected regulation. To meet external demands or pressures in the form of gaining a reward or avoiding punishment, the individual is said to be externally (interpersonally) regulated (Deci & Ryan, 2000; Ryan & Deci, 2000). This is the most extrinsic form of motivation and the locus of control is entirely external. Introjected regulation means that the individual is exerting pressure on him or herself in the form of self-imposed guilt, feelings of shame or the

threat of being less worthy as a person; thus, intrapersonally regulated (Deci & Ryan, 2000; Ryan & Deci, 2000).

Autonomous and controlled motivated behaviour have a shared characteristic: they are intentional in nature. Amotivation, in contrast, is characterised by a lack of intention. Amotivation was originally conceptualised as one-dimensional (see Deci & Ryan, 1985), but some studies also treated amotivation as multidimensional (Cheon, Reeve, & Song, 2016; Green-Demers, Legault, Pelletier, & Pelletier, 2008; Legault, Green-Demers, & Pelletier, 2006; Pelletier, Dion, Tuson, & Green-Demers, 1999). According to the multidimensional perspective, amotivated individuals do not engage (or rather passively engage) in the required behaviour for a variety of reasons (i.e. because they feel incapable, or because the required activity does not bring the desired outcome, or because they do not value the activity altogether) (Ryan, Lynch, Vansteenkiste, & Deci, 2011). There is value in treating amotivation as either uni- or multidimensional, and the research question would largely determine how to approach the concept. Most recently, Ryan and Deci (2017) identifed three forms or "subtypes" of amotivation. The first subtype refers to amotivation resulting from an inability to foresee positive outcomes and stems from a general helplessness (i.e. people cannot effectively attain outcomes) or personal helplessness (i.e. the person cannot effectively attain outcomes). The second subtype refers to amotivation resulting from a lack of interest, or disinterest. The last subtype refers to amotivation resulting from defiance or a resistance to act (Ryan & Deci, 2017).

In the second study, amotivation was conceptualised as two-dimensional and corresponds to the first subtype of Ryan and Deci (2017): personal (i.e. the expectation that one does not have the 'human capital') and structural amotivation (i.e. the expectation that structural factors prevent positive outcomes even if one engages in the desired behaviours). Within economics, some of these types of amotivation are reflected in the barriers experienced by unemployed people. Herein it is argued that unemployed people are mostly discouraged by poverty, high unemployment rates, own duration of unemployment, the cost of job search, and lack of education, to name a few (Fourie, 2012; Kingdon & Knight, 2006). From the literature, there are consequently "personal or human capital barriers" that stem from indogenous factors as opposed to "environmental or structural barriers" that stem from exogenous factors. Both personal and structural amotivation captures reasons for the "inability to see positive outcomes" mentioned in the first form of amotivation (Ryan & Deci,

2017). The choice of multidimensionality is then beneficial to expand and refine our knowledge base which could improve the effectiveness of future interventions. If profiles emerge with different levels of personal or structural amotivation, we expand SDT person-centred literature by wedding it with economics literature and we refine motivational profiles by understanding how subtypes of amotivation manifests. In the second study, four types of job search motivation (introjected, extrinsic, and personal amotivation, and structural amotivation) were investigated to provide a comprehensive picture of the functioning of the unemployed under investigation.

2.4 Motivational Profiles

Individuals can endorse more than one type of motivation, with high and/or low scores on these types, reflected by different motivational profiles (Vansteenkiste & Mouratidis, 2016). Literature on motivational profiles – with purely SDT constructs – proliferated and solutions with different numbers of profiles were found. The nature of these profiles differs from profiles consisting of low to high levels of the more controlled types of motivation in combination with low to high levels of the more autonomous types of motivation. Table 3 provides an overview of profile research using SDT constructs. In general, the studies support the assumptions of the SDT, showing that people differ in the amount of motivation (i.e. having high, moderate or low scores on each motivational regulation) and the quality of motivation (more autonomous vs. more controlled profiles). Results, however, also differed across studies, which could be caused by the differences in method or context (Vansteenkiste & Mouratidis, 2016). Given the differences between studies and the unique nature of the unemployment context, results of previous studies cannot be extrapolated and it is necessary to investigate profiles in this context.

In line with best practice guidelines and because of the inherent value, several studies investigated the impact of motivational profiles summarised in Table 3. The propositions of SDT, that more autonomous profiles lead to positive outcomes, were confirmed by several person-centred studies (e.g. Bioché, Sarrazin, Grouzet, Pelletier, & Chanal, 2008; Vansteenkiste, Sierens, Soenens, Luyckx, & Lens, 2009). However, contrary to the tenets of the SDT, some studies have also demonstrated that a combination of controlled motivation, with at least some level of autonomous motivation – i.e. mixed profiles – has the most positive outcomes (Gillet, Berjot, Vallerand, Amoura, & Rosnet, 2012; Moran, Diefendorff,

Kim, & Liu, 2012; Van den Broeck, Lens, De Witte, & Van Coillie, 2013), but perhaps more for performance (Gillet et al., 2012; Moran et al., 2012) than well-being (Gillet et al., 2012; Van den Broeck et al., 2013). Attempting to satisfy external expectations may motivate individuals to perform, especially in competitive environments, but at the same time the pressure may lead to a decline in well-being (Gillet et al., 2012). Moreover, the different types of motivation may not have their expected impact because of the pressuring nature of the unemployment context (see Vallerand, Pelletier, & Koestner, 2008). More research is therefore necessary to test these assumptions, with the current study that examined both well-being and performance.

Table 3

Overview of Literature on Motivational Profiles

Author/s	Domain	Types of motivation	Profiles	Outcomes	Method of analysis
Aelterman, Vansteenkiste, Soenens, and Haerens (2016)	Education (physical) – High school	- Controlled motivation (non-participation) - Amotivation - Controlled motivation - Autonomous motivation	*Five profiles:* 1. Controlled motivated (non-)participation-amotivation: Average levels of autonomous motivation and high to very high levels of controlled motivation, amotivation and controlled motivation (non-participation). 2. Controlled motivated participation-amotivation: Low levels of autonomous motivation, high to very high levels of controlled motivation and amotivation, but average levels of controlled motivation (non-participation). 3. Low motivation: Very low levels of autonomous and controlled motivation and low levels of amotivation and controlled motivation (non-participation). 4. High motivation: High levels of autonomous and controlled motivation and low levels of amotivation and controlled motivation (non-participation). 5. Autonomously motivated participation: High levels of autonomous motivation, very low to low levels of controlled motivation, amotivation and controlled motivation (non-participation).	- Self-reported learning: High motivation = Autonomously motivated participation > Controlled motivated (non-) participation-amotivation = Controlled motivated participation-amotivation = Low motivation. - Teacher-rated performance: Autonomously motivated participation > Controlled motivated (non-)participation-amotivation = Controlled motivated participation-amotivation = Low motivation = High motivation. - Resentment towards lesson: Controlled motivated (non-) participation-amotivation > Controlled motivated participation-amotivation = High motivation > Low motivation > Autonomously motivated participation. - Resentment towards teacher: Controlled motivated (non-) participation-amotivation > Controlled motivated participation-amotivation > Low motivation > High motivation = Autonomously motivated participation.	Cluster analysis
Bioché, Sarrazin, Grouzet, Pelletier, and Chanal (2008)	Education (physical) – High school	- Amotivation - External - Introjected - Identified - Intrinsic	*Study 1: Three profiles (Gymnastics)* 1. Self-determined: High levels of self-determined forms of motivation (i.e. intrinsic and identified regulation), moderate level of introjected regulation, and low levels of external regulation and amotivation. 2. Moderate: Average scores for every form of motivation. 3. Non self-determined: Low levels of self-determined forms of motivation, a low level of introjected regulation, and relatively high levels of external regulation and amotivation. *Study 2: Three profiles (Gymnastics)* Replicated the profiles from Study 1.	*Study 1:* - Performance: Self-determined > Moderate > the Non-self-determined. *Study 2:* - Final performance controlling for initial performance: Self-determined > Moderate > the Non-self-determined. - Grades: Self-determined > Moderate > the Non-self-determined. - Objective effort: Self-determined = Moderate > Non-self-determined.	Cluster analysis

Table 3 *(continues…)*

Author/s	Domain	Types of motivation	Profiles	Outcomes	Method of analysis
Haerens, Kirk, Cardon, De Bourdeaudhuij, and Vansteenkiste (2010)	Education (physical) – University	- Amotivation - Controlled motivation - Autonomous motivation	*Five profiles:* 1. Amotivated: Very low levels of autonomous and average levels of controlled motivation, but very high levels of amotivation. 2. Controlled-amotivated: Low levels of autonomous motivation, but high to relatively high levels of controlled motivation and amotivation. 3. Lowly motivated: Low levels of autonomous and controlled motivation, but relatively average levels of amotivation. 4. Autonomous-controlled: High levels of autonomous and controlled motivation, but relatively low levels of amotivation. 5. Autonomous: High levels of autonomous, but relatively low levels of controlled motivation and amotivation.	*Concurrent transfer:* - Total amount: Autonomous > Autonomous-Controlled > Controlled-Amotivated > Lowly Motivated = Amotivated. - Sports: Autonomous > Autonomous-Controlled > Controlled-Amotivated > Lowly Motivated = Amotivated. - Active: Autonomous = Autonomous-Controlled > Controlled-Amotivated = Amotivated. *Self-reported transfer:* - Self-reported: Autonomous = Autonomous-Controlled > Lowly Motivated = Controlled-Amotivated = Amotivated. *Delayed transfer:* - Total amount: Autonomous-Controlled > Autonomous > Lowly Motivated = Amotivated; Controlled-Amotivated > Autonomous. - Sports: Autonomous = Autonomous-Controlled > Lowly Motivated = Controlled-Amotivated = Amotivated. - Active: Autonomous > Lowly Motivated > Controlled-Amotivated; Autonomous-Controlled = Amotivated > Controlled-Amotivated.	Cluster analysis
Hayenga and Corpus (2010)	Education – Middle School	- Intrinsic - Extrinsic	*Four profiles:* 1. High quantity (HQ): High levels of both intrinsic and extrinsic motivations. 2. Good quality (GQ): High intrinsic motivation, but low extrinsic motivation. 3. Poor quality (PQ): Low intrinsic motivation, but high extrinsic motivation *4.* Low quantity (LQ): Low levels of both constructs.	- Grade point averages (GPA) in fall: GQ > LQ > HQ > PQ. - Grade point averages (GPA) in spring: GQ = LQ > HQ > PQ.	Cluster analysis

Table 3 *(continues…)*

Author/s	Domain	Types of motivation	Profiles	Outcomes	Method of analysis
Ratelle, Guay, Vallerand, Larose, and Senécal (2007)	Education – High school students and college students	- Amotivation - External - Introjected - Identified - Intrinsic	*Study 1: Three profiles (High school students)* 1. Controlled (C): Low levels of autonomous motivations and moderate to high levels of both controlled motivations and amotivation (amotivation was the strongest type). 2. Moderate autonomous-controlled (Moderate AU-C): Moderate levels of autonomous and controlled motivations and by levels of amotivation. 3. High autonomous-controlled (High AU-C): High levels of autonomous and controlled motivations and low levels of amotivation. *Study 2: Three profiles (High school students):* Replicated the profiles of Study 1. *Study 3: Three profiles (College students):* 1. High autonomous-controlled (High AU-C): High levels of both autonomous and controlled motivations and low levels of AM. 2. Low autonomous-controlled (Low AU-C): Low to moderate levels of autonomous and controlled motivations. 3. Autonomous (AU): High levels of autonomous motivations and low levels of controlled motivations.	*Study 1:* - Anxiety: C = Moderate AU-C > High AU-C. - Distraction: C > Moderate AU-C > High AU-C. - Satisfaction: High AU-C > Moderate AU-C > C. - Dropout: C > Moderate AU-C. High AU-C was a negative predictor. *Study 2:* - Achievement: High AU-C = Moderate AU-C > C. - Absenteeism: C > Moderate AU-C = High AU-C. *Study 3:* - Achievement (fall): AU = High AU-C > Low AU-C. - Achievement (winter): AU = High AU-C > Low AU-C.	Latent Profile Analysis

Table 3 *(continues…)*

Author/s	Domain	Types of motivation	Profiles	Outcomes	Method of analysis
Vansteenkiste, Sierens, Soenens, Luyckx, and Lens (2009)	Education – High school and college	- Autonomous - Controlled	*Four profiles: 7th to 12th Grade* 1. Good quality (GQ): Relatively high scores on autonomous and relatively low scores on controlled motivation. 2. Poor quality (PQ): Low scores on autonomous and high scores on controlled motivation. 3. Low quantity (LQ): Low scores on both autonomous and controlled motivation. 4. High quantity (HQ): High scores on both autonomous and controlled motivation. *Four profiles: College students* Replicated the profiles from Study 1.	*Study 1:* - Cognitive processing: GQ = HQ > PQ = LQ. - Test anxiety: HQ = PQ > GQ = LQ. - Time and environment use: GQ = HQ > PQ = LQ. - Meta-cognitive strategy use: GQ = HQ > PQ = LQ. - Effort regulation: GQ = HQ > PQ = LQ. - Procrastination: PQ > LQ > HQ > GQ. - GPA: GQ > HQ < PQ = LQ. - Cheating behaviour: PQ = LQ > GQ = HQ. - Cheating attitude: PQ = LQ > HQ > GQ. *Study 2:* - Cognitive processing: GQ = HQ > PQ = LQ. - Test anxiety: PQ > HQ > GQ; GQ = LQ; HQ = LQ. - Time and environment use: GQ = HQ > PQ = LQ. - Meta-cognitive strategy use: GQ = HQ > PQ = LQ. - Effort regulation: GQ > LQ > PQ; GQ = HQ; HQ = LQ. - Procrastination: PQ > LQ > GQ; GQ = HQ; HQ = LQ. - Teacher autonomy support: GQ > HQ = LQ > PQ. - Teacher structure: GQ = HQ > LQ > PQ. - Teacher involvement: GQ = HQ > LQ > PQ.	Cluster analysis
Gillet, Berjot, Vallerand, Amoura, and Rosnet (2012)	Sport – Elite athletes	- Amotivation - External - Introjected - Identified - Intrinsic	*Study 1: Three profiles (Junior fencers)* 1. Low: Moderate levels of intrinsic and identified regulation, and low levels of introjected and external regulation and amotivation. 2. Moderate: Moderate to high levels of intrinsic and identified regulation, moderate levels of introjected and external regulation, and low levels of amotivation. *3.* High: High levels of intrinsic, identified, introjected and external regulation, and low levels of amotivation. *Study 2: Three profiles (Long distance runners)* Replicated the profiles from Study 1.	*Study 1:* - Previous season performance: No difference among clusters. - End of season performance: High > Moderate = Low. - End of season performance controlling for the previous season's performance: High > Moderate = Low. *Study 2:* - Performance: High > Low. - Performance variable controlling for covariates: High > Low. - Emotional and physical exhaustion: High > Moderate = Low.	Cluster analysis

Table 3 *(continues…)*

Author/s	Domain	Types of motivation	Profiles	Outcomes	Method of analysis
Gillet, Vallerand, and Rosnet (2009)	Sport – Elite athletes	- Amotivation - External - Introjected - Identified - Intrinsic	*Study 1: Four profiles (Tennis players)* 1. High autonomous-high controlled (High AU–High C): High levels of intrinsic, identified, introjected, and external regulation, but low levels of amotivation. 2. Moderate autonomous-low controlled (Mod AU–Low C): Moderate levels of intrinsic and identified, but low levels of introjected and external regulation and amotivation. 3. High autonomous-moderate controlled (High AU–Mod C): High level of intrinsic and identified, but low to moderate levels of introjected and external regulation and amotivation. 4. Moderate autonomous-high controlled (Mod AU–High C): Moderate levels of intrinsic and identified, but moderate to high levels of introjected and external regulation and amotivation. *Study 2: Three profiles (Fencers)* Replicated Profiles 1 and 2 of Study 1. The third profile differed from those in Study 1 – Moderate-autonomous-moderate controlled (Mod AU-Mod C): Moderate levels of autonomous and controlled motivation and low levels of amotivation.	*Study 1:* - Previous performance: No significant differences. - Performance 1: Mod AU–High C > High AU–High C = Mod AU–Low C = High AU–Mod C. - Performance 2: Mod AU–High C > High AU–High C = Mod AU–Low C = High AU–Mod C. - Performance 3: Mod AU–High C > High AU–High C = Mod AU–Low C = High AU–Mod C. - Performance 4: Mod AU–High C > High AU–High C = Mod AU–Low C = High AU–Mod C. *Study 2:* - Previous performance: No significant differences. - Performance 1: High AU–High C > Mod AU–Low C; Mod AU–Mod C = High AU–High C; Mod AU–Mod C = Mod AU–Low C.	Cluster analysis
Gillet, Vallerand, and Paty (2013)	Sport – Elite tennis athletes	- Amotivation - External - Identified - Intrinsic	*Studies 1 and 2: Three profiles* 1. Moderate autonomous-high controlled (Mod AU-High C): Moderate intrinsic and identified, as well as high external regulation and low amotivation scores. 2. High autonomous-high controlled (High AU-High C): High intrinsic, identified and external regulation, but low amotivation scores. 3. High autonomous-low controlled (High AU-Low C): High scores on intrinsic, moderate scores on identified regulation, but low scores on external regulation and amotivation.	*Study 1:* - Performance: High AU-Low C > Mod AU-High C; High AU-High C = High AU-Low C; High AU-High C = Mod AU-High C. *Study 2:* - Performance: High AU-High C = High AU-Low C > Mod AU-High C.	Cluster analysis

Table 3 *(continues…)*

Author/s	Domain	Types of motivation	Profiles	Outcomes	Method of analysis
Graves, Cullen, Lester, Ruderman, and Gentry (2015)	Work – Managers	- External - Introjected - Identified - Intrinsic	*Six profiles:* 1. Very low internal: Average external, slightly average introjected and very low internal (identified and intrinsic) motivation. 2. Low internal: Average external and introjected and slightly below average internal motivation. 3. Moderately low internal: Average external and slightly below average introjected and internal motivation. 4. Moderately high: Somewhat high levels of all four motivations. 5. High internal: Average external and high introjected, and internal motivation. 6. Self-determined: Low external motivation, slightly low introjected, and high internal motivation.	- Job satisfaction: High internal = Self-Determined > Moderately Low Internal = Moderately high > Very low internal and Low internal. - Commitment: Self-determined > Moderately high; High internal = Self-determined; High internal = Moderately high. - Intent to turnover: Moderately high = High internal = Self-determined > Very low internal. - Promotability: Did not differ across the profiles.	Latent profile analysis
Howard, Gagné, Morin, and Van den Broeck (2016)	Work	- Amotivation - External (social and monetary) - Introjected - Identified - Intrinsic	*Four profiles (two samples):* 1. Amotivated: Very high levels of amotivation and average to low levels on all the other types. 2. Moderately autonomous: Low levels of amotivation, very low levels of social and material forms of external regulations and introjection regulations, and average or slightly above average levels of identified and intrinsic motivation. 3. Highly motivated: Relatively low level of amotivation and moderate to high levels on all the other types. 4. Balanced: Average levels of all regulations.	- In-role and extra-role performance: Moderately autonomous = Highly motivated > Amotivated = Balanced. - Job satisfaction and engagement: Moderately autonomous = Highly motivated > Balanced > Amotivated. - Burnout: Amotivated > Balanced > Moderately autonomous = Highly motivated.	Latent profile analysis

Table 3 *(continues…)*

Author/s	Domain	Types of motivation	Profiles	Outcomes	Method of analysis
Moran, Diefendorff, Kim, and Liu (2012)	Work	- External - Introjected - Identified - Integrated - Intrinsic	*Five profiles:* 1. Low introjection: Moderate scores on all types of motivation, but low scores on introjected regulation. 2. Moderate: Moderately on all types of motivation. 3. Low autonomy: Low scores on integrated and intrinsic regulations. 4. Self-determined: High on all types of motivation except external. 5. Motivated: High scores on all types of motivations.	- Social support: Self-determined = Motivated > Moderate > Low introjection = Low autonomy. - Job autonomy: Self-determined = Motivated > Low Introjection = Low autonomy; Self-determined > Moderate. - Skill variety: Self-determined = Motivated > Low introjection = Moderate > Low autonomy. - Task identity: Self-determined = Motivated > Low introjection = Moderate; Moderate = Low autonomy. - Task significance: Self-determined = Motivated > Low introjection > Low autonomy; Self-determined = Moderate; Low introjection = Moderate. - Feedback: Self-determined = Motivated > Low introjection = Low autonomy; Moderate > Low autonomy. - Psychological need satisfaction (overall and for specific dimensions): In general, Self-determined = Motivated > Moderate > Low Introjection > Low autonomy. - In-role performance: Only significant difference is the Motivated had higher levels than the Low introjection and Low autonomy.	Cluster analysis
Van den Broeck, Lens, De Witte, and Van Coillie (2013)	Work	- Autonomous - Controlled	*Four motivational profiles (two samples):* 1. HA-HC: High autonomous and high controlled motivation. 2. HA-LC: High autonomous and low controlled motivation. 3. LA-HC: Low scores on autonomous and high scores on controlled motivation. 4. LA-LC: Low scores on both types of motivation.	- Job satisfaction: HA-HC = HA-LC > LA-HC = LA-LC. - Work enthusiasm / engagement: In Sample 1, HA-LC = HA-HC > LA-LC > LA-HC. In Samples 2 and 3, HA-LC = HA-HC > LA-HC > LA-LC. - Strain / burnout: In Sample 1, LA-HC > LA-LC > HA-HC > HA-LC. In Samples 2 and 3, LA-HC = LA-LC > HA-LC = HA-HC.	Cluster analysis

2.5 Job Search Motivation and Psychological Need Satisfaction and Frustration as Predictors

From the preceding sections, it is evident that different psychosocial profiles may exist in SA. Also, the unemployed may have different motivational profiles that have different experiential, attitudinal, and behavioural outcomes. Knowing that different groups of unemployed exist, based on their responses to psychosocial or motivational variables, provides insight into the functioning of the unemployed and is valuable for both theory and practice. However, to refine our knowledge about the functioning of the variables at stake (i.e. the relationships between the variables), a variable-centred approach is valuable and complements the variable centred-approach of the first two studies. This knowledge then enables further refinement of suggestions for interventions.

Previous research investigating the relationship between job search motivation and affective (i.e. experiences), attitudinal (commitment to employment), and behavioural (job search) outcomes within the domain of unemployment is summarised in Table 4. From a review of the literature, four observations can be made. One, findings were mostly in line with the theoretical propositions of SDT, with few exceptions. For example, in line with SDT, controlled motivation (Vansteenkiste et al., 2004, 2005) and amotivation (Vansteenkiste et al., 2004) were significant predictors of negative experiences. Surprisingly, autonomous motivation was also a positive predictor of negative experiences (Vansteenkiste et al., 2004), but this finding could not be replicated by Vansteenkiste et al. (2005). It seems that the unemployed who felt motivated to obtain employment did not feel positive, as they failed to get employment (Vansteenkiste et al., 2004), or they had difficulty enjoying their free time because they sincerely wanted a job (Vansteenkiste & Van den Broeck, in press). Also, previous studies found a significant positive correlation between both autonomous and controlled motivation and employment commitment (Vansteenkiste et al., 2004, 2005), but not with amotivation (Vansteenkiste et al., 2004). Once again, this is surprising given that in the development and validation of the Multidimensional Work Motivation Scale, findings illustrated that autonomous motivation relates positively to favourable attitudes, whereas the opposite is true for controlled motivation and amotivation (Gagné et al., 2015). Two, more empirical studies were conducted with job search behaviour as outcome than with the other two outcome variables. Three, the studies on job search motivation were also longitudinal (but maximum six weeks' time lag), whereas those on negative experiences and employment

commitment were only cross-sectional. Four, these studies were conducted in developed countries in which the unemployment rate is lower than in developing countries, like SA, and the unemployed have access to financial assistance – which is not the case for the SA unemployed. The participants were also mostly compelled to attend reemployment courses or meetings with presumably different implications for motivation than in SA where no such courses exist. More research is necessary, given that some findings contradict theoretical expectations (Observation 1); unemployment is complex and affective experiences and attitudes are also important (De Witte, 1992), not only job search behaviour (Observation 2); longitudinal studies are superior to cross-sectional research (Observation 3); and several authors argue that the context may be important for motivational consequences (Ryan & Deci, 2017; Vallerand et al., 2008) (Observation 4).

Table 4

Overview of Literature on Motivation and Outcomes

Author/s	Sample characteristics	Design	Motivational variables	Outcomes
da Motta Veiga and Gabriel (2016)	- New labour market entrants (business school students) from three American universities.	- Longitudinal - Weekly diary study for five weeks.	- Autonomous - Controlled	- Perceived job search effort: Only significantly related to autonomous motivation.
Koen, Klehe, and Van Vianen (2015)	- Unemployed participating in a compulsory reemployment course in the Netherlands.	- Longitudinal (prospective design) - One year time lag. - Motivation and job search intensity both measured at Time 2, (controlled for Time 1 search).	- Relative autonomy index (RAI)	- Job search intensity: Significantly predicted by more internalised motivation.
Koen, Van Vianen, Van Hooft, and Klehe (2016)	- Newly registered unemployed welfare recipients (job seekers) in the Netherlands.	- Longitudinal (prospective design) - Six week time lag.	- Autonomous - Controlled - Amotivation	- Job search intensity: Significantly predicted by autonomous motivation, but not by amotivation.
Vansteenkiste, Lens, De Witte, De Witte, and Deci (2004)	- Unemployed Belgians who are obliged to attend meetings with the aim of finding employment.	- Cross-sectional	- Autonomous - Controlled - Amotivation	*Study 1* - Negative experiences: Significantly predicted by autonomous, controlled, and amotivation. - Employment commitment: Significant positive correlation with autonomous and controlled motivation. - Job search intensity: Significantly predicted by autonomous motivation, but not by controlled or amotivation. *Study 2* - Negative experiences: Significantly predicted by controlled motivation and amotivation. - Job search intensity: Significantly predicted by autonomous motivation.
Vansteenkiste, Lens, De Witte, and Feather (2005)	- Unemployed Belgians who are obliged to attend meetings with the aim of finding employment.	- Cross-sectional	- Autonomous - Controlled	- Negative experiences: Significantly predicted by controlled motivation, but not by autonomous motivation. - Employment commitment: Significant positive correlation with autonomous and controlled motivation. - Job search intensity: Significantly predicted by autonomous motivation.

Despite the fact that some studies have already investigated the relationships between the different types of motivation, few have studied the underlying process of these relationships. None of these studies have investigated whether job search motivation influences experiences, attitudes and behaviour because it satisfies (or frustrates) basic psychological needs. Three psychological needs can be differentiated: autonomy, competence and relatedness. *Autonomy* concerns the need to experience a sense of ownership over one's behaviours, feelings, and thoughts, and to engage in activities because one wants to do so (deCharms, 1968). For example, when satisfied, the unemployed would feel that they have control over the decisions (e.g. applying for a job) that concern them and that their decisions reflect their wishes. *Competence* concerns the need to experience a sense of effectiveness when engaging in an activity, while also mastering new skills in the process (White, 1959). For example, when satisfied, the unemployed would be confident and capable to pursue an activity (e.g. approaching a prospective employer). *Relatedness* involves the need to develop meaningful and satisfying relationships (Baumeister & Leary 1995), but also that one is adding value to the lives of others (Deci & Ryan, 2014). For example, if satisfied, the unemployed would feel close and connected to those who support them in coping with the frustrations accompanying unemployment.

Recently, it is argued that studies should not only measure psychological need (dis)satisfaction, because needs can also be actively blocked or thwarted (Van den Broeck, Ferris, Chang, & Rosen, 2016). Low need fulfilment indicates dissatisfaction with the perceived satisfaction of a particular need and whereas low need fulfilment may inhibit personal growth, the frustration of needs has more detrimental consequences such as defensiveness, ill-being, and even psychopathology (Vansteenkiste & Ryan 2013). This was supported by several empirical studies (Bartholomew, Ntoumanis, Ryan, Bosch, & Thøgersen-Ntoumani, 2011; Bartholomew, Ntoumanis, Ryan, & Thøgersen-Ntoumani, 2011; Cordeiro, Paixão, Lens, Lacante, & Sheldon, 2016; Vansteenkiste & Ryan 2013). For the unemployed, if the need for autonomy is frustrated, decisions become a series of "musts and shoulds" and reflect the commands of others. If the need for competence is frustrated, they would feel insecure or even like a failure (e.g. when they do not get a job after an interview). If the need for relatedness is frustrated, they would feel rejected by others.

Motivational researchers have previously theorised that motivation provides energy for the psychological needs (Vansteenkiste & Ryan, 2013). More specifically, they talk about the

"positive cascading effect" (p. 266) of more autonomous types of motivation. In other words, searching for jobs because one feels that it is valuable to do so (i.e. introjected regulation), has the potential to satisfy the basic psychological needs of the unemployed. If job search is performed with the belief that it is important for achieving a self-selected desired goal (for example, approaching a prospective employer), an unemployed individual can experience a sense of autonomy (because it is a self-selected desired goal), competence (because they feel effective in approaching potential employers) and relatedness (not prescribed by others). However, searching because of financial or social pressure or because one feels guilty (i.e. controlled motivation) would not satisfy basic psychological needs. Indeed, the search process becomes a series of "musts" and "shoulds", and most likely results in an unwillingness to explore the labour market and to search for development opportunities. Such an unemployed person may also feel less loved and cared for by others. Similarly, searching for a job by going through the motions even if you don't feel confident or positive about the outcomes (i.e. amotivation) could also lower one's perceived autonomy and competence. When feeling alone in this futile venture, perceived relatedness is also undermined.

Theoretically, motivation relates to psychological need satisfaction, and the opposite should hold for psychological need frustration. Identified regulation has the potential to lower the frustration of basic psychological needs of the unemployed. Once again, if job search is performed with the belief that it is important, an unemployed individual should not feel pressured, insecure, or isolated. However, controlled motivation and amotivation would frustrate basic psychological needs. Indeed, obligations, guilt, and passively engaging in job search enhance perceived pressure, doubts, and feelings of being disliked by and distant from others, especially when failing to obtain a job. However, no published research to date has investigated needs as outcomes of motivation – neither in other domains nor in unemployment. Only one study (see Koen et al., 2016) in Table 4 takes the role of basic psychological needs into account, but not as a pathway.

Meaningful links can be drawn between the psychological needs and the negative experiences of unemployment (Vansteenkiste & Van den Broeck, in press). For example, the unemployed reporting feeling satisfied in their needs for autonomy and competence would perhaps report more structured days filled with regular activities because they have both the confidence and the freedom to structure their days and to fill them with meaningful activities. Hence, they may report few negative experiences. They would also report more employment commitment

as they integrate the importance of work with the self, and they are also likely to search more intensively because their basic needs are nutrients providing energy to put effort into searching for a job (Deci & Ryan, 1985). In contrast, the unemployed reporting frustration of their needs for autonomy and competence would perhaps not only report less structured days with irregular activities but could report ill-structured days and boredom and hence suffer from negative experiences. They may also attempt to become less involved (Ryan & Deci, 2017; Vansteenkiste & Ryan, 2013) in the unemployment process by lowering their employment commitment and withdrawing from the job search process. In line with SDT, several studies indicated that need satisfaction relates positively to indicators of well-being and negatively to indicators of ill-being, fosters positive attitudes, and enables continued performance (see Van den Broeck et al., 2016, for an overview in the work context). However, to date, no study has examined the association between need satisfaction (and frustration) and well-being, commitment or job search among the unemployed.

The question then remains whether different types of job search motivation influence the outcome variables differently because the motivational types relate differently to psychological needs. Research on prosocial behaviour (Martella & Ryan, 2016; Weinstein & Ryan, 2010) concluded that engaging autonomously in prosocial behaviour enhances well-being but that need satisfaction plays an important role in explaining the well-being benefits of this behaviour (Ryan & Deci, 2017). Similarly, experimental studies (Legate, DeHaan, & Ryan, 2015; Legate, DeHaan, Weinstein, & Ryan, 2013) demonstrated compliance with instructions to ostracise others (i.e. controlled motivation) caused harm for the ostracisers because it frustrated their psychological needs (Ryan & Deci, 2017). However, little research exists regarding the mediating role of psychological needs and none of these studies were conducted in the unemployment domain.

2.6 Conclusion

A review of the literature illustrated that a number of different typologies exist. The psychosocial typology of De Witte (1992) is, however, both empirically and theoretically superior. Associations with socio-demographic variables are established in existing literature and support the interpretation of the psychosocial typology, yet a broader review of associations between the separate dimensions and these characteristics indicate that these associations are complex. Different motivational profiles also exist, consisting of different

levels and types of motivational regulations, with more within-context similarity than between-context. Furthermore, these profiles induce different outcomes, with more autonomous profiles being more beneficial than more controlled or amotivated profiles. Deviations are also noted and may either have a contextual explanation or depend on the outcome at stake. A review of variable-centred unemployment research, with SDT as guiding framework, similarly reveals the odd occasion in which findings contradict the expectations of the theory. Again, this may have a contextual explanation. Moreover, theoretical and empirical support exists for the role of basic psychological need satisfaction (and to a lesser extent for need frustration) in experiential, attitudinal and behavioural outcomes, yet this remains relatively unexplored in the unemployment domain where basic needs are prone to low fulfilment or frustration. To conclude, psychological needs also possess explanatory power, but remain relatively untested in the unemployment and other domains.

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CHAPTER 3

ARTICLE 1

Van der Vaart, L., De Witte, H., Van den Broeck, A., & Rothmann, S. (2018). A psychosocial typology of the unemployed in South Africa. *South African Journal of Psychology*. doi:10.1177/0081246317721600

A PSYCHOSOCIAL TYPOLOGY OF THE UNEMPLOYED IN SOUTH AFRICA

Abstract

The aim of this study was to investigate whether there were different types of unemployed people in South Africa. A psychosocial typology, developed in Europe, identified five types of unemployed people based on their attitudes, behaviour, and experiences. To determine whether the same types could be found in South Africa, we studied a convenience sample of 381 unemployed individuals residing in the Potchefstroom area in the North West province in South Africa. Latent profile analysis indicated that only four types of unemployed could be identified in the current study: optimists, the desperate, the discouraged, and the adapted. Significant associations were found among these types and background characteristics, mostly in line with previous research. The results may be utilised to design interventions tailored to the different types of unemployed people.

Key words: Attitudes, behaviour, experiences, latent profile analysis, unemployment, typology

Rather than being "homogeneous", the unemployed seem to consist of individuals with an infinite number of unique combinations of characteristics and experiences (Knopf, 2013). This observation gives rise to the idea that different types of unemployed may exist. A typology is the classification of a relatively homogeneous group into abstract categories called subtypes (Jahiel & Babor, 2011). Practically, such a typology will enable both policy-makers and practitioners to design and implement policies and interventions tailored to the needs of the unemployed (Houssemand, Pignault, & Meyers, 2014).

De Witte (1992) developed a psychosocial typology based on self-evaluated affective experiences, attitudes towards work, and search behaviour of long-term unemployed people in Belgium. Firstly, De Witte's typology captures unemployed individuals' (negative) experiences based on the deprivation of five latent needs. Jahoda (1982) postulates that employment provides both latent and manifest benefits. Manifest benefits refer to the monetary rewards obtained from employment, whereas latent benefits derive from the satisfaction of five psychological needs: social contact, social status, shared purpose, time structure, and regular activity. Deprivation of the latent and manifest benefits results in a decline in psychological well-being (Jahoda, 1982). However, some unemployed also seem to

have positive experiences (Herbert, Drebing, Mueller, & Van Ormer, 2006). Therefore, the current study included an additional dimension, namely, positive experiences.

Secondly, unemployed individuals' attitudes towards employment are reflected in their commitment to employment (De Witte, Rothmann, & Jackson, 2012), also referred to as work involvement or work-role centrality (McKee-Ryan, Song, Wanberg, & Kinicki, 2005). Commitment to employment is defined as "the extent to which a person wants to be engaged in paid work" (Warr, Cook, & Wall, 1979, p. 130) and reflects the degree to which work may take a central role in one's life (McKee-Ryan et al., 2005). Finally, job search behaviour is operationalised as the frequency with which individuals have engaged in a particular job search activity within a specific time frame (Wanberg, 2012).

Theoretically, experiences, commitment, and job search behaviour are interdependent. For example, job search behaviour is a form of problem-focused coping (McKee-Ryan et al., 2005) with positive outcomes such as an increase in the number of job offers received (Kanfer, Wanberg, & Kantrowitz, 2001) and increased positive experiences (McKee-Ryan et al., 2005). In addition, cognitive dissonance theory (CDT; Festinger, 1957) suggests that if there is a discrepancy between the importance one attaches to work and one's job search behaviour, one will either alter one's search behaviour or change the value one attaches to work to maintain consensus and reduce negative experiences (Griep, Baillien, Vleugels, Rothmann, & De Witte, 2013). Long-term unemployment may, thus, decrease the unemployed's active searching behaviour and employment commitment as part of the psychological withdrawal process to cope with negative experiences (De Witte, 1993; De Witte & Hooge, 1995). Only person-centred research allows for the investigation of the interdependency of variables within individuals (Howard, Gagné, Morin, & Van den Broeck, 2016) and the identification of types of individuals based on this interdependency.

De Witte (1992) distinguished five different psychosocial types of unemployed people in Belgium (see Table 1).

Table 1

Types of Unemployed People in Belgium (N = 309)

Type	Frequency	Employment commitment	Job search behaviour	(Negative) Experiences
Optimists	28%	Average	Average	Average
Desperate	11%	Very high	High	Very high
Discouraged	14%	Very high	Average	High
Adapted	17%	High	Low	Low
Withdrawn	30%	Low	Very low	Low

Despite the country's high unemployment rate, no research has been published to date on types of unemployed people in South Africa. The closest one can get to understanding differences in the unemployed in the South African context involves the grouping of individuals based on their job search behaviour (see Kingdon & Knight, 2006). Although job search behaviour is relevant, it is unlikely to be sufficient to cluster unemployed individuals. Around the world, other scholars have defined meaningful types based on how they deal with being less involved in society (i.e., sociological) (Hoff & Van Echtelt, 2008), how they experience unemployment (i.e., psychological) (Wanberg & Marchese, 1994), and how they experience unemployment in relation to their social environment (i.e., psychosocial) (De Witte, 1992). However, almost all typologies were identified using cluster analysis. Cluster analysis is criticised for the absence of statistical indices and tests on which the number of clusters retained can be based (Steinley, 2003). Latent profile analysis – one of the best methods to discern typologies – was applied in only one of these studies (see Hoff & Van Echtelt, 2008). Moreover, only the typology developed by De Witte (1992) was replicated (De Witte & Hooge, 1995).

The current study aimed to examine the psychosocial typology of unemployed people in South Africa (SA). As such, it makes three important contributions. Firstly, it contributes to theory by classifying different types of unemployed people. We based our study on De Witte's (1992) typology, as (a) it is superior to others in light of its theoretical underpinnings, (b) it has been validated previously and, hence, may be the best candidate to be generalisable (Howard et al., 2016) to the SA context, and c) it corresponds to Statistics SA's (Stats SA) expanded definition of unemployment: people "who did not work", "want to work and are available to start work", "have taken active steps to look for work or to start some form of self-employment" (Stats SA, 1998, p. 1), or "did not take active steps to find work" during the reference period (Stats SA, 2017, p. 21). Negative experiences may result from being without work; the individual's attitudes towards employment is reflected in being available for work, and the intensity with which one searches for a job is evaluated in looking for work (Griep et al., 2013). Secondly, this study contributes to practice by identifying different types of unemployed people, each with its specific intervention implications. Thirdly, the study extends research on typologies from a methodological perspective by using latent profile analysis (LPA).

Given the exploratory nature of person-centred research and previous research done in Belgium, no specific hypotheses were set, but we expected to find different types of unemployed. To gain further understanding of the different types of unemployed people, we

analysed them regarding demographic differences. Meaningful interpretation and construct validity of the typology depend on meaningful relations with covariates, such as demographic variables (Howard et al., 2016). The demographic characteristics of the unemployed may make it more likely that they will experience unemployment in a particular way (Strandh, Hammarström, Nilsson, Nordenmark, & Russel, 2013). Indeed, characteristics such as age[1], area, number of dependants, highest educational level, employment history, gender, marital status, and unemployment duration may influence how the unemployed cope with unemployment and may affect their chances of re-employment (McKee Ryan et al., 2005). Therefore, they have been included in several meta-analyses on unemployment and well-being (e.g., Wanberg, 2012) and have been used to characterise the different types of unemployed in Belgium (De Witte, 1992). For example, De Witte established that the *optimists* comprised more females, were younger, and were more educated; the duration of their unemployment to date was shorter than the other types. The *desperate* included more males, were older, and had been unemployed longer; they were poorly educated, with less work experience, and struggled more financially. The *discouraged* were, on average, older. They were unemployed for a shorter time than the desperate, but also poorly educated and relatively poor. The *adapted* were, on average, older than all other types, but also poorly educated and skilled. This type comprised more married individuals with children and had the highest unemployment duration. The *withdrawn* type comprised significantly more females than males and had the highest number of unemployed with (younger) children. The current study assessed the replicability of previous findings by De Witte. Once again, given the exploratory nature of our work, we expected that demographic variables would differ among the different types, but would not generate specific hypotheses.

Method

Participants

The participants were sampled from three areas (assumed to represent diversity in socio-economic status) in the North West province of South Africa: Potchefstroom (mainly white = 21.1%), Promosa (coloured = 54.5%), and Ikageng (African = 24.5%). The province's expanded unemployment rate (41.7 %) is greater than the national average of 36.4% (Stats SA, 2017). A convenience sample of individuals who were unemployed at the time of the study (n = 381) participated in the research. Almost three quarters (73.5%) had been

[1] Age was categorised as "young" (18 to 24), "middle-aged" (25 to 49), and "older" (50 and above) in line with literature on unemployment and well-being (see Creed & Watson, 2003; De Witte, Hooge, & Vanbelle, 2010; Paul & Moser, 2009; Wanberg, 2012).

unemployed for more than one year, thus being long-term unemployed. The sample consisted of both females (46.2%) and males (53.8%). The majority of the respondents were Afrikaans-speaking (65.4%) and between the ages of 17 and 30 years (57.3%), with the minority (6.27%) of respondents being older than 50 years. Almost all participants had obtained a Grade 12 or lower (90.8%), leaving very few with a diploma or degree. The Humanities and Health Research Ethics Committee of the North-West University (NWU-HS-2016-0002) granted ethical approval for the study. A cover letter, attached to the questionnaire, specified the purpose of the study and stressed the confidential and voluntary nature of the study.

Instruments

A *biographical questionnaire* was used to determine age, area, dependants, education, employment history, gender, marital status, and unemployment duration.

The *Experience of Unemployment Questionnaire* (EUQ; De Witte et al., 2010) was utilised for measuring participants' affective *experiences, attitudes* towards employment, and job search *behaviour*. Questions tapping into negative and positive affective experiences consisted of eight and five items, respectively. Example items included participants rating their experiences (e.g., "I feel lonelier since losing my job" or "I have made more friends since I have become unemployed") on a frequency scale ranging from 1 (*often*) to 3 (*never*). The importance of work was measured by seven items based on the *Employment Commitment Scale* of Warr et al. (1979). Participants had to indicate to what extent they agreed with a range of statements (e.g., "I find it important to have work") on a scale ranging from 1 (*agree*) to 3 (*disagree*). Job search behaviour was measured by asking how many times participants had performed any of the five different behaviours (e.g., "Spontaneously presented yourself to an employer"), reflected on a frequency scale ranging from 0 (*never*) to 4 (*10 times or more*). Three additional *retrospective questions* asked participants to compare their current with their previous affective experiences, the importance of work, and job search behaviour.

Procedure

A quantitative, non-experimental survey design was used as the strategy of enquiry. Three trained fieldworkers, proficient in English, Afrikaans, and Setswana, administered the questionnaire (which was available in the three languages). Interviews and focus groups were conducted to refine the English version of the EUQ, after which it was translated into Afrikaans and Setswana by professional translators (De Witte et al., 2012). A process of back

translation was used, and questionnaires were presented to experts to evaluate face validity. Unemployed people were conveniently selected using door-to-door selection in different areas in town as well as in the informal settlement. Structured interviews, based on the questionnaires, were conducted with most of the participants due to the low levels of education of some participants (De Witte et al., 2012).

Statistical Analysis

Mplus 7.4 (Muthén & Muthén, 1998-2015) was used for data analysis. Confirmatory factor analysis (CFA) was performed using the mean- and variance-adjusted weighted least squares (WLSMV) estimator. We used the indices to assess fit based on recommendations by Kelloway (2015). CFI and TLI values of .90 are traditionally deemed reasonable (Wang & Wang, 2012). RMSEA values of .06 indicate a good fit between the model and the data (Hu & Bentler, 1999), with a non-significant value indicating close fit of the specified model (Wang & Wang, 2012). A WRMR value of 1.00 or lower is considered a good fit (Yu, 2002). The reliabilities of the scales were calculated using the omega reliability coefficient (ω), which is appropriate for estimating the reliability of variables on an ordinal level (Gadermann, Guhn, & Zumbo, 2012). LPA was performed on the factor scores of variables identified through CFA (Wang & Wang, 2012). LPA is a model-based approach to cluster individuals or cases into groups (i.e., latent profiles) based on their responses to observed continuous variables (Muthén & Muthén, 2000). Formal statistical procedures were used to determine the number of profiles (Wang & Wang, 2012). To determine model fit, we used the indices recommended by Tofighi and Enders (2008).

Cross-tabulation was used to determine whether an association existed between the types of unemployed people and the various demographic variables. Pearson's chi-square (χ^2) test was employed to determine whether these associations between the categorical variables were significant. Cramer's V provided a measure of the strength of the association between the categorical variables (Field, 2013). Cohen's (1988) guidelines were used to determine the magnitude of the practical effect sizes: small (.10), medium (.30), and large (.50).

Results

Confirmatory Factor Analysis for the Measuring Instruments

The four latent variables were specified as separate, but related, factors. Based on the fit statistics, the hypothesised model (Model 1) yielded acceptable fit to the data. Model

development was performed by deleting one item from the negative experiences scale ("I must save on my personal expenditure") and one item from the importance of work scale ("People do not have to work as such to be constructively occupied") because of inadequate factor loadings (.17 and .10). The revised model (Model 1a) had a good fit (see Table 2).

Table 2

Measurement Models (N = 380)

Model	χ^2	*p*-value	*df*	TLI	CFI	RMSEA	WRMR
Model 1	742.08	.00	344	.89	.90	.06 [.05, .06]	1.35
Model 1a	596.77	.00	293	.92	.92	.05 [.05, .06]	1.27

The reliability coefficients for the respective scales were negative experiences (.91), positive experiences (.80), the importance of work (.90), and job search behaviour (.91).

Latent Profile Analysis

The optimal number of profiles was determined by estimating five models with increasing numbers of latent profiles and comparing the fit statistics of these models. Table 3 shows the fit indices for the models. The Akaike information criterion (AIC), Bayesian information criterion (BIC), and adjusted Bayesian information criterion (ABIC) values of the model with one latent profile were the largest, indicating that this model fitted the data the worst.

Table 3

Comparison of LPA Models

Model	AIC	BIC	ABIC	LMR LR test *p*	ALMR LR test *p*	BLRT *p*
1-profile LPA	2096.92	2128.42	2103.03	N/a	N/a	N/a
2-profile LPA	1902.49	1953.68	1912.44	.01	.01	.00
3-profile LPA	1829.48	1900.36	1843.25	.33	.34	.00
4-profile LPA	1806.33	1896.90	1823.92	.10	.11	.00
5-profile LPA	1782.32	1892.57	1803.73	.20	.21	.00

N/a – not applicable

We then explored the model with four profiles. The first step was to find the best log-likelihood values for the models. The second step was to conduct a five-profile analysis to make sure that the k − 1 profile model (four profiles) showed the best log-likelihood value found in Step 1. The Vuong-Lo-Mendell-Rubin likelihood ratio (LMR LR) test for four

versus five profiles had a log-likelihood value of -880.17 (two times the log-likelihood difference = 34.02, difference in the number of parameters = 5, mean = 9.66, *SD* = 36.72, *p* = .20). The adjusted LMR (ALMR) LR test (value = 32.91) was also not statistically significant (*p* = .21). In the third step, a four-profile analysis was done. The parametric bootstrap LR test for three versus four profiles was statistically significant (*p* = .00), rejecting the three-profile model in favour of the four-profile model (Wang & Wang, 2012). In the three- and four-profile models, both the LMR LR and the ALMR tests were not statistically significant (*p* > .05), but the bootstrap likelihood ratio test (BLRT) test was (*p* = .00); that is, the first two tests were not in favour of more than two profiles. However, in general, the BLRT test performs better than the other two tests (Nylund, Asparouhov, & Muthén, 2007), which cannot reject the three- or four-profile models. The AIC, BIC, and ABIC values were smaller in the four-profile model, compared to the three-profile model. A review of the four-profile model compared to the five-profile model revealed that both the LMR LR and the ALMR LR tests were not statistically significant (*p* > .05), but the BLRT test was (*p* = .00). The BIC value of the five-profile model was lower than that of the four-profile model, and this difference in BIC values (4.37) indicated positive evidence, but not strong evidence (Raftery, 1995). According to Nylund et al. (2007), the BIC value performs consistently. Consequently, the more parsimonious four-profile model was preferred.

We then continued with examining the profile classification. The entropy values for the two-profile, three-profile, and four-profile LPA were .71, .68, and .70, respectively, which indicated a good classification (Clark, 2010). Only for the four-profile LPA model, the posterior profile membership probabilities were all larger than .73, which was larger than the recommended cut-off value of .70 (Nagin, 2005).

As displayed in Figure 1, Profile 1 (*optimists*) had the second lowest mean levels of both negative and positive experiences, the lowest mean levels of the importance they attached to work, and the highest mean levels of the intensity with which they applied for jobs; it constituted 11.95% of the unemployed. Profile 2 (*desperate*) had the highest mean levels of negative experiences, the lowest mean levels of positive experiences, the highest mean levels of the importance they attached to work, and the second highest intensity with which they applied for jobs; it constituted 30.86% of the unemployed. Profile 3 (*discouraged*) had the second highest mean levels of negative experiences, the highest mean levels of positive experiences, the second highest mean levels of the importance they attached to work, and the second lowest intensity with which they applied for jobs; it constituted 37% of the unemployed. Profile 4 (*adapted*) had the lowest mean levels of negative experiences, the

second highest mean levels of positive experiences, the second lowest mean levels of the importance they attached to work, and the lowest mean levels of the intensity with which they applied for jobs; it constituted 20.19% of the unemployed.

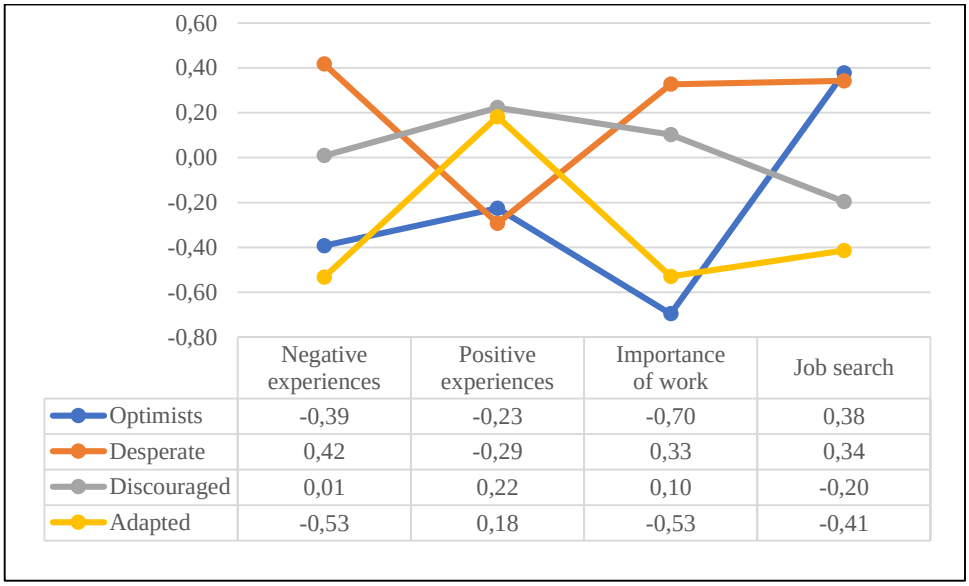

Figure 1. The four latent profiles

Table 4 shows the mean scores for each of the dimensions for the respective types.

Table 4

Mean Scores for the Different Types of Unemployed People

Type	Negative experiences	Positive experiences	Importance of work	Application behaviour
Desperate	2.85	1.70	2.91	3.15
Optimists	2.09	1.73	2.14	3.46
Discouraged	2.50	2.30	2.81	2.37
Adapted	1.85	2.23	2.34	1.93

Cross-tabulations

The relation between type and age [χ^2 (df = 6, N = 375) = 13.17, p < .05, V = 0.13)], type and area [χ^2 (df = 6, N = 379) = 16.87, p < .01, V = 0.15)], type and level of education [χ^2 (df = 6, N = 373) = 24.29, p < .0001, V = 0.18)], and type and unemployment duration [χ^2 (df = 6, N = 370) = 12.78, p < .0001, V = 0.13)] was statistically significant. Three evolution variables were also significantly associated with the typology. The relation between type and unemployment experiences [χ^2 (df = 9, N = 373) = 85.26, p < .0001, V = 0.20)], type and

importance of work [χ^2 (df = 9, N = 379) = 40.81, p < .0001, V = 0.20)], and type and job search behaviour [χ^2 (df = 9, N = 370) = 33.24, p < .0001, V = 0.17)] was statistically significant.

The results of the cross-tabulation, Tables 5 and 6, supported the interpretation of the various types. The *optimists* were younger (24 years or younger), had a higher level of education (Grade 12 and higher), and were short-term unemployed (less than one year). Looking at the evolution variables, they felt worse than before, and they considered work as more important than before, but were still investing the same amount of effort in the search process as before. The *desperate* were, in general, more middle-aged (25 to 49 years), and most of them had relatively lower levels of education (Grade 11 and below). Looking at the evolution variables, they also reported feeling worse than before about not having a job, they considered work as more important than before, and they were making increased efforts to find a job. The *discouraged* mainly resided in Ikageng, quite a number of them had relatively lower levels of education (Grade 11 and below), and more than half of them had been unemployed for longer than four years. Looking at the evolution variables, they also reported feeling worse than before and that they were making less of an effort to search for a job. The *adapted* were also more long-term unemployed (two years and longer), and the majority had a level of education equal to, or below, Grade 12. Looking at the evolution variables, they felt better about not having a job, work had not really become more or less important to them, and they had not adjusted their search behaviour.

Table 5

Socio-demographic Variables by Categories of the Unemployed

	N (%)	Optimist (Expected count)	Desperate (Expected count)	Discouraged (Expected count)	Adapted (Expected count)
Age					
18-24	119 (31.4)	17 (12.40)	26 (36.80)	46 (46.60)	30 (23.20)
25-49	231 (60.9)	22 (24.00)	80 (71.50)	89 (90.60)	40 (45.00)
50-64	25 (6.6)	0 (2.60)	10 (7.70)	12 (9.80)	3 (4.90)
χ^2 (*df*)	13.17 (6)*				
Cramer's *V*	0.13				
Area					
Promosa	206 (54.4)	23 (21.70)	67 (63.10)	82 (81.00)	34 (40.20)
Potchefstroom	80 (21.10)	8 (8.40)	32 (24.50)	20 (31.50)	20 (15.60)
Ikageng	93 (24.50)	9 (9.80)	17 (28.50)	47 (36.60)	20 (18.20)
χ^2 (*df*)	16.87 (6)**				
Cramer's *V*	0.15				
Level of education/qualification					
Grade 11 and lower	243 (64.10)	22 (26.10)	89 (73.60)	97 (95.10)	35 (48.20)
Grade 12	101 (26.60)	14 (10.80)	16 (30.60)	38 (39.50)	33 (20.00)
Tertiary qualification	29 (7.70)	4 (3.10)	8 (8.80)	11 (11.40)	6 (5.80)
χ^2 (*df*)	24.19 (6)***				
Cramer's *V*	0.18				
Unemployment duration					
Less than one year	101 (26.60)	13 (10.40)	36 (31.40)	32 (39.90)	20 (19.40)
Two to three years	91 (24.00)	12 (9.30)	24 (28.30)	31 (35.90)	24 (17.50)
More than four years	178 (47.00)	13 (18.30)	55 (55.30)	83 (70.20)	27 (34.20)
χ^2 (*df*)	12.78 (6)***				
Cramer's *V*	0.13				

* $p < 0.05$
** $p < 0.01$
*** $p < 0.001$

Table 6

Evolution Variables by Categories of the Unemployed

	N (%)	Optimist (Expected count)	Desperate (Expected count)	Discouraged (Expected count)	Adapted (Expected count)
Experiences (feeling)					
I feel better than before	37 (9.90)	3 (4.00)	3 (11.30)	17 (14.70)	14 (7.00)
I feel worse than before	277 (74.30)	27 (29.70)	106 (84.70)	118 (109.90)	26 (52.70)
I do not feel better or worse	40 (10.70)	7 (4.30)	2 (12.20)	9 (15.90)	22 (7.60)
I have never felt bad	19 (5.10)	3 (2.00)	3 (5.80)	4 (7.50)	9 (3.60)
χ^2 (*df*)	85.26 (9)***				
Cramer's *V*	0.28				
Importance of job (attitude)					
Work is more important	285 (79.60)	33 (29.50)	95 (83.60)	112 (115.40)	45 (56.50)
Work is less important	33 (9.20)	1 (3.40)	7 (9.70)	20 (13.40)	5 (6.50)
Work is neither more nor less important	32 (8.90)	3 (3.30)	3 (9.40)	10 (13.00)	16 (6.30)
Work has never been important	8 (2.20)	0 (0.80)	0 (2.30)	3 (3.20)	5 (1.60)
χ^2 (*df*)	40.81 (9)***				
Cramer's *V*	0.20				
Job search (behaviour)					
I look for work more often	229 (61.70)	17 (24.10)	87 (69.90)	89 (91.00)	36 (43.90)
I look for work less often	58 (15.60)	9 (6.10)	14 (17.70)	27 (23.00)	8 (11.10)
I look for work as often as before	70 (18.90)	11 (7.40)	12 (21.40)	27 (27.80)	20 (13.40)
I have never looked for jobs	13 (3.50)	2 (1.40)	0 (4.00)	4 (5.20)	7 (2.50)
χ^2 (*df*)	33.24 (9)***				
Cramer's *V*	0.17				

*** $p < 0.001$

Discussion

The first aim of this study was to determine whether different types of unemployed could be identified in South Africa based on the experiences, commitment, and job search behaviour of the unemployed (De Witte, 1992). The results of LPA indicated four types of unemployed people: optimists, the desperate, the discouraged, and the adapted. The fifth type found in Belgium, the withdrawn, was not found in this study. The Belgian withdrawn reported higher than average household incomes (De Witte, 1992). A comprehensive financial unemployment support system is lacking in South Africa (Klasen & Woolard, 2008), increasing financial strain (Nordenmark, Strandh, & Layte, 2006) and preventing the withdrawal of the unemployed. Future research could study whether the withdrawn can be identified among the unemployed who can rely on pension systems that may lower labour force participation in

multigenerational households (Abel, 2013). Interestingly, there were almost a third fewer optimists and almost three times as many desperate and discouraged unemployed people in this SA sample compared to the Belgian sample. The financial hardship experienced in SA may result in more desperate seekers in SA (Vleugels, Rothmann, Griep, & De Witte, 2013). The high unemployment rate also means that the supply exceeds the demand, leading to fewer optimists and more discouraged work seekers.

The optimists in this SA sample had a profile typical of the unemployed engaged in problem-focused coping, just as in Belgium. The desperate experienced unemployment as very negative, perhaps because they thought work was important, and they were searching quite intensely for work, yet they remained unemployed. This incongruence between what they wanted and had resulted in distress (Paul & Moser, 2006). Although the discouraged experienced negative feelings because of the discrepancy between their values and behaviour, their positive experiences could indicate that they were investing their time in something else, which might be worthwhile. The adapted reduced the discrepancy between values and behaviour to reduce negative experiences, in line with the CDT.

While the desperate and discouraged attached equal importance to work in Belgium, the desperate in SA attached higher importance to work than the discouraged. In all, the discouraged in SA were more committed and reported positive experiences, which might be explained by their demographics (the relatively lower educated discouraged in South Africa who resided mainly in Ikageng) as indicated below. For the adapted in Belgium, work was still important, facilitating their psychological coping (De Witte et al., 2010), but this was not the case in South Africa.

The categorisation of the unemployed was supported by statistically significant, but small, practical associations with some biographical variables, which provided valuable insight into the profiles. Optimists' background characteristics (younger, educated, and short-term unemployed) might give them a better chance of re-employment, explaining their optimism and problem-focused coping. Younger employees got more job offers and found it easier to find (re)employment (Wanberg, Kanfer, Hamann, & Zhang, 2016). Higher-qualified individuals were also more "employable", while those without a secondary-level education were more likely to remain unemployed (Stats SA, 2017). The shorter the duration of unemployment, the more positive their experiences (Paul & Moser, 2009), while the more commitment they had, the more intensely the unemployed searched, which is characteristic of problem-focused coping (De Witte et al., 2010).

In both countries, the desperate group consisted of middle-aged (25 to 49 years) individuals; however, the South African group was less educated than the Belgians. Both age and educational level might explain why these individuals were more committed to work, were desperately seeking jobs, and had negative experiences. It is widely accepted that middle-aged individuals suffer more than younger and older unemployed individuals (Warr & Jackson, 1984). This is because middle-aged individuals often have more family responsibilities, increasing the importance of the manifest benefit of a job and prompting search intensity, whereas younger individuals tend to have more financial support – perhaps from their parents – and older individuals may have fewer financial resources (Jackson & Warr, 1984). Middle-aged individuals may also be more committed, tied to their well-being, due to the career phase in which they find themselves. Younger unemployed people may not value employment yet (Lahelma, 1989), and older unemployed people may have distanced themselves from work due to imminent retirement (Kanfer, Beier, & Ackerman, 2013). Younger and older individuals may also have other social roles that they fulfil, satisfying their latent needs (Winefield, Tiggemann, Winefield, & Goldney, 1993) and buffering their negative experiences.

Lower levels of education and resultant lower objective employability (Stats SA, 2017) equally influenced the experiences of unemployment, making the unemployed more negative and increasing the importance attached to work (De Witte, 1993). Not surprisingly, the discouraged resided mainly in Ikageng, a black community, and had the lowest educational levels, which might be ascribed to the legacy of apartheid. The positive experiences reported by the discouraged might be a reflection of them valuing the opportunity to spend more time with significant others, derived from a collectivistic culture in which interpersonal relationships are important (Hofstede, 2001). The adapted, both in South Africa and Belgium, were long-term unemployed, with a relatively lower level of education. Unemployment duration and low educational levels led to reduced search intensity – especially when repeatedly rejected by employers (De Witte et al., 2010) – to facilitate psychological coping.

The findings of this study can be used to further develop interventions aimed at facilitating the transition from unemployment to employment or coping with unemployment, regular monitoring of the unemployed, and policy-making. Interventions customised to the different types are needed because some individuals benefit more from particular interventions than others (Liu, Hang, & Wang, 2014). Notably, the associations between the types and evolution variables, furthermore, indicate that the optimists, the desperate, and the discouraged feel worse than before. The discouraged make less of an effort to search, and the adapted did not,

and still do not, search, with economic implications. The increase in commitment among the optimists and the desperate, although positive from an economic perspective, may have negative psychological consequences if they do not achieve their goal of finding employment. Monitoring should focus on preventing the onset or exacerbation of symptoms through early interventions enhancing psychological functioning. Finally, policies should pay more attention to the psychological aspects of being unemployed.

We contributed to theory and research by showing that the typology might be useful in a non-Western context to make sense of the phenomenon of heterogeneity in the unemployment experience. Future studies can use this psychosocial typology for identifying different types of unemployed elsewhere to provide further evidence for generalisability. Replication studies in person-centred research enable the identification of a set of core profiles that commonly occur in most contexts and those profiles that may arise due to specific circumstances (Solinger, Van Olffen, Roe, & Hofmans, 2013). Furthermore, future research should use this typology to identify factors predicting profile membership, as well as the outcomes associated with different types of unemployed people, to strengthen the construct validity of this typology and to enable its meaningful interpretation, for which our research has provided a foundation. A significant limitation of this study was the use of a non-experimental survey design and the use of self-report measures. The sample was obtained using convenience sampling and is not representative of the unemployed population of South Africa. Even though the findings were mostly in line with previous research and supported by theory, the design and sampling method call for more research to evaluate the generalisability of our results. Finally, latent profile analysis is also criticised for taking a confirmatory, as opposed to an exploratory, approach (Marsh, Lüdtke, Trautwein, & Morin, 2009), although we tested several different models.

Conclusion

The results indicated that four types of unemployed could be identified in the current study: optimists, the desperate, the discouraged, and the adapted. These types differed in background characteristics, mostly in line with previous research. The study confirmed that people – with different background characteristics – had different reactions to the same life event of unemployment. Therefore, unemployment programmes should consist of different components, addressing the needs of specific groups.

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CHAPTER 4

ARTICLE 2

Motivational Profiles in Unemployment: A Self-Determination Perspective

Abstract

Individuals suffer from unemployment, leading to affective, behavioural and cognitive consequences. The reason for searching for a job, i.e. one's motivation to look for a job, may explain the prevalence of these consequences. Following self-determination theory, the unemployed may endorse multiple reasons for job search and these reasons combine in motivational profiles. Profile composition determines whether these different types of motivation have positive or negative consequences. The study aimed to examine profiles of job search motivation among the unemployed and to explore the relations between the profiles and affective experiences, commitment to employment and job search behaviour. A quantitative survey design was used to collect cross-sectional data from 865 unemployed individuals in South Africa. Latent profile analysis highlighted four distinct motivational profiles ("identified and not amotivated", "motivated, but structurally impaired", "undifferentiated" and "amotivated). These profiles also differed in term of their affective, behavioural and cognitive consequences. The study contributes to the literature on unemployment by investigating one's motivation to search for a job and associated outcomes from a person-centred perspective. The findings help to tailor interventions and policy for particular types of unemployed people.

Keywords: attitudes, behaviour, experiences, latent profile analysis, motivation, person-centred

Unemployment has negative consequences for countries, societies and individuals. Countries and societies suffer from poor economic growth, poverty, and political instability (Fourie, 2012), while unemployed individuals suffer from negative experiences, negative attitudes and resulting poor job search performance (McKee-Ryan, Song, Wanberg, & Kinicki, 2005; Paul & Moser, 2009; Wanberg, 2012).

Key in the prevalence of these consequences may be the motivation of the unemployed, i.e. the "why" for engaging in search behaviour (Vansteenkiste & Van den Broeck, in press). While some individuals invest little or no time and effort in job search activities, others will search for many different reasons. In other words, from a self-determination theory (SDT) perspective, the unemployed may lack motivation or be controlled by external or internal

forces, or be more autonomous in looking for a job because they find it important or valuable (Deci & Ryan, 2000; Ryan & Deci, 2000).

To date, all studies of the different types of motivation of the unemployed have adopted a variable-centred approach, with the focus on the variables under investigation and their (in)direct link with other variables. Although such research is valuable, it does not illustrate how the different types of motivation combine within individuals and how – in combination – they have a different impact on how people feel, think and behave (see Vansteenkiste & Mouratidis, 2016). A person-centred approach, in contrast, allows identifying homogeneous groups (i.e. profiles) of people with similar levels and combinations of motivation (Aldenderfer & Blashfield, 1984; Moran, Diefendorff, Kim, & Liu, 2012). It further allows exploring how the interplay between different types relates to outcomes (Moran et al., 2012); thus, to explore whether different types (or profiles) experience unemployment differently, and whether they display different attitudes and behaviour. The study of profiles and their differential impact not only has theoretical value, but also enables practitioners to design interventions customised for a particular context (Howard, Gagné, Morin, & Van den Broeck, 2016) and subpopulations (Morin & Marsh, 2015).

Attesting to the value and importance of person-centred research, researchers working in the domain of sports, physical education, educational psychology and work psychology have illustrated that different combinations and levels of the types of motivation based on SDT yield different motivational profiles, with different implications for individuals' functioning. Some studies support the proposition of SDT that more autonomous profiles lead to positive outcomes (e.g. Bioché, Sarrazin, Grouzet, Pelletier, & Chanal, 2008; Hayenga & Corpus, 2010; Vansteenkiste, Sierens, Soenens, Luyckx, & Lens, 2009). Others have demonstrated that autonomous motivation combined with some level of controlled motivation leads to positive outcomes (e.g. Gillet, Vallerand, & Paty, 2013; Graves, Cullen, Lester, Ruderman, & Gentry, 2015; Van den Broeck, Lens, De Witte, & Van Coillie, 2013). This suggests that it is the interplay between motivational variables rather than the variables in isolation that determines how outcomes prevail.

No studies were conducted in an unemployment context. Several researchers provided contextual arguments relevant for motivational profiling studies (Gillet, Vallerand, & Rosnet, 2009; Moran et al., 2012; Ratelle, Guay, Vallerand, Larose, & Senécal, 2007). Moran et al. (2012), for example, argued that the educational context may be more supportive of controlled motivation, while the sports context may be more supportive of autonomous motivation, and that the work context may support both. The current study focuses on the

unemployment context, which is a pressuring context where the outcome (reemployment) is often not within control. More specifically, we focus on the unemployed within South Africa (SA). Due to structural (e.g. high unemployment rate, 37%, in SA or their area) and human capital (e.g. long duration of unemployment and low educational levels) barriers, the probability of finding work is reduced (Kingdon & Knight, 2006). The South African context is competitive and discouraging, which would presumably foster more amotivated and controlled profiles. Amotivation may co-present with high levels of motivation – in those that are motivated to search, yet feel that (re)employment is not attainable. As unemployment benefits are only available to a select few, people are mostly motivated to search due to financial pressures, presumably fostering more controlled profiles.

In short, this study examines the motivational functioning of the unemployed in SA. We have two specific objectives. First, we explore motivational profiles of the unemployed. Second, we test the relations between motivational profiles and affective (i.e. experiences), attitudinal (commitment to employment), and behavioural (job search) outcomes.

In doing so, we contribute to motivational research by taking a person-centred approach in a challenging and discouraging context to study how the different types of motivation combine and jointly influence experiences of unemployed people. We also add to unemployment research that is also predominantly variable-centred. Theoretical advances stem from research explaining the unemployed person's motivation (i.e. person-centred) and its impact on important psychological outcomes. To position these objectives in literature, we present a review of the literature on the SDT, followed by insight into previous studies on motivational profiles before concluding with a review of the impact of motivational profiles on the experiences, attitudes, and behaviour of the unemployed.

Different types of motivation in self-determination theory

Although investing time and effort in job search is linked to reemployment (Kanfer, Wanberg, & Kantrowitz, 2001), unemployed individuals may or may not be motivated to look for a job. According to SDT, the unemployed may have different reasons not to search or to search. First of all, they may be amotivated or lack the motivation to search because they encounter several barriers in job search. Originally, amotivation was conceptualised as a one-dimensional construct (see Deci & Ryan, 1985), but there may be different reasons for people being amotivated (Ryan, Lynch, Vansteenkiste, & Deci, 2011). In operationalising reasons for amotivation in the current study, two considerations are important. First, guided by a recent review of SDT research that there may be subtypes of amotivation (Ryan & Deci,

2017), we evaluated the relevance for unemployment. Second, we examined the barriers typically faced by the unemployed when searching, highlighted in economics (see Kingdon and Knight, 2006).

The first form of amotivation differentiates between a person who does not act because they perceive no positive outcome for anyone undertaking the activity (i.e. people cannot control outcomes, hence a universal helplessness) and a person who does not act because they believe they cannot effectively perform a task. The second form of amotivation refers to those who do not act because they have no interest in the activity. The third form of amotivation refers to those who actively resist (or defy) the activity. Each subtype has its implications (Ryan & Deci, 2017). Previous research illustrated the differential outcomes of different "subtypes" of amotivation (Legault, Green-Demers, & Pelletier, 2006; Shen, Li, Sun, & Rukavina, 2010). For example, Legault et al. (2006) reported that academic performance was negatively predicted by ability and effort beliefs, but not significantly predicted by the value placed on the task or the characteristics of the tasks. This supports the value of differentiating between the reasons for amotivation.

Within economics, the first form of amotivation is reflected in the barriers that unemployed people experience, and is most applicable to the current study. Herein it is argued that unemployed people are mostly discouraged by poverty, high unemployment rates, own duration of unemployment, the cost of job search, and lack of education, to name a few (Kingdon & Knight, 2006). From the literature, there are consequently "personal or human capital barriers" and "environmental or structural barriers".

Building on these studies, the current study operationalised amotivation as *personal amotivation* and *structural amotivation*. Personal amotivation reflects amotivation resulting from the expectation that one lacks the "human capital", i.e. competence or capacity, to perform a certain behaviour. People that are amotivated due to personal reasons cannot imagine positive outcomes in the future because they do not have the capacity or personal resources to engage in the behaviour necessary to achieve these outcomes. For example, unemployed individuals who are personally amotivated do not know how to start looking for a job, or are too tired to look for a job, or lack the financial resources to look for a job (e.g. do not have enough money to access the internet, or to buy newspapers to identify vacancies, or to pay for transport to apply personally at the organisations).

Structural amotivation reflects amotivation resulting from the expectation that structural factors prevent positive outcomes even if one engages in the desired behaviours. For example, structurally amotivated unemployed are discouraged to search because there are no

jobs available. Both personal and structural amotivation capture reasons for the "inability to see positive outcomes" mentioned in the first form of amotivation (see Ryan & Deci, 2017), but based on the differentiation made by economics literature, we operationalised them as two different subtypes rather than one. Personal amotivation reflects the person's inability, whereas structural amotivation reflects a universal helplessness.

Apart from not being motivated, following SDT, the unemployed may also be motivated to search for a job, and may also have different reasons to do so in terms of external, introjected or identified regulation. First, unemployed individuals may search for a job to avoid criticism or because they need to earn an income. This is labelled as *external regulation* (Deci & Ryan, 2000; Vansteenkiste & Van den Broeck, in press). The unemployed then act to meet external demands or pressures in the form of gaining a reward or avoiding punishment, which can be material (i.e. money) or social (i.e. praise or criticism) in nature (Gagné et al., 2015). Second, unemployed individuals who feel ashamed of being unemployed display *introjected regulation* (Vansteenkiste & Van den Broeck, in press). These individuals exert pressure on themselves to search for a job in the form of self-imposed guilt, feelings of shame, or the threat of being less worthy as a person (Deci & Ryan, 2000; Ryan & Deci, 2000). External and introjected regulation are two subtypes of controlled motivation, which means that the unemployed participates in an activity purely out of pressure (Deci & Ryan, 2000).

In contrast to unemployed individuals searching due to pressure, there as those who search because they perceive employment as important or meaningful (Vansteenkiste & Van den Broeck, in press). These individuals accept the reason for searching as their own. They display *identified regulation* (Deci & Ryan, 2000; Ryan & Deci, 2000). Note that they do not experience exploration of the job market as pleasant or enjoyable, as would be the case with intrinsic motivation (Van Hooft, Wanberg, & Van Hoye, 2012). Rather, identified regulation is a type of extrinsic motivation, but as the source of regulation is considered to be internal, identified regulation is considered to be an autonomous type of extrinsic motivation (Deci & Ryan, 2000; Ryan & Deci, 2000).[2]

[2] Note that we exclude intrinsic regulation. We argue that the unemployed may, at most, see the job search task as instrumental in achieving valued outcomes – i.e. finding employment – but will not regard the search activity itself as fun or interesting. The social context, which is a significant antecedent of motivational regulation (Deci & Ryan, 2012), does not allow for people to enjoy looking for a job. Similarly, Vansteenkiste and Sheldon (2006) argue that individuals' motives for behavioural change in therapeutic settings may be instrumental in coping with or alleviating problems (identified regulation), so the person may not resist the behaviour but will also not experience it as fun or enjoyable (intrinsic regulation). Qualitative discussions with unemployed individuals in SA prior to this research confirmed this assumption.

Motivational Profiles

The notion that unemployed individuals are (a)motivated for different reasons, and that these different reasons jointly influence how people feel, think and behave, can be effectively investigated through motivational profiles. Motivational profiles are the product of combining individuals with common motivational attributes in mutually exclusive groups based on their responses to the different types of motivation. These motivational profiles then allow us to describe the respective groups' functioning (Moran et al., 2012).

In the literature on motivational profiles – with purely SDT constructs – different numbers of profiles were found (Moran et al., 2012), ranging from three (Bioché et al., 2008; Gillet et al., 2009; Gillet, Berjot, Vallerand, Amoura, & Rosnet, 2012; Gillet et al., 2013; Ratelle et al., 2007) to six (Graves et al., 2015). The nature of these profiles differs from profiles consisting of low to high levels of the more controlled types of motivation in combination with low to high levels of the more autonomous types of motivation. In general, the studies support the assumptions of the SDT, showing that people differ in the amount of motivation (i.e. having high, moderate or low scores on each motivational regulation).

Results, however, also differed between studies, which could be caused by the differences in method or context. First, regarding method, the motivational variables included differed (Howard et al., 2016), and the factorial structures ranged from only distinguishing between intrinsic and extrinsic motivation (Hayenga & Corpus, 2010), to collapsing the different regulations into autonomous and controlled (Vansteenkiste et al., 2009; Van den Broeck et al., 2013), or using the regulations independently (Aelterman, Vansteenkiste, Soenens, & Haerens, 2016; Gillet et al., 2013; Graves et al., 2015; Howard et al., 2016). Amotivation is often excluded, and when included, treated as a unidimensional construct (Aelterman et al., 2016; Gillet et al., 2013; Howard et al., 2016). Second, different methods of analysis were used, with the majority of studies utilising cluster analysis as opposed to latent profile analysis (LPA), which has been criticised for a lack of objective, statistical indices and tests to decide upon the optimal number of profiles (Bergman & Magnusson, 1997; Steinley, 2003). Third, the contexts in which these studies were done differed with regard to their potential to foster specific profiles. For example, college education may foster more autonomous profiles and elite sports more controlled profiles. The work context may foster both (Moran et al., 2012). Although more consistency exists among within-context findings, between-context findings have more variations. For example, in the educational context, various studies find more or less the same number of profiles (between three and

four) with similar patterns (Hayenga & Corpus, 2010; Ratelle et al., 2007; Vansteenkiste et al., 2009). However, profiles in the work context differ from the ones identified in an educational or sports context, both regarding number and pattern. More specifically, in the educational and sport domains, between three and four profiles are the norm, while in the work domain, the number is between four and six. Studies in the work context also reported more truly autonomous profiles than studies in the educational (especially among high school students) and sport (especially among elite athletes) contexts, in which more controlled profiles emerged.

Given the unique nature of the unemployment context, it is necessary to investigate profiles in this context. Individuals find themselves embedded in societal contexts that impact on their motivation. This is facilitated by the extent to which their psychological needs for autonomy (control over decision-making), competence (feelings of efficacy) and relatedness (sense of belonging) are satisfied through engagement with their environments (Deci & Ryan, 2012). In general, it is assumed that the needs of the unemployed are frustrated (Vansteenkiste & Van den Broeck, in press). In searching for a job, social and material pressures inhibit autonomy, and repeated rejection undermines competence (Vansteenkiste, De Witte, & Lens, 2006), while isolation and not being able to provide for the family frustrate their need for belonging (Underlid, 1996). Similarly, human capital and structural barriers can inhibit competence or autonomy. The fewer psychological needs are satisfied, the more unemployed individuals develop controlled job search motivation or amotivation (Vansteenkiste & Van den Broeck, in press). In short, given the absence of evidence in the unemployment context and the variations in previous studies, we expect to find between three and six profiles differing in their motivational regulations.

Substantive interpretation of motivational profiles furthermore depends on a process of construct validation which can be achieved by demonstrating that these profiles relate meaningfully to covariates (i.e. determinants or outcomes) (Meyer & Morin, 2016). In the current study, we examined profile associations with background characteristics and included affective experiences, employment commitment and job search intensity to evaluate the construct validity of the motivational profiles. These outcome variables have important implications for the well-being and reemployment of the unemployed (Wanberg, 2012). A review of the literature supports the assumptions of the SDT, showing that the different types of motivation (more autonomous vs more controlled profiles) induce different outcomes.

Experiences, attitudes, and behaviour as a function of profile membership

The unemployed may have a lot of negative affective experiences reflected by the deprivation of latent benefits such as social contact, social status, shared purpose, time structure, and regular activity provided by being employment (Jahoda, 1982). However, some individuals may also have positive experiences, such as enjoying the extra time they have to spend with significant others, or feeling more relaxed (Herbert, Drebing, Mueller, & Van Ormer, 2006). Therefore, we include both negative and positive experiences. According to SDT, high levels of amotivation and controlled motivation are associated with more negative experiences and fewer positive experiences (Vansteenkiste, Lens, De Witte, De Witte, & Deci, 2004). So, more amotivated and controlled profiles should have more negative experiences and fewer positive experiences. Perceiving job search as futile or as a series of 'musts' and 'shoulds' potentially deprives the unemployed even more of the aforementioned latent benefits, and prevents them from making the most of their available time (Vansteenkiste & Van den Broeck, in press). The opposite should hold for autonomously motivated individuals. However, the outcomes for autonomous motivation may not be positive, because of the inability of the unemployed to achieve their goal of securing a job (Vansteenkiste et al., 2004; Vansteenkiste, Lens, De Witte, & Feather, 2005).

Commitment to employment reflects the unemployed person's attitude toward jobs (De Witte, Rothmann, & Jackson, 2012). It is defined as "the extent to which a person wants to be engaged in paid work" (Warr, Cook, & Wall, 1979, p. 130). Amotivation should associate with lower commitment to employment, as one does not see value in employment (Vansteenkiste et al., 2004). Also, controlled motivation in searching for a job alienates individuals from the value of employment (Vansteenkiste et al., 2004; Vansteenkiste et al., 2005). Autonomously searching should associate with a higher value attached to employment, as performing activities, which are volitional and consistent with the self, elicits positive attitudes (Graves et al., 2015). So, profiles with higher levels of amotivation or controlled motivation should report lower levels of commitment, with the opposite being true for autonomously motivated profiles.

Job search behaviour is the most important problem-focused coping strategy of the unemployed (McKee-Ryan et al., 2005). It is captured by the frequency with which individuals have engaged in a particular job search activity within a specific timeframe (Wanberg, 2012). Amotivated individuals lack the motivation to persist (Vansteenkiste et al., 2004), so profiles with higher levels of amotivation should report lower levels of job search.

Job search frequency is lower among those who are more controlled, because they may resist the activity (Vansteenkiste et al., 2004; Vansteenkiste et al., 2005). In contrast, individuals who can identify with an activity, i.e. those who are more autonomously motivated, will most likely invest more energy in the activity (Cerasoli, Nicklin, & Ford, 2014). Profiles with higher levels of controlled motivation should then report lower levels of job search, with the opposite being true for autonomously motivated profiles.

The propositions of SDT were confirmed by several person-centred studies (e.g. Aelterman et al., 2016; Howard et al., 2016). However, contrary to the tenets of the SDT, some studies have also demonstrated that a combination of controlled motivation, with at least some level of autonomous motivation – i.e. mixed profiles – has the most positive outcomes (Graves et al., 2015; Hayenga & Corpus, 2010; Moran et al., 2012; Van den Broeck et al., 2013), but perhaps more for performance (Gillet et al., 2012; Moran et al., 2012) than well-being (Gillet et al., 2012; Van den Broeck et al., 2013). Attempting to satisfy external expectations may motivate individuals to perform, especially in competitive environments, but at the same time, the pressure may lead to a decline in well-being (Gillet et al., 2012). Moreover, the different types of motivation may not have their expected impact, because of the pressuring nature of the unemployment context (see Vallerand, Pelletier, & Koestner, 2008). More research is therefore necessary to test these assumptions, with the current study examining both well-being and performance. In short, we test the expectation that affective experiences, employment commitment and job search behaviour will differ across the motivational profiles.

Method

Participants and Procedure

We conducted structured interviews based on the questionnaires with most of the participants, due to their low levels of education. A back-translation judgmental design was employed to determine the equivalence of translated questionnaires (De Kock, Kanjee, & Foxcroft, 2013). A letter of information, adhering to strict ethical requirements, and a consent letter requesting voluntary participation were handed out to participants. The inclusion criteria were in line with the expanded definition of unemployment (Statistics South Africa [Stats SA], 2017). In the absence of a list of unemployed, convenience (i.e. recruiting unemployed participants roaming the streets, and door-to-door) and volunteer sampling (i.e.

advertisements in community newspapers and on community radio stations) were employed. In this manner a variety of participants were informed about the study in order to obtain a more heterogeneous sample. Participants were recruited from two informal settlements in the Gauteng Province of SA: Boipatong and Orange Farm. Since 1955, Boipatong has housed the employees of a manufacturing company. However, with the turbulence in the world steel market the organisation decided to drastically reduce its labour force (Maloma, 2005), increasing unemployment among the inhabitants of Boipatong. Orange Farm, a much younger township, was developed by former farm workers, and has attracted many unemployed or retrenched farm workers since 1988. It has since become the largest and most populous informal settlement in SA, with the majority of its (unskilled) residents living in shacks, having inadequate infrastructure to access the community, and informal activities as their only source of income (City of Johannesburg, 2015).

The final sample consisted of 867 participants from Boipatong (54.20%) and Orange Farm (45.80%). Slightly more females (54.30%) than males (45.70%) participated. Almost all participants (99.20%) were black and most spoke either Sesotho (46.80%) or isiZulu (28.50%). The majority reported not having completed (58.70%) or only completed (38.70%) secondary education. On average, they were 32 years old (*SD* = 10.46) and most had been unemployed for more than two years (64.90%). Quite a number of them were single (79.30%), more than half of them were living with parents or grandparents (or other family members) (50.50%), with no other income in the household from either employment or self-employment (50.10%). On average, they had two individuals who were financially dependent on them (*SD* = 2), with two-thirds (66.10%) reporting social assistance received by others in the household. Only 22.50% received grants themselves. The sample is mostly characteristic of the unemployed in SA: the unemployment rate is higher among black females, individuals between the ages of 15 and 24, and those with a qualification lower than secondary school level. The expanded unemployment rate of the City of Johannesburg, in which Orange Farm is situated, is also slightly lower (30.20%) than that of the non-metro municipality (36.60%) in which Boipatong is situated.

Measures

Background characteristics. Several variables were included that are commonly associated with motivation and/or experiences, attitudes and behaviour in an unemployment context: gender, age, educational level, marital status, living situation, township, unemployment duration, employment history, social assistance (self or others) or another

form of income earned by others in the household, and the number of individuals financially dependent on the unemployed participant.

Motivation. In total, 26 items adapted from Vansteenkiste et al. (2004) tapped into individuals' motives-to-search. Respondents were asked to rate to what extent they agreed (or disagreed) with statements reflecting personal amotivation (e.g. "I do not look for a job because I do not know how to start searching for a job"), structural amotivation (e.g. "I do not look for a job because there are no jobs available"), external (e.g. "I look for a job because I feel pressure from others to do so"), introjected (e.g. "I look for a job because I feel ashamed of being unemployed"), and identified regulation (e.g. "I look for a job because work is personally important to me") on a three-point Likert-type scale ranging from 1 (*disagree*) to 3 (*agree*).

Experiences. The experiences of unemployment were measured with 16 items, derived from De Witte, Hooge, and Vanbelle (2010), tapping into participants' positive (e.g. relaxed) and negative (e.g. lonely) affective experiences. The affective experiences of the individual operationalise Jahoda's (1982) theory and were rated on a three-point frequency scale ranging from 0 (*never*) to 2 (*often*).

Commitment. The importance of work measured was measured by seven items based on the Employment Commitment Scale of Warr et al. (1979). Participants needed to indicate to what extent they agree with a range of statements (e.g. "I find it important to have work") on a three-point Likert-type scale ranging from 1 (*disagree*) to 3 (*agree*).

Job search behaviour was measured by asking how many times participants had performed any of the seven different behaviours [e.g. "Searched for advertisements on the internet (e.g. job or organisational websites) or social media (e.g. Facebook, LinkedIn)" or "Submitted job applications"], reflected on a five-point frequency scale ranging from 0 (*never*) to 4 (*10 times or more*).

Analyses

Mplus 8 (Muthén & Muthén, 1998-2017) was used for data analyses. First, confirmatory factor analysis (CFA) was performed using the mean- and variance-adjusted weighted least squares (WLSMV) estimator to evaluate the preliminary measurement models. We used the indices to assess fit based on recommendations by Kline (2016). The reliabilities of the scales were calculated using the omega reliability coefficient (ω), which is appropriate

for estimating the reliability of variables on an ordinal level (Gadermann, Guhn, & Zumbo, 2012).

Second, LPA was performed on the factor scores saved from preliminary measurement models, a practice which is more common in recent applications of mixture models (Meyer & Morin, 2016; Morin, Meyer, Creusier, & Biétry, 2016). This procedure controls partially for measurement error by giving less weight to items with higher levels of measurement error, thus reducing bias to which scale scores are more prone (Skrondal & Laake, 2001). Factor scores were standardised, to have a mean of 0 and a standard deviation of 1 to obtain more easily interpretable scores, while raw scores were provided for transparency (Meyer & Morin, 2016). LPA is a model-based approach to cluster individuals or cases into groups (i.e. latent profile), based on their responses to observed continuous variables (Muthén & Muthén, 2000). Being model-based, formal statistical procedures were used to determine the optimal number of profiles (Wang & Wang, 2012). To determine model fit, we used the indices recommended by Tofighi and Enders (2008). Simulation research has looked at the performance of these various indicators to facilitate decision-making regarding the optimal number of latent profiles (see Howard et al., 2016 for a brief overview).

Third, we identified the "typical unemployed" within each profile regarding background characteristics based on chi-square difference (χ^2) test and Cramer's V, which indicates the strength of the relationship between the categorical variables. Cohen's (1988) guidelines were used to determine the magnitude of the practical effect sizes: small (.10), medium (.30) and large (.50). Finally, we performed MANOVA, ANOVA and pairwise comparisons (using Tukey's honestly significant difference test) to compare the levels of negative experiences, positive experiences, employment commitment, and job search behaviour across the profiles.

Results

Preliminary measurement models

Two competing measurement models were tested. In Model 1, amotivation was specified as unidimensional (13 items). Together with controlled motivation (10 items), and identified regulation (3 items), there were three separate, but correlated factors. In Model 2, amotivation was modelled in terms of two latent variables, namely personal amotivation (8 items) and structural amotivation (5 items), while external and introjected were still

combined into controlled motivation, as the perceived locus of control for both types of motivation was external (Vansteenkiste & Sheldon, 2006). Based on the fit statistics, Model 2 yielded a better fit to the data. Model development was performed by deleting one item from the controlled motivation scale ("I look for a job because the money that I will earn will allow me to buy all things that I ever wanted to buy") and one item from the amotivation scale ("I do not look for a job because I do not have the right connections") because of repeated cross loadings on other factors – indicated by high MI-values. The revised model (Model 2a) had a very good fit reflected in most fit statistics (see Table 1).

The measurement model for the outcomes was specified in line with theory: negative experiences (10 items), positive experiences (6 items), the importance of work (7 items), and job search behaviour (7 items). Fit statistics are reported in Table 5. The revised model had acceptable fit on most fit statistics. Factor scores were exported from the final measurement model and used for subsequent analysis.

Table 1

Measurement Models (N = 867)

Model	χ^2	***p*-value**	***df***	**TLI**	**CFI**	**RMSEA**	**WRMR**
Model 1	1232.91	.00	296	.93	.94	.06 [.06, .06]	1.95
Model 2	959.81	.00	293	.95	.96	.05 [.05, .06]	1.65
Model 2a	682.08	.00	246	.96	.97	.05 [.04, .05]	1.44

Means, standard deviations, reliability coefficients and correlations for all variables used in the present study are reported in Table 2.

Table 2

Means, Standard Deviations, Reliability Estimates and Correlations

		Mean	SD	1	2	3	4	5	6	7	8
1.	Structural amotivation	.006	.65	(.95)							
2.	Personal amotivation	.042	.67	.82**	(.94)						
3.	Controlled regulation	-.004	.37	.32**	.19**	(.90)					
4.	Identified regulation	-.105	.59	-.12**	-.46**	.63**	(.93)				
5.	Negative experiences	-.011	.57	.12**	-.00	.42**	.40**	(.90)			
6.	Positive experiences	.005	.41	-.11**	-.02	.02	-.06	-.08*	(.79)		
7.	Commitment	-.041	.57	.05	-.10**	.43**	.49**	.67**	.01	(.89)	
8.	Job search	-.003	.56	-.10**	-.11**	.03	.11**	.23**	.01	.14**	(.89)

Note: * $p < .05$, ** $p < .01$

Latent profile analyses

Next, the optimal number of profiles was determined by estimating five models with increasing numbers of latent profiles based on the theoretical meaning and the statistical adequacy of the solutions and our expectation that three to six profiles would be identified,. Table 3 shows the fit indices for the models.

Table 3

Comparison of LPA Models

Model	**Log likelihood**	**#fp**	**scaling**	**AIC**	**BIC**	**ABIC**	**Entropy**	**LMR**	**ALMR**	**BLRT**
1-profile LPA	-2868.10	8	0.89	5752.21	5790.33	5764.92	n/a	-	-	-
2-profile LPA	-2401.71	13	1.07	4829.43	4891.37	4850.09	.87	.00	.00	.00
3-profile LPA	-2225.82	18	1.28	4487.64	4573.41	4516.25	.86	.00	.00	.00
4-profile LPA	-2106.50	23	1.42	4259.00	4368.60	4295.56	.86	.02	.02	.00
5-profile LPA	-1978.43	28	1.28	4012.87	4146.29	4057.37	.89	.00	.00	.00

Note: #fp = number of free parameters; AIC = Akaike information criterion; BIC = Bayesian information criterion; ABIC = sample size adjusted BIC; LMR = *p* value associated with the Vyong-Lo–Mendell–Rubin likelihood ratio test; ALMR = *p* value associated with the adjusted LMR likelihood ratio test; BLRT = *p* value associated with the bootstrap likelihood ratio test.

Examination of the plots indicated that adding a fourth profile resulted in the addition of a qualitatively and quantitatively different profile, compared to the model with three

profiles, whereas adding a fifth profile resulted in a division of existing profile into smaller profiles but did not add anything theoretically meaningful. We explored the plots because the AIC, BIC, and ABIC values failed to reach a minimum and because the LMR, ALMR, and the BLRT also remained statistically significant ($p < .05$). Since these tests are all tests of statistical significance, determining the optimal number of profiles can be influenced by sample size (Marsh, Lüdtke, Trautwein, & Morin, 2009). It is likely that indicators may improve without reaching a minimum (Howard et al., 2016). Consequently, the more parsimonious 4-profile model was preferred. For the 4-profile LPA model, the posterior profile membership probabilities were all above .81, which is larger than the recommended cut-off value of .70 (Nagin, 2005). The entropy value was also quite high, indicating good classification (Clark, 2010).

As displayed in Figure 1, and in line with our expectations, four profiles differing in motivational regulations could be identified in the present study. Profile 1 characterised *identified (and not amotivated)* unemployed (corresponding to 33.70% of the sample), presenting slightly above-average levels of identified regulation and average to very low levels of controlled regulation and amotivation. Profile 2 characterised the *motivated (but structurally impaired)* unemployed (corresponding to 33.30% of the sample), presenting relatively high levels of identified and controlled regulation, average levels of personal amotivation and high levels of structural amotivation. Profile 3 characterised the *undifferentiated* unemployed (corresponding with 10.30% of the sample), presenting average levels of all regulations. Profile 4 characterised the *amotivated* unemployed (corresponding with 22.80% of the sample), presenting high to very high levels of both types of amotivation, average levels of controlled regulation and low levels of identified regulation.

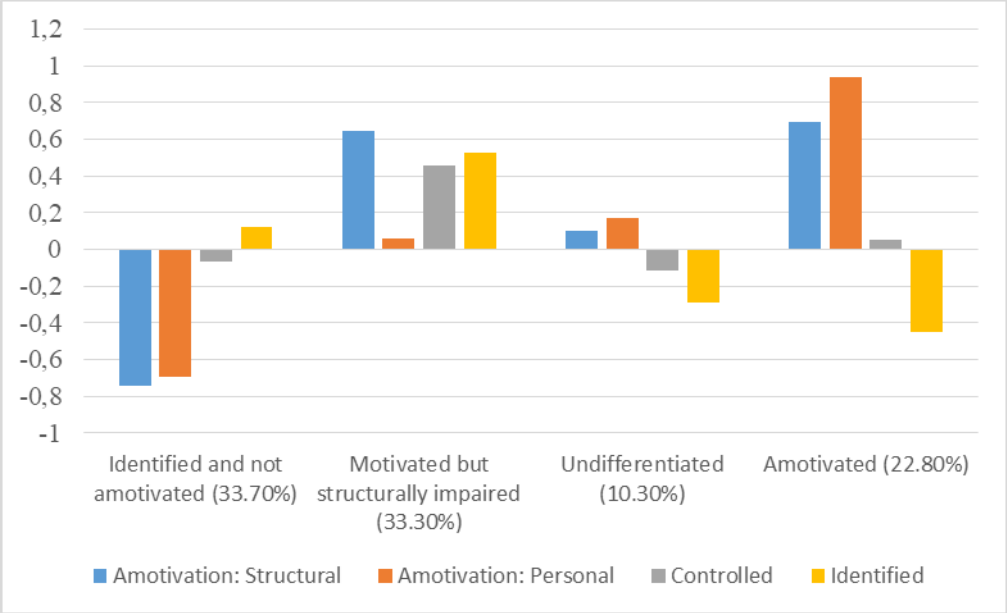

Figure 1. Motivational Profiles (Standardised Factor Score Plot)

Characterisation of groups

We then compared the four groups on participants' background characteristics. As outlined in Table 4, χ^2-tests indicated that the four groups differed regarding age, education, marital status, living situation, township, unemployment duration, and the number of dependants. First, the identified (and not amotivated) group included somewhat more individuals with quite a few financial dependants (more than four), compared to the other groups. Second, the motivated (but structurally impaired) group represented more middle-aged (35-54 years) individuals, who did not complete secondary school, lived in Boipatong and had been unemployed for longer, compared to both the identified (and not amotivated) and the undifferentiated groups. They also reported having one or two financial dependants, and fewer lived with other family members, compared to the other groups. Third, in contrast to the motivated (but structurally impaired), the undifferentiated group included younger (18-34 years) individuals who had no partners and fewer financial dependants, and who had been unemployed for a shorter period of time. Finally, the unemployed of the amotivated group were also relatively lowly educated (less than secondary school qualification) and had been unemployed for a longer period of time – i.e. very similar to the motivated (but structurally impaired) group. With the exception of age, the associations between the groups and the background variables were of small practical significance. No significant differences were

found for gender, employment history, grants, and other members of the household earning an income.

Table 4

Differences in Cluster Membership: Background Characteristics

	Total sample	**Identified and not amotivated**	**Motivated but structurally impaired**	**Undifferentiated**	**Amotivated**	***df***	**χ^2-values**	**Cramer's V**
N	867	289	82	295	199			
Gender								
Male	395	46%	44%	44%	47%	3	0.55	.03
Female	470	54%	56%	56%	53%			
Age								
18-24	232	20%	8%	41%	23%	12	98.72***	.34
25-34	328	36%	25%	39%	44%			
35-54	263	37%	57%	18%	28%			
55+	36	6%	6%	2%	5%			
Education								
< Grade 12	505	57%	70%	50%	67%	9	25.35**	.17
Grade 12	333	39%	25%	46%	32%			
> Grade 12	23	4%	4%	3%	1%			
Marital Status								
With partner	138	24%	19%	9%	14%	6	33.94***	.20
Without partner	723	76%	80%	91%	85%			
Living Situation								
Family members	435	50%	38%	58%	44%	18	58.79***	.26
Alone	80	10%	8%	6%	13%			
Single parent	116	7%	23%	15%	18%			
Unemployed partner	108	16%	10%	9%	13%			
Employed partner	91	11%	21%	7%	11%			
Other	31	6%	0%	4%	2%			
Township								
Boipatong	470	54%	89%	49%	49%	3	46.97***	0.23
Orange Farm	397	46%	11%	52%	51%			

Note: ** $p < .01$, ** $p < .001$

Table 4 *(continues)*

	Total sample	Identified and not amotivated	Motivated but structurally impaired	Undifferentiated	Amotivated	*df*	χ^2-values	Cramer's V
Unemployment Duration								
< 1 year	180	22%	16%	28%	11%	9	41.71***	0.22
1-2 years	122	14%	8%	17%	12%			
> 2 years	559	64%	76%	53%	77%			
Employment History								
Mostly employed	208	26%	20.50%	21%	27%	9	7.15	0.09
Equally employed and unemployed	83	11%	6.00%	10%	9%			
Mostly unemployed	559	61.90%	69.90%	67.10%	62%			
Grant (Self)								
Yes	185	19%	23%	23%	27%	3	4.50	.07
No	636	81%	77%	77%	73%			
Grant (Other)								
0	277	30%	42%	30%	32%	12	19.32	.15
1	258	31%	31%	26%	33%			
2	153	15%	11%	22%	17%			
> 3	129	16%	8%	17%	14%			
Income (Other)								
0	408	53%	45%	43%	45%	3	6.95	.09
> 1	459	47%	55%	57%	55%			
Dependants								
0	201	21%	15%	30%	21%	15	36.09**	0.20
1	165	16%	23%	21%	18%			
2	159	19%	29%	16%	17%			
3	120	16%	12%	11%	17%			
> 4	185	26%	22%	17%	21%			

Note: ** $p < .01$

Experiences, attitudes, and behaviour as a function of profile membership

Mean levels of the factor scores and raw scores of the motivation for each of the profiles are displayed in Table 6. We also examined mean-level differences between the four motivational groups regarding negative experiences, positive experiences, the importance of work, and job search behaviour. In the sample (Wilks' $\lambda = .83$; $F(12, 2275.64) = 13.85$, $p < .00$, $\eta^2 = .06$), the omnibus MANOVA analysis revealed significant group differences. As

displayed in Table 6, follow-up one-way ANOVAs and Tukey tests indicated significant differences for each of the four outcomes.

Table 5

Measurement Models for Outcome Variables (N = 867)

Model	χ^2	***p*-value**	***df***	**TLI**	**CFI**	**RMSEA**	**WRMR**
Model 1	1305.905	.00	399	.85	.87	.05 [.05, .05]	1.70
Model 1a	974.43	.00	342	.89	.90	.05 [.04, .05]	1.53

Note: Model improvement included deleting one item from the negative experiences scale ("I must save on my personal expenditure", low factor loading of .26) and one item from the importance of work scale ("People do not have to work as such to be constructively occupied", insignificant factor loading). Two correlations between the residuals of items were allowed. "My self-worth has decreased" and "I have lost my self-confidence" (MI = 81.92) due to the theoretical overlap and "Searched for advertisements in newspapers and weeklies" and "Searched for advertisements on the internet (e.g. job or organisational websites) or social media (e.g. Facebook, LinkedIn)" (MI = 62.61) due to similar prompts.

Table 6

Mean-level Differences Between Retained Motivational Groups

	Identified and not amotivated (Profile 1)	**Motivated but structurally impaired (Profile 2)**	**Undifferentiated (Profile 3)**	**Amotivated (Profile 4)**
Structural amotivation	-.75[c] (1.03)	.64[a] (2.71)	.10[b] (1.82)	.69[a] (2.54)
Personal amotivation	-.70[d] (1.01)	.06[c] (1.21)	.17[b] (1.39)	.94[a] (2.20)
Controlled motivation	-.07[c] (2.19)	.45[a] (2.84)	-.12[c] (2.07)	.05[b] (2.31)
Identified motivation	.12[b] (2.94)	.53[a] (3.00)	-.29[c] (2.82)	-.45[d] (2.79)
Negative experiences	-0.02[b] (1.31)	.41[a] (1.67)	-0.11[b] (1.25)	-0.03[b] (1.36)
Positive experiences	0.10[a] (1.06)	-0.14[b] (.83)	-0.07[b] (.92)	0.05[a] (.98)
Commitment	0.05[b] (2.81)	0.38[a] (2.93)	-0.20[c] (2.66)	-0.19[c] (2.73)
Job search	0.08[a] (2.25)	-0.13[b] (1.60)	-0.03[ab] (2.01)	-0.03[ab] (2.12)

Note: Indicators estimated from scaled scores indicated in brackets; within rows, means with different letters are significantly different from each other.

First, the unemployed in the motivated (but structurally impaired) group reported the highest levels of negative experiences, followed by the other three groups who did not differ significantly from each other. Second, both the identified (and not amotivated) and the

amotivated reported significantly more positive experiences. Third, the motivated (but structurally impaired) were most committed, followed by the identified (and not amotivated). The undifferentiated and the amotivated groups reported the lowest levels but did not differ from each other. Last, the only significant differences in job search intensity were reported by the unemployed in the identified (and not amotivated) group, compared to the motivated (but structurally impaired) group.

Discussion

Our goal was to examine the motivational functioning of the unemployed by exploring their motivational profiles for job search and the associated feelings, attitudes and behaviour. The study is important because investigations into motivational profiles have been conducted in contexts that are presumably more supportive, and included tasks that are potentially more interesting, challenging or satisfying. Job search is conducted in a discouraging context and individuals are less likely to reach their goals. In this sample, results indicate that different types of (a)motivation can combine naturally into four different groups. This is in line with our expectations and previous findings in other domains reflecting homogeneous motivational groups differing from one another in their levels and types of motivation (Howard et al., 2016; Van den Broeck et al., 2013; Vansteenkiste et al., 2009).

In line with our reasoning that the unemployed may not search – or search with less effort for different reasons – we identified two profiles in which amotivation plays a significant role. Specifically, we found an *amotivated* profile with high levels of both types of amotivation and average to low levels of controlled and identified motivation, which contained more lowly educated and long-term unemployed. This amotivated profile was similar to those previously reported (Gillet et al., 2012; Howard et al., 2016; Ratelle et al., 2007). Longer unemployment duration and lower chances of being re-employed (i.e. low education and hence low objective employability) were thus associated with both subtypes of amotivation.

Surprisingly, the amotivated were not experiencing unemployment as detrimental as one would have expected. Their negative experiences were equally negative compared to the other groups (except the motivated but structurally impaired reporting the most negative experiences). Furthermore, they were just as positive as the identified. This contradicts the propositions of SDT that less autonomous profiles should report more negative experiences,

as well as previous findings that the amotivated profile is detrimental to well-being (Howard et al., 2016). However, SDT also maintains that people who are constantly frustrated by their context may engage in compensatory behaviours such as releasing self-control and compulsively sticking to familiar behaviour. This may provide a sense of satisfaction, even if only temporarily (Vansteenkiste & Ryan, 2013). Lowering commitment to employment while still searching for a job may allow the amotivated to have low negative experiences and to facilitate positive experiences.

The other amotivated profile, the *motivated but structurally impaired*, reported very high levels of structural amotivation. Amotivation can thus manifest differently if operationalised as multidimensional. At the same time, they reported high levels of both controlled and identified motivation. In previous research, high levels of amotivation combined with low – rather than high – levels of other types of motivation (Gillet et al., 2012; Howard et al., 2016; Ratelle et al., 2007). In the context of unemployment, some individuals may thus feel inhibited by their environment but are still motivated to search. For example, the number of dependants may fuel motivation to search, especially in the absence of other family members providing financially (Jackson & Warr, 1984). Although middle-aged individuals value employment more (Lahelma, 1989), their poor education may be reflected in average levels of personal amotivation.

The motivated (but structurally impaired) also experienced the most negative experiences and low levels of positive experiences. Previous literature with highly motivated individuals also reported poor well-being outcomes (Gillet et al., 2012; Van den Broeck et al., 2013). One explanation for this is that their levels of controlled motivation were almost as high as their levels of identified motivation, offsetting the positive effect of identified motivation (Gagné, 2017). Alternatively, our findings may show the detrimental effect of perceiving the environment as constraining when motivated to find a job. SDT proposes that for optimal well-being one should be able to freely engage in an action in line with what one wants and should be supported by the environment (Deci & Ryan, 2000, 2012). The motivated (but structurally impaired) attached the most value to employment, echoing profile research which reported favourable attitudes among the highly motivated (Howard et al., 2016; Van den Broeck et al., 2013). However, this may reflect a substitute coping mechanism, resulting in negative experiences.

Next to the amotivated profiles, we also found a more self-determined profile, the *identified and not amotivated* profile with moderate levels of identified motivation, low controlled motivation and low amotivation. This finding is in line with previous research

which found a more internally, albeit only moderately, motivated profile (Howard et al., 2016). People in this profile may see the value in searching for jobs because it enables them to provide for their families (Jackson & Warr, 1984), similar to the motivated (but structurally impaired). In this case, the job search may not be instrumental in providing an income, but valued for the difference it can make in the lives of those dependants. In line with this view, this profile therefore also searched harder for a job than the motivated (but structurally impaired). In line with SDT, this more autonomous profile is more adaptive, with less negative and more positive experiences than the more motivated (but structurally impaired) profile. Previous research also supported the more autonomous profile as being more adaptive (Howard et al., 2016; Van den Broeck et al., 2013). Surprisingly, there were no significant differences between the identified (and not amotivated) and the amotivated in their experience of unemployment. This finding supports previous variable-centred research with the little positive effect of autonomous motivation in unemployment, showing that being denied the very thing that one wants decreases well-being (Vansteenkiste et al., 2004).

The identified (and not amotivated) also reported more commitment to employment than their counterparts with undifferentiated and amotivated profiles, in line with SDT and previous research (Howard et al., 2016; Van den Broeck et al., 2013). However, they did not display more commitment than the highly motivated. This contradicts the propositions of the SDT, but is somewhat in line with previous research that reported equally positive attitudes between these two groups (Graves et al., 2015; Howard et al., 2016; Van den Broeck et al., 2013).

Lastly, the results indicated an *undifferentiated* profile with moderate levels of all types of motivation. This corresponds with the balanced profiles reported in previous studies (Bioché et al., 2008; Gillet al., 2012; Howard et al., 2016). The undifferentiated profile contains younger, single, and shorter-term unemployed with fewer people financially dependent on them. Although younger employees get more job offers and find it easier to find (re)employment (Wanberg, Kanfer, Hamann, & Zhang, 2016), the unemployment rate is the highest among SA youth (Stats SA, 2017), which may explain average levels of amotivation. Younger individuals tend to have more financial support, perhaps from their parents (Jackson & Warr, 1984), and are usually without the added financial "burden" of dependants. Extrinsic factors do not yet really motivate them. Also, their shorter unemployment duration is not yet discouraging them (De Witte et al., 2010), explaining their average levels of identified motivation – but perhaps it has not provided enough impetus to search either.

The outcomes for the undifferentiated are almost the same as for the amotivated, except that they have slightly fewer positive experiences. In a way, being lowly motivated is just as detrimental as being less autonomous, supporting the findings of Howard et al. (2016) and Ratelle et al. (2007). Compared to the motivated (but structurally impaired), the lower motivation of the undifferentiated seems to buffer against the negative experiences, but at the cost of valuing employment. This supports the findings of Howard et al. (2016), who also reported inverse differences in experiences (i.e. well-being) and attitudes between the balanced and motivated groups.

Taken together, three observations can be made. First, the more autonomous profile has better outcomes compared to the motivated (but structurally impaired) profile. Being more internally regulated thus results in fewer negative experiences, more positive experiences and more search behaviour, even if it comes at some cost for the value one attaches to employment. Therefore, it is the most optimal profile in the current study. This observation is in line with SDT and previous research, with autonomous profiles being more beneficial for both well-being and performance than highly motivated profiles.

Second, being more autonomous does not mean that one is better off than either being undifferentiated (and lowly motivated) or being amotivated (and less autonomous), except for attaching more value to employment. This observation supports theoretical arguments of SDT of non-supportive environments and empirical research in unemployment. The unemployed tend to withdraw from job search activities as a coping mechanism, improving their experiences because they do not have to deal with repeated rejections from employers (De Witte, 1993; De Witte et al., 2010).

Third, the nature and prevalence of the respective profiles either reflect the frustrating impact of the environment on motivation or the adaptation of the unemployed who develop these profiles to cope with their environment. A profile with truly optimal motivation is not present, and the “most optimal profile” only accounts for roughly a third of the sample. Furthermore, half of the sample reported high levels of one or both forms of amotivation; the motivated profile reported high levels on only structural amotivation, whereas the amotivated reported high levels of both types.

Notably, our results indicated that these profiles have small but practically significant associations with some background characteristics. This provides support for the construct validity of these profiles and facilitates meaningful interpretation.

Limitations

Although the study makes a notable contribution to motivation and unemployment research using sophisticated statistical methods, some limitations are worth mentioning. The cross-sectional design makes it impossible to reach conclusions regarding the direction of the associations between the profile and the dependent variables. It is possible that the reversed or even the reciprocal associations may be significant (Howard et al., 2016). Motivation and unemployed experiences may change over time (De Witte et al., 2010; da Motta Veiga & Gabriel, 2016). Therefore, it is important that future research investigates the dynamics of these profiles.

The strength of the study lies in the novel context in which it investigated profiles, and although the sample was mostly typical of the unemployed in SA, future research in different samples of unemployed could strengthen the validity of these profiles. Future research may also include other factors that are important in the psychological impact of unemployment to enhance our understanding of the psychological burden of unemployment (see Paul & Moser, 2009 & Wanberg, 2012). The inclusion of psychological need satisfaction and need frustration would also serve to provide important empirical evidence regarding the ability of psychological needs to support some of our explanations.

Implications for Theory and Practice

The current study extends motivation literature by investigating motivational profiles from an SDT perspective, using a person-centred approach in an unemployment context. We illustrate how motivational groups manifest in a highly competitive, yet discouraging environment. Our findings allow to generalise previous research in both the work (Howard et al., 2016) and high school educational contexts (Ratelle et al., 2007), which did not obtain highly self-determined profiles, but also support the contextual influences argument to the extent that one peripheral profile (motivated but structurally impaired) unique to this context emerged. Our research also stresses the value of differentiating between different reasons for being amotivated. CFA illustrated that the amotivation items load onto separate factors, and both the "types" of amotivated profile differ in almost all outcomes. Conceptualising amotivation as multidimensional is also helpful for career counsellors and other stakeholders dealing with the unemployed – who will benefit more from knowing why people are searching without intent or not searching at all.

Motivational profiles can enhance both accessibility and comprehension of motivation research by practitioners when information is presented regarding an individual's, rather than a variable's, functioning (Vansteenkiste et al., 2009). If we can tell them about unemployed people's motivation, they can design interventions for the unique groups. Several recommendations can be made. First, unemployment counsellors should think in terms of different people when they counsel the unemployed, because they are not one homogeneous group. Second, the fact that the moderately identified are the more adaptive profile, with presumably better prospects of finding employment, interventions should concentrate on facilitating employment among these profiles. Third, interventions should aim to reduce the number of individuals in the motivated but structurally impaired profile, which is the least psychologically adaptive profile – for example by increasing one's coping with or removing the structural barriers. Lastly, although the amotivated and undifferentiated are not less desirable from a psychological perspective, they are from an economic perspective. They have less commitment to employment and search behaviour will likely decrease, to minimise the discrepancy between values and behaviour, if left unattended.

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CHAPTER 5

ARTICLE 3

Experiences, attitudes and behaviours of the unemployed: The role of motivation and psychological needs

Abstract

Alleviating the psychological burden of unemployment and preventing the unemployed from withdrawing from the labour market remains a priority for unemployment researchers and practitioners alike. Job search motivation and the differential relationships with experienced psychological need satisfaction (and need frustration) potentially induce different well-being (i.e. experiences), attitudinal (i.e. employment commitment) and behavioural (i.e. job search intensity) outcomes in unemployment. This study examined if job search motivation relates to the experiences, attitudes and behaviour of the unemployed over time through basic need satisfaction and frustration. In a two-wave study (n_{T1} = 461; n_{T2} = 244), the results demonstrated that job search motivation has no relationship with the affective experiences, attitudes towards employment, and job search behaviour over time. It also showed that only controlled motivation and amotivation were significantly related to need frustration. Finally, only psychological need satisfaction, and not the frustration of their needs, was significantly related to affective experiences over time. The implications for unemployment and self-determination theory research are discussed and recommendations for practitioners are made.

Keywords: Unemployment, affective experiences, employment commitment, job search behaviour, self-determination theory, psychological need satisfaction, psychological need frustration

1. Introduction

Being without work is not only bad for society (Brand, 2015; Fourie, 2012), but also for the unemployed (Wanberg, 2012). It is therefore important that the unemployed find employment. The likelihood of transitioning from unemployment to employment depends on various factors (Van Hooft, 2014). Among others, it depends on whether the unemployed feel well (Wanberg, 2012), are committed to employment and are searching for jobs (Kanfer, Wanberg, & Kantrowitz, 2001). Understanding what influences the unemployed's well-being (i.e. affective experiences), their attitudes (i.e. employment commitment), and their behaviour (i.e. job search intensity) is crucial to alleviate the psychological burden of unemployment and to remain responsive job seekers.

One of the proposed factors influencing the experiences, attitudes and behaviour of the unemployed is motivation (Vansteenkiste & Van den Broeck, in press). Recent developments in motivational psychology suggest that not only the amount of motivation matters but also the type of motivation (the reasons for or the *why*) (Ryan & Deci, 2017). The self-determination theory (SDT) proposes that the types of motivation underlying behaviour range on a continuum, from having little or no interest in pursuing an activity (i.e. amotivation) to pursuing the activity because one is compelled to do so (i.e. controlled) or because one concurs with the activity (i.e. autonomous) (Deci & Ryan, 2000; Ryan & Deci, 2000). The closer people are to autonomous motivation, the more positive the consequences in terms of well-being, attitudes and behaviour (Ryan & Deci, 2017).

Although considerable SDT research has been conducted in other domains, limited international research has assessed the implications of motivation in unemployment. The results of these studies were sometimes not replicated and at times not in line with the theoretical assumptions of SDT (e.g. Vansteenkiste, Lens, De Witte, De Witte, & Deci, 2004; Vansteenkiste, Lens, De Witte, & Feather, 2005). More research is thus needed to determine the relevance of SDT in unemployment, especially in developing countries with relatively high unemployment rates and little or no financial assistance for the unemployed. Several researchers have advocated that the availability of choice and safety nets could influence motivation and the consequences it produces (Ryan & Deci, 2017). The current study, therefore, aims to examine implications of the different types of motivation for the experiences, commitment and job search behaviour of the unemployed in South Africa.

We furthermore aim to understand the processes underlying these relationships. Within SDT the different types of motivation are said to have different implications for well-being, attitudes and behaviour because they relate differently to the basic psychological needs (Vansteenkiste & Van den Broeck, in press). Basic psychological needs are the "innate psychological nutrients that are essential for ongoing psychological growth, integrity, and well-being" (Deci & Ryan, 2000, p. 229). Need satisfaction seems to be only one side of the coin. While low need satisfaction may hamper people's functioning, the active thwarting of needs may spark defensiveness, ill-being, and even psychopathology (Ryan & Deci, 2017; Vansteenkiste & Ryan, 2013). Therefore, more recently, researchers also advocate for investigating the influence of the frustration of these needs (Van den Broeck, Ferris, Chang, & Rosen, 2016), even more so in unemployment where individuals are more prone to need frustration (Vansteenkiste & Van den Broeck, in press). In response, the current study aims to expand our understanding of need frustration by examining to which degree need frustration

– next to need satisfaction – explains the associations between the different types of motivation and individuals' well-being, attitudes and behaviour.

In short, the study contributes to both unemployment and SDT literature in three ways. One, the outcomes of motivation are assessed in a presumably more challenging context where a safety net is absent. Second, we examine the relevance of and the most optimal type of motivation in the South African context over time. Three, both psychological need satisfaction and frustration are introduced. As such, we broaden the ecological validity of basic psychological needs, evaluate the relevance of psychological need satisfaction in unemployment, and explore the unique role of need frustration among individuals at risk. Both need satisfaction and frustration are specified as a pathway for explaining the impact of motivation. In doing so, we broaden and refine our understanding of the pathways in which motivation influences affective experiences and responsiveness over time.

1.1. Motivation and unemployment

Various theories have been used to understand the motivation of the unemployed. Scholars have viewed unemployment for example from a perspective of self-regulation (e.g. Kanfer et al., 2001), expectancy-value (EVT) (e.g. Van den Broeck, Vansteenkiste, Lens, & De Witte, 2010) and self-determination (e.g. Koen, Van Vianen, Van Hooft, & Klehe, 2016; Vansteenkiste et al., 2004, Vansteenkiste et al., 2005). SDT is deemed valuable in providing a framework for explaining the role of motivation to search for a job in alleviating the negative experiences of the unemployed while fostering their responsiveness. This is because SDT allows to systematically explain the entire motivational process (Vansteenkiste & Van den Broeck, in press). It also has an experiential and affective focus (Vansteenkiste & Mouratidis, 2016) and differentiates different types of motivation (Vansteenkiste et al., 2005).

Specifically, when considering job search motivation, SDT first considers whether some unemployed are simply going through the motions. In this case, the unemployed is said to be amotivated (Vansteenkiste & Van den Broeck, in press). When amotivated, the person invests little or no energy in the activity for a variety of reasons such as feeling incapable, lacking interest in the activity, or actively resisting the activity (Ryan & Deci, 2017). Second, the theory also examines whether the unemployed search because they need the money (external financial regulation), because others are forcing them (external social regulation), or because they feel guilty or ashamed (introjected regulation) as types of controlled motivation. Finally, SDT considers that the unemployed may search for a job because they find it meaningful (identified regulation) (Vansteenkiste & Van den Broeck, in press), which is defined as a type

of autonomous motivation[3] (Ryan & Deci, 2017). The value of differentiating between types of motivation is supported by empirical evidence illustrating their affective, attitudinal, and behavioural consequences (Ryan & Deci, 2017). More specifically, amotivation and controlled motivation are associated with a range of negative consequences (e.g. ill-being, unfavourable attitudes and unsatisfactory performance), whereas the opposite is observed for autonomous motivation (i.e. well-being, favourable attitudes and optimal performance) (see Deci, Olafsen, & Ryan, 2017 and Ryan & Deci, 2017 for overviews).

Based on this literature it may be assumed that the different types of motivation also have implications for affective, attitudinal and behavioural dimensions of unemployment that capture the complexity of unemployment (De Witte, Hooge, & Vanbelle, 2010). The *affective experiences* of the unemployed are best understood from the latent deprivation theory postulated by Jahoda (1982). According to this theory, employment serves two sets of functions – manifest (referring to monetary rewards) and latent. The latent functions include (a) establishing a daily time structure; (b) sharing contact and experience with others outside of the immediate family; (c) having a collective purpose; (d) forming a social identity through social status; and (e) engaging in regular activities (Jahoda, 1982). In contrast to individuals participating in employment, the unemployed are deprived of the opportunity to fulfil these functions and therefore have negative experiences (Jahoda, 1982). For example, the unemployed report negative experiences like boredom because of ill-structured days and a lack of regular activities, or feel lonely because of a lack of social contact outside the home (De Witte et al., 2010). Attitudes toward employment are captured by *employment commitment*, which is defined as the importance or value that people attach to employment (Kanfer et al., 2001). Job search intensity captures job search effort and is defined as the frequency with which unemployed people have engaged in a variety of preparatory (i.e. speaking to others about possible job openings) and active (i.e. contacting an employment agency) job search activities in a specific time frame (Wanberg, 2012).

Theoretically, SDT proposes that more amotivation and controlled motivation would result in more negative experiences, whereas the opposite would hold for autonomous motivation (Vansteenkiste et al., 2004). SDT also expects that amotivation is associated with the worst outcomes for well-being (Ryan, Deci, & Grolnick, 1995). So, going through the motions of

[3] Note that we exclude intrinsic regulation. Theoretically, we argue that the unemployed may, at most, see the job search task as instrumental in achieving valued outcomes – i.e. finding employment – but will not regard the search activity itself as fun or interesting. The social context, which is a significant antecedent of motivational regulation (Deci & Ryan, 2012), does not allow for people to only enjoy looking for a job. Similarly, Vansteenkiste and Sheldon (2006) argued that individuals' motives for behavioural change in therapeutic settings may be instrumental in coping or alleviating problems (identified regulation), so the person may not resist the behaviour, but will not experience it as fun or enjoyable (intrinsic regulation). Qualitative discussions with unemployed individuals in SA prior to this research confirmed this assumption.

job search without having the motivation should produce the most negative experience, followed by controlled motivation where the unemployed feel compelled. Searching because one considers it valuable for an outcome that is personally important may lead to a more positive experience. So over time, the more autonomous unemployed should be least at risk for a negative experience. The amotivated unemployed will also likely attach very little value to employment, aligned with their lack of motivation for the job search activity. Those searching because they are compelled to do so, will likely also report less employment commitment than their autonomous counterparts who will likely foster positive attitudes towards employment (Vansteenkiste et al., 2004, 2005).

Amotivation and controlled motivation hamper behavioural persistence over time, whereas autonomous motivation enables behavioural persistence (Ryan & Deci, 2017). Amotivated unemployed lack motivation to engage in any behaviour, so they are also unlikely to engage in job search behaviour (Vansteenkiste et al., 2004). So, amotivation should be the most detrimental to performance (Ryan et al., 1995). Unemployed who experience controlled motivation, in contrast, do have the intention to engage in job search behaviour, but their engagement is likely to be relatively superficial. They should perform poorly over time, whereas those searching because it is valuable should perform better in the long run.

Results of previous studies were mostly in line with these theoretical propositions. Amotivation predicted negative experiences (Vansteenkiste et al., 2004), and so did controlled motivation (Vansteenkiste et al., 2004, 2005), although less strongly than amotivation. Contrary to expectations, autonomous motivation was shown to be unrelated (Vansteenkiste et al., 2005) or even positively related to negative experiences (Vansteenkiste et al., 2004), raising the question whether autonomous motivation in the face of continuous failure could have a dark side (Vansteenkiste et al., 2004). Contrary to expectations, a positive correlation between controlled motivation and employment commitment was previously reported. As expected, the correlation between autonomous motivation and employment commitment was also positive (Vansteenkiste et al., 2004, 2005). Empirically, contrary to expectations, amotivation (Koen et al., 2016; Vansteenkiste et al., 2004) and controlled motivation (Vansteenkiste et al., 2004, 2005) were unrelated to search behaviour in previous research. Autonomous motivation was a significant predictor of search (da Motta Veiga & Gabriel, 2016; Koen, Klehe, & Van Vianen, 2015; Koen et al., 2016; Vansteenkiste et al., 2004, 2005) also over time (da Motta Veiga & Gabriel, 2016; Koen et al., 2016).

Given the mixed results reported in the literature, we deemed it important to further examine the associations between the different types of SDT and motivation. To provide a

strong test of these relationships, we conducted longitudinal research in South Africa. Within this context, structural (e.g. high unemployment rate, 37%, in SA or their area) and human capital (e.g. long duration of unemployment and low educational levels) barriers reduce the probability of finding work (Kingdon & Knight, 2006). Financial barriers add to these challenges, as unemployment benefits are only available to a select few (Woolard & Leibbrandt, 2010). These individual and contextual challenges could impact on motivation and the outcomes thereof. Moreover, we separated the measurements of motivation on the one hand and the unemployed's experiences, commitment and job search behaviour on the other hand to examine the longitudinal relationships between motivation and unemployed's functioning.

1.2. Psychological need satisfaction and frustration

Job search motivation can influence experiences, attitudes and behaviour, but it can also influence psychological needs. Three psychological needs can be differentiated within SDT: autonomy, competence and relatedness (Deci & Ryan, 2000; Ryan & Deci, 2000). *Autonomy* concerns the need to experience a sense of ownership over one's behaviours, feelings, and thoughts, and to engage in activities because one wants to do so (deCharms, 1968). For example, when feeling satisfied in the need for autonomy, the unemployed would experience a sense of control over decisions to apply for a job and that their decisions reflect their wishes. *Competence* concerns the need to experience a sense of effectiveness when engaging in an activity while also mastering new skills in the process (White, 1959). For example, when satisfied, the unemployed experience a sense of confidence and feel capable and energised to pursue an activity (e.g. going for an interview). *Relatedness* involves the need to develop meaningful and satisfying relationships (Baumeister & Leary 1995), and the need to feel that one is adding value in the lives of others (Deci & Ryan, 2014). For example, if satisfied, the unemployed would experience a sense of closeness to and connection with those who support them in coping with the frustrations accompanying unemployment.

Recently, it is argued that studies should not only measure psychological need (dis)satisfaction, because needs can also be actively blocked or thwarted (Chen et al., 2015; Van den Broeck et al., 2016; Vansteenkiste & Ryan, 2013). Low levels of need satisfaction merely illustrate a lack of need satisfaction; it does not provide us with an indication of whether the needs are thwarted – which the level of need frustration would (Bartholomew, Ntoumanis, Ryan, & Thøgersen-Ntoumani, 2011). Autonomy frustration is the experience of decisions as reflective of the wishes of others (e.g. when one has to do something that runs

counter to one's own values). Competence frustration is the experience of insecurity or even feeling like a failure (e.g. when a person does not get the job after an interview), and relatedness frustration is experiencing those providing social support as cold and distant (Chen et al., 2015). Previous studies empirically demonstrated that need satisfaction and need thwarting differently predict positive (e.g. positive affect, satisfaction with life, and vitality) and negative (i.e. burnout, disordered eating, exhaustion and negative affect) mental health outcomes (Bartholomew, Ntoumanis, Ryan, Bosch, & Thøgersen-Ntoumani, 2011; Bartholomew, Ntoumanis, Ryan, & Thøgersen-Ntoumani, 2011; Cordeiro, Paixão, Lens, Lacante, & Sheldon, 2016) and should be studied together to fully understand individuals' functioning.

Some researchers have theorised that the basic needs may not only foster the development of optimal motivation, but may also flow from it (Vansteenkiste & Ryan, 2013). Hence, searching for a job because one has to go through the motions, even if you do not feel confident or positive about the outcomes (i.e. amotivation), could lower one's perceived autonomy and competence. When feeling alone in this futile venture, perceived relatedness is also undermined. Searching for a job because of financial or social pressure or because one feels guilty (i.e. controlled motivation) would also not satisfy basic psychological needs. Indeed, the search process becomes a series of "musts" and "shoulds" with little opportunity to experience choices as reflective of own wishes, and most likely fewer experiences of effectance and mastery. Such an unemployed person may also experience little relatedness, especially from those who are exerting the pressure.

On the other hand, searching for a job because one feels that it is valuable to do so (i.e. identified regulation) has the potential to satisfy the basic psychological needs of the unemployed. If the job search is performed because it is viewed as important for achieving a self-selected desired goal, an unemployed individual can experience a sense of autonomy (because it is a self-selected desired goal), competence (because they feel effective in approaching potential employers) and relatedness (satisfying relationships because one aims to contribute to society and/or sustain one's family). Vansteenkiste and Ryan (2013) refer to this as a "positive cascading effect" (p. 266).

The opposite would hold for the relation between the different types of motivation and need frustration. SDT argues that amotivation and controlled motivation would frustrate basic psychological needs (Deci & Ryan, 2000). Indeed, passively engaging in job search, complying with obligations, or avoiding guilt in job search, enhances perceived incongruence, doubts, and feelings of being disliked by and distant from others, especially

when failing to obtain a job. In contrast, identified regulation has the potential to lower the frustration of basic psychological needs of the unemployed. Once again, if job search is performed because it is viewed as important, an unemployed individual should not feel pressured, insecure, or isolated. Studies in the domains of ostracism (Legate, DeHaan, & Ryan, 2015; Legate, DeHaan, Weinstein, & Ryan, 2013) and pro-social behaviour (Martella & Ryan, 2016; Weinstein & Ryan, 2010) proved that motivation influence experiential, attitudinal, and behavioural outcomes through psychological needs. However, to date, no empirical research exists on these relationships in the context of unemployment. In this study, we want to examine whether need satisfaction and need frustration are the underlying processes of the relationship between the different types of motivation and the well-being, attitudes and behaviour of the unemployed.

Theoretical links can be drawn between the psychological needs and the affective experiences, attitudes and behaviour of the unemployed (Vansteenkiste & Van den Broeck, in press). For example, based on SDT, the unemployed experiencing autonomy, competence, and relatedness are likely to report less negative experiences because they would have more structured days filled with regular activities contributing to the community. They would also report more employment commitment as they integrate the importance of work with the self. Also, they are likely to search more intensively because their basic needs are nutrients providing energy to put effort into their journey to look for a job (Deci & Ryan, 1985). In line with SDT, several studies indicated that need satisfaction relates positively to indicators of well-being, negatively to indicators of ill-being, fosters positive attitudes, and enables continued performance (see Van den Broeck et al., 2016 for an overview in the work context). However, to date, no study has examined the association between need satisfaction and the well-being, commitment or job search among the unemployed.

Consistent with theorising, we therefore expect that job search motivation is indirectly related to affective experiences, employment commitment and job search intensity through psychological need satisfaction. More specifically, we hypothesise that

Hypothesis 1a: need satisfaction mediates the positive association between amotivation and the negative affective experiences of the unemployed, and the negative association of amotivation with employment commitment and job search intensity.

Hypothesis 2a: need satisfaction mediates the positive association between controlled motivation and the negative affective experiences of the unemployed, and the negative association of controlled motivation with employment commitment and job search intensity.

Hypothesis 3a: need satisfaction mediates the negative association between autonomous motivation and the negative affective experiences of the unemployed, and the positive association of autonomous motivation with employment commitment and job search intensity.

Similarly, need frustration may also come into play. For example, the unemployed reporting frustration of their needs for autonomy, competence, and relatedness could report more negative experiences (i.e. ill-structured days, boredom, feeling insignificant, interpersonal conflict and alienation). They may also try to become less involved in the unemployment process (Ryan & Deci, 2017; Vansteenkiste & Ryan, 2013) and attach less value to employment and lower job search intensity. Therefore, job search motivation would undermine experiential, attitudinal and behavioural outcomes insofar as it frustrates psychological needs. We, therefore, hypothesise that

Hypothesis 1b: need frustration mediates the positive association between amotivation and the negative affective experiences of the unemployed, and the negative association of amotivation with employment commitment and job search intensity.

Hypothesis 2b: need frustration mediates the positive association between controlled motivation and the negative affective experiences of the unemployed, and the negative association of controlled motivation with employment commitment and job search intensity.

Hypothesis 3b: need frustration mediates the negative association between autonomous motivation and the negative affective experiences of the unemployed, and the positive association of autonomous motivation with employment commitment and job search intensity.

2. Methods

2.1. Sample and procedure

Data were collected from unemployed individuals in Boipatong, a small informal settlement in the Gauteng Province of South Africa, at two points in time. In the absence of an official list of unemployed, a dual process was followed to recruit participants who meet the criteria of the expanded definition of unemployment (see Statistics South Africa, 2017) at Time 1: Convenience sampling (via door to-door recruitment) and volunteer sampling (responses from an advertisement in the local newspapers and community radio stations). In

this way, a variety of prospective participants were informed about the study, ensuring a more diverse sample. A unique code was assigned to all participants at Time 1, which they had to provide at Time 2 for verification purposes and to enable the researcher to match responses. We assessed their job search motivation and their experienced basic psychological need satisfaction and frustration at Time 1. Psychological need satisfaction and frustration are most likely to be experienced concurrently with the reasons for searching for a job. At Time 2, six months later, all participants were contacted, and we then assessed their negative experiences, employment commitment and job search behaviour. These outcomes were separated temporally from motivation and experienced need satisfaction and frustration to determine whether more (or less) optimal types of motivation put the unemployed more (or less) at risk at a later time point. Structured interviews, based on the questionnaires, were conducted with most of the participants due to their low levels of education.

A total of 461 unemployed participated at Time 1. Of these, 244 participated again at Time 2. At Time 1, slightly more females (51.40%) than males (48.40%) participated. Almost all participants (98.50%) were black and spoke Sesotho (55.70%) or isiZulu (15.80%). The majority reported not having completed (64.00%) or having only completed (32.30%) secondary education. On average, they were 34 years old (*SD* = 10.72) and most had been unemployed for more than two years (69.20%). Slightly more than two thirds (64%) indicated that they had been mostly or always unemployed. Quite a few were single (74.40%), almost half of them were living with parents or grandparents (or other family members) (43.40%), with half of them reporting no other income in the household from either employment or self-employment (50.30%). On average, they had two individuals who were financially dependent on them (*SD* = 2), with almost two thirds (60.90%) reporting social assistance received by one or more in the household. Only 19.10% received grants themselves.

At Time 2, more females (59.80%) than males (40.20%) participated. Almost all participants (99.60%) were black and spoke Sesotho (52.00%) or isiZulu (16.40%). The majority reported not having completed (64.00%) or having only completed (32.00%) secondary education. On average, they were 36 years old (*SD* = 10.95) and most had been unemployed for more than two years (73.80%). Slightly more than two thirds (65%) indicated that they had been mostly or always unemployed. Quite a few were single (73.40%), more than a third of them were living with parents or grandparents (or other family members) (38.90%), with slightly more than half of them reporting no other income in the household from either employment or self-employment (54.90%). On average, they had two

individuals who were financially dependent on them (*SD* = 2), with almost two thirds (61.40%) reporting social assistance received by one or more in the household. Only 21.30% receive grants themselves.

Chi-square tests revealed no significant differences, between participants who responded at Time 1 and those who responded at both times (Time 1 and Time 2), in terms of their level of education ($\chi^2 = 0.03$, $p = .99$), marital status ($\chi^2 = 0.01$, $p = .94$), living situation ($\chi^2 = 2.97$, $p = .56$), unemployment duration ($\chi^2 = 1.79$, $p = .41$), employment history ($\chi^2 = 0.59$, $p = .74$), grant (self) ($\chi^2 = .45$, $p = .50$), grant (others) ($\chi^2 = 1.04$, $p = .79$), and income (others) ($\chi^2 = 1.01$, $p = .32$). The two groups did differ in terms of age ($\chi^2 = 8.43$, $p = .04$), gender ($\chi^2 = 4.44$, $p = .04$) and the number of financial dependants ($\chi^2 = 10.64$, $p = .03$). Between the two time points, younger males with less financial dependants dropped out of the study.

2.2. Measures

2.2.1. Negative experiences

Negative experiences were measured at Time 2, which operationalise Jahoda's (1982) theory, and consists of 10 items from De Witte et al. (2010). Participants had to rate their negative (e.g. lonely, uncertain) affective experiences on a three-point frequency scale ranging from 1 (never) to 3 (often), which was recoded to 0 (Never) to 2 (Often) for analysis.

2.2.2. Employment commitment

Employment commitment was measured at Time 2 by seven items based on the Employment Commitment Scale of Warr, Cook, and Wall (1979). Participants had to indicate to what extent they agreed with a range of statements (e.g. "I find it important to have work") on a three-point scale ranging from 1 (agree) to 3 (disagree).

2.2.3. Job search behaviour

Behaviour was assessed at Time 2 by asking how many times participants had performed any of the seven different behaviours [e.g. "Searched for advertisements on the internet (e.g. job or organisational websites) or social media (e.g. Facebook, LinkedIn)"], reflected on a five-point frequency scale ranging from 0 (never) to 4 (10 times or more), in the past three months. The scale of De Witte et al. (2010) was adapted by adding two items to accommodate more recent job search methods (i.e. social media).

2.2.4. Job search motivation

The adapted Search Regulation Questionnaire – Job Searching (SRQ-JS) was used to measure individuals' motives-to-search at Time 1, and consists of 26 items. Vansteenkiste et al. (2004) constructed the questionnaire as part of their study by asking participants why they were (or were not) searching for jobs. The instrument was adapted in the current study through the elimination of items that are not relevant in South Africa (e.g. "because I find it enjoyable to explore the job market and search for jobs for which I am qualified"), and some items were adapted (e.g. "because I am too poorly educated to be accepted by an employer"). The amotivation items were developed guided by research on discouraged job seekers in which the barriers that unemployed people experience discourage them from seeking. Herein it is argued that unemployed people are mostly discouraged by poverty, high unemployment rates, own duration of unemployment, the cost of job search, and lack of education, to name a few (Kingdon & Knight, 2006). Respondents were asked to rate to which degree they agree with statements reflecting amotivation (13 items, e.g. "I do not look for a job because it is too expensive to search"), external (five items, e.g. "I look for a job because I feel pressure from others to do so"), introjected (five items, e.g. "I look for a job because I feel ashamed of being unemployed"), and identified regulation (three items, e.g. "I look for a job because work is personally important to me") on a three-point Likert-type scale ranging from 1 (disagree) to 3 (agree).

2.2.5. Basic psychological need satisfaction and frustration

Basic psychological need satisfaction and need frustration were measured at Time 1 with a shortened version of the Basic Psychological Need Satisfaction and Need Frustration Scale (BPNSFS; Chen et al., 2015). Items were excluded from the original scale based on their lower factor loadings as obtained in the study by Chen et al. (2015). The final version contained 19 items, six items for each of the needs, except relatedness, which is measured with seven items. Respondents were asked to rate to which degree they agree with statements reflecting autonomy satisfaction (e.g. "I feel that my decisions reflect what I really want"), autonomy frustration (e.g. "Most of the things I do feel like I have to"), competence satisfaction (e.g. "I feel capable at what I do"), competence frustration (e.g. "I feel insecure about my abilities"), relatedness satisfaction (e.g. "I feel that the people I care about also care about me") and relatedness frustration (e.g. "I have the impression that people I spend time with dislike me") on a three-point Likert-type scale ranging from 1 (disagree) to 3 (agree).

2.2.6. Socio-demographic characteristics

The following socio-demographic characteristics, deemed important to describe an unemployment sample, were measured: age, dependants, education, employment history, gender, living situation, marital status, unemployment duration, social assistance (self or others) or another form of income earned by others in the household.

3. Results

Table 1 presents the means, standard deviations (SD), reliability estimates and correlations between all variables in this study. We used Mplus 8 (Muthén & Muthén, 1998–2017) to evaluate the factorial validity of the measures using the measurement model and to test the hypotheses using the structural model estimated with the mean- and variance-adjusted weighted least squares (WLSMV) estimator for categorical variables. The following indices are used to assess the model fit based on recommendations by Kline (2016): chi-square (χ^2), degrees of freedom (*df*), root mean square error of approximation (RMSEA), the weighted root-mean square residual (WRMR), and incremental fit indices, including the comparative fit index (CFI), and the Tucker-Lewis index (TLI). CFI and TLI values higher than .95 are considered acceptable (Hu & Bentler, 1999), but should be treated as guidelines in applied research (West, Taylor, & Wu, 2012). Wang and Wang (2012) consider .90 as appropriate cut-off values for these two fit indices. Further, RMSEA values lower than .08 and WRMR values closer to 1 indicate acceptable fit between the model and the data (Wang & Wang, 2012). The reliabilities of the scales were calculated using the omega reliability coefficient (ω), which is appropriate for estimating the reliability of variables on an ordinal level (Gadermann, Guhn, & Zumbo, 2012).

Table 1

Means, standard deviations, reliability estimates and correlations

	Mean	SD	1	2	3	4	5	6	7	8
1. Amotivation	-.00	.66	(.96)							
	(1.60)	(.56)								
2. Controlled	-.00	.41	.34***	(.93)						
	(2.32)	(.52)								
3. Identified	-.10	.65	.00	.62***	(.95)					
	(2.90)	(.31)								
4. Need Satisfaction	-.05	.40	.01	.15*	.23*	(.95)				
	(2.53)	(.42)								
5. Need Frustration	.01	.61	.44***	.69***	.30***	.07	(.91)			
	(2.05)	(.51)								
6. Negative experiences	-.00	.34	.09	.20**	.17	-.14	.17*	(.90)		
	(1.27)	(.45)								
7. Commitment	-.04	.49	.18*	.32***	.29*	-.02	.23***	.60***	(.88)	
	(2.76)	(.30)								
8. Job search	-.01	.53	.06	.15	.15	.09	.13	.33***	.23**	(.83)
	(2.00)	(.88)								

Note: Mean and SD estimated from factor scores and scale scores (indicated in brackets).

* $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$

3.1. Model fit

Three competing measurement models were tested. In Model 1, identified regulation (3 items), external regulation (5 items), introjected regulation (5 items) and amotivation (13 items) were four separate, but correlated factors. Psychological need satisfaction (9 items) and need frustration (10 items) were two separate factors in line with recent research by Bidee, Vantilborgh, Pepermans, Griep, and Hofmans (2016). Negative experiences (10 items), employment commitment (7 items) and job search behaviour (7 items) were modelled as separate constructs. In Model 2, external and introjected were combined into controlled motivation as the perceived locus of control for both types of motivation is external (Vansteenkiste & Sheldon, 2006). Based on the fit statistics, the models yielded similar fit to the data. Model 3 was like Model 2, except that psychological needs were modelled as one factor (with all items loading onto the same factor). Model 3 fitted the data the worst. For reasons of parsimony, Model 2 was preferred to Model 1 and is supported by recommendations from previous studies (see Gagné et al., 2015).

Model development was performed by deleting two items from the amotivation scale ("I do not look for a job because I have been unemployed for too long" and "I do not look for a job because I am waiting for a good job which will allow me to provide adequately for my family in the long term") and one item from the job search scale ("Searched for advertisements on the internet or social media") because of repeated cross-loadings on other factors. One item from the negative experiences scale ("I must save on my personal

expenditure") and one item from the employment commitment scale ("People do not have to work as such to be constructively occupied") were also deleted because of insignificant loadings on their respective scales. Modification indices indicated the residuals of autonomy satisfaction 2 ("I feel that my decisions reflect what I really want") and 3 ("I feel my choices express who I really am") (MI = 53.70) and the residuals of competence frustration 1 ("I have serious doubts about whether I can do things well") and 2 ("I feel insecure about my abilities") (MI = 118.21) should be correlated, due to similar stems. The revised model (Model 2a) had a good fit reflected in most fit statistics (see Table 2).

Table 2

Measurement models (N = 244)

Model	χ^2	***df***	***p*-value**	**RMSEA**	**CFI**	**TLI**	**WRMR**
Model 1	3127.00	2241	.00	.04 [.04, .04]	.86	.86	1.36
Model 2	3145.83	2249	.00	.04 [.04, .04]	.86	.86	1.37
Model 2a	2516.42	1922	.00	.04 [.03, .04]	.90	.90	1.23
Model 3	3557.05	2123	.00	.05 [.05, .06]	.78	.77	1.64

3.2. Hypothesis testing

The structural model was based on the measurement model, and the results are presented in Figure 1. The results showed that both amotivation and controlled motivation are significantly related to psychological need frustration. They also showed that need satisfaction is negatively related to negative experiences. More recent statistical developments in mediation analysis no longer require the direct path between *X* and *Y* (*c'*) to be significant to proceed with tests for indirect effect. Indirect effect, however, equals the product of two paths: *a* (*X* to *M*) and *b* (*M* to *Y*) (Hayes, Preacher, & Myers, 2011). In the current study, there were no significant consecutive relationships from job search motivation to need satisfaction or frustration and from need satisfaction or frustration to the outcome variables. Hence, *a*, *b*, and *c'* in the required sequences were non-significant and this excludes the possibility for indirect effects to emerge. Consequently, the hypotheses are rejected.

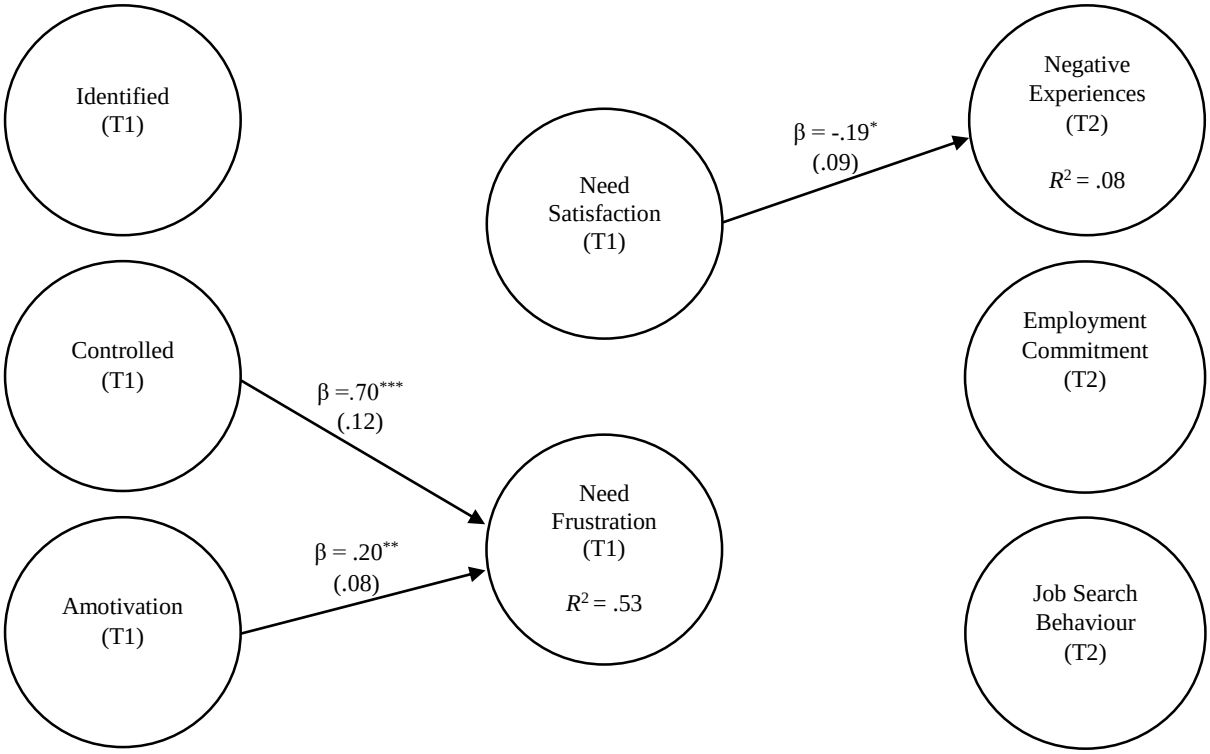

Fig. 1. Path coefficient for the hypothesised model. *Note.* Non-significant hypothesised paths are included in the analysis but not displayed for clarification purposes. $^{*}p < 0.05$, $^{**}p \leq 0.01$, $^{***}p < 0.001$ (2-tailed).

4. Discussion

This paper aimed to examine if motivation relates to the experiences, attitudes and behaviour of the unemployed over time through basic need satisfaction and frustration. Our results showed that job search motivation has no relationship with the affective experiences, attitudes towards employment and job search behaviour over time. They also showed that only controlled motivation and amotivation were significantly related to need frustration. Finally, only psychological need satisfaction, and not the frustration of their needs, was significantly related to affective experiences over time. These findings extend the SDT unemployment literature by investigating motivational outcomes in unemployment over a longer period (da Motta Veiga & Gabriel, 2016; Koen et al., 2015, 2016; Vansteenkiste et al., 2004, 2005). It also extends both unemployment (Koen et al., 2016) and SDT literature by including both psychological need satisfaction and frustration and by specifying them as a pathway from the different types of motivation to affective, attitudinal, and behavioural outcomes.

4.1. Theoretical implications

Our work provides insight into the relations between job search motivation and experiences, attitudes and search behaviour over time. More specifically, it shows that unemployed individuals' negative experiences, their attitudes to employment and the intensity with which they search for jobs at a certain point in time are not dependent on their reasons for searching for jobs six months earlier. Our findings are thus not in line with theoretical expectations that amotivation and controlled motivation will have a negative impact on affective experiences and their responsiveness. It also contradicts theoretical expectations regarding the positive outcomes of identified regulation. Our results were, however, in line with previous research which also found no significant relationship with autonomous motivation (Vansteenkiste et al., 2004, 2005), contrary to SDT expectations. The insignificant association between amotivation and employment commitment is also in line with previous cross-sectional results (Vansteenkiste et al., 2004). Similar to previous cross-sectional and longitudinal research, neither amotivation nor controlled motivation (Koen et al., 2016; Vansteenkiste et al., 2004, 2005) was significantly related to job search intensity.

In general, the absence of significant relations between motivation and the affective experiences, their commitment to employment or the intensity with which they search for jobs could be attributable to both methodological and theoretical reasons. From a methodological perspective, factors such as time and the use of motivational variables in isolation are worth mentioning. Notably, more autonomous (i.e. intrinsic and identified regulation), as opposed to more controlled (extrinsic and introjected regulation), forms of motivation are associated with more well-being and persistence over time (Deci et al., 2017; Ryan & Deci, 2017) and by implication also positive attitudes. Therefore, the association with controlled motivation (and by implication also amotivation) may decline over time and can become insignificant – especially if faced with constant challenges. The time lags of previous longitudinal studies were also considerably shorter (maximum six weeks) than in the current study and identified regulation could perhaps also wane over time in the unemployment domain.

The motivational variables were also viewed in isolation (i.e. a variable-centred approach). Researchers advocate for person-centred approaches in which the motivational variables are combined (theoretically and analytically) to evaluate the dynamics of these variables which may be more effective in predicting affective, attitudinal and behavioural outcomes (Howard, Gagné, Morin, & Van den Broeck, 2016; Vansteenkiste & Mouratidis, 2016).

From a theoretical point of view, it is also plausible that in a highly discouraging and challenging environment other factors may be at play in determining the affective experiences, commitment, and search behaviour. Several factors beyond motives determine the functioning of the unemployed (see Kanfer et al., 2001; McKee-Ryan, Song, Wanberg, & Kinicki, 2005; Paul & Moser, 2009; Wanberg, 2012 for overviews). Importantly, the challenges experienced in South Africa, such as financial hardship and a high unemployment rate, may require more than only motivation to ensure well-being and to sustain responsiveness over time. High mean levels of commitment (M = 2.76; SD = .30) and search intensity (M = 2.00; .88) illustrate that the participants are indeed committed to employment and searching for jobs, so other drivers (for example self-regulation) ought to be present, which could be studied in recommendations for future research.

The lack of relationships of autonomous motivation may also be domain specific. Although autonomous motivation usually has positive consequences even over time, these consequences may be unobservable in the unemployment domain where people cannot obtain what they want: employment (Vansteenkiste et al., 2004). In South Africa, the unemployed will be even less likely to obtain employment, which means that the chances are even slimmer for obtaining valued outcomes. Within such a context, identified regulation may, therefore, be unable to foster positive outcomes or sustain job search behaviour over time. To some extent, this provides evidence for theorisation that the context in which motivation occurs determines how motivation will influence outcomes (Ryan & Deci, 2017; Vallerand, Pelletier, & Koestner, 2008).

Contrary to our expectations, none of the job search motivations were related to psychological need satisfaction. Psychological need satisfaction is thus not supported or undermined by their reasons for searching for a job. The perceived locus of identified regulation is internal (Ryan & Deci, 2017), and although it does not have positive consequences in this sample, it is not detrimental enough to be associated with a truly negative outcome such as need frustration. Our results showed that both amotivation and controlled motivation are detrimental in unemployment when considering the impact on psychological need frustration. This is in line with our theoretical expectations. However, the lack of a relationship between identified regulation and need satisfaction in this study was striking. Following our discussion of the role of more autonomous types of motivation, it seems that identified regulation is indeed not capable of producing positive consequences in an unemployment context: it did not relate positively to need satisfaction or any of the outcomes.

Interestingly, the study shows that experienced need satisfaction has a lasting relationship with affective experiences. This is in line with our expectations and previous research that experienced need satisfaction is positively related to well-being (Van den Broeck et al., 2016). Experienced need satisfaction is, however, not related to employment commitment and job search behaviour. So, experienced need satisfaction serves as an important protective factor against the psychological burden of unemployment but is surprisingly not able to foster responsiveness over time. This contradicts previous research which reported positive associations with favourable attitudes and behaviours (Van den Broeck et al., 2016). This could be because the satisfaction of psychological needs and experiences have stronger theoretical links (both are experiential) and are thus more likely to be related to each other. However, if this was indeed so, similar (but opposite) relations would be observed with need frustration. It is thus plausible that experienced need satisfaction influences negative experiences while other factors foster responsiveness.

Experienced psychological need frustration is not related to any of the outcomes. So, in this sample, the experienced need frustration is unrelated to a negative experience of unemployment and does not foster responsiveness. In general, SDT expects that frustration of the needs will have negative consequences, even more so than low need satisfaction (Bartholomew, Ntoumanis, Ryan, Bosch, & Thøgersen-Ntoumani, 2011; Bartholomew, Ntoumanis, Ryan, & Thøgersen-Ntoumani, 2011; Vansteenkiste & Ryan, 2013). In line with our earlier observations, responsiveness may indeed be better explained by other factors. The impact on well-being, however, may be more complicated. The absence of an economic safety net (and hence financial difficulties) and long unemployment duration make them susceptible to chronic need frustration. Above average mean levels also indicate that they experience need frustration ($M = 2.05$; $SD = .51$). The detrimental outcome (i.e. negative experiences) is then presumably buffered by other factors not measured by the current study. These factors can include coping resources or adaptive coping strategies (McKee-Ryan et al., 2005) or maladaptive coping mechanisms like need substitutes and compensatory behaviours which provide fleeting satisfaction (Vansteenkiste & Ryan, 2013).

The findings of our study again provide some support for the divergent validity of psychological need frustration because it related differently to affective experiences (i.e. being unrelated with) than experienced need satisfaction (i.e. being negatively related).

4.2. Practical implications

Our findings have some clear implications for practitioners. First, given that both amotivation and controlled motivation lead to frustration of the psychological needs of the unemployed, interventions should focus on reducing both. Following SDT, amotivation may be lowered when the unemployed would feel fewer barriers in finding employment or would have the means to overcome these barriers, while controlled motivation can be lowered when they would feel less pressure from others to engage in job search behaviour. However, in the absence of positive outcomes of identified regulation, we suggest that job creation should remain high on the economic and political agenda for the unemployed to obtain valued employment. Alternatively, the unemployed could perhaps derive benefits from autonomously non-engaging in job search if they invest time and effort into other important activities (i.e. volunteering) (Vansteenkiste et al., 2004; Vansteenkiste & Van den Broeck, in press).

Second, given that psychological need satisfaction can lower the negative experiences of the unemployed, interventions should focus on enhancing the satisfaction of the psychological needs. Many suggestions along this line were made (see Rocchi, Pelletier, & Desmarais, 2017 and Vansteenkiste & Van den Broeck, in press). For example, autonomy satisfaction may be enhanced by providing the unemployed with a choice in matters that affect them, by providing reasons for performing particular activities, and by acknowledging their opinions. Acknowledging the unemployed person's achievements, believing in them, and giving positive feedback would enhance perceived competence. Showing care, warmth and genuine interest, as well as conveying unconditional positive regard for the unemployed, would enhance perceived relatedness.

4.3. Limitations and future directions

The study makes several contributions to literature and practice, but is not without limitations. One, the design does not allow for establishing causality, even though we temporally separated motivation and psychological needs from the outcome variables. We based our model in theory suggesting that motivation may relate to individuals functioning through basic psychological needs. However, as we measured motivation and the basic needs concurrently, basic psychological needs could be specified as an antecedent of job search motivation and motivation could then be modelled as a pathway to well-being, attitudes, and behaviour. The current study aimed to determine whether experiences, attitudes, and behaviour are associated with earlier job search motivation and psychological needs. The

design is appropriate, given the research aim. A recommendation for future research is to adopt a design that allows for capturing the developmental and dynamic nature of the variables under investigation to refine our understanding of motivational dynamics. At a between-person level, da Motta Veiga and Gabriel (2016) illustrated that autonomous motivation stabilised after a while and that controlled motivation was stable from the onset of the study. Recent studies also showed that psychological need satisfaction (and frustration) are not static (Cowan & Taylor, 2015; Bidee et al., 2016), but perhaps more at a within-person level than a between-person level. A multi-level longitudinal design and analytical strategy with several data points will provide more clarity of the stability and variation of variables at various levels and the implications for psychological functioning. Such a design would also clarify the direction of causality (i.e. whether job search motivation influences psychological needs or vice versa).

Two, the time lag between waves was chosen for pragmatic (i.e. retention of participants) and theoretical purposes (to allow for the predictor variables to develop consequences). However, the longer time lag may have influenced the ability to detect significant relationships. Future studies should carefully consider the spacing of data collection, especially with dynamic variables. Three, we collected our data in a difficult economic period. Also, the participants were relatively poorly educated, were long-term unemployed and had more unemployment than employment spells. Their chances of finding a job are significantly reduced when unemployment rates are high and are exacerbated by low "objective employability" (De Witte et al., 2010), with implications for both motivation and job search, but also perhaps for the relation between them. Controlling for the impact of these variables is recommended for future research.

Four, we aggregated the scores for need satisfaction and need frustration. Although in line with recent research (see Bidee et al., 2016), researchers should consider specifying the different needs separately as recommended by Van den Broeck et al. (2016). Finally, the use of self-report surveys may have been problematic, especially given that both employment commitment and job search are susceptible to social desirability (Raphael, 2014; Van Hooft, 2014).

Despite the rejection of many of our hypotheses, optimal motivational regulation and the presence of need satisfaction (and the absence of need frustration) proved to be valuable across many domains. They are valuable themselves, but also because they can influence well-being, persistence and performance (Ryan & Deci, 2017). Relieving the psychological burden of unemployment while encouraging responsiveness remains important for all

assisting the unemployed. Investigation of the hypothesised model in other samples is encouraged to confirm (or disconfirm) our results, especially in other developing countries. This is also important in the light of significant correlations that were reported, for example between the different types of job search motivation and commitment that became insignificant in the path model. The relatively high correlations between, for example, identified regulation and controlled motivation as well as between job search motivation and need frustration could also have influenced relationships with other variables in the current study. Other studies may find lower correlations and hence different outcomes for job search motivation and psychological needs.

Beyond SDT, unemployment researchers are also encouraged to include other contextual and situational variables which may be deemed important for well-being, attitudes, and performance. Along this line, other authors argue that self-regulation may play an important role (perhaps even more important than motivation), especially in sustaining responsiveness (e.g. Baay, de Ridder, Eccles, Van der Lippe, & Van Aken, 2014; Van Hooft, 2014). Work values and job flexibility (Van den Broeck et al., 2010) and quality of job search may also be worth investigating (Koen et al., 2016; Van Hooft, 2014). Finally, the psychological vulnerabilities associated with need frustration may be best captured by variables, such as anxiety or depression, which better illustrate the severity of need frustration than negative experiences. Investigating these variables may be a fruitful avenue to understand the detrimental impact of need frustration and including adaptive and maladaptive coping strategies can provide insight into the accommodations adopted.

5. Conclusion

The results of the study did not support our theorisation that job search motivation influences the affective experiences, attitudes toward employment, and job search behaviour of the unemployed via the satisfaction (or frustration) of basic psychological needs. Instead, our results showed that amotivation and controlled motivation are detrimental in that they frustrate the needs of the unemployed. The negative pathway, however, does not result in negative affective, attitudinal, and behavioural outcomes. Identified regulation does not seem to have a positive impact in the context of unemployment, but it is less detrimental than amotivation and controlled motivation – at least as far as basic psychological needs are concerned. This has important implications for psychological interventions, but so does the fact that experienced need satisfaction seems to play a protective role in reducing the negative experience associated with unemployment.

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CHAPTER 6

CONCLUSIONS, CONTRIBUTIONS, LIMITATIONS AND RECOMMENDATIONS

The purpose of this chapter is to present the conclusions of this study according to the general and specific objectives formulated in this thesis. The chapter also illustrates the contributions and limitations of the study. Recommendations for future research and practice are shared at the end of this chapter.

6.1 Conclusions

The general objectives of the study were to evaluate the generalisability of a psychosocial typology of unemployed people; to explore their motivational profiles and differential outcomes thereof; and to determine whether motivation relates to the experiences, attitudes and behaviour of the unemployed over time through basic need satisfaction and frustration.

The first three objectives were to conceptualise psychosocial typologies and associations with socio-demographic variables; motivational profiles and the associated outcomes for experiences, attitudes, and behaviour; and the relationships between job search motivation, psychological need satisfaction and frustration, experiences, attitudes, and behaviour according to literature. A review of the literature showed that several different typologies exist, ranging in foci and the number of types identified. The psychosocial typology of De Witte (1992) is, however, both empirically and theoretically superior. Associations with socio-demographic variables are established in existing literature and support the interpretation of the psychosocial typology of De Witte, yet a broader review of associations between the separate dimensions and these characteristics indicates that these associations are complex.

A review of the literature indicated that different motivational profiles exist, consisting of different levels and types of motivational regulations, with more within-context than between-context similarities. Furthermore, these profiles induce different outcomes – with more autonomous profiles being more beneficial than more controlled or amotivated profiles. However, deviations are reported. For example, some studies have also demonstrated that a combination of controlled motivation with at least some level of autonomous motivation –

i.e. mixed profiles – has the most positive outcomes (Gillet, Berjot, Vallerand, Amoura, & Rosnet, 2012; Moran, Diefendorff, Kim, & Liu, 2012; Van den Broeck, Lens, De Witte, & Van Coillie, 2013), but perhaps more for performance (Gillet et al., 2012; Moran et al., 2012) than well-being (Gillet et al., 2012; Van den Broeck et al., 2013). These deviations from SDT expectations may either have contextual explanations (Vallerand, Pelletier, & Kostner, 2008), depend on the outcome at stake, or on the ratio of autonomous vs controlled motivation (Gagné, 2017).

A review of the literature indicates that amotivation is most detrimental for experiential, attitudinal, and behavioural outcomes (Ryan, Deci, & Grolnick, 1995), followed by controlled motivation. Autonomous motivation is deemed to have positive outcomes (Ryan & Deci, 2017). Again, some deviations exist. For example, controlled motivation has previously correlated positively with employment commitment (Vansteenkiste, Lens, De Witte, De Witte, & Deci, 2004; Vansteenkiste, Lens, De Witte, & Feather, 2005), and autonomous motivation was positively related to negative experiences (Vansteenkiste et al., 2004). Theoretically, different types of motivations should relate differently to need satisfaction and need frustration and, in turn, the needs should relate differently to experiential, attitudinal, and behavioural outcomes. Research in other domains (Martella & Ryan, 2016; Weinstein & Ryan, 2010) showed that engaging autonomously in behaviour enhances well-being, but that need satisfaction plays an important role in explaining the well-being benefits of this behaviour (Ryan & Deci, 2017). Similarly, experimental studies (Legate, DeHaan, & Ryan, 2015; Legate, DeHaan, Weinstein, & Ryan, 2013) demonstrated that compliance with instructions (i.e. controlled motivation) caused harm to the compliers because it frustrated their psychological needs (Ryan & Deci, 2017).

The next four objectives empirically investigated the first three theoretical objectives of the thesis. Accordingly, Study 1 set out to determine the types of unemployed based on the three-dimensional psychosocial typology (experiences, employment commitment and job search behaviour) and to explore whether socio-demographic characteristics can be associated with the different types of unemployed. The results of LPA indicated four types of unemployed people in the selected areas in South Africa: optimists, the desperate, the discouraged, and the adapted. The fifth type found in Belgium, the withdrawn, was not found in this study. In short, the findings of De Witte (1992) were mostly replicated. Results also indicated that the discouraged were the most prevalent type, followed by the desperate and the adapted, with

the optimists being the least prevalent profile. Small, practically significant associations indicated that the different types of unemployed differed in background characteristics and supported the interpretations of the different types of unemployed. For example, the optimists had better objective employment prospects, followed by the desperate and discouraged unemployed. The findings were mostly in line with previous research on the psychosocial typology in Belgium.

Study 2 aimed to determine whether different motivational profiles, based on SDT, manifest in the unemployment context and to explore differences between motivational profiles regarding experiential, attitudinal and behavioural outcomes. In the sample of this thesis, results indicated that different types of (a)motivation can combine naturally into four different groups: identified (and not amotivated), motivated (but structurally impaired), undifferentiated, and amotivated. Results also indicated that the identified (and not amotivated) and motivated (but structurally impaired) groups were highly prevalent, followed by the amotivated and, lastly, the undifferentiated, which were the least prevalent. Compared to the other profiles, the motivated (but structurally impaired) experienced unemployment as most negative, were highly committed but displayed relatively low job search. The identified (and not amotivated) and amotivated reported equally positive experiences with unemployment. While the identified (and not amotivated) were committed to being employed and invested most in job search, the amotivated were less committed, although they were also said to search for a job. The latter did not differ from the undifferentiated in these regards. The identified (and not amotivated) reflected a somewhat more autonomous profile and were the most optimal profile in the current study. However, being more autonomous does not mean one is better off than either being undifferentiated (and lowly motivated) or being amotivated (and less autonomous), except for attaching more value to employment.

Finally, Study 3 aimed to investigate whether motivation relates to the experiences, attitudes and behaviour of the unemployed over time through basic need satisfaction and frustration. The results indicated that job search motivation did not influence experiential, attitudinal, and behavioural outcomes six months later, and psychological needs played no role in (the absence of) these relationships. The results indicated that both amotivation and controlled motivation were detrimental because they thwarted the experience of basic psychological needs. Results also showed that basic psychological need satisfaction was beneficial for experiential outcomes in unemployment six months later.

6.2 Contributions

6.2.1 Theoretical Contributions

The first study contributed to illustrating the generalisability of the psychosocial typology, as it was the first study outside of Belgium that attempted to replicate the findings of De Witte (1992). The absence of the withdrawn and the prevalence of the different types are two notable differences that are likely attributable to contextual differences. The majority of the South African unemployed have no financial assistance (Klasen & Woolard, 2009), and this leaves little opportunity for them to withdraw from the labour market. The withdrawn are then perhaps a peripheral profile that one can only identify in more affluent countries. The nature of the profiles supported both the Cognitive Dissonance Theory (Festinger, 1957), with the adapted reducing both employment commitment and job search behaviour to reduce negative experiences, and the scarcity hypothesis (Inglehart, 1990), with the discouraged attaching more value to employment and searching more because it is their only way out of financial hardship.

The prevalence of the respective psychosocial profiles (i.e. more undesirable types) is striking and provides evidence for the influence of context. The study also supports the construct validity of the psychosocial typology using associations with socio-demographic characteristics. Slight differences between the two studies are also what one would expect in the presence of contextual differences. For example, the discouraged had lower educational levels than their Belgian counterparts. They resided in Ikageng, and due to the imbalances created by past educational policies driven by the apartheid ideology, their lower educational levels were not surprising. The results of the current study also provide support for previous arguments that socio-demographic variables may influence the unemployment experience (Strandh, Hammarström, Nilsson, Nordenmark, & Russel, 2013).

Using a person-centred approach, the second study illustrated the manifestations of motivational profiles in a challenging and discouraging environment, thereby extending both SDT and unemployment literature. It supports SDT literature that motivational regulations naturally combine to form profiles (Vansteenkiste & Mouratidis, 2016). Specifically, it replicated previous findings from both the work and educational contexts because these studies also did not identify truly optimal profiles (i.e. only moderately autonomous profiles)

(e.g. Howard, Gagné, Morin, & Van den Broeck, 2016) or, at best, only a moderately autonomous combined with controlled profile (e.g. Ratelle, Guay, Vallerand, Larose, & Senécal, 2007). The most optimal profile in the current study was also only moderately optimal. The amotivated (Haerens, Kirk, Cardon, De Bourdeaudhuij, & Vansteenkiste, 2010; Howard et al., 2016) and undifferentiated (Bioché, Sarrazin, Grouzet, Pelletier, & Chanal, 2008; Howard et al., 2016) profiles were also found in previous studies. Even though a profile emerged (motivated but structurally impaired) which is unique to the current context, the results demonstrated the generalisability of motivational profiles beyond the educational, sport, and work contexts. The second study extends the SDT literature by differentiating between different subtypes of amotivation which manifest differently within the profiles. The motivated profile reported high levels on only structural amotivation, whereas the amotivated reported high levels of both types. Some variable-centred studies (see Cheon, Reeve, & Song, 2016; Green-Demers, Legault, Pelletier, & Pelletier, 2008; Legault, Green-Demers, & Pelletier, 2006; Pelletier, Dion, Tuson, & Green-Demers, 1999) established the value of this differentiation, yet it remains unexplored in motivational profile research. This second study contributes to unemployment research by illustrating how perceived barriers to employment present within motivational profiles. Specifically, the motivated (but structurally impaired) were significantly worse off, but more committed to employment than the amotivated. The prevalence of the respective profiles provides insight into the motivation of the unemployed in SA. The "most optimal profile" only accounted for roughly a third of the sample, whereas half of the sample reported high levels of one or both forms of amotivation.

Associations with outcomes illustrated that profiles have different outcomes, supporting their construct validity and allowing for meaningful interpretation. In line with SDT and most empirical research, the optimal profile (identified and not amotivated) is the most desirable. Surprisingly, the undifferentiated (lowly motivated) and amotivated (and less autonomous) were not as badly off as one would expect, compared to the identified (and not amotivated) group. This contradicts previous SDT research (Aelterman, Vansteenkiste, Soenens, & Haerens, 2016; Howard et al., 2016) and raises the question as to the value of a more autonomous profile in an environment where their goal of finding employment is continuously blocked. This may provide support for contextual arguments in which it is theorised that context determines the outcomes (Ryan & Deci, 2017; Vallerand et al., 2008). The negative well-being and performance outcomes for the highly motivated (but structurally impaired) group indicated that this is the least desirable profile, similar to previous studies

(Bioché et al., 2008; Vansteenkiste, Sierens, Soenens, Luyckx, & Lens, 2009). The results also provided further support of the value of differentiating between two subtypes of amotivation with differential outcomes depending on the type of amotivation which is present.

The third study extends current SDT unemployment literature because it investigated motivational outcomes over a longer period. It also extends both unemployment and SDT research by including both psychological need satisfaction and frustration by specifying them as mediational pathways from the different types of motivation to the individual outcomes. It supported previous SDT research on the inability of more autonomous types of motivation (i.e. identified regulation) to foster optimal outcomes in unemployment. It also supported both theory and empirical research on the negative outcomes of amotivation and controlled motivation by illustrating the associations with experienced need frustration. The positive consequences of experience need satisfaction for the experiential outcomes were demonstrated by means of an inverse relationship with negative experiences.

Despite the psychological burden of unemployment and the impact of psychological well-being on reemployment (Wanberg, 2012), research on unemployment in South Africa is mostly conducted by taking an economic perspective (see Fourie, 2012). Accordingly, in addition to the specific contributions of each of the respective studies to unemployment, psychosocial and SDT research, the general objective makes several theoretical contributions to provide a holistic picture of the unemployed in these specific communities. First, the thesis investigated psychological variables not previously researched in a South African environment, but which are deemed important for alleviating the psychological burden of the unemployed and to optimise their responsiveness (i.e. employment commitment and job search). Second, it supported person-centred arguments that “the unemployed” are not one homogenous group by illustrating that four different psychosocial profiles and motivational profiles can be identified. These profiles allow for making sense of the heterogeneity in unemployment and provide the basis for exploring predictors and outcomes of the profiles in future research.

Third, the types of unemployed identified – the majority of which are either desperate and discouraged or motivated (but structurally amotivated) and amotivated – illustrate the severity of the psychological consequences of unemployment, prompting further research in

SA. Fourth, although the study did not specifically test for this, theoretical links can be drawn from combining the results of the first and second studies. More specifically, the following links are plausible: optimists-identified (and not amotivated); desperate-motivated (but structurally impaired); discouraged-amotivated; and adapted-undifferentiated. These general links are based on the general impressions from Figures 1 and 2.

Figure 1. Psychosocial profiles (standardised factor score plot)

Figure 2. Experiences, attitudes, and behaviour as a function of motivation profile membership (standardised factor score plot)

The optimists and identified suffer little psychologically and show less commitment to employment, but are nonetheless searching for employment. The desperate and motivated

(but structurally impaired) are the opposite, because they suffer the most psychologically, show quite some commitment to employment and do search for jobs. The discouraged and amotivated do not really suffer psychologically, but also seem to attach little value to employment and reflect this in their little effort to search for a job. The same goes for the adapted and discouraged, but they are even less committed and involved in search initiatives. The theoretical combination provides the basis for expanding our knowledge of the functioning of the unemployed through future empirical research. Last, integrating the findings of the second and third study, theoretically the motivated (but structurally impaired) and the amotivated should be more at risk for experienced need frustration because both these profiles present with high levels of amotivation. The motivated (but structurally impaired) also present with high levels of controlled motivation and are, therefore, most at risk. The opposite is true for the identified (and not amotivated) and the undifferentiated. These theoretical links form the basis for refining our knowledge of the functioning of the unemployed, which can be tested in future empirical research.

6.2.2 Methodological Contributions

Two specific methodological contributions transpired from the current study. One, latent profile analysis (LPA) was used in the first and second studies to identify the psychosocial and motivational profiles. Cluster analysis was mostly employed as an analytical strategy in previous studies. LPA is deemed superior because the decision of the optimal number of profile that one should retain is based on statistical indices, which are more objective (Bergman & Magnusson, 1997; Steinley, 2003). Second, the third study employed a longitudinal design with a longer time lag than previous studies (see da Motta Veiga & Gabriel, 2016; Koen, Klehe, & Van Vianen, 2015; Koen, Van Vianen, Van Hooft, & Klehe, 2016). In doing so, we could determine whether both motivational regulation and psychological need satisfaction (and frustration) “predict” employee experiences over time.

6.3 Limitations and Recommendations

Several methodological and theoretical limitations are worth mentioning. To provide solutions for these limitations and to address the final objective of this thesis, recommendations are made for future research. Recommendations for future research are divided into methodological and theoretical recommendations. Methodologically,

recommendations focus on improving the quality of the questionnaires and validating them in the South African context; including other stakeholders in the measurement of the variables concerned; and choosing more scientifically rigorous designs for establishing causality and employing analytical strategies to evaluate stability or variation. Theoretically, recommendations focus on separating the different types of motivational regulations and psychological needs and exploring the role of other variables in the psychological functioning of the unemployed in South Africa.

The first set of limitations pertains to the questionnaires used in the current study. The use of self-report surveys may have been problematic, given that both employment commitment and job search are susceptible to social desirability (Raphael, 2014; Van Hooft, 2014). When surveying for example employment commitment (Raphael, 2014) and job search intensity (Van Hooft, 2014), other means of assessment should be considered as these variables are susceptible to social desirability. Along this line, other reports (e.g. counsellors, partners, family members or friends) or objective data (e.g. proof of actual job applications or prospective employers approached) were suggested in previous literature (Van Hooft, 2014; Vansteenkiste et al., 2005).

The questionnaires were either adapted by adding or removing items from the original scales, or by revising items to make them more contextually relevant. Accordingly, a limitation of the current study was the absence of a pilot study to establish the psychometric properties of the newly adapted and translated questionnaires. Best practice guidelines suggest that judgemental and statistical designs (see De Kock, Kanjee, & Foxcroft, 2013) should be employed to evaluate the equivalence and other psychometric properties of scales following adaptation or revision. In this thesis, care was taken to follow established judgemental procedures. For example, theory and expert judgement guided adaptation and revisions, and most of the participants opted for the English version. Statistically, the items loaded significantly onto their respective factors (with only a few exceptions). It is, however, recommended that future researchers conduct pilot studies after steps for judgemental designs were implemented. Furthermore, future adaptations of the job search motivation questionnaire can benefit from designing both approach and avoidance items measuring external and introjected regulations (Gagné et al., 2015); having a balance of monetary and social pressure items measuring external regulation; and revising the amotivation subscale to reflect the three subtypes of amotivation that were theorised more recently (i.e. an inability to

foresee positive outcomes that stem from a general helplessness or personal helplessness; a lack of interest or disinterest; and defiance or a resistance to act) (Ryan & Deci, 2017).

The second set of limitations is related to the designs employed. The most notable limitation of the design in Studies 1 and 2 was the cross-sectional survey nature. Causational directions can neither be claimed for the associations with socio-demographic variables in both studies (i.e. whether certain socio-demographic variables increase the probability of belonging to a certain profile) nor for experiential, attitudinal, and behavioural "outcomes" in Study 2 (i.e. whether motivational profiles cause these outcomes). Also, motivation and unemployed experiences may change over time (De Witte, Hooge, & Vanbelle, 2010; da Motta Veiga & Gabriel, 2016) and hence people may change profiles over time – which is not captured by a cross-sectional design. Along this line, more recent research illustrates that motivational profiles should not be considered stable (Gillet, Morin, & Reeve, in press).

The longitudinal design used in Study 3 is superior compared to the design used in Studies 1 and 2, and appropriate given the research aim. Causality is, however, not captured through the current prospective, longitudinal design. To achieve this goal, and to control for previous levels of the latent variables, more than two waves of data are required (Hamaker, Kuiper, & Grasman, 2015). Also, the current design does not capture the developmental and dynamic nature of motivation and basic psychological needs and the consequences for individual outcomes. Previous between-person findings in unemployment (da Motta Vega & Gabriel, 2016) illustrated that motivation is more stable at this level, and studies in other domains also show that psychological need satisfaction (and frustration) fluctuate, but at the within-person level (Bidee, Vantilborgh, Pepermans, Griep, & Hofmans, 2016; Cowan & Taylor, 2015). However, only a multi-level longitudinal design and an analytical strategy with several data points will provide more clarity on the stability (or variation) of motivation and psychological needs at the various levels and the implications for psychological functioning.

It is recommended that future research designs allow for modelling change in or transition between psychosocial and motivational profiles over time. Such a design should include data collected at multiple points in time, which not only allows for exploring latent profile transitions, but also for specifying a random intercept cross-lagged panel model (RI-CLPM). In RI-CLPMs, a random intercept is included, and the "model then accounts for temporal stability but also for time-invariant trait-like stability" (Hamaker et al., 2015, p. 104) and

disentangle the within-person effects from the between-person effects when investigating causality (Hamaker et al., 2015). The design should also allow for determining the most optimal time lag, after which the effect(s) become(s) non-significant.

The third set of limitations pertains to controlling for socio-demographic variables. Previous studies illustrated that socio-demographic variables influence experiential, attitudinal, and behavioural outcomes (De Witte, 1992; 1993). Accordingly, a limitation of the second and third studies was that socio-demographic variables were not controlled for, mostly because the associations were only of small practical significance. It is nevertheless recommended that researchers control for socio-demographic variables in both latent transition analysis (and the changes in outcomes for the different latent profiles) and in the RI-CLPM to eliminate the possible confounding impact of these variables.

The fourth set of limitations pertains to the different levels on which the respective variables were measured. For example, job search motivation and job search intensity are situational-level variables (i.e. motivation for a specific activity), whereas negative experiences, employment commitment, and experienced psychological need satisfaction (and frustration) are domain-level variables (i.e. in the context of unemployment). The hierarchical model of motivation theorised that consequences of motivation would be on the same level as the motivation concerned (Vallerand, 1997). In the current study, job search motivation was more likely to produce situational outcomes (i.e. job search intensity) than domain outcomes. Although the opposite was observed in the third study (i.e. job search motivation was significantly related to psychological need frustration, but not job search intensity), the temporal separation could have played a role, which makes the levels on which the variables were measured a limitation. Future studies should carefully consider the levels of the respective variables in the design phases of their research.

The final set of limitations is theoretical in nature. Following these limitations, recommendations focus on separating the different types of motivational regulations and psychological needs and exploring the role of other variables in the psychological functioning of the unemployed in South Africa. We aggregated the scores for need satisfaction and need frustration. Although in line with recent research (see Bidee et al., 2016), researchers should consider specifying the different needs separately as recommended by Van den Broeck, Ferris, Chang, and Rosen (2016). Similarly, external and introjected regulation were

aggregated to form the controlled scale, not only because their perceived locus of control is extrinsic (Vansteenkiste & Sheldon, 2006), but also for reasons of parsimony (for example, see Study 3). This was also in line with previous research in the unemployment domain (see Vansteenkiste et al., 2004, 2005; Koen et al., 2015; 2016), but several authors advocate for the use of the regulations separately, if it makes sense for the research question at hand (Gagné et al., 2015; Howard et al., 2016). Disaggregating different basic psychological needs and job search regulations is in line with recommendations from previous literature (see Gagné et al., 2015, Van den Broeck et al., 2016) and can refine our understanding of the motivational dynamics of the unemployed even further.

The study also only included certain psychological variables as proxies of well-being and responsiveness, and as pathway from motivation to well-being and responsiveness. Also, only motivation was included as determinant for the outcome variables. Although this was theoretically justified and indeed the aim of the thesis, many other variables serve as indicators of well-being and responsiveness. Other indices of well-being include depression, anxiety, psychosomatic symptoms (Paul & Moser, 2009) and flourishing (Keyes, 2005) whereas job search quality is another indicator for responsiveness (Wanberg, 2012). Indices of eudaimonic well-being are particularly recommended following the little interest they receive in unemployment research (Paul, Vastamäki, & Moser, 2016). These indices are worth investigating from a person-centred (i.e. outcomes of motivational profiles) and variable-centred perspective (i.e. outcomes of motivational profiles).

Many other factors also determine the well-being and responsiveness of the unemployed. Several meta-analyses postulated variables that influence well-being (McKee-Ryan, Song, Wanberg, & Kinicki, 2005; Paul & Moser, 2009; Wanberg, 2012) and job-search behaviour (Kanfer, Wanberg, & Kantrowitz, 2001) worth investigating in future studies. For example, labour market opportunities (Paul & Moser, 2009), self-regulation (Van Hooft, 2014), personality traits and job search self-efficacy (Kanfer et al., 2001), and coping resources and strategies (McKee-Ryan et al., 2005). Additionally, goal orientations (Vansteenkiste & Van den Broeck, in press) and work values (Van den Broeck, Vansteenkiste, Lens, & De Witte, 2010; Vansteenkiste, Verbruggen, & Sels, 2016) may have experiential and behavioural consequences relevant in unemployment. Retrospective studies with the recently employed may also provide insights into how they coped with unemployment and what assisted them to remain responsive. Along this line, Vansteenkiste and Van den Broeck (in press) also

advocate for investigating the quality of employment. Low-quality jobs provide little opportunity for satisfaction of basic psychological needs with a host of negative performance and well-being outcomes (Van den Broeck et al., 2010). In a country with no financial safety net, the unemployed may be particularly prone to accepting low-quality jobs.

6.4 Implications for Practice

Our findings have some clear implications for practitioners. From a person-centred perspective, different groups of unemployed can be identified. More specifically from a psychosocial perspective, the optimists are psychologically more resilient (fewer negative experiences), whereas the desperate are at risk (more negative experiences). Interventions for these two groups should focus on optimising the former's "optimism" and lowering the psychological distress experienced by the latter. Given the larger number of desperate unemployed (compared to the optimists), priority should be given to tailored interventions aimed at reducing negative experiences and to assist with achieving their desired goal of employment. The discouraged and adapted are risks from an economic perspective, with little job search activity. Interventions should, however, not blindly focus on "activating" these two groups, as they can easily turn into desperate (and at risk), rather than optimistic (and resilient) job seekers. From a motivational perspective, the undifferentiated and amotivated are not psychologically at risk, but they are also an economic risk. Once again, care should be taken in simply "activating" them.

Due to the detrimental psychological outcomes for the motivated (but structurally impaired), it is recommended that interventions focus on reducing amotivation and controlled motivation. These interventions would then also prevent psychological need frustration. This could be achieved by removing the perceived barriers or providing the means by which to overcome these barriers. Such interventions could also assist the amotivated groups to become more responsive. Lowering controlled motivation could be achieved by removing financial or social pressures, which will benefit the motivated (but structurally impaired).

Given that psychological need satisfaction can lower the negative experiences of the unemployed, interventions should focus on enhancing the satisfaction of the psychological needs. Many suggestions were made along this line (see Rocchi, Pelletier, & Desmarais, 2017 and Vansteenkiste & Van den Broeck, in press). For example, autonomy satisfaction may be

enhanced by providing the unemployed with a choice in decisions which affect them, a reason for performing a particular activity, and acknowledging that their opinions can enhance perceived autonomy. Acknowledging unemployed persons' achievements, believing in them, and giving positive feedback would enhance perceived competence. Showing care, warmth and genuine interest, and conveying unconditional positive regard for the unemployed would enhance perceived relatedness. The desperate and motivated (but structurally impaired) can benefit the most from such interventions.

Following the caution not to blindly "activate" the discouraged, adapted, undifferentiated, and amotivated, job creation and entrepreneurial interventions are recommended in conjunction with psychological interventions to enhance psychological need satisfaction. These interventions would also help to create more optimists and identified (but not amotivated). Alternatively, the unemployed should be encouraged to participate in other activities that can provide them with a sense of psychological need satisfaction while searching for (self)employment opportunities.

Taken together, our results highlight the need for interventions tailored to the needs of different groups as opposed to a one-size-fits-all approach (Liu, Hang, & Wang, 2014). It also emphasises the need for combined interventions. Such combinations focus on occupational skills training and psychological interventions and are effective for enhancing psychological well-being (Koopman, Pieterse, Bohlmeijer, & Drossaert, 2017). These interventions would be more successful if jobs are created or support is provided for self-employment.

6.5 Chapter Summary

This chapter presented the conclusions according to the objectives formulated in this thesis. The chapter also illustrated the methodological and theoretical contributions and limitations of the study, and recommendations were made based on the limitations and empirical conclusions.

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