

**Concordance between goals and meaning in  
the community domain of life: Association with  
well-being and socio-demographic variables**

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Mini-dissertation accepted in partial fulfilment of the  
requirements for the degree Master of Arts in Positive  
Psychology at the North-West University

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Graduation: May 2020

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With this, my most colourful gratitude to the people that were with me every step of the way on this academic adventure. Ms Amanda Cromhout, my supervisor: what a pleasure to have met and worked with you. Thank you for your absolute dedication, support, and encouragement through every step of the way. Your knowledge and guidance were evident in your kindness and leadership. Dr Lusilda Schutte, co-supervisor: your academic expertise, meticulousness, and strive for excellence was an encouragement to keep going. Thank you for your guidance and kindness. Prof. Marié P. Wissing, co-supervisor: kindness and grace just come together in a highly educated woman of note. Your proficiency, guidance, sense of humour, participation in activities, and energy were the example you lead by. It was an honour to be part of the Positive Psychology programme, with you as head of department.

Mrs Elcke du Plessis-Smit, language editor: thank you for all your meticulous hours spent in your busy schedule to get my article and dissertation ready for examination and printing. Your service is of a very high standard and excellently executed. Your appreciation of beauty and excellence shines through. To Cipla SA: for the funding of my studies. Thank you for believing in me and making my future growth endless. Opinions expressed and conclusions arrived at are those of the authors and are not necessarily to be attributed to Cipla SA. To the North-West University, South Africa: thank you for the partial financial support in the form of a master's degree scholarship.

My family and friends, thank you for your bravery, fairness, and zest to support me on this life-changing journey. I will always love you. My sincerest acknowledgement to God, Jesus Christ, and the Holy Spirit, for protection through this process of learning and discovery of goals and meaning for our and other communities.

### Summary

According to the self-concordance model, people experience higher levels of well-being when their goals and the things they find meaningful in their lives are aligned. For eudaimonic well-being, meaning and goals are important aspects to consider. The alignment/concordant patterns between goals and the things people find meaningful, and how they are associated with indicators of well-being and socio-demographic variables, have scarcely been researched in the community domain of life. Making use of already gathered data from FORT3, the aim of this study was to explore four patterns of alignment between goals and meaning in the community domain, namely: no-goal-no-meaning, both-goal-and-meaning, only-goal-no-meaning, only-meaning-no-goal, and how these patterns are associated with indicators of well-being (SWLS, PANAS-PA, PANAS-NA, MLQ-P, MLQ-S, and MHC-SF-tot = Mental Health Continuum-Short Form Total, and socio-demographic variables, i.e., gender, age, standard of living, educational level, and marital status). This study employed a mixed methods convergent parallel design where quantitative and qualitative data were gathered simultaneously and cross-sectionally from a non-probability sample of South African participants ( $N = 585$ ) who were 18 years or older and had at least a grade 12 level of education. The coded qualitative data were analysed to determine the degree of alignment/concordance between goals and meaning with indicators of well-being and socio-demographic variables in the community domain of life. Analyses were done to determine the frequencies with which community was mentioned as a goal or meaningful thing, or as a reason for a goal or meaningful thing. One-way ANOVA was applied to determine the associations between alignment patterns and socio-demographic variables and well-being indicators, respectively. Two-way ANOVA was applied to determine the interaction between alignment patterns, socio-demographic variables, and well-being indicators. Results indicated that community was more often mentioned as a goal or a reason

for a goal than a meaningful thing or reason for a meaningful thing. The no-goal-no-meaning alignment pattern was most prominent in the community domain. There were statistically significant associations between alignment patterns and the Meaning in Life Questionnaire, Presence subscale (MLQ-P), and the Mental Health Continuum-Short Form-Total. There were no statistically significant associations between alignment patterns and socio-demographic variables. A statistically significant interaction effect was found between alignment patterns, socio-demographic variables (standard of living) and well-being indices (satisfaction with life). The results contribute to a better understanding of the different alignment patterns between goals and meaning and these alignment patterns are associated with well-being indicators and socio-demographic variables. Sub-groups were small and caution should be applied when interpreting the results. Future research should replicate this study in larger samples. Limited support for the self-concordance model was found.

*Keywords:* concordance, meaning, goals, community, well-being, socio-demographic variables

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## Preface

This mini-dissertation is submitted in partial fulfilment of the requirements for the Master of Arts degree in Positive Psychology, where the mini-dissertation accounts for 60 credits of the total of 180 course credits. This mini-dissertation has been done in article format as indicated in the 2019 General Academic Rules (A4.2.3.3; A4.3.1.3; A4.4.1; 4.3.4; 4.10.1; 4.10.3, 4.10.5; 4.10.8; 4.10.9; 4.10.10; and 4.10.11) of the North-West University. The manuscript and article style follow the requirements of the specific journal, the Journal of Positive Psychology, to which it will be submitted, with some exceptions – inter alia to ease the reading of this dissertation, which includes the numbering of pages and the use of font type Times New Roman. UK English will be used for the mini-dissertation but will be converted back to US English before submission to the intended journal. This applies also to the inclusion of the relevant tables and figures in the text instead of adding it separately at the end of the manuscript and a somewhat longer manuscript for mini-dissertation purposes.

The body of this mini-dissertation contains three sections. Chapter 1 contains the background and literature review, which reflects the first stage of the research and the preparation for the main phase and manuscript (ethical application form and approval of relevant bodies). Chapter 2 comprises the research report, in article format, for examination purposes, and Chapter 3 concludes and reflects on the research outcomes and process and makes recommendations for further research and possible applications of findings.

This study forms part of a collection of studies that are affiliated to and use data from the FORT3 research project (FORT3 studies the prevalence of levels of psychosocial health: dynamics and relationship with biomarkers of (ill)health in South African social contexts). This collection of studies explores the concordance of goals and meaning in different life domains and the associations thereof with sociodemographic variables and psychosocial well-being. The present study considers the community domain of life. Since all of the

studies utilise the same methodology and are based on the same data, there will necessarily be some overlap. However, each study has its own distinct focus linked to the domain of life relevant to the study, resulting in uniqueness in the study's conceptual background, results, discussion, implications, and contribution.

### Letter of Permission

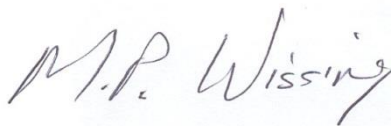
Permission is hereby granted by the co-authors that this manuscript may be submitted by the first author for the purpose of a mini-dissertation. The first author conducted the literature review, interpreted the results, and drafted the manuscript with incorporation of suggestions from the co-authors. She took responsibility for the technical and language editing of the manuscript.

A handwritten signature in black ink that reads "A. Cromhout". The signature is written in a cursive style with a large initial 'A'.

Ms Amanda Cromhout (Supervisor)

A handwritten signature in black ink that reads "L. Schutte". The signature is written in a cursive style with a large initial 'L' and a horizontal line extending to the right.

Dr Lusilda Schutte (co-supervisor)

A handwritten signature in black ink that reads "M. P. Wissing". The signature is written in a cursive style with a large initial 'M' and 'P'.

Prof. M. P. Wissing (co-supervisor)



10 October 2018

**LETTER OF CONSENT FOR AN AFFILIATED STUDY OF THE FORT3 PROJECT  
(ETHICS NUMBER: NWU 00002-07-A2)**

I, Prof. M. P. Wissing, hereby give consent for the student,

**Mrs. Thelma Booysen (student number: 22826319)**

to use data from my FORT-research programme for purposes of a master's degree mini-dissertation under my supervision. The specific project from which data will be used is the FORT3 project: *The prevalence of levels of psychosocial health: dynamics and relationships with biomarkers of (ill)health in South African social contexts*, with the HREC approval number: NWU-00002-07-A2 (renewal valid until 31 August 2019). The student may use the data from the following questionnaires:

- Socio-demographic questionnaire
- SWLS
- PANAS
- MLQ
- MHC-SF
- EHHI – 2 questions on goals and meaning

The title of the envisaged study by the student will be:

**Concordance between goals and meaning in the community domain of life: Associations with well-being and socio-demographic variables**

A handwritten signature in black ink that reads 'M.P. Wissing'.

Prof. M. P. Wissing

FORT3 Principal Investigator  
AUTHeR  
North-West University

### Solemn Declaration

I, Thelma Booyesen (student number: 22826319), hereby declare that the work in this dissertation, with the title: **Concordance between goals and meaning in the community domain of life: Associations with well-being and socio-demographic variables** is my own work and has only been submitted to North-West University for examination.

A handwritten signature in black ink, appearing to read 'Thelma Booyesen', written in a cursive style.

Thelma Booyesen

Student

**Declaration of Language Editor**

This is to declare that I,

**Maria E Nelson,**

accredited language practitioner of the

South African Translators' Institute,

have language edited only Chapter 1 of the

mini-dissertation excluding any bibliography

with the title

**Concordance between goals and meaning in the community domain of life:  
Associations with well-being and socio-demographic variables**

**by T Booyesen**



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Mini-dissertation submitted in partial fulfilment of the requirements for the degree  
Master of Arts in Positive Psychology at the North-West University

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13 November 2019

To whom it may concern

This is to testify that sections of the master's dissertation titled

'Concordance between goals and meaning in the community domain of life:  
Associations with well-being and socio-demographic variables'

by

Thelma Booysen

has been language edited to the best of the language practitioner's knowledge and ability. Please note that the student requested that only Chapters 2 and 3 of the dissertation be edited, thereby excluding Chapter 1 and all references.

The language practitioner in question is registered at the South African Translators' Institute (SATI) with membership number 1003382 and thereby fully qualified and authorised to provide said services.

Should there be any queries, please feel free to contact the language practitioner at the number provided below.

Kind regards

Elcke du Plessis-Smit (I.D. 9212030060083)

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Membership number: 1003382

## **Chapter 1**

Concordance between goals and meaning in the community domain of life: Associations  
with well-being and socio-demographic variables

### **1.1 Background and orientation**

As indicated in the Preface this dissertation has been done in article format as indicated in the 2019 General Academic Rules (A4.2.3.3; A4.3.1.3; A4.4.1; 4.3.4; 4.10.1; 4.10.3, 4.10.5; 4.10.8; 4.10.9; 4.10.10; and 4.10.11) of the North-West University. This section will reflect the first phase of the research process leading up to the manuscript as the main research report that will be presented in Chapter 2.

A literature review exploration was directed on relevant studies and a research proposal was developed that was firstly approved by a subject research group and then secondly by the Research Proposal Scientific Committee of the Africa Unit for Transdisciplinary Health Research (AUTHeR). Ethical approval was then granted by the Health Research Ethics Committee (HREC) of the North-West University. The approved documentation in this regard, submitted and approved, is included in Chapter 1, with some minor technical editing. The list of addenda specified in the HREC application is not included.

Since all these documents are part of the same research project in different phases, it is probable that there is an overlap between the research proposal, ethics application in Chapter 1 and part of the manuscript in Chapter 2. The manuscript in Chapter 2 is the final research report.

### **1.2 Approved protocol for this study**



Cover Page for Research Proposal		
School	Africa Unit for Trans-disciplinary Health Research (AUTHeR)	
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Student		
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Degree	Master of Arts in Positive Psychology	
Date of first registration for above-mentioned degree	2017	
Student number	22826319	
Title of thesis/dissertation/mini-dissertation	<b>Concordance between goals and meaning in the community domain of life: Associations with well-being and socio-demographic variables</b>	
Study leader/promoter	Ms A. Cromhout	
Help-/co-leader/promoter	Dr. L. Schutte	
Help-/co-leader/promoter	Prof. M. P. Wissing	
Number of times of submission of this protocol	1 <sup>st</sup>	X
	2 <sup>nd</sup>	
	3 <sup>rd</sup>	
Does this project fall under a greater umbrella project?		Yes X
		No
If yes, Ethical number of the umbrella project	NWU-00002-07-A2	
Title of the umbrella project	FORT3: The prevalence of levels of psychosocial health: dynamics and relationship with biomarkers of (ill) health in South African social contexts. Sub-Project: Meaning and Relational Well-being as core facets of functioning well and Psychosocial Health (NRF-CPRR funded project).	
Leader of the umbrella project	Prof. M. P. Wissing	

<p>Specific aims of umbrella project with which this study links</p>	<p><b>FORT3:</b> The specific aims included to explore:</p> <ul style="list-style-type: none"> <li>i. the nature, source and motives of goals, meaning and positive relationships with a qualitative and quantitative mixed method approach. This will be achieved by applying the Eudaimonic-Hedonic Happiness Investigating instrument (EHHI), various visual (photo) and other art forms (e. g. poetry) in different groups (e.g. adolescents, adults, teachers) and in various South African cultural contexts;</li> <li>ii. the links between meaning, goals/purposes, positive relational processes and other facets of psychosocial well-being, considering some social-demographic and contextual variables.</li> </ul>		
<p>Will new data be collected?</p>		<p>Yes</p>	
		<p>No</p>	<p>X</p>
<p>Names of <b>small group panel</b> within the school/unit that approved this research protocol (before send to AUTHeR)</p>	<p>1</p>	<p>Prof. M. P. Wissing</p>	
	<p>2</p>	<p>Dr. K. Redelinghuys</p>	
	<p>3</p>	<p>Mrs. Christelle Liversage</p>	
	<p>4</p>	<p>Ms. Amanda Cromhout</p>	
<p>Date of approval by above-mentioned panel</p>	<p>27 September 2018</p>		

### **Executive summary**

Having goals and experiencing meaning in life are important aspects of eudaimonic well-being. According to the self-concordance model people experience higher levels of well-being when their goals and the things they find meaningful in their lives are aligned. Research on the alignment of goals and meaning in specific life domains, and their associations with socio-demographic variables and indicators of well-being, is scarce.

This study forms part of the FORT3 Research Project which investigated the prevalence of levels of psychosocial health with regard to the dynamics and relationships with biomarkers of (ill)health in a South African social context. This affiliated study will address two specific aims of FORT 3, namely, to explore the nature, sources and motives for positive relationships, goals and meaning and to explore the connections between positive relational processes, goals, meaning and other aspects of psychosocial well-being. Making use of formerly gathered data, the aim of this study is to explore patterns of alignment between goals and meaning in the community domain, and how these patterns are associated with socio-demographic variables and indicators of well-being.

This study will employ a mixed methods convergent parallel design where quantitative and qualitative data were gathered simultaneously and cross-sectionally. The qualitative data will be coded and the degree of alignment between goals and meaning in the community domain of life will be determined. It is expected that the results of this study will contribute to a better understanding of the alignment of goals and meaning to enhance well-being in the community domain of life, specifically with regard to how they are associated with socio-demographic variables and different well-being indicators. Practitioners may also structure interventions accordingly.

**Keywords:** *concordance, meaning, goals, community, well-being, socio-demographic variable*

## **Research Proposal**

### **1. Proposed Title**

**Concordance of goals and meaning in the community domain of life:**

**Associations with well-being and socio-demographic factors in a South-African group**

*Keywords: concordance, meaning, goals, community, well-being, socio-demographic variables*

### **2. Problem Statement**

This study forms part of the FORT3 research project: The prevalence of levels of psychosocial health: Dynamics and relationships with biomarkers of (ill) health in South African social contexts. The FORT3 project aimed to explore the prevalence of various levels of psychosocial well-being in diverse groups in a South African context, as well as the links between meaning, goals and other facets of psychosocial well-being as associated with socio-demographic factors. Data were gathered in a quantitative and qualitative, mixed method approach.

The present study will be a secondary analysis of existing data from the FORT3 project (Wissing, 2008; 2012) and is thus an affiliated study of the FORT3 project which was approved by the Ethics Committee of the North-West University, South Africa, Potchefstroom, with ethics number: NWU 00002-07-A2. This present study will explore patterns of alignment of important goals and meaningful things in life and their associations with indicators of well-being and socio-demographic variables in the community domain of life.

#### **2.1. Hedonic and Eudaimonic Dimensions of Well-being**

Early research on well-being has mostly been done from two perspectives, namely the hedonic perspective (Kahneman, Diener, & Schwarz, 1999; Ryan & Deci, 2001) and from a eudaimonic perspective (Hart & Sasso, 2011; Waterman 2008; Huta & Waterman, 2014). The hedonic approach focuses on happiness and describes well-being in terms of

evading pain and experiencing pleasure (Ryan, & Deci, 2001), while the eudaimonic approach focuses on meaning, a person's self-realisation, and being fully functioning (Ryan & Deci, 2001; Waterman, 2008).

One theory that can be classified as forming part of the hedonic perspective, is Fredrickson's (2001) broaden and build theory of positive emotions that focuses on the importance of experiencing positive emotions and explains how positive emotions like joy, pride, interest, love, and contentment broaden thoughts and actions, which in turn build enduring personal resources on intellectual, social, physical, and psychological levels. The broadening effect refers to the process in which positive emotions open the mind and expand the perceptual abilities to broaden our functional capacity. Positive emotions promote discovery of creative actions, ideas and social bonds, also in the community context, which in turn build social, psychological, intellectual and physical resources (Fredrickson, 1998, 2001). The building effect refers to the building of more durable personal resources over time, for example intellectual resources, such as the capacity to be mindful or to solve life problems (Fredrickson, 1998; 2001). Keyes's (1998, 2002, 2007) Mental Health Continuum includes components of both hedonic (feeling good) and eudaimonic (functioning well) well-being. Keyes (1998, 2002, 2007) discerns three components of mental well-being, namely emotional well-being (EWB), personal/psychological well-being (PWB), and social well-being (SWB), with EWB forming part of the hedonic perspective, and PWB and SWB forming part of the eudaimonic perspective. EWB include positive emotions, interest in life, and life satisfaction. PWB includes self-acceptance, autonomy, personal growth, positive relations, environmental mastery, and purpose in life. Since SWB is specifically relevant to this study, the components of SWB will be discussed in more detail. SWB consists of (a) *social acceptance*, that refers to the positive attitudes we feel towards others; (b) *social actualisation*, which is the belief that society can grow into something better; (c) *social contribution*, which refers to the belief that daily activities of the individual community

member contribute to society and that those activities are valued by the community; (d) *social coherence*, or the way society makes sense to us in a logical, predictable and understandable way; and (e) *social integration*, referring to the reciprocal way people feel part of a community and the support and harmony shown and experience towards each other. In the eudaimonic well-being perspective, goals and meaning are included as influencing well-being and were studied by many researchers (Delle Fave, Brdar, Wissing, & Vella-Brodick, 2013; Emmons, 2003; Hennecke & Brandtstädter, 2017).

## **2.2. Goals and Meaning as facets of Eudaimonic Well-being**

Previous research indicated that having goals and meaning are generally associated with higher levels of well-being, also in the community context (Fredrickson, 2013; Keyes et al., 2008; Schnell, Hoge & Pollet, 2013; Van Schalkwyk & Wissing, 2013). Several theories that aim to explain well-being focus on goals and meaning as facets of eudaimonic well-being.

Frankl (1962; 1969) suggested that meaning in life is a primary force that motivates human behaviour, and that meaning can be found even amid suffering. Wong (1998, 2011) identified purpose (P), understanding (U), responsible action (R) and enjoyment/evaluation (E), or PURE as the main components of meaning. Wong (2012) refers to meaning as the experience that one's life and the world around it are reasonably consistent and that there are opportunities to experience fulfilment and connectedness in line with one's core values. Steger (2012) contended that meaning in life includes having high-quality relationships and is associated with an effective ability to understand how a person fits with the world around him/her. In Steger's meaning model (2012), he distinguished between the presence of meaning, which refers to the person's subjective experience of how meaningful their life is, and the search for meaning, which refers to a person's incentive and method to find meaning or acquire a better understanding of meaning in their life. Another perspective on meaning is the relationality-meaning model of well-being (Wissing, 2014; Wissing & Delle Fave 2013),

that represents meaning as meaning *in* life (for example where and when we acknowledge meaning in life), meaning *of* life (for example being attached to something ultimately valuable), and meaning *to* life (for example what we do to realise our values and how we express that in our relations and activities).

Ryff and colleagues' theoretical focus and empirical work reflected mainly a eudaimonic perspective (e.g., Ryff, 1989; Ryff & Singer, 1998; 2008). Ryff (1989) suggested six dimensions of wellness, namely self-acceptance, personal growth, purpose in life, environmental mastery, autonomy, and positive relations with others. Continued growth, quality ties to others, and the experience of meaning and positive relationships are indicators of well-being (Ryff, 1989).

Goals and purpose can also be viewed as intertwined with eudaimonic well-being, (Delle Fave, Brdar, et al. (2013). In a study by Wilson, Wissing, Schutte, and Kruger (2018) goals, and the underlying motivation for these goals for adults in deprived situations in an African context, give insight into how seemingly extrinsic material goals may be linked with interpersonal values. In this study participants had to indicate the three most important goals in their lives and had to give reasons why these goals were important to them.

Environmental considerations, meeting social needs, financial security, generative caring, and relational goals were themes that emerged from the data. The results implied that goal motivations were not simply intrinsic processes pointed at personal need satisfaction, but that they had a strong interdependent emphasis rooted in existing relational ties. Roman et al. (2015) explained that when life goals are valued, whether intrinsic or extrinsic, the sense of community and belonging is facilitated and can create psychological well-being.

Diener (2012) described goals as the accomplishment of a valued aim or moving towards an ideal state. Goals play an important role in directing behaviour and to induce well-being (Monzani et al., 2015). Goals are linked with constructs such as self-monitoring (Baumeister, Vohs, & Tice, 2007), purpose and meaning (Klinger, 2012), personal projects

(Little, 1998), hope (Snyder, 2002), self-determination (Deci & Ryan, 2008), and self-determination (Deci & Ryan, 2000). MacLeod (2013) proposed that well-being is goal-based and is associated with how people approach life. It is a good starting point for promotion of well-being if committed goals are clear and attainable (Potgieter & Botha, 2014). When desired goals are achieved by directed actions, meaning will be the outcome (Park, 2010). A sense of well-being, self-esteem and satisfaction are derived from factors that increase the possibility of goal achievement (Brandtstädter, 2006). Not having clear or realistic goals, or violation of significant goals, are associated with lower levels of well-being (Klug & Maier, 2015). Gray, Ozer, and Rosenthal (2017) suggested that the pursuit of personal goals can lead to increased well-being, meaning, and a psychologically fulfilling life.

Thus, experiencing meaning in life and having goals can be understood as having a sense of purpose, having a life of significance and value, and a life that makes sense and is coherent (Heintzelman & King, 2014; Steger, 2012). The Self-concordance model (Sheldon & Elliot, 1999) suggests that when individuals' goals and the things they perceive as meaningful in their lives are aligned, they will experience higher levels of well-being.

### **2.3. The Self-concordance Model**

Sheldon and Elliot (1999) contended that individuals will experience higher levels of psychological well-being if their goals and what is meaningful to them are well aligned. According to the Self-concordance model (Sheldon & Elliot, 1999), individuals typically select a set of goals that reflect their values and interests, and then commit to them. People create and pursue more self-concordance goals in domains where they feel the gratification of psychological needs (Milyavskaya, Nadolny, & Koestner, 2014). Those pursuing self-concordance goals put more constant effort into achieving those goals. Exerting more effort in goal pursuit results in progress and a higher likelihood of goal accomplishment (Sheldon & Elliot, 1999). When people select to pursue self-concordant goals, moving towards goal-achievement is fulfilling in itself (Sheldon & Elliot, 1999). Zhang, Chen, and Schlegel

(2018) suggested that even when individuals do not perform well in goal-pursuit, or are faced with setbacks or frustration, they can still find meaning in what they do. In this regard Baumeister, Vohs, Aaker, and Garbinsky (2013), as well as Park (2010), indicate that people can compensate for one source of meaning with another, relying on the self-concordant reasons. There is, however, very little information on the concordance of goals and what is meaningful to people in specific life domains, specifically also in the community domain of life, and how such alignment is associated with indicators of well-being and socio-demographic variables.

#### **2.4. Community well-being**

According to Lee and Kim (2016), most research had been conducted on individual well-being while neglecting community well-being or well-being in the community domain of life. Wiseman and Brasher (2008) suggested that community well-being arises from a variety of factors such as social, economic, environmental, cultural, and political conditions which are identified by individuals and their communities as essential for them to flourish and fulfill their potential. Delle Fave, Brdar, Freire, Vella-Brodrick, and Wissing (2011) found in a cross-country study (including Australia, Croatia, Germany, Italy, Portugal, Spain, and South Africa) that happiness and meaning were mostly found in the domains of close interpersonal relationships, but that participants across countries seldom report the community domain of life as a source of happiness and meaning, and suggested that further research should try to understand this finding better if the aim is to enhance well-being in youths and educational contexts, or to contribute to policy-making regarding well-being interventions. Keyes and Lopez (2002) indicated the importance of social well-being for mental, emotional, and psychological well-being. According to Keyes (1998) the dimensions of social well-being (social coherence, social actualisation, social integration, social acceptance and social contribution) relate positively to a person's happiness, generosity, optimism, life satisfaction, physical health, their trust perceptions and safety within their

communities. These dimensions also relate to their levels of involvement in their communities. On community well-being, Sheldon and Kasser (2001) indicated that goal-striving for authentic, self-concordant reasons produces greater goal-achievement and enhanced well-being. Well-being and relationship quality are also better when people orient toward intrinsic values such as intimacy, community, and growth, rather than extrinsic values such as status, money, and image (Sheldon & Kasser, 2001). Socio-cultural meaning patterns, cultural practices, as well as upbringing and personal and relational needs, provide direction for people on their expected path and how they will do what is expected of them to achieve well-being (Kitayama, Karasawa, Curhan, Ryff, & Markus, 2010). In their study on need fulfilment and social capital and how these provide a sense of community and well-being, Yetim and Yetim (2014) indicated that need fulfilment and variables of social capital significantly predicted sense of community and individual well-being. Merriam (2016) wrote extensively on community well-being and indicated that gender equity creates human and social capital that enables community well-being. According to Theodori (2009) greater community satisfaction and attachment result in higher levels of individual well-being.

### **2.5. Socio-demographic variables**

It must be kept in mind that context is important when dealing with socio-demographic variables, since the influence of socio-demographic variables can vary from context to context. Agrawal et al. (2011) did a study on socio-demographic correlates of subjective well-being in urban India and found that socio-demographic variables, such as gender, education, age, income, marital status, work status and religion, had minimal effect on subjective well-being (Agrawal et al., 2011). In another study, meaningful socio-demographic differences were found between women and men working as community volunteers in their sense of purpose, as well as marital status and living arrangements (Koukoulis, Vlachonikolis, and Philalithis, 2002). In this regard Delle Fave et al. (2011),

suggested that cultural contexts and socio-demographic variables are to be considered if well-being is to be understood and enhanced.

The role of socio-demographic factors in the patterns of alignment of goals and meaning in the community domain of life is greatly unexplored. The present study will explore the associations of socio-demographic variables such as gender, age, standard of living, educational level and marital status and their associations with the alignment patterns of goals and meaning in a South African community context.

### **2.6. The present study**

As indicated above, the experience of meaning in life (Martela & Steger, 2016; Wong, 2010) and having goals that one can strive to achieve (Diener, 2012; Noori & Narafshan, 2018) are associated with higher levels of well-being. Furthermore, the Self-concordance model (Sheldon & Elliot, 1999) suggests that when individuals' goals and the things they experience as meaningful are aligned, they are likely to experience higher levels of well-being.

There is a gap in knowledge on the concordance of goals and meaning in the community domain of life and how these are associated with indicators of well-being and socio-demographic variables. Four alignment patterns, as distinguished by Wissing, M. P., Carlquist, E., Martos, T., & Schutte, L. (2017), will be explored in the community domain of life. These alignment patterns are represented in Figure 1.

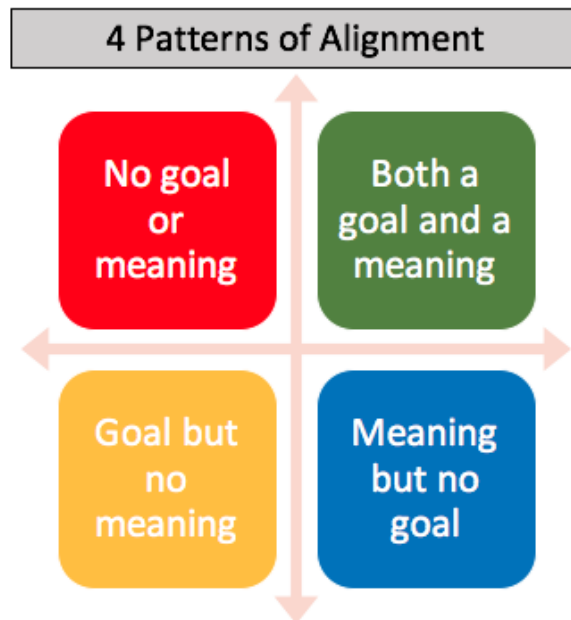


Figure 1. Patterns of concordance/alignment of goals and meaning (Wissing et al., 2017).

This study will specifically explore how these patterns of alignment of goals and meaning are associated with well-being indicators and socio-demographic variables as manifested in the community domain of life among adults in a South African context. These findings will contribute to a better understanding of the different alignment patterns between goals and meaning and how they are associated with indicators of well-being and socio-demographic variables. This study will further contribute to the development of strategies to facilitate alignment of goals and meaning, while also considering the influence of socio-demographic variables, in order to enhance well-being in the community domain of life. “Concordance” and “alignment” will be used as synonyms in this study.

### **Aim**

The aim of this affiliated study is to explore the alignment patterns of goals and meanings and their associations with indicators of well-being and socio-demographic variables in the community domain of life in an adult South African group.

## **Method**

Prior to describing the method, it is noted that the original FORT 3 project did not comply with all the present ethics requirements. The limitation in the original study was that the informed consent form was not as elaborate as per the current requirements, and the participants did not receive the informed consent form a week prior to participation. However, the FORT 3 project attained ethical consent from the Health Research Ethics Committee of the North-West University and data were collected in agreement with all the rules at the time when the project was developed. Monitoring reports are completed and submitted on an annual basis as required by the Health Research Ethics Committee of the North-West University, which means that the FORT 3 project is active to permit analysis of already collected data. Data integrity is ensured by the Principal Investigator and the participants consented to what is done in this present study. These materials and matters were discussed with the Head of the Ethics Office and the Chair of the Health Research Ethics Committee of the North-West University, Potchefstroom Campus and it was made clear that the study is ethically acceptable. Information on other specific aspects will be discussed below.

### **4.1 Research Design**

A mixed methods convergent parallel research design (cf. Creswell & Plano Clark, 2018) was implemented in the cross-sectional gathering of data in the FORT3 project (Wissing, 2008; 2012) of which the present study is an affiliated study. Quantitative and qualitative data were collected concurrently from 2011 to 2014. Qualitative data were transformed into quantitative data by implementing the international coding system developed by Delle Fave et al. (2011, 2013, 2016). This quantifiable coding system was developed in an extensive process of qualitative thematic analysis across various countries. All verbal expressions of participants were captured in codes which were then categorised in an iterative process, and then further abstracted into life domains (among which the

*Community* domain, on which this study focuses). The qualitative codes could thus be transformed to quantitative data. In this study “codes” will thus refer to the code numbers that will make quantification possible.

## **4.2 Participants**

Participants ( $N = 585$ ) were recruited with the snowball method of data gathering. This involved an adult, multi-cultural, South African sample. Section 4.6.4. outlines the procedure followed to recruit participants and Section 4.6.5. describes the inclusion and exclusion criteria of the study.

For the present study participants had to be: (a) South African citizens, (b) 18 years of age or older, (c) had to have at least Grade 12 level of education, and (d) had to have sufficient skill in reading and writing English (as indicated by a grade 12 level of education), since questionnaires were directed in English. Socio-demographic data were collected on gender (male = 37.9%; female 61.9%), age ( $M = 42.15$ ;  $SD = 11.50$ ; between 18 and 25 [8.7%], between 26 and 40 years [36.4 %], between 41 and 60 years [52 %] and 60 years and above [2.7%]); marital status (single [24.8%], married [62.7%], co-habiting participants [3.2%], divorced or separated [5.8%] and widowed [1.9%]), level of education (secondary [37.6%] and tertiary [61.7%]); and standard of living (above average [25.1%], average [65.8%], and below average [5.5%]) and not indicated [3,6%]. Where totals do not add up to a hundred percent, it is indicative of participants who did not answer a question.

## **4.3 Measuring instruments**

A socio-demographic questionnaire and several psychosocial well-being measures, as well as semi-structured, open-ended questions were used in the FORT3 research project. The following instruments are relevant to the present study:

### **4.3.1 Quantitative measures**

#### **4.3.1.1 Socio-demographic questionnaire.** Participants had to provide socio

demographic information such as age, gender, level of education, standard of living, and marital status.

**4.3.1.2 Satisfaction with Life Scale (SWLS).** The Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985) is a 5-item scale measuring a respondent's level of global life satisfaction as it is experienced on a cognitive level on a 7-point Likert-type scale from 1 (*strongly disagree*) to 7 (*strongly agree*). The items are positively worded and scores between 5 and 35 are possible.

The SWLS (Diener et al., 1985) showed good psychometric properties with a test-retest reliability score of .82 and sufficient internal consistency reliability (Cronbach's alpha .87). Westaway, Maritz, and Golele, (2003), did internal consistency calculations and the Coefficient alpha was .92. Wissing et al. (2010) validated the scale in South Africa and reported Cronbach's alpha values between .66 and .77 for the Setswana speaking group. In the present study a Cronbach's alpha value of .87 was found for the SWLS.

**4.3.1.3 Positive-Negative Affect Schedule (PANAS).** The PANAS (Watson, Clark, and Tellegen, 1988) is a 20-item scale measuring positive affect (PA; 10 items, e.g., attentive, interested) and negative affect (NA; 10 items, e.g., jittery, irritable). Participants indicate whether they generally feel emotionally in a positive or negative mood on a Likert-type scale ranging from 1 (*very slightly or not at all*) to 5 (*extremely*). A score of between 10 and 50 for each of the PA subscale and the NA subscale is possible. For the PA subscale, the internal consistency reliability was  $\alpha = .82$  and for the NA subscale  $\alpha = .84$  as found by Humboldt, Monteiro, and Leal, (2017) in a group of older adults (75 years of age or older). In a South African context, PANAS was validated on university students and the scale displayed good reliability scores respectively for PA ( $\alpha = .85$ ) and NA ( $\alpha = .79$ ) within that context (Du Plessis & Guse, 2017). In the present study a Cronbach's alpha value of .83 was found for the PA subscale and a Cronbach's alpha value of .89 for the NA subscale.

**4.3.1.4 The Meaning in Life Questionnaire (MLQ).** The MLQ (Steger, Frazier, Oishi, & Kaler, 2006) is a 10-item questionnaire that comprises two subscales namely, Search for Meaning (MLQ-S) and Presence of Meaning (MLQ-P). Each subscale consists of 5 items which are rated on a 7-point Likert-type scale ranging from 1 (*absolutely untrue*) to 7 (*absolutely true*). The MLQ-S (items 2, 3, 7, 8 & 10) measures the strength of an individual's yearning to find meaning and the MLQ-P (items 1, 4, 5, 6 & 9) measures how full of meaning participants feel their lives currently are (Schulenberg, Strack, & Buchanan, 2011). The 10 items are all positively worded and positively scored except for item 9, which is reverse phrased and inversely scored. Steger et al. (2006) found that the MLQ scores were reliable ( $\alpha = .82$  for the MLQ-P and  $\alpha = .88$  for the MLQ-S) among a multi-cultural sample of North American students. Adequate test-retest stability over periods of a month to a year was found and demonstrated discriminant and convergent validity for both the MLQ-P and the MLQ-S (Steger et al., 2006).

Temane, Khumalo, and Wissing (2014) found that the MLQ had good reliability with  $\alpha = .85$  for the MLQ-P and  $\alpha = .84$  for the MLQ-S, as well as good construct and convergent validity in a multi-cultural sample of South African undergraduate students. Schutte, Wissing, Ellis, Jose, and Vella-Brodrick (2016) indicated that although the MLQ generally displayed good psychometric properties in a sample of adults from South Africa, Australia, and New Zealand, the scale had too many response categories. Schutte et al. (2016) further indicated that the presence of meaning subscale showed poor targeting, with most of the participants gaining high scores. These findings may be explained by differences in language and culture groups and different age groups for example (Schutte et al., 2016). In the present study a Cronbach's alpha of .82 was found for the MLQ-P and a Cronbach's alpha value of 0.89 for the MLQ-S.

**4.3.1.5 Mental Health Continuum-Short Form (MHC-SF).** The MHC-SF was developed by Keyes (1998, 2002, 2006). The 14-item scale measures positive mental health

and consists of three subscales, namely Emotional Well-Being (EWB, items 1-3), Social Well-Being (SWB, items 4-8), and Psychological Well-Being (PWB, items 9-14). The incidence of each statement as occurring in the past month is measured on a 6-point Likert-type scale, ranges from 0 (*never*) to 5 (*every day*). The scale had good internal consistency reliability ( $\alpha > .83$ ) for the total MHC-SF (Keyes, 2006). The scale has shown good internal consistency reliability ( $\alpha > .80$ ) as well as construct validity in adults in the USA (Westerhof & Keyes, 2010). In the Netherlands, Lamers, Westerhof, Bohlmeijer, ten Klooster, and Keyes, (2011) found Cronbach's alpha values of .89 for the total MHC-SF,  $\alpha = .83$  for the EWB,  $\alpha = .83$  for the PWB, and  $\alpha = .74$  for the SWB.

Keyes et al. (2008) found sufficient reliability (Cronbach's alpha = .72) in a South African sample when validating the Setswana version of the scale for a mainly Setswana-speaking community. In a more recent South African study, Schutte and Wissing (2017) validated the Setswana, English, and Afrikaans versions of the MHC-SF. A 3-factor, bifactor exploratory structural equation modelling model (bifactor ESEM) displayed superior fit. Omega coefficients above .70 showed sufficient reliability for the overall scale, but subscale reliabilities remained insufficient with omega values  $\leq .65$  (Schutte & Wissing, 2017), which means that a global mental health factor can be used and interpreted, but the subscale scores should be used with caution. In the present study a Cronbach's alpha value of .89 was found for the total MHC.

#### **4.3.2 Qualitative measures**

**4.3.2.1 Semi-structured open-ended questions on goals and meaning.** Semi-structured open-ended questions were used. They were formulated consistent with the methodology used by Delle Fave et al. (2011) in the Eudaimonic-Hedonic Happiness Investigation. The questions on goals and meaning were: (a) "Please list the three most important future goals for you," followed by "For each of them, please specify why it is important" and (b) "Please list the three things that you consider most meaningful in your

present life”, followed by “For each of them, please specify why it is meaningful (try to be as specific as possible).”

#### **4.4. Procedures and Data gathering**

This affiliated study will make use of data collected in the FORT3 research programme (ethical approval number NWU 00002-07-A2). The study will be conducted by looking at the FORT3 data and how the different alignment patterns concord with specific socio-demographic variables such as gender, age, marital, level of education and standard of living. After they were trained in the administration of psychosocial well-being measures, post-graduate students acted as fieldworkers under the supervision of the researcher team. For the fieldworker training, the PI and collaborator explained the questions on the questionnaires to the fieldworkers, answered any questions that fieldworkers may have had, and then the fieldworkers had to practice the taking down and completion of the questionnaire on each other, under supervision of the PI and collaborator. Any questions that arose from the taking down or completion of the questionnaires were answered by the PI and collaborator. These fieldworkers collected data all over South Africa, using the snowball sampling method. Section 4.6.6. describes the procedure followed in the recruiting of the participants. Section 4.6.4. describes the procedure of obtaining informed consent. When informed consent was given, participants completed the research battery at a time and place that they found convenient. Participation was totally voluntary, and participants were free to withdraw from the study at any phase without any negative consequence. Participants were given background on the research project. Trained fieldworkers obtained written informed consent. The contact details of the researchers had been made available to give the participants the opportunity to ask questions.

The participants returned the completed questionnaires to the fieldworkers who then handed the questionnaires back to the researchers. The questionnaires contained mostly positive content but, although there is a minimal risk of it, the completion of the

questionnaires could have elicited a negative emotional reaction from some participants. In the case of a negative emotion felt, the participant may choose to ignore a question or to withdraw from the study. The telephone numbers of counsellors or psychologists, who were requested to help with debriefing should assistance become necessary, were handed to the participants. No participant specified a need for debriefing. No incentives were offered for participating (refer to paragraph 4.6.7). Participants were not given feedback on the questionnaires since it was not a condition when the data were gathered for the study.

The informed consent forms were submitted separately from the questionnaires to ensure that no participant could be identified. These anonymised data were used for the quantitative data capturing by the North-West University's Statistical Consultation Services. In Section 4.6.10. the procedure is set out that was and will be followed to manage, store and destroy the data. For this specific study, the data will be analysed by Dr. L. Schutte – Section 4.5.2. describes the procedure that will be followed. The student will then compile the research report from the research results received. Section 4.6.11. describes how the report-writing process will be monitored.

#### **4.5. Data Analysis**

In the present study the existing FORT3 dataset will be utilised where participants completed the measures and questions mentioned above.

**4.5.1. Qualitative data analysis and trustworthiness.** In the present study the qualitative responses of participants on the questions regarding goals and meaning were transformed into quantitative data, implementing a coding system developed in an international project by Delle Fave et al. (2011). In this coding system, all verbal expressions of participants were assigned a basic code. Codes were then categorised and grouped into life domains, amongst others the *Community* domain of life, on which this study will focus. Only codes and categories grouped under the *Community* life domain are relevant for purposes of this study. For the South African data coding, verbal responses of the data were coded by one trained

coder and these codes were then checked by another trained coder. The coders were trained by Prof. M. Wissing in the use of the international EHHI coding system (Delle Fave, 2011) that is used in this study. Prof M. Wissing is part of the core group that leads the EHHI project. Prof M. Wissing co-developed and oversees the international EHHI coding system. Both coders signed confidentiality agreements. Inconsistencies were discussed to see if consensus could be reached. If consensus could not be reached, the FORT3 PI was involved in the discussion to allot the final code. In a few cases, coding difficulties were discussed with the international expert and co-developer of the coding system, Prof. A. Delle Fave, who helped to decide if new codes needed to be added to the international coding system.

To limit bias and intensify the trustworthiness of the findings, the coder and the co-coder conducted the qualitative data analysis independently from each other. Since the quality of qualitative research depends on how the data have been gathered and analysed, every effort had been made to ensure the trustworthiness of the qualitative component by complying with Lincoln and Guba's (2013) requirements for trustworthiness, namely

(a) **Credibility** (referring to accuracy and validity). The inclusion criteria of the FORT3 project strengthened the quality and accuracy of the data. This required the participants to be a) 18 years of age and older and b) having at least a Grade 12 level of education, increasing the probability of having the necessary cognitive and reflective capacity to answer the questions. A trained coder assigned codes to the data, then another trained coder verified it. If there were any discrepancies the PI (Prof. Wissing) was consulted to assign a final code. If there were still any difficulties, the final decision was made by Prof Delle Fave who is a co-developer of the EHHI coding system. When considering structural coherence Delle Fave et al. (2011) and Delle Fave, Wissing, et al. (2013) have shown that the open-ended questions in the EHHI instrument resulted in rich and relevant data. Since South African data were included in previous international studies, it is expected that the data will be adequate for purposes of this study.

(b) **Transferability** (referring to applicability in other contexts). There was a variety with regard to the participants within the dataset in terms of socio-demographic variables such as gender, age, educational level, standard of living, and marital status. A limitation was that the sample had only South Africans and only a certain selection of the population. This limits the transferability of the findings to other groups.

(c) **Dependability** (referring to repeatability of findings). In this coding system, all verbal expressions of participants were assigned a basic code. Codes were then categorised and grouped into life domains. For the South African data coding, verbal responses of the data were coded by one trained coder and these codes were then checked by another trained coder. Both coders signed confidentiality agreements. Inconsistencies were discussed to see if consensus could be reached. If consensus could not be reached, the FORT3 PI was involved in the discussion to allot the final code. In a few cases, coding difficulties were discussed with the international expert and co-developer of the coding system, Prof. A. Delle Fave, who added new codes to the international coding system, if required. It is therefore reasonable to conclude that dependability was ensured based on the processes being followed.

(d) **Confirmability** (referring to neutrality of findings). The coders who coded the qualitative data aimed for objectivity and repressed their own worldviews in order not to contaminate the process of interpretation of the data. Detailed instruction had to be adhered to through the whole process which contributed to neutrality. This new knowledge or these insights gained from the themes will then be matched with existing theory. The following additions can be added in accordance with Tracy's (2010) criteria for confirmability:

**Worthy topic:** The exploration of the alignment between goals and meaningful facets and the associations thereof with the socio-demographic variables and well-being indicators, is relevant to individuals. Better understanding of this matter has the potential to increase well-being in many different groups such as the community domain of life. **Significant**

**contribution:** A possible contribution of such a study can be the generation of insight and knowledge for a better understanding of the concordance of meaning and goals and the associations thereof with well-being and socio-demographic variables. This can serve as a basis for further research, exploring and utilising the results to enhance well-being.

**4.5.2. Quantitative data analysis.** For the present study, a current FORT3 data set where participants completed the EHHI and the other measures mentioned above, will be used. The coded (quantified) qualitative data were then combined with the quantitative data from the socio-demographic and the well-being questionnaires in order to conduct the following analyses for purposes of the present study:

**4.5.2.1** The reliability scores of the SWLS, PANAS, MLQ, and MHC-SF had been determined by calculating using Cronbach's alpha values for the total scales. Values of .70 or higher will be indicative of adequate internal consistency reliability. Cronbach's alphas will be calculated using IBM SPSS Statistics. Using Mplus version 8 confirmatory factor analysis will be used to determine factorial validity.

**4.5.2.2** The frequency of the *community* domain being stated as an important goal, the reason for an important goal, as something meaningful, and as a reason for something being meaningful will be determined.

**4.5.2.3** The alignment patterns between goals (what and why) and meaningful things (what and why) within the *community* domain will be determined per person using Microsoft Office Excel. Four alignment patterns will be distinguished (Wissing et al., 2017):

- i. The **community** domain was NEITHER mentioned in the participant's important goals and the reasons therefore, NOR in his/her meaningful things and motivations therefore.

ii. The **community** domain was mentioned in BOTH the participant's important goals and the reasons therefore, AND in his/her meaningful things and motivations therefore.

iii. The **community** domain WAS mentioned in his/her important goals and the reasons therefore, BUT NOT in his/her meaningful things and motivations therefore.

iv. The **community** domain WAS NOT mentioned in the participant's important goals and the reasons therefore, BUT IT WAS mentioned in his/her meaningful things and motivations therefore.

**4.5.2.4** In this study one-way ANOVA's will be conducted to connect the scores on the SWLS, PANAS-PA, PANAS-NA, MLQ-P, MLQ-S, as well as the MHC-SF total score, with the four alignment pattern groups as indicated in 4.4.2.3. A separate ANOVA will be performed for each of the well-being scales or subscales. This step, in other words, will involve six one-way ANOVA's.

**4.5.2.5** Two-way ANOVA's will be performed where the scores on the SWLS, PANAS-PA, PANAS-NA, MLQ-P, MLQ-S, and MHC-SF total score will be compared for the four alignment pattern groups determined in 4.5.2.3, the respective demographic variables (gender, age group, educational level, standard of living, and marital status), and the interaction between alignment patterns. A separate ANOVA will be performed for each of the well-being scales or subscales and for each demographic variable. This step, in other words, will involve  $6 \times 5 = 30$  two-way ANOVA's.

#### **4.6. Ethical considerations.**

**4.6.1. Goodwill permission/consent / Legal authorisation.** Data selected from the FORT3 research project (Wissing, 2008; 2012) form the basis for this study. The Ethics Committee of the North-West University approved the FORT3 project, with ethics number: NWU 00002-07-A2. The Health Research Ethics Committee of the North-West University

requires the submission of completed monitoring reports on an annual basis. These annual monitoring reports are completed and submitted, thus the FORT3 project is active for analysis of already gathered data. The FORT3 aims to be explored are:

- i. the nature, sources and motives for meaning, goals and positive relationships with a qualitative and quantitative mixed method approach. This will be done amongst others by applying the Eudaimonic-Hedonic Happiness Investigation instrument (EHHI) established by Delle Fave et al. (2011), and visuals (photo) and other art forms (e.g. poetry) in different groups (e.g. adolescents, adults, teachers) and in numerous South African cultural contexts, as well as for flourishing and languishing participants; and
- ii. the links between meaning, goals /purposes, positive relational processes and other facets of psychosocial well-being, bearing in mind some socio-demographic and contextual variables.

This specific study aims to explore the patterns of alignment/concordance of goals and meanings in the community domain of life and how different patterns of alignment are linked with demographic variables and indicators of well-being. The aims of the present affiliated study align with the aims of FORT3 in the sense that the alignment patterns between goals and meaning in the community domain of life will be explored, as well as how these patterns are linked with well-being indicators and demographic variables.

Authorisation for the use of the measures used in this study was obtained from the authors.

**4.6.2. Facilities.** The participants could complete the test battery at a time and place that they found convenient. Most of the participants chose to complete the questionnaires at their homes.

**4.6.3. Risks and benefits.** Although minimum risk was foreseen with regard to participation in the study, as the focus of the test battery was on positive aspects of human functioning, some questions could elicit negative feelings from the participants. The

participants could have ignored uncomfortable questions or withdrawn from the study at any stage without negative consequence. For debriefing and referral, psychologists were available to assist should it be needed. No participant indicated a need for debriefing or referral.

There were no direct benefits to the participants, but their contribution could bring about knowledge of psychosocial well-being and quality of life of other South Africans. The potential benefits were considered to outweigh the possible risks, since the risk for this study is minimal. This affiliated study does not add additional risk, as the study will make use of already gathered data and as the data will be analysed anonymously. Furthermore, data integrity will be ensured as described in section 4.6.10. The research in this study will be monitored as described in Section 4.6.11. The experience and expertise of the team that work on this study, as described in Section 4.6.12, will prevent additional risk that could arise if data are not analysed in a scientifically accountable manner.

**4.6.4. Informed consent.** Postgraduate students, who acted as fieldworkers and who were trained in the administration of psychosocial well-being measures, obtained informed consent under the supervision of the researchers. The informed consent form was signed off-site and handed back to the fieldworkers. This was an acceptable manner of obtaining informed consent at the time of data collection. The participants were assured that their responses would be used anonymously, and that participation was completely voluntary. Participants were free to withdraw from the study at any stage without any negative consequence. No coercion took place. The possible benefits of participation and emotional reactions were also explained to the participants by the fieldworkers. The principal investigator and research team were available for any questions regarding the study that the participants might have.

After questions were answered and the aims of the study and related ethical aspects understood, the participants were given time to decide whether they wanted to partake in the

research study. Only after participants agreed to participate, the consent forms were handed out to them to complete at a convenient time and place. The completed questionnaires were then handed back to the fieldworkers who then handed the questionnaires to the researchers. Note is taken of the latest ethical rules, which require participants to receive the informed consent form at least a week before participation. This rule though, was not applicable when the original FORT3 data were gathered, but the applicable ethical guidelines that were valid at the time of data gathering were followed. Since participants were allowed to complete the test battery in their own time and at a place of their convenience, it is reasonable to accept that they had the necessary time to consider participation.

**4.6.5. Inclusion and exclusion criteria.** To be included in the FORT3 research project, participants had to be a) South African citizens b) be at least 18 years of age or older, and c) have at least a Grade 12 level of education to ensure sufficient cognitive ability and reflective ability to complete the research battery and had sufficient skill in reading and writing English since the research battery was administered in English. There were no specific exclusion criteria.

All the participants in the FORT3 project who completed the questionnaires relevant to this study and whose qualitative data had been coded according to the EHHI coding system, which was developed by the international project team (Delle Fave et al., 2011) were included. This resulted in a sample size of  $N = 585$ . The coding of the quantitative data is described in section 4.5.1.

**4.6.6. Participant recruitment.** A non-probability snowball method of recruiting participants was used in the original FORT3. This ensured participants were recruited from all over South Africa. Fieldworkers, who were trained in applying psychosocial well-being measures, identified people within their communities who met the inclusion criteria. These people were invited to partake in the research without any manipulation, pressure or intimidation from the fieldworkers. These people could identify other people in the

community they might know, who might be interested to participate and fitted the inclusion criteria. The fieldworkers obtained contact details from community members and then followed up leads of these identified community members. Fieldworkers checked that participants adhered to the inclusion criteria before informed consent and test battery forms were given to the participants. The snowball method of sampling helped to include participants who fit the inclusion criteria of the study and to add diversity to the research sample, thus making it the best sampling method. The informed consent process is discussed in Section 4.6.4.

**4.6.7. Incentives and/or remuneration of participants.** No incentives and/or compensation were offered for participation in the study, as this was not an ethical requirement at the time the FORT3 data were gathered. Should a similar study be conducted now, a small token of appreciation can be offered to the participants. We consider it ethically justifiable that the participants were not offered incentives, since they were not exploited in any way because a) this study involved minimal risk, b) participants could complete the questionnaire at a time and place that were convenient to them, including their homes, and therefore no costs were incurred to participate in the study and c) participation involved minimal inconvenience, since completion of the questionnaire took about 30 minutes of the participants' time and d) the study offered the indirect benefit that participants had the opportunity to reflect on positive aspects such as well-being, meaning in life and one's life goals.

**4.6.8. Dissemination of results.** The responsibility of disseminating data to the original participants were not a clear ethical requirement at the time when the data were gathered and therefore contact details were not obtained. No contact details of the original participants were obtained, only their names and signatures were requested on the consent form, thus the results cannot be communicated to the participants of the study. Participants were recruited from all over South Africa and this makes it impossible to disseminate the

findings to a specific community. The findings of this study will be shared in the lay community as well as in the scientific community. The findings, limitations and results will be submitted in scientific publications and journals in the field. Results of the research will be integrated with other findings from the FORT3 project, which will be published in the lay press. The results may be used in workshops and lectures.

**4.6.9. Privacy and confidentiality.** The participants were allowed to complete the research battery at a time and place of their convenience. Most participants chose to complete the research battery at their homes. It is therefore reasonable to assume that the participants would have completed the research battery in a setting that provided sufficient privacy. By separating each participant's questionnaire from his or her informed consent form after data collection, confidentiality of data was ensured. The coding and capturing of data, were therefore done anonymously. Captured data were stored on password protected databases on the North-West University premises, at the Africa Unit for Transdisciplinary Health Research department locked offices. In this current study, data analysis will be done on group scores and no participant will be identified during the analysis of the data or the reporting of the results.

**4.6.10. Management, storage and destruction of data.** The data integrity was and will be ensured as follows: The data from the Likert-type questionnaires were captured by Statistical Consultation Services who captures data twice and check for any discrepancies, where after the electronic dataset was sent to the FORT3 principal investigator (PI, Prof. Marié P. Wissing) and collaborator (Dr. Lusilda Schutte). The FORT3 PI/Collaborator collected the hard copies of the questionnaires from Statistical Consultation Services. The qualitative data were coded by one coder and checked by another coder who were both trained in the EHHI coding system and who signed confidentiality agreement forms. Any differences were discussed and if consensus could not be reached the FORT3 PI was involved to make a final decision.

In cases where codes did not exist for the response, this matter was taken up with the international EHHI team, who then added an appropriate code to the coding system. Once codes were finalised, trained research interns, who signed confidentiality agreement forms, captured the codes twice independently. The FORT3 collaborator established a checking function in Excel to verify if the codes of the two instances of data capturing corresponded. The responses were captured again if any differences were flagged. This process was overseen and monitored by the FORT3 PI and collaborator. The coding and code checking were done at the coders' home, on the hard copy versions of the questionnaires, which were handed to coders, one pile at a time.

When the coder was done with the pile, it was handed back to the FORT3 PI/collaborator. Capturing of the codes was done on computers that are placed within a locked office on the premises of the North-West University and the data were locked in cupboards in that office for the duration of data capturing. The captured data were sent to the FORT3 PI and collaborator and the data were then removed from the computers of the data capturers. After data coding and capturing, the hard copies of the questionnaires were moved to cupboards in a locked office of the North-West University where they are stored. The FORT3 PI and collaborator monitor access to the hard copies of the data. The FORT3 collaborator (Dr. Schutte), who has a master's degree in statistics and is competent and experienced in data management and data cleaning, merged the qualitative and quantitative data. The FORT3 PI and collaborator keep the electronic data on password-protected computers to ensure the integrity of the data. If any of them need to make a change to the data, this is communicated to the other in writing and the updated dataset is shared with the other so that both have the same latest version on their computers.

Should the need arise to share the full dataset with another person to assist with the data analyses (e.g., a statistical consultant from Statistical Consultation Services), the dataset, as stored on the computers of the PI and collaborator, will be sent to the relevant

person who is, seeing his professional obligation, also responsible to safeguard the data integrity. Since all analyses for this study will be conducted by the FORT3 collaborator, the student researcher and other team members involved will only receive the output from the analyses. They will not have access to the original data. FORT3 data will be destroyed, as per North-West University protocol, six years after the last publication from the data. FORT3 data questionnaires will be shredded and electronic data permanently deleted.

**4.6.11. Monitoring of research.** The supervising team, including the principal investigator of the FORT3 project (Prof. M. Wissing) and collaborator of the research project (Dr. L. Schutte), will oversee and ensure that the research will be done in an ethical manner and that the correct protocol will be followed by the student researcher. The co-study leader of this study, Dr. L. Schutte, who is also a statistician and experienced in data analysis, will attend to the data analysis and send the results to the student researcher. The student researcher will only have access to the results of the data analysis which are relevant to this study. These data will be stored on the student researcher's own computer which is password protected. Upon completion of the study, all the data will be deleted and completely removed from the student researcher's computer. An annual research monitoring report in respect of the FORT3 will be submitted to the Health Research Ethics Committee for approval to ensure the continuation of the research projects. Furthermore, the study leader, Ms. A. Cromhout, will submit an annual research monitoring report in respect of this study to the Health Research Ethics Committee. Section 4.6.10 describes the management, storage and destruction of data.

**4.6.12. Competence of researchers.** The supervisor is Ms. Amanda Cromhout. She is registered for a PhD in Health Sciences with Positive Psychology. She holds an MA in Positive Psychology (MAPP) and worked as a research intern with the Positive Psychology team of AUTHeR in 2017. Her training in the MAPP-course and her internship equipped her with a detailed background in Positive Psychology. Her training in research methodology as

part of the MAPP-programme and internship equipped her for participation as co-supervisor in the current study.

The co-supervisor is Dr. Lusilda Schutte who will analyse the data for the present study. She previously worked as a statistical consultant at the North-West University's Statistical Consultation Services, which equipped her to conduct the analyses for the current study. Dr. Schutte is a senior lecturer at AUTHeR at NWU. She is a registered Clinical Psychologist and holds a PhD in Psychology and a master's Degree in Statistics.

Prof. M. P. Wissing is the assistant study leader and is a registered Clinical Psychologist. She is an experienced senior researcher with a PhD in Psychology, at AUTHeR who has supervised more than 100 students. She has more than 100 peer-reviewed publications. She is the Principal Investigator of FORT3 and the present study overlaps with her research focus. Similar methodology to the methodology used in the present study was used in the large international study of which Prof. Wissing is a core member.

The student researcher, Thelma Booysen, has a BCur. Ed et Admin degree and was trained in research methodology as part of the MAPP-programme and in the BCur degree as extra curriculum, where methods related to the methodology used in the present study, were taught.

**4.6.13. Conflict of interest.** Neither the student nor the supervisors have a conflict of interest to declare.

#### **Expected Contribution of the Study**

The possible contribution of the present study is to add more understanding to the body of existing knowledge by generating novel research in the community domain of life. The contribution of this study may lead to better understanding of alignment patterns between goals and meaning and how it linked to socio-demographic variables and well-being indicators. The research may stimulate future research in patterns of alignment of goals and meaning and interventions, for it investigates a topic little explored of alignment

of goals and meaning. The research may contribute towards the facilitation of eudaimonic well-being in the community domain of life, while also considering the complexities of the community systems in which these facilitations and interventions are being introduced.

### **Choice and Structure of Research Report**

Article format (as indicated in rule A4.4.2.9 for minidissertations) and the following outline will be followed.

#### **6.1. Structure**

Title page

Acknowledgements

Summary (with key words)

Table of contents

Preface

Letter of permission (from co-authors)

Declaration of no-plagiarism

Section 1:

1.1 Background and orientation

1.2 References

Section 2:

2.1 Manuscript in article format

2.1.1 Author guidelines from journal for manuscripts

2.2 Manuscript

2.2.1 Abstract

2.3 Introduction / Literature review / Problem statement and aim

2.4 Method

2.4.1 Research design

2.4.2 Participants

2.4.3 Measures

2.4.4 Procedure

2.4.5 Ethical Considerations

2.4.6 Data Analysis

2.5 Results

2.6 Discussion

2.7 References

Section 3:

3.1 Conclusion, limitations and reflections

3.2 References

## 6.2. Intended Journal

The Journal of Positive Psychology

### Budget and Sources of Funding

The data for this project were collected as part of the FORT3 project therefore no costs were incurred related to data gathering. The present study will be partly funded by a bursary from the NWU master's student bursary to the amount of R12 000. Costs not covered by the NWU bursary will be funded by a bursary from the student's employer (Cipla) and the student herself.

Table 1

#### *Estimated research cost*

<b>Item</b>	<b>Detail</b>	<b>Amount</b>
<b>Accommodation (Krugersdorp- Potchefstroom)</b>	R4000 per week x 4	R16 000
<b>Data and Internet cost</b>	R500 per month x 7 months	R3 500
<b>Co-coder/ Statistician</b>	To be done by Dr. Lusilda Schutte	-

<b>Language editing</b>	40c per word*260 words per page* 60 pages	R6 240
<b>Soft copies of dissertation</b>	3 Copies*(30c per page*100 pages+ R20 for binding)	R150
<b>Binding hard copies of dissertation</b>	5 copies*30c per page*100 pages +R190 for binding)	R1 100
<b><u>Total</u></b>		<b><u>R28 990</u></b>

### Research Time Schedule

Table 2

Research Time Schedule 2018/2019

<i>Submission required</i>	<i>Submission date</i>	<i>Panel date</i>
Small group discussion of proposal	14 September '18	27 September'18
Submission to AUTHeR scientific panel	4 October '18	16 October '18
HREC submission	February '19	March '19
Data analyses starting	30 May '19	
Data analyses completed	30 June '19	
First thesis draft complete	31 July '19	
First final draft completed	31 August '19	
Language editing	30 September '19	
Final hand-in date	25 November '19	

## References

- Agrawal, J., Murthy, P., Philip, M., Mehrotra, S., Thennarasu, K., John, J., Girish N., Thippeswamy V., Isaac, M. (2011). Socio-demographic correlates of Subjective Well-being in Urban India. *Social Indicators Research*, 101(3), 419–434.  
<https://doi.org/10.1007/s11205-010-9669-5>
- Baumeister, R. F., Vohs, K. D., & Tice, D. M. D. M. (2007). The strength model of self-control. *Current Directions in Psychological Science*, 16(6), 351–355.  
<http://doi:10.j.14678721.2007.00534.x>
- Baumeister, R. F., Vohs, K. D., Aaker, J. L., & Garbinsky, E. N. (2013). Some key differences between a happy life and a meaningful life. *The Journal of Positive Psychology*, 8, 505-516. doi:10.1080/17439760.2013.830764
- Brandtstädter, J. (2006). adaptive resources in later life: tenacious goal pursuit and flexible goal adjustment. In M. Csikszentmihalyi & I. S. Csikszentmihalyi (Eds.). *A life worth living: Contributions to positive psychology*. (pp. 143–164). Trier, Germany: Oxford University Press
- Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research (Third; International student; ed.)*. Thousand Oaks, California: SAGE Publications Inc. Cogent. <https://doi.org/10.1080/2331186X.2017.1287391>
- Deci, E.L., & Ryan, R. M. (2000) The "What" and "Why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227-268. DOI: 10.1207/S15327965PLI1104\_01
- Deci, E. L., & Ryan, R. M. (2008). Self-determination theory: A macrotheory of human motivation, development, and health. *Canadian Psychology/Psychologie canadienne*, 49(3), 182–185. <https://doi.org/10.1037/a0012801>
- Delle Fave, A., Brdar, I., Freire, T., Vella-Brodrick, D., & Wissing, M. P. (2011). The eudaimonic and hedonic components of happiness: Qualitative and quantitative

- findings. *Social Indicators Research*, *100*(2), 185–207.  
<https://doi.org/10.1007/s11205-010-9632-5>
- Della Fave, A. D., Brdar, I., Wissing, M. P., & Vella-Brodrick, D. A. (2013). Sources and motives for personal meaning in adulthood. *Journal of Positive Psychology*, *8*(6), 517–529. <https://doi.org/10.1080/17439760.2013.830761>
- Delle Fave, A., Brdar, I., Wissing, M. P., Araujo, U., Castro Solano, A., Freire, T., ... Soosai-Nathan, L. (2016). Lay definitions of happiness across nations: The primacy of inner harmony and relational connectedness. *Frontiers in Psychology*, *7*(30).  
<https://doi.org/10.3389/fpsyg.2016.00030>
- Delle Fave, A., Wissing, M. P., Brdar, I., Vella-Brodrick, D., & Freire, T. (2013). Cross-cultural perceptions of meaning and goals in adulthood: Their roots and relation with happiness. In A. Waterman (Ed.), *The best within us. Positive Psychology Perspectives on Eudaimonic Functioning* (pp 227-248). Washington DC: American Psychological Association
- Diener, E. (2012). New findings and future directions for subjective well-being research. *The American Psychologist*, *67*(8), 590–597.  
<https://doi.org/10.1037/a0029541>
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction with Life Scale. *Journal of Personality Assessment*, *49*(1), 71–75.  
[http://doi.org/10.1207/s15327752jpa4901\\_13](http://doi.org/10.1207/s15327752jpa4901_13)
- Du Plessis, G. A., & Guse, T. (2017). Validation of the scale of positive and negative experience in a South African student sample. *South African Journal of Psychology*, *47*(2), 184–197. <https://doi.org/10.1177/0081246316654328>
- Emmons, R. (2003). Personal goals, life meaning, and virtue: Wellsprings of a positive life. In *Flourishing: Positive psychology and the life well-lived*. (American Psychological Association), 105-128. Retrieved from

<http://www.psychology.hku.hk/ftbcstudies/refbase/docs/emmons/2003/53Emmons2003.pdf>

Frankl, V. E. (1962). Psychiatry and man's quest for meaning. *Journal of Religion and Health, 1*(2), 93–103. <https://doi.org/10.1007/BF01532076>

Frankl, V. E. (1969). *The will to meaning: Foundation and applications of logotherapy*. New York, NY: New American Library.

Fredrickson, B. L. (1998). Cultivated emotions: Parental socialization of positive emotions and self-conscious emotions. *Psychological Inquiry, 9*(4), 279–281. [https://doi.org/10.1207/s15327965pli0904\\_4](https://doi.org/10.1207/s15327965pli0904_4)

Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist, 56*(3), 218–226. <https://doi.org/10.1037/0003-066X.56.3.218>

Fredrickson, B. L. (2013). Positive Emotions Broaden and Build. *Advances in Experimental Social Psychology, 47*, 1–53. <https://doi.org/10.1016/B978-0-12-407236-7.00001-2>

Gray, J. S., Ozer, D. J., & Rosenthal, R. (2017). Goal conflict and psychological well-being: A meta-analysis. *Journal of Research in Personality, 66*, 27–37. <https://doi.org/10.1016/J.JRP.2016.12.003>

Hennecke M., Brandstätter V. (2017). Means, ends, and happiness: The role of goals for subjective well-being. In: Robinson M., Eid M. (Eds.), *The Happy Mind: Cognitive Contributions to Well-Being*. Springer, Cham.

Hart, K. E., & Sasso, T. (2011). Mapping the contours of contemporary positive psychology. *Canadian Psychology, 52*(2), 82–92. <https://doi.org/10.1037/a0023118>.

Heintzelman, S. J., & King, L. A. (2014). Life is pretty meaningful. *American Psychologist, 69*(6), 561–574. <https://doi.org/10.1037/a0035049>

- Humboldt, S., Monteiro, A., & Leal, I. (2017). Validation of the PANAS: A Measure of positive and negative affect for use with cross-national older adults. *Review of European Studies*, 9(2), 10. <https://doi.org/10.5539/res.v9n2p10>
- Huta, V., & Waterman, A. S. (2014). Eudaimonia and Its Distinction from Hedonia: Developing a Classification and Terminology for Understanding Conceptual and Operational Definitions. *Journal of Happiness Studies*, 15(6), 1425–1456. doi:10.1007/s10902-013-9485-0
- Kahneman, D., Diener, E., & Schwarz, N. (1999). *Well-being: The foundations of hedonic psychology*. (pp. 330–350). New York, NY: Russell Sage Foundation.
- Keyes, C. L. M. (1998). Social well-being. *Social Psychology Quarterly*, 61(2), 121–140. <https://doi.org/10.2307/2787065>
- Keyes, C. L. M. (2002). The Mental Health Continuum: From languishing to flourishing in life. *Journal of Health and Social Behaviour*, 43(2), 207. <https://doi.org/10.2307/3090197>
- Keyes, C. L. M. (2006). The subjective well-being of America's youth: Toward a comprehensive assessment. *Adolescent & Family Health*, 4(1), 3–11. <https://doi.org/10.1055/s-0030-1249816>
- Keyes, C. L. M. (2007). Promoting and protecting mental health as flourishing: A complementary strategy for improving national mental health. *American Psychologist*, 62(2), 95–108. <https://doi.org/10.1037/0003-066X.62.2.95>
- Keyes, C. L. M., & Lopez, S. J. (2002). Towards a science of mental health: Positive directions in diagnosis and intervention. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 45-59). New York: Oxford University Press
- Keyes, C. L. M., Wissing, M., Potgieter, J. P., Temane, M., Kruger, A., & van Rooy, S. (2008). Evaluation of the mental health continuum-short form (MHC-SF) in

- Setswana-speaking South Africans. *Clinical Psychology and Psychotherapy*, 15(3), 181–192. <https://doi.org/10.1002/cpp.572>
- Kitayama, S., Karasawa, M., Curhan, K. B., Ryff, C. D., & Markus, H. R. (2010). Independence and interdependence predict health and wellbeing: Divergent patterns in the United States and Japan. *Frontiers in Psychology*, (SEP). <https://doi.org/10.3389/fpsyg.2010.00163>
- Klinger, E., (2012). The search for meaning in evolutionary goal-theory perspective. In *The human quest for meaning: Theories, research and application*. (pp. 23-55). New York: Routledge/Taylor & Francis Group.
- Klug, H. J. P., & Maier, G. W. (2015). Linking goal progress and subjective well-being: A meta-analysis. *Journal of Happiness Studies*, 16(1), 37–65. <https://doi.org/10.1007/s10902-013-9493-0>
- Koukoulis, S., Vlachonikolis, I., & Philalithis, A. (2002). Socio-demographic factors and self-reported functional status: the significance of social support. *BMC Health Services Research*, 2(1), 20. <https://doi.org/10.1186/1472-6963-2-20>
- Lamers, S., Westerhof, G., Bohlmeijer, E., ten Klooster, P., & Keyes, C. (2011). Evaluating the psychometric properties of the mental health continuum-short form (MHC-SF). *Journal of Clinical Psychology*, 67(1), 99-110. <http://doi:10.1002/jclp.20741>
- Lincoln, Y. S., & Guba, E. G. (2013). *The constructivist credo*. (pp. 1-208). Walnut Creek, CA: Left Coast Press Inc.
- Lee, S. J., & Kim, Y. (2016). Structure of well-being: An exploratory study of the distinction between individual well-being and community well-being and the importance of intersubjective community well-being. In Y., Kee, S. J. Lee, S. J. & R. Phillips, (Eds.). *Social Factors and Community Well-Being* (pp. 13–37). Switzerland: Springer. <https://doi.org/10.1007/978-3-319-29942-6>

- Little, B. R. (1998). Personal project pursuit: Dimensions and dynamics of personal meaning. In *The human quest for meaning: A handbook of psychological research and clinical applications*. (pp. 193–212). Mahwah, NJ, US: Lawrence Erlbaum Associates Publishers.
- MacLeod, A. (2013). Goals and plans: Their relationship to well-being. In A. Efklides, D. Moraitou, A., *A positive psychology perspective on quality of life*. 51, (pp. 33–50). New York, NY, US: Springer Science. <https://doi.org/http://dx.doi.org/10.1007/978-94-007-4963-4>
- Martela, F., & Steger, M. F. (2016). The three meanings of meaning in life: Distinguishing coherence, purpose, and significance. *Journal of Positive Psychology, 11*(5), 531–545. <https://doi.org/10.1080/17439760.2015.1137623>
- Mawissirtela, F., & Steger, M. F. (2016). The three meanings of meaning in life: Distinguishing coherence, purpose, and significance. *Journal of Positive Psychology, 11*(5), 531–545. <https://doi.org/10.1080/17439760.2015.1137623>
- Merriam, S. B. (2016). Gender equity and community well-being. In Y. Kee, S. J. Lee, & R. Phillips (Eds.), *Social factors and community well-being* (pp. 71–85). Switzerland: Springer International Publishing
- Milyavskaya, M., Nadolny, D., & Koestner, R. (2014). Where do self-concordant goals come from? The role of domain-specific psychological need satisfaction. *Personality and Social Psychology Bulletin, 40*(6), 700–711. <https://doi.org/10.1177/0146167214524445>
- Monzani, D., Steca, P., Greco, A., D’Addario, M., Pancani, L., & Cappelletti, E. (2015). Effective pursuit of personal goals: The fostering effect of dispositional optimism on goal commitment and goal progress. *Personality and Individual Differences, 82*, 203–214. <https://doi.org/10.1016/j.paid.2015.03.019>

- Noori, S., & Narafshan, M. H. (2018). Promoting goal setting: An experimental study of positive psychology in an EFL context. *World Journal of Educational Research*, 5(2), 144–158. <https://doi.org/10.22158/wjer.v5n2p144>
- Nolen-Hoeksema, S., & Rusting, C. L. (1999). Gender differences in well-being. In D. Kahneman, E. Diener, & N. Schwarz (Eds.), *Well-being: The foundations of hedonic psychology*. (pp. 330–350). New York, NY: Russell Sage Foundation.
- Park, C. L. (2010). Making sense of the meaning literature: An integrative review of meaning making and its effects on adjustment to stressful life events. *Psychological Bulletin*, 136(2), 257–301. <https://doi.org/10.1037/a0018301>
- Potgieter, J. & Botha, K. (2014). Functioning well. In Wissing, M., Potgieter, J., Guse, T., Khumalo, T. & Nel, L. (Eds). *Towards Flourishing Contextualising Positive Psychology* (pp. 68-71). Potchefstroom, South Africa: Van Schaik Publishers
- Roman, N. V., Davids, E. L., Moyo, A., Schilder, L., Lacante, M., & Lens, W. (2015). Parenting styles and psychological needs influences on adolescent life goals and aspirations in a South African setting. *Journal of Psychology in Africa*, 25(4), 305–312. <https://doi-org.nwulib.nwu.ac.za/10.1080/14330237.2015.1078087>
- Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, 52(1), 141–166. <https://doi.org/10.1146/annurev.psych.52.1.141>
- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, 57(6), 1069–1081. <https://doi.org/10.1037/0022-3514.57.6.1069>
- Ryff, C. D., & Singer, B. H. (1998). The role of purpose in life and personal growth in positive human health. In P.T.P. Wong & P. S. Fry (Eds.), *The human quest for meaning: A handbook of psychological research and clinical applications*. (213–235). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

- Ryff, C. D., & Singer, B. H. (2008). Know thyself and become what you are: A eudaimonic approach to psychological well-being. *Journal of Happiness Studies*, 9(1), 13–39. <https://doi.org/10.1007/s10902-006-9019-0>
- Schnell, T., Höge, T., & Pollet, E. (2013). Predicting meaning in work: Theory, data, implications. *The Journal of Positive Psychology*, 8(6), 543–554. <https://doi.org/10.1080/17439760.2013.830763>
- Schulenberg, S. E., Strack, K. M., & Buchanan, E. M. (2011). The meaning in life questionnaire: psychometric properties with individuals with serious mental illness in an inpatient setting. *Journal of Clinical Psychology*, 67(12), 1210–1219. <https://doi.org/10.1002/jclp.20841>
- Schutte, L., & Wissing, M. (2017). Clarifying the factor structure of the mental health continuum short form in three languages: A bifactor exploratory structural modeling approach. *Society and Mental Health*. doi:7. 215686931770779. 10.1177/2156869317707793
- Schutte, L., Wissing, M. P., Ellis, S. M., Jose, P. E., & Vella-Brodrick, D. A. (2016). Rasch analysis of the Meaning in Life Questionnaire among adults from South Africa, Australia, and New Zealand. *Health and Quality of Life Outcomes*, 14(1), 12. <http://doi:10.1186/s12955-016-0414-x>
- Sheldon, K. M., & Elliot, A. J. (1999). Goal striving need satisfaction, and longitudinal well-being: The self-concordance model. *Journal of Personality and Social Psychology*, 76(3), 482–497. <https://doi.org/10.1037/0022-3514.76.3.482>
- Sheldon, K. M., & Kasser, T. (2001). Goals, congruence, and positive well-being: New empirical support for humanistic theories. *Journal of Humanistic Psychology*, 41(1), 30–50. <https://doi.org/10.1177/0022167801411004>
- Snyder, C. R. (2002). Hope Theory: Rainbow in minds. *Psychological Inquiry*, 13(4), 276–321. <https://doi.org/10.1207/S15327965PLI1304>

- Steger, M. F. (2012). Experiencing meaning in life: Optimal functioning at the nexus of well-being, psychopathology, and spirituality. In P. T. P. Wong (Ed.), *Personality and clinical psychology series. The human quest for meaning: Theories, research, and applications* (pp. 165-184). New York, NY, US: Routledge/Taylor & Francis Group.
- Steger, M. F., Frazier, P., Oishi, S., & Kaler, M. (2006). The meaning in life questionnaire: Assessing the presence of and search for meaning in life. *Journal of Counselling Psychology, 53*(1), 80–93. <https://doi.org/10.1037/0022-0167.53.1.80>
- Temane, L., Khumalo, I. P., & Wissing, M. P. (2014). Validation of the Meaning in Life Questionnaire in a South African context. *Journal of Psychology in Africa, 24*(1), 51-60
- Theodori, G. L. (2009). Examining the effects of community satisfaction and attachment on individual well-being. *Rural Sociology, 66*(4), 618–628. <https://doi.org/10.1111/j.1549-0831.2001.tb00087.x>
- Tracy, S. J. (2010). Qualitative quality: Eight “big-tent” criteria for excellent qualitative research. *Qualitative inquiry, 16*(10), 837-851
- Van Schalkwyk, I., & Wissing, M.P. (2013). Evaluation of a program to enhance flourishing in adolescents. In M. P. Wissing (Ed.), *Well-being research in South Africa* (pp. 581-606). Dordrecht, The Netherlands: Springer
- Waterman, A. S. (2008). Reconsidering happiness: A eudiamonist’s perspective. *Journal of Positive Psychology, 3*(4), 234–252. <https://doi.org/10.1080/17439760802303002>
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: the PANAS scales. *Journal of personality and social psychology, 54*(6), 1063

- Westaway, M. S., Maritz, C., & Golele, N. J. (2003). Empirical testing of the satisfaction with life scale: A South African pilot study. *Psychological Reports, 92*(2), 551–554. <https://doi.org/10.2466/pr0.2003.92.2.551>
- Westerhof, G. J., & Keyes, C. L. M. (2010). Mental illness and mental health: The two continua model across the lifespan. *Journal of Adult Development, 17*(2), 110-119. <http://doi:10.1007/s10804-009-9082-y>
- Wilson, A., Wissing, M. P., & Schutte, L. & Kruger, I. M. (2018). Understanding goal motivations in deprived contexts: Perspectives of adults in two rural South African communities, *Applied Research in Quality of Life*, p. 1-17. Springer Netherlands. <http://doi:10.1007/s11482-017-9583-y>
- Wiseman, J., Brasher, K. (2008). Community wellbeing in an unwell world: Trends, challenges, and possibilities. *Journal of Public Health Policy, 29*, 353-366.
- Wissing, M. (2008/2012). *The prevalence of levels of psychosocial health: dynamics and relationships with biomarkers of (ill) health in South African social contexts (FORT3)*. Research project with ethical approval registered at the North-West University.
- Wissing, M. P. (2014). Meaning and relational well-being: A reflection on the state of the art and a way forward. *Journal of Psychology in Africa, 24*(1), 115-121. <https://doi.org/10.1080/14330237.2014.904100>
- Wissing, M. P., & Delle Fave, A. (2013). Meaning and relational well-being: Towards a model. Paper presented at the Second Conference on Positive Psychology (CPPC) in Brno, Czech Republic
- Wissing, M. P., Thekiso, S. M., Stapelberg, R., Van Quickelberge, L., Choabi, P., Moroeng, C., Nienaber, A., Temane, Q. & Vorster, H. H (2010). Validation of three Setswana measures for psychological wellbeing. *SA Journal of Industrial Psychology, 36*(2). <https://doi.org/10.4102/sajip.v36i2.860>

- Wissing, M. P., Carlquist, E., Martos, T., & Schutte, L. (2017, September). *Do goals walk the talk of meaning in well-being?* Presentation in symposium: In their own voices: Lay people's perceptions and dimensions of well-being facets across world regions. Annual Conference on "Quality of Life: Towards a better Society". Innsbruck, Austria.
- Wissing, M., & Temane, Q. M. (2008). The structure of psychological well-being in cultural context: Towards a hierarchical model of psychological health. *Journal of Psychology in Africa*, 18(1) 45-56.
- Wong, P. T. (1998). Implicit theories of meaningful life and the development of the personal meaning profile. In P. T. P. Wong & P. S. Fry (Eds.), *The human quest for meaning: A handbook of psychological research and clinical applications* (pp. 111-140). Mahwah, NJ: Erlbaum.
- Wong, P. T. P. (2010). Meaning therapy: An integrative and positive existential psychotherapy. *Journal of Contemporary Psychotherapy: On the cutting edge of modern developments in psychotherapy*, 40(2), 85–93. <https://doi.org/10.1007/s10879-009-9132-6>
- Wong, P. T. (2011). Positive psychology 2.0: Towards a balanced interactive model of the good life. *Canadian Psychology*, 52(2), 69 - 81.
- Wong, P. T. P. (2012). *Acceptance & well-being: A meaning-management perspective*. Paper presented at the Australian Positive Psychology conference, Wollongong.
- Yetim, N., & Yetim, Ü. (2014). Sense of community and individual well-being: A research on fulfilment of needs and social capital in the Turkish community. *Social Indicators Research*, 115(1), 93–115. <https://doi.org/10.1007/s11205-012-0210->
- Zhang, H., Chen, K., & Schlegel, R. (2018). How do people judge meaning in goal-directed behaviors: The interplay between self-concordance and performance? *Personality and Social Psychology Bulletin*, 44(11), 1582-1600.

<https://doi.org/10.1177/0146167218771330>

**1.2 Approval letter of the AUTHeR Scientific Committee**

Private Bag X6001, Potchefstroom  
South Africa 2520

Tel: 018 299-2094  
Web: <http://www.nwu.ac.za>

**AUTHER SCIENTIFIC COMMITTEE APPROVAL LETTER**

Dear Chair and members of the HREC committee,

Please find herewith the approval letter to acknowledge that the below mentioned study underwent critical quality review by members of the AUTHeR Scientific Committee and have been granted approval for review by the HREC:

Title:	Concordance between goals and meaning in the community domain of life: Association with well-being and socio-demographic variables
Student Name/Researcher	Thelma Booysen
Supervisor:	Ms Amanda Cromhout
Co-supervisor	Dr Lusilda Schutte, Mrs C Liversage & Prof Marié Wissing
Date of the meeting	17 October 2018
Reviewers	Prof Lanthé Kruger and Drs Kylah Forbes-Biggs and Herman Myburgh
Final date of approval	21 November 2018

\_\_\_\_\_  
Signature of the chairperson

21 November 2018

Date

\_\_\_\_\_  
Signature of the Director

21 November 2018

Date

### 1.3 Approved Health Research Ethics Committee Application



NORTH-WEST UNIVERSITY  
YUNIBESITI YA BOKONE-BOPHIRIMA  
NOORDWES-UNIVERSITEIT

Faculty of Health Sciences Ethics Office for Research, Training and Support  
[health-sciences.ac.za/healthethics](http://health-sciences.ac.za/healthethics)

HREC Health Research Ethics Committee (REC-130913-037)

## Standard Full Ethics Application Form

to apply for the approval of **single** or **larger**  
**health** and **health-related** scientific projects involving **human participants**  
and **biological samples** of **human origin** for research or education/training

*HREC 01-01a, version Nov 2016*

**CONFIDENTIAL!** This document contains confidential information that is intended exclusively for the applicant(s), the Health Research Ethics Committee (HREC) of the Faculty of Health Sciences of the North-West University and the designated reviewers. Should this document or parts thereof come into your possession in error, you are requested to return it to the HREC without delay or destroy it. Unauthorised possession, reading, studying, copying or distribution of this material, or any other form of abuse, is illegal and punishable.

**NWU Ethics Number:**  
(issued upon 1<sup>st</sup> submission)

**NWU-00010-19-S1**

#### Instructions and recommended path for the completion of your application:

- a. The research proposal forms the base document that is evaluated in conjunction with this application form. This application form gives the researcher the opportunity to expand on specific ethical issues required for approval.
- b. All applicants complete § 0, 0, 0, 0, 0 and 0.
- c. Select and complete the research-specific sub-sections from § 0 as applicable to the specific requirements of your study (utilise the table of contents).
- d. Ensure that a proposal that has been approved by an appropriate Scientific/Research Proposal Committee is attached to the application form as well as proof of its approval according to the standardised template (see § 0).
- e. Also attach an executive summary of the study (see § 0).
- f. The applicants should ensure that a copy of the informed consent form for approval, that has been compiled according to the informed consent template and checklist supplied by the Faculty of Health Sciences Ethics Office for Research, Training and Support, is submitted with the ethics application form.
- g. Any questionnaires or interview schedules that will be used in the completion of the study have to be attached
- h. Any advertisements that will be used in the study have to be attached
- i. Attach any permission letters received from governing bodies.
- j. Attach any contracts with collaborators/sponsors.

- k. For applications of collaborative studies being conducted on more than one site, it is required that copies of the proposal and the informed consent forms from all centres involved in the study are included with the application.
- l. Attach a 2-page narrative CV for each of the researchers involved in the study.
- m. Liaise with the appropriate officials and colleagues mentioned in § 0, complete and sign a printed copy.
- n. Submit scanned copies of the signed pages.
- o. Include copies of proof of ethics training for all researchers involved in the study (not older than three years).
- p. Submit the completed Ethics Application Form (with all the required attachments) via e-mail to [Ethics-HRECApply@nwu.ac.za](mailto:Ethics-HRECApply@nwu.ac.za).
- q. All required documentation (as previously outlined) should be attached separately to the aforementioned e-mail as indicated in point p.
- r. Applicants must please ensure that all required finalised documents as indicated above are included with the application. **No additional attachments or version correction(s) will be accepted.** If this does occur and the application was incomplete, then it will have to be resubmitted with the application form and all the required attachments which could mean that the application may miss the deadline for the closing of the agenda for the HREC meeting.

NWU Ethics Number NWU-00010-19-S1			
Campus	Potchefstroom	Faculty	Health Sciences
Principle Investigator/Study Leader	Prof. M. Wissing	Research entity	AUTHeR
Study Title	<b>Concordance between Goals and Meaning in the community domain of life: Associations with well-being and socio-demographic factors</b>		

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**SECTION 1: STUDY IDENTIFICATION**

Provide the necessary descriptions below to identify this study application:

**Full, descriptive title of the study**

**Concordance between Goals and Meaning in the community domain of life: Associations with well-being and socio-demographic factors**

**Name of the Study Leader/Primary investigator **NB!** Not the student's name**

Prof. Marie' Wissing (PI) / Miss. Amanda Cromhout (Study leader)

**Name and Surname of the Student (if applicable)**

Thelma Booysen

**Student number**

22826319

**Discipline e.g. Consumer sciences**

Positive Psychology

**Type of study**

Single study	<input type="checkbox"/>
Larger study	<input type="checkbox"/>
Single study affiliated to another study	<input checked="" type="checkbox"/>
Educational	<input type="checkbox"/>
Other: Specify <a href="#">Click here to enter text.</a>	

**In this study use is made of**

Mark ALL options as "Yes" or "No" with X in the appropriate box – more than one option may be marked as "Yes".

Description	Yes	No	
Human participants (subjects)	Qualitative	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Quantitative	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Mixed method	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Other e.g. program evaluation	<input type="checkbox"/>	<input type="checkbox"/>
Filed privileged information (e.g. medical files) or stored biological samples of human origin (e.g. samples collected for another study or medical diagnosis)	<input type="checkbox"/>	<input type="checkbox"/>	

**Envisaged commencement and completion date of the study**

*More information*  
 Here you can indicate the expected commencement and ending dates of the study, which may be anything from a day to a few years. The full expected duration of the study must be filled in below. Even if the expected duration of the study is uncertain, you can still make an estimate here and report the progress with the annual report. Ensure that the commencement date is at least a few weeks after the date of the HREC meeting at which your application is to be reviewed. The HREC will only grant ethics approval for a one-year period. If the study should take longer, a monitoring report requesting permission for continuation must be submitted to the HREC two months before the expiry of the study.

Commencement Date	Completion Date
2019/03/14	2019/12/31

**SECTION 2: STUDY CLASSIFICATION**

Complete every option of all the questions in this section. This section is used to classify your study and select suitable reviewers.

**Name of the Ethics Committee handling the application**

Health Research Ethical Committee of the North-West University

**Dates of applications**

Fill in below the date of the first submission and revised submission (of applicable) of this ethics application

Date of first application	Date of revise application (if applicable)
2019/02/19	<a href="#">Click here to enter a date.</a>

**Version number**

Fill in the number of times this application has been submitted.

Version	1
---------	---

**Estimated risk level**

Please indicate the estimated risk level of the research by using the two risk level tables indicated for adult human participants or children/incapacitated adults.

**Estimated risk level for adult human participants**

Minimal risk	<input checked="" type="checkbox"/>
Medium risk	<input type="checkbox"/>
High risk	<input type="checkbox"/>

<b>Estimated risk level for children/incapacitated adults</b>	
No more than minimal risk of harm (negligible risk)	<input type="checkbox"/>
Greater than minimal risk but provides the prospect of direct benefit for the child/incapacitated adult	<input type="checkbox"/>
Greater than minimal risk with no prospect of direct benefit to the child/incapacitated adult, but a high probability of providing generalizable knowledge	<input type="checkbox"/>

**Context of the Study**

Mark ALL options as “Yes” or “No” with X in the appropriate box – more than one option may be “Yes”.

<b>Description</b>		<b>Yes</b>	<b>No</b>
Scientific Research	Study falls within a research entity	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Study falls outside a research entity	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Study includes postgraduate students (e.g. masters or doctorate)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Study includes contract work	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Education and training (e.g. undergraduate practicals)	For staff of the North-West University	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	For students (undergraduate or postgraduate learners)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	For other learners (not associated with University)	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**This study encompasses aspects that require additional ethical explanation**

Mark ALL options as “Yes” or “No” with X in the appropriate box – more than one option may be “Yes”. If a specific option is marked, please complete the corresponding section in Section 0.

<b>Description</b>	<b>Yes</b>	<b>No</b>
Vulnerable participants	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Infection, genetic modification and commercialisation of cell and tissue lines	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Use of drugs / medicines	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Use of drug delivery systems	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Use of food, fluids or nutrients	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Use of radio-active substances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Use of toxic substances or dangerous substances	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Measuring instruments and questionnaires that need psychometric interpretation	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Possible impact on the environment	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Any other aspect of potentially ethically sensitive nature (specify below)	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Other aspects (specify)

Not applicable

**For this study the following persons will be included in the study team**

Fill in the number concerned with ALL options. Ensure that the participant numbers in this table correspond with the individuals indicated in Section 0, 0 and 0.

*More information*

The **study leader** is generally viewed as the individual who takes the final responsibility for all aspects of the study e.g. study leader or principle investigator.

The **study supervisor** is generally the individual responsible for the day-to-day management of the study.

Description		Number	
		Local	Foreign
Only for research studies	Study Leader (e.g. study leader/principle investigator)	1	0
	Study supervisor (day to day manager)	0	0
	Co-workers (researchers of the North-West University)	2	0
	Co-workers (researchers outside the North-West University)	0	0
	Co-workers (postgraduate students of the North-West University)	1	0
	Assistants/field workers	0	0
Only for education and training (e.g. undergraduate practicals)	Educator	0	0
	Co-workers (lecturers of the North-West University)	0	0
	Co-workers (lecturers outside the North-West University)	0	0
	Students (undergraduate learners of the North-West University)	0	0
	Students (postgraduate learners of the North-West University)	0	0
	Other learners (not associated with the North-West University)	0	0
	Assistants/field workers	0	0
Sponsors		0	0

Other members of the study team not mentioned above (specify)

Not applicable

**The following professional supervisory persons are involved in this study  
(may in no way be directly part of the research team)**

*More information*

**Supervisor** indicates that the individual is an independent monitor involved during data gathering of the study and acts as an advocate for the participants/patients. (Fill in the number involved in ALL options.)

Researcher / Supervisor	Number	Researcher / Supervisor	Number
Supervisory Doctor	0	Supervisory Psychologist	0
Supervisory Nurse	0	Supervisory Pharmacist	0
Supervisory Psychiatrist	0	Supervisory Social worker	0

Other supervisory person (specify)

Not applicable

I hereby declare that the above information in “Section 0: Study Classification” is complete and correct and that I did not withhold any information.

Yes	No
<input checked="" type="checkbox"/>	<input type="checkbox"/>

Remember to save your document regularly as you complete it!

### SECTION 3: DETAIL OF STUDY LEADER/PRINCIPAL INVESTIGATOR, CO-WORKERS AND SUPERVISORS

#### Details of Study Leader/Principle investigator

*More information*  
**NB!** Only NWU staff, or extraordinary professors in collaboration with staff of the North-West University, may register as Study Leaders/Principal Investigators. The Study Leader/Principal Investigator accepts final, overall responsibility for the total study.

Surname	Full Names	Title
Cromhout	Amanda..	Miss.

NWU Campus	Faculty	Research entity/School
Potchefstroom	Health Science	AUTHeR

Position	University No.	Professional Registration (body & category)
Academic assistant	11792833	

Telephone			NWU-box or Postal Address
Work	Home	Cell	
018 299 2519	Click here to enter text.	0836174231	Internal Box 500 NWU

E-mail Address
Cromhout.amanda@gmail.com

[PLEASE ATTACH THE TWO-PAGE NARRATIVE CV OF THE STUDY LEADER]

*More information*  
**NB!** A 2-page CV in a narrative format, giving a brief overview of:

- a researcher’s qualifications
- career path to date
- specific research experience applicable to the present study (e.g. methodology or skills required)
- supervisory experience
- publication list (for the past 4 years)

#### Details of Study Supervisor

Is the Study Leader also the study supervisor?  
 (Please mark with X in the appropriate box.)

*More information*  
 Where the Study Leader is not physically present or consistently available and where supervision of the research activities is necessary, a suitable researcher/lecturer may be designated as **study supervisor**. The study supervisor is part of the study team.

Yes	No
<input checked="" type="checkbox"/>	<input type="checkbox"/>

If “Yes”, this part can be left blank.

If “No” (i.e. if the Study Leader is not the Study Supervisor) give details below.

Surname	Full Names	Title
Click here to enter text.	Click here to enter text.	Click here to enter text.

NWU Campus	Faculty	Research entity/School
Click here to enter text.	Click here to enter text.	Click here to enter text.

Position	University no.	Professional Registration (body & category)
Click here to enter text.	Click here to enter text.	Click here to enter text.

Telephone			NWU-box or Postal Address
Work	Home	Cell	
Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.

E-mail Address
Click here to enter text.

[PLEASE ATTACH THE TWO-PAGE NARRATIVE CV OF THE STUDY SUPERVISOR]

*More information*  
**NB!** A 2-page CV in a narrative format, giving a brief overview of:

- a researcher’s qualifications
- career path to date
- specific research experience applicable to the present study (e.g. methodology or skills required)
- supervisory experience

- *publication list (for the past 4 years) (if applicable)*

**Professional Supervisors**

This section is completed if applicable and mentioned in Section 0.

*More information*  
*Professional supervisor does not refer to the study leader or the study supervisor. In all cases where medical emergencies may possibly arise, the physical presence of a doctor and a registered nurse is required. For the drawing of blood samples (e.g. diet manipulation and similar studies) the presence of a registered nurse is sufficient.*

Name and qualifications of all supervisory professional persons

Name	Qualifications	Professional Registration	Function
Not applicable	Not applicable	Not applicable	Not applicable

(Type one name per row, or type "Not applicable" if there is no supervisory person.  
 In last table cell, click on [tab] to add another row)

[PLEASE ATTACH THE TWO-PAGE NARRATIVE CV OF THE PROFFESIONAL SUPERVISOR/S]

*More information*  
**NB!** *A 2-page CV in a narrative format, giving a brief overview of:*

- *a researcher’s qualifications*
- *career path to date*
- *specific research experience applicable to the present study (e.g. methodology or skills required)*
- *supervisory experience*
- *publication list (for the past 4 years) (if applicable)*

**Other Members of the Study Team**

Names, qualifications, professional registration and functions of all the other co-workers (researchers, postgraduate students in the case of a research study, or lecturers (in the case of training) and assistants/field workers who form part of the study team) should be indicated. The information given in this table should correspond with the number of team members given in Section 0 (Add extra rows to the table if required.)

Name	Qualifications	Professional Registration	Function
Prof.Marie Wissing	D Phil, Drs Phil	HPCSA Clinical Psychologist	Co-supervisor/ PI

Dr. Lusilda Schutte	PhD (Psychology) MSc (Statistics)	HPCSA Clinical Psychologist	Co-Supervisor
T. Booyesen	BCur Ed Admin	SANC	Student

Note: Type one name per row, or type “none” if there is no other team member.

[PLEASE ATTACH A TWO-PAGE NARRATIVE CV FOR ALL THE MENTIONED RESEARCH TEAM MEMBERS IN THIS SECTION]

*More information*  
**NB!** A 2-page CV in a narrative format, giving a brief overview of:

- a researcher’s qualifications
- career path to date
- specific research experience applicable to the present study (e.g. methodology or skills required)
- supervisory experience
- publication list (for the past 4 years)

**Conflict of Interests and Sponsors (if applicable)**

Declare with full details any conflict of interests that any member of the study team or professional supervisor (see § 0, 0, 0 and 0) might have.

*More information*  
 Examples of conflict of interest: financial, non-financial: intellectual, bias, overly optimistic promises of potential benefits, role of the researcher/s, desire of professional advancement, desire to make a scientific breakthrough, relationship with participants.

Name of Researcher	Complete description of the conflict and how it will be managed
Not applicable	Not applicable

Note: Type one name per row, or type “Not applicable” if there is no member of the study team or professional supervisor with a conflict of interest.

Give full details of all sponsors of the study.

Name of Sponsor	Contact Details	Affiliation & Contribution	Nature & Extent
NWU ½ Master degree bursary	NWU 11 Hoffman Street Potchefstroom, 2531	Monetary bursary towards study fees	1st time Master’s degree ½ bursary

Cipla SA Pty (Ltd)	PO. Box 1096, Durbanville, 7551. 021 943 4200	Monetary bursary towards study fees	Towards Master's degree in Positive Psychology
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Note: Type one name per row, or type "Not applicable" if there are no sponsors. Add extra rows to the table if required.

Is any participant in the study directly or indirectly involved with one or more of the sponsors or the researchers? Give full details.

Name of Participant	Association with Sponsor/Researcher
Not applicable	Not applicable

Note: Type one name per row, or type "Not applicable" if there are no such participants. Add extra rows to the table, if required.

Does any member of the study team receive any form of remuneration or other benefits from the sponsor(s), either directly or indirectly? Give full details.

Name of Team Member	Details
Prof. M.P. Wissing	Principle investigator for the FORT3 project which is partially funded by the NRF.
Thelma Booyesen	Cipla contributed monetary towards the studies of the student, who is in their full-time employment.

Note: Type one name per row, or type "Not applicable" if there are no such team members. Add extra rows to the table if required.

**Collaborations (if applicable)**

Declare with full details all collaboration agreements, e.g. with researchers or lecturers from another institution, national or international, who will be working on a defined section of the study.

*More information*  
 Your local team may collaborate with a team from a different national institution in South Africa or internationally, and thereby incorporate and benefit from their expertise and/or facilities. Typically, in such cases, functions and responsibilities differ for certain parts of the study. These functions and responsibilities must be fully described.

Name of Collaborator	National/International (Indicate which)	Full Description of functions and responsibilities
Not applicable	Not applicable	Not applicable

Note: Type one name per row, or type "Not applicable" if there are no contractors. Add extra rows to table, if required.

### Contractual Agreements (if applicable)

Declare with full details all contractual agreements (e.g. with team members, collaborators and sponsors) on the study. Please note: A copy of any contractual agreements must be submitted to the Health Research Ethics Committee, together with the submission of this application. Add extra rows to the table, if required.

#### *More information*

*Sometimes there are contractual obligations with co-workers or organisations outside the University. These contractual obligations may e.g. place restrictions on certain aspects on the availability of raw data i.t.o. intellectual right of ownership. Particularly where foreign co-workers are involved, these contracts can get complex. Therefore, you must indicate here what these contractual obligations encompass, whether the University approved and sanctioned it and declare and describe any other potential legal and ethical implications thereof.*

Name of Contractor	Full Description of the agreement
Not applicable	Not applicable

Note: Type one name per row, or type "Not applicable" if there are no contractors. Add extra rows to the table, if required.

[PLEASE ATTACH ALL CONTRACTUAL AGREEMENTS]

### Confidentiality

Note: Other people involved in the research that could pose a risk to confidentiality should sign confidentiality agreements e.g. transcribers and co-coder/s.

[PLEASE ATTACH ALL CONFIDENTIALITY AGREEMENTS (SEE CONFIDENTIALITY AGREEMENTS AS APPROVED BY THE LEGAL OFFICE OF THE NWU)]

### Indemnity

Note: If people are involved in the research as part of the research team but are not as staff on the payroll of the university or by contract on the payroll of the university, they will not be covered by the insurance of the university and have to sign an indemnity form.

[PLEASE ATTACH ALL INDEMNITY FORMS (SEE INDEMNITY FORMS AS APPROVED BY THE LEGAL OFFICE)]

Remember to save your document regularly as you complete it!

## SECTION 4: RESEARCH PROPOSAL AND SCIENTIFIC COMMITTEE APPROVAL

### Executive summary and research proposal

Executive summary of the study

Provide an executive summary (maximum 150 words) of the study in the following format:

- brief problem statement (approx. 3 sentences)
- aims and objectives of the study
- study design and method

#### Executive summary

According to the self-concordance model people experience higher levels of well-being when their goals and the things they find meaningful in their lives are aligned. Making use of already gathered data from FORT3, the aim of this study is to explore patterns of alignment between goals and meaning in the community domain, and how these patterns are associated with socio-demographic variables and indicators of well-being. This study will employ a mixed methods convergent parallel design where quantitative and qualitative data were gathered simultaneously and cross-sectionally. The qualitative data will be coded and the degree of alignment between goals and meaning in the community domain of life will be determined. The results of this study may contribute to a better understanding of the alignment of goals and meaning to enhance well-being in the community domain of life, and how they are associated with socio-demographic variables and different well-being indicators.

Proposal

Note: For each study a descriptive proposal has to be submitted and is used as the main document for evaluation. The proposal should reflect the ethics of the research throughout. Attach a proposal approved by the Scientific/Proposal Committee of your research entity.

[ATTACH THE RESEARCH PROPOSAL]

Scientific/Proposal Committee approval

This study should have been reviewed and approved by a Scientific/Proposal Committee.

#### *More information*

*The proposal needs to be approved by a Scientific/Proposal Committee before it will be reviewed by the HREC. The HREC relies on the scientific expertise of this committee regarding the evaluation of the scientific merit and design of the study.*

		Details	
Yes <input checked="" type="checkbox"/>	Name of formal Scientific/Proposal Committee:	AUTHeR	
	Title, initials and surname of all of the members of Scientific/Proposal Committee present during the review.	Prof. Lanthé Kruger and Drs. Kylah Forbes-Biggs and Herman Myburgh	
	Date of approval:	2018/10/16	
No <input type="checkbox"/>	Reason:	Not applicable	

Letter confirming approval of protocol

The HREC has to have proof of confirmation of approval by the Scientific/Proposal Committee.

[ATTACH CONFIRMATION OF APPROVAL OF THE STUDY PROPOSAL BY THE SCIENTIFIC/PROPOSAL COMMITTEE ON THE MANDATED TEMPLATE.]

Remember to save your document regularly as you complete it!

**SECTION 5: ADDITIONALLY, REQUIRED INFORMATION ABOUT ETHICAL IMPLICATIONS OF THE RESEARCH NOT PROVIDED IN THE PROPOSAL**

Note: The information contained in this section is *additional* to what is contained in the proposal.

**What will be expected of participants during data gathering?**

What will be expected of participants during data gathering e.g. a one-hour interview, venepuncture, needle prick, etc.

*More information*  
 Highlight what participants will be expected to do and what will be done to them, and how long it will take? This includes aspects such as procedures, sample collections and methods of information gathering and what the probable associated experience of participants will be. Provide particular details on any step that might violate privacy e.g. having to undress. This section supports you in the completion of the section in the informed consent form entitled, “What will your responsibilities be?”

When informed consent was given, participants completed the research battery at a time and place that they found convenient. Participation was totally voluntary, and participants were free to withdraw from the study at any phase without any negative

consequence. Participants were asked to complete a selection of questionnaires on psychosocial well-being, which took approximately 30 minutes to complete. The contact details of the researchers had been made available to give the participants the opportunity to ask questions.

The participants returned the completed questionnaires to the fieldworkers who then handed the questionnaires back to the researchers. The questionnaires contained mostly positive content but, although there is minimal risk for it, the completion of the questionnaires could have elicited a negative emotional reaction from some participants. In the case of a negative emotion felt, the participant may choose to ignore a question or to withdraw from the study. The telephone numbers of counsellors or psychologists, who were requested to help with debriefing should assistance became necessary, were handed to the participants. No participant specified a need for debriefing.

**Risks and precautions**

Name and explain *all the possible risks* for *all procedures* that the participants might experience during the research. Use the template at the back of the approved risk level descriptor document to guide you into identifying all the possible types of risk as well as the probability and magnitude of harm. Ensure that you also include reference to various biological sampling techniques e.g. venepuncture, buccal swabs etc. By completing this section it will help you to answer the two sections on “Are there risks involved in your taking part in research?” and “What will happen in the unlikely event of some form of harm occurring as a direct result of your taking part in this research study?” in the informed consent form.

<p><b>Risks</b> (e.g. physical, psychological, social, legal, economic, dignitary and community) Identify all the possible risks.</p>	<p><b>Precautions</b> (When describing these precautions be clear on how they will mitigate all the identified risks)</p>
<p>Psychological</p>	<p>No interventions were done in the study. As such, only minimal risk was foreseen with regard to participation in the study, as the focus of the test battery was on positive aspects of human functioning. However, some questions could elicit negative feelings from the participants. The participants could have ignored uncomfortable questions or withdraw from the study at any stage without negative consequence. For debriefing and referral, psychologists were available to assist should it be needed. No participant indicated a need for debriefing or referral. No additional risks are foreseen in the present study as the data is anonymized</p>

	and participants can't be identified. Data integrity will be ensured as described in section 5.14 and the study will be monitored as described in section 5.15. Further additional risks will be prevented as the research team has the necessary expertise to conduct this study.
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**Benefits for participants**

Describe 1) the potential *direct* benefits that the study might hold for the *individual participants*; or 2) the *indirect* benefits that the study holds for the *society at large* or for *the researchers and the organisations/institutions* they are working for, through the knowledge gained. By completing this section, it will help you to answer the section on “Will you benefit from taking part in this research” in the informed consent form.

Direct benefits for participants	Indirect benefits for society at large or for the researchers/institution
No direct benefit to the participants. The data collected from the participants could bring about knowledge of psychosocial well-being and quality of life of other South Africans. Since no interventions were done and already gathered (anonymised) data is used in this study, this affiliated study does not add additional risk. As such, the benefits are deemed to outweigh the risks which are considered minimal.	There were no indirect benefits to the participants.

**Risk/benefit ratio analysis**

The overall benefits should, in general, *always outweigh the risks*, for a study to be considered ethical. If this is not the case, there needs to be a *strong justification* for why research ethics approval should be given.

Benefit outweighs the risks	<input checked="" type="checkbox"/>		
Risks outweigh the benefit	<input type="checkbox"/>	Justify:	Not applicable

**Facilities**

Describe the place(s) and facilities in detail where the study will be implemented. This description is applicable to both institutions and the community. Also describe the availability of measures to handle emergencies in an applicable manner and how this will be executed.

The participants could complete the test battery at a time and place that they found convenient. Most of the participants chose to complete the questionnaires at their homes.

All participants were given the opportunity to obtain contact details of qualified professionals to provide debriefing if needed.

### Legal authorisation

Describe in detail *which bodies* must grant legal authorisation for this study (e.g. Department of Health, Medicine Control Council, etc.). Mention *whether authorisation has already been obtained*, with reference to attached proof, or *how you will go about* getting authorisation before the study commences.

Conditional approval will be granted to obtain this authorisation, but the study cannot commence before the HREC has received the final documents.

Not applicable

[PLEASE UPLOAD ALL DOCUMENTS INDICATING LEGAL AUTHORISATION]

### Goodwill permission /consent

Describe in detail *what interest group representatives* must give permission for this study (e.g. community leaders, church leaders, tribal chiefs or other). Also mention *whether permission has already been obtained*, with reference to attached proof, or *how you will go about getting* permission before the study commences.

Conditional approval will be granted until proof of goodwill permission has been granted but the study cannot commence before the HREC has received the final documents.

Not applicable

[PLEASE UPLOAD ALL LETTERS OF GOODWILL PERMISSION]

### Criteria for participant selection and recruitment

Describe in full which inclusion and exclusion criteria will be used to select participants and justify each of your choices. If you include one of the following in your exclusion/inclusion criteria, the need for it in the research has to be justified i.e. *race or ethnic origin, person's health or sex life, a person's inherited characteristics or biometric information*. Ensure that your exclusion criteria are not merely the opposite of the inclusion criteria.

Inclusion criteria

Justification

<p>Inclusion criteria of the affiliated study: To be included in the FORT3 research project, participants had to be a) South African citizens b) be at least 18 years of age or older, and c) have at least a Grade 12 level of education to ensure sufficient cognitive ability and reflective ability to complete the research battery and had sufficient skill in reading and writing English since the research battery was administered in English. There were no specific exclusion criteria.</p> <p>All the participants in the FORT3 project who completed the questionnaires relevant to this study and whose qualitative data had been coded according to the EHHI coding system, which was developed by the international project team (Delle Fave et al., 2011) were included. This resulted in a sample size of <math>N = 585</math>.</p>	<p>The criterion of secondary education was applied to ensure that participants had a good comprehension of the measures. Sufficient fluency in English enhanced the likelihood that participants were able to interpret and complete the questionnaires. Being 18 and above years of age enhances the probability of sufficient cognitive and reflective abilities for the participant to provide accurate data on the questions posed. The criterion of South African citizen ensured that participants function within the South African context (similar data were collected in other countries as part of a collaborative multi-country study which have comparative aims. The present study will only include the South African data.).</p>
<p><b>Exclusion criteria</b></p>	<p><b>Justification</b></p>
<p>Not Applicable</p>	<p>Not applicable</p>

**Participant recruitment**

Recruitment of human participants must take place within a specified time frame/schedule (i.e. specified starting and ending date) and cannot continue indefinitely. Explain how you will go about recruiting the participants.

*More information*  
*This process should take place in such a way that the participants do not feel intimidated by the process or implicitly “bribed” but decide absolutely voluntarily to participate. It should be fair and equitable. Include aspects of community entry e.g. advertisements, community advisory boards and the use of gatekeepers and mediators etc.*

The data was gathered between 2011 and 2014. A non-probability snowball method of recruiting participants was used in the original FORT3. This ensured participants were recruited from all over South Africa. Fieldworkers, who were trained in applying psychosocial well-being measures, identified people within their communities who met the inclusion criteria. These people were invited to partake in the research without any manipulation, pressure or intimidation from the fieldworkers. These people could identify other people in the community they might know, who might be interested to participate and fitted the inclusion criteria. The fieldworkers obtained contact details from community members and then followed up leads of these identified community members. Fieldworkers checked that participants adhered to the inclusion criteria before informed consent and test battery forms were given to the participants. The

snowball method of sampling helped to include participants who fit the inclusion criteria of the study and to add diversity to the research sample, thus making it the best sampling method.

### **Informed consent (consent, permission, assent and dissent)**

The focus in this section is on a detailed informed consent *process description*. According to law all participants must be fully informed about the implications and risks associated with participation in the study.

#### *More information*

*How will you go about contacting them and explaining the study and accompanying implications to all participants? Ensure that participants are aware that participation in the research is voluntary and that they may withdraw from the study at any time. Where research is not carried out in participants' mother tongue, explain how you will go about conveying the information in an understandable manner. Where participants are not literate, a witness should be involved in obtaining informed consent. Be clear on who will obtain the informed consent (independent person) and how the researcher will be included to explain the research and answer questions. Discuss the role of the independent person. For your convenience you can use the template for informed consent as well as the accompanying checklist. Be clear on your description of the use of consent, permission, assent and dissent. For minors ensure that parental permission and child assent or adolescent consent (where applicable) is obtained for all participants.*

Postgraduate students, who acted as fieldworkers and who were trained in the administration of psychosocial well-being measures, obtained informed consent under the supervision of the researchers. The informed consent form was signed off- site and handed back to the fieldworkers. This was an acceptable manner for obtaining informed consent at the time of data collection. The participants were assured that their responses would be used anonymously, and that participation was completely voluntary. Participants were free to withdraw from the study at any stage without any negative consequence. No coercion took place. The possible benefits of participation and emotional reactions were also explained to the participants by the fieldworkers. The principal investigator and research team were available for any questions regarding the study that the participants might have.

After questions were answered and the aims of the study and related ethical aspects understood, the participants were given time to decide whether they wanted to partake in the research study. Only after participants agreed to participate, the consent forms were handed out to them to complete at a convenient time and place. The completed questionnaires were then handed back to the fieldworkers who then handed the questionnaires to the researchers. Note is taken of the latest ethical rules, which require participants to receive the informed consent form at least a week before participation. This rule though, was not applicable when the original FORT3 data were gathered, but the applicable ethical guidelines that were valid at the time of data

gathering were followed. Since participants were allowed to complete the test battery in their own time and at a place of their convenience, it is reasonable to accept that they had the necessary time to consider participation. Since participants gave consent for their responses to be used in the FORT3 project, in which all ethical guidelines were adhered to, and since the aim of the present study is aligned with the aims of the FORT3 research programme, no further consent needs to be sought for the affiliated study.

[PLEASE UPLOAD YOUR INFORMED CONSENT FORM FOR APPROVAL AND THE INFORMED CONSENT CHECKLIST]

**Incentives and/or remuneration of participants**

Is any form of incentive and/or reimbursement offered to the participants? If “Yes”, describe it in full in terms of *what, how, where, when, how much, terms and conditions*, etc. Remember to work according to the TIE principle (time, inconvenience, expenses e.g. transport and meals). If no remuneration is offered, *justify why this is not the case* (Please mark with X in the relevant block and provide details).

Yes	No	Description
<input type="checkbox"/>	<input checked="" type="checkbox"/>	No incentives and/or compensation were offered for participation in the study, as this was not an ethical requirement at the time the FORT3 data was gathered. Should a similar study be conducted now, a small token of appreciation can be offered to the participants. We consider it ethically justifiable that the participants were not offered incentives, since they were not exploited in any way because a) this study involved minimal risk, b) participants could complete the questionnaire at a time and place that were convenient to them, including their homes, and therefore no costs were incurred to participate in the study and c) participation involved minimal inconvenience, since completion of the questionnaire took about 30 minutes of the participants’ time and d) the study offered the possibility of indirect benefit in that participants had the opportunity to reflect on positive aspects such as well-being, meaning in life and one’s life goals.

**Announcement of study results to participants**

Indicate *what, how, when and to whom* you will communicate the results of the study to the participants.

<b>What?</b>	The responsibility of disseminating data to the original participants were not a clear ethical requirement at the time when the data were gathered and therefore contact details were not obtained. No contact details of the original participants were obtained, only their names and
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	signatures were requested on the consent form, thus the results cannot be communicated to the participants of the study. Participants were recruited from all over South Africa and this makes it impossible to disseminate the findings to a specific community. The findings of this study will be shared in the lay community as well as in the scientific community. The findings, limitations and results will be submitted to scientific journals in the field. Results of the research will be integrated with other findings from the FORT3 project, which will be published in the lay press. The results may be used in workshops and lectures.
<b>How?</b>	Publication of results in an acknowledged, field related academic journal and relevant conferences. The results will be integrated with other findings of the FORT3 project and disseminated in the lay press.
<b>When?</b>	On completion of the study.
<b>To whom?</b>	The larger scientific reader base for example academics as well as the public.

### Privacy and Confidentiality

Explain how you will ensure both privacy and confidentiality throughout the research.

#### Privacy

Privacy is concerned with who has access to *personal information and records* about the participant as well as *privacy during physical measurements* e.g. anthropometric measures or *psychological procedures* e.g. interviews/focus groups. Explain how privacy will be ensured in your study.

The participants were allowed to complete the research battery at a time and place of their convenience. Most participants chose to complete the research battery at their homes. It is therefore reasonable to assume that the participants would have completed the research battery in a setting that provided sufficient privacy. By separating each participant's questionnaire from his or her informed consent form after data collection, confidentiality of data was ensured. The coding and capturing of data, were therefore done anonymously. Captured data was stored on password protected databases on the North-West University premises, at the Africa Unit for Transdisciplinary Health Research and the questionnaires were placed in locked cupboards in locked offices. In this current study, data analysis will be done on group scores and no participant will be identified during the analysis of the data or the reporting of the results.

**Confidentiality**

Confidentiality ensures that *appropriate measures* will be implemented to *prevent disclosure of information* that might identify the participant either during the course of the research or afterwards e.g. anonymising data or pooling results. Explain how confidentiality will be ensured in your study.

The participants were allowed to complete the research battery at a time and place of their convenience. Most participants chose to complete the research battery at their homes. It is therefore reasonable to assume that the participants would have completed the research battery in a setting that provided sufficient privacy. By separating each participant's questionnaire from his or her informed consent form after data collection, confidentiality of data was ensured. The coding and capturing of data, were therefore done anonymously. Captured data was stored on password protected databases on the North-West University premises, at the Africa Unit for Transdisciplinary Health Research and the questionnaires were placed in locked cupboards in locked offices. In this current study, data analysis will be done on group scores and no participant will be identified during the analysis of the data or the reporting of the results.

**Management, storage and destruction of data/biological samples**

Describe how you will manage the collected data/biological samples as well as the storage thereof.

**Data/biological samples management**

For management of data/biological samples, indicate:

- what data/biological samples will be stored
- how it will be stored
- how data in its various forms will be managed e.g. questionnaires, recorded interviews or biological samples
- who will manage the data/biological samples storage?
- who will have access to the stored data/biological samples?
- how will data be regained from other research team members
- and if data sharing is to occur, how will this be managed?

Ensure that you refer to both *electronic* and *hard copy versions* of data as well as *biological samples*.

The data integrity was and will be ensured as follows: The data from the Likert-type questionnaires were captured by Statistical Consultation Services who captures data twice and check for any discrepancies, where after the electronic dataset was sent to the FORT3 principal investigator (PI, Prof. Marié P. Wissing) and collaborator (Dr. Lusilda Schutte). The FORT3 PI/Collaborator collected the hard copies of the questionnaires from Statistical Consultation Services. The qualitative data was coded by one coder and checked by another coder who were both trained in the EHHI coding system and who signed confidentiality agreement forms. Any differences were discussed and if consensus could not be reached the FORT3 PI was involved to make a final decision.

In cases where codes did not exist for the response, this matter was taken up with the international EHHI team, who then added an appropriate code to the coding system. Once codes were finalised, trained research interns, who signed confidentiality agreement forms, captured the codes twice independently. The FORT3 collaborator established a checking function in Excel to verify if the codes of the two instances of data capturing corresponded. The responses were captured again if any differences were flagged. This process was overseen and monitored by the FORT3 PI and collaborator. The coding and code checking were done at the coders' home, on the hard copy versions of the questionnaires, which were handed to coders, one pile at a time.

When the coder was done with the pile, it was handed back to the FORT3 PI/collaborator. Capturing of the codes was done on computers that are placed within a locked office on the premises of the North-West University and the data was locked in cupboards in that office for the duration of data capturing. The captured data was sent to the FORT3 PI and collaborator and the data was then removed from the computers of the data capturers. After data coding and capturing, the hard copies of the questionnaires were moved to cupboards in a locked office of the North-West University where it is stored. The FORT3 PI and collaborator monitor access to the hard copies of the data. The FORT3 collaborator (Dr. Schutte), who has a master's degree in statistics and is competent and experienced in data management and data cleaning, merged the qualitative and quantitative data. The FORT3 PI and collaborator keep the electronic data on password-protected computers to ensure the integrity of the data. If any of them need to make a change to the data, this is communicated to the other in writing and the updated dataset is shared with the other so that both have the same latest version on their computers.

Should the need arise to share the full dataset with another person to assist with the data analyses (e.g., a statistical consultant from Statistical Consultation Services), the dataset, as stored on the computers of the PI and collaborator, will be sent to the relevant person who is, from his professional obligation, responsible to also safeguard the data integrity. Since all analyses for this study will be conducted by the FORT3 collaborator, the student researcher and other team members involved will only receive the output from the analyses. They will not have access to the original data. FORT3 data will be destroyed, as per North-West University protocol, six years after the last publication from the data. FORT3 data questionnaires will be shredded and electronic data permanently deleted.

### **Storage and destruction of data/biological samples**

Describe:

- where and how data/biological samples will be stored
- for how long it will be stored
- who will be responsible for storage?
- how it will be destroyed?

Ensure that you refer to both *electronic* and *hard copy versions* of data as well as *biological samples*

The data integrity was and will be ensured as follows: The data from the Likert-type questionnaires were captured by Statistical Consultation Services who captures data twice and check for any discrepancies, where after the electronic dataset was sent to

the FORT3 principal investigator (PI, Prof. Marié P. Wissing) and collaborator (Dr. Lusilda Schutte). The FORT3 PI/Collaborator collected the hard copies of the questionnaires from Statistical Consultation Services. The qualitative data was coded by one coder and checked by another coder who were both trained in the EHHI coding system and who signed confidentiality agreement forms. Any differences were discussed and if consensus could not be reached the FORT3 PI was involved to make a final decision.

In cases where codes did not exist for the response, this matter was taken up with the international EHHI team, who then added an appropriate code to the coding system. Once codes were finalised, trained research interns, who signed confidentiality agreement forms, captured the codes twice independently. The FORT3 collaborator established a checking function in Excel to verify if the codes of the two instances of data capturing corresponded. The responses were captured again if any differences were flagged. This process was overseen and monitored by the FORT3 PI and collaborator. The coding and code checking were done at the coders' home, on the hard copy versions of the questionnaires, which were handed to coders, one pile at a time.

When the coder was done with the pile, it was handed back to the FORT3 PI/collaborator. Capturing of the codes was done on computers that are placed within a locked office on the premises of the North-West University and the data was locked in cupboards in that office for the duration of data capturing. The captured data was sent to the FORT3 PI and collaborator and the data was then removed from the computers of the data capturers. After data coding and capturing, the hard copies of the questionnaires were moved to cupboards in a locked office of the North-West University where it is stored. The FORT3 PI and collaborator monitor access to the hard copies of the data. The FORT3 collaborator (Dr. Schutte), who has a master's degree in statistics and is competent and experienced in data management and data cleaning, merged the qualitative and quantitative data. The FORT3 PI and collaborator keep the electronic data on password-protected computers to ensure the integrity of the data. If any of them need to make a change to the data, this is communicated to the other in writing and the updated dataset is shared with the other so that both have the same latest version on their computers.

Should the need arise to share the full dataset with another person to assist with the data analyses (e.g., a statistical consultant from Statistical Consultation Services), the dataset, as stored on the computers of the PI and collaborator, will be sent to the relevant person who is, from his professional obligation, responsible to also safeguard the data integrity. Since all analyses for this study will be conducted by the FORT3 collaborator, the student researcher and other team members involved will only receive the output from the analyses. They will not have access to the original data. FORT3 data will be destroyed, as per North-West University protocol, six years after the last publication from the data. FORT3 data questionnaires will be shredded and electronic data permanently deleted.

## Monitoring of research

Describe how you as the researcher will monitor:

- both the *implementation and progress* of the research
- compliance with the approved protocol
- the management of ethics throughout the research process
- the management of amendments during the execution of the research study, should they be needed
- how *incidents and adverse events/serious adverse events* (if applicable) will be reported.

The supervising team, including the principal investigator of the FORT3 project (Prof. M. Wissing) and collaborator of the research project (Dr. L. Schutte), will oversee and ensure that the research will be done in an ethical manner and that the correct protocol will be followed by the student researcher. The co-study leader of this study, Dr. L. Schutte, who is also a statistician and experienced in data analysis, will attend to the data analysis and send the results to the student researcher. The student researcher will only have access to the results of the data analysis which is relevant to this study. This data will be stored on the student researcher's own computer which is password-protected. Upon completion of the study, all the data will be deleted and completely removed from the student researcher's computer. An annual research monitoring report in respect of the FORT3 will be submitted to the Health Research Ethics Committee for approval to ensure the continuation of the research projects. Furthermore, the study leader, Ms. A. Cromhout, will submit an annual research monitoring report in respect of this study to the Health Research Ethics Committee. The statistical analyses and identification of the particular subset of participants that should be included in this particular study, will be done by the study supervisor, Dr. L. Schutte, who is a statistician and competent in doing such analyses. The qualitative data analysis will be done by the student researcher and co-coder, and monitored by the supervising team who are experienced in this kind of analysis.

## Misleading of participants (if applicable)

Is use made of any form of misleading in the research, where the participants are not told the complete truth (e.g. placebo or psychotherapeutic interventions)?

### *More information*

*In the case of using a placebo (e.g. drug or psychotherapeutic intervention), justification has to be provided that there is no alternative treatment with proven efficacy. When such an alternative treatment exists, the **standard of care** should be provided to both the experimental and control group.*

If "Yes", in either case of using a placebo or during a psychotherapeutic intervention:

- justify in full why it is necessary
- describe how the participants will be protected against potential negative consequences of the placebo or misleading information/action.

- when you will disclose and debrief
- describe how you will disclose to them that they were misled.

Yes	No	Justification	Precautionary measures
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Not applicable	Not applicable
		<b>Disclosure</b>	
		<b>When?</b>	<b>How?</b>
		Not applicable	Not applicable

**Use of previously collected data/biological samples (if applicable)**

When your research study is making use of previously collected data or biological samples, provide a comprehensive description of the following.

**What was the purpose of the original collection?**

The FORT3 research project investigated the prevalence of levels of psychosocial health: Dynamics and relationships with biomarkers of (ill)health in a South African context. This included to explore the nature, source and motives of goals, meaning and positive relationships with a qualitative and quantitative mixed method approach. The links between meaning, goals/purposes and other facets of psycho-social well-being, considering some social-demographic and contextual variables.

**What will your purpose be?**

This study forms part of the FORT3 research project and make use of already gathered data. This study will focus on concordance of goals and meaning in the community domain of life and how these are associated with socio-demographic.

**Give a description of how research integrity was ensured in the original study by referring to:**

- **how informed consent was obtained from participants**
- **what they consented for**
- **the circumstances under which the data/biological samples were gathered**
- **how the ethics of data/biological sample collection was ensured?**

Data integrity is ensured by the Principal Investigator of the study and the participants' informed consent covers the research done in this affiliated study. Data selected from the Fort3 research project (Wissing, 2008; 2012) form the basis for this study. The Ethics Committee of the North-West University approved the FORT3 project, with ethics number, NWU 00002-07-A2. The Health Research Ethics Committee of the North-West University requires the submission of completed monitoring reports on annual basis, thus the FORT 3 project is active for analysis of already gathered data. The aims of the present affiliated study align with the aims of FORT3 in the sense that the concordance patterns between goals and meaning in the community domain of life will be explored, as well as how these patterns are linked with demographic variables and well-being indicators.

Postgraduate students trained as fieldworkers were trained in the administration of psychosocial well-being measures under the supervision of the researchers. The participants were assured that their responses would be used anonymously, and that participation was completely voluntary. Participants were free to withdraw from the study at any stage without any negative consequence. No coercion took place. The possible indirect benefits of participation and negative emotional reactions were also explained to the participants by the fieldworkers. The principal investigator and research team were available for any questions regarding the study that the participants might have.

After questions were answered, clarified and aims understood and ethical aspects understood, the participants were given time to decide whether they wanted to partake in the research study. Only after participants agreed to participate, the consent forms were handed out to them to complete at a convenient time and place. The completed questionnaires were then handed back to the fieldworkers and who then handed the questionnaires to the researchers. Notice were taken with the latest ethical rules which require participants to receive the informed consent form at least a week before participation. The applicable ethical guidelines during the time of data gathering were followed. Since participants were allowed to complete the questionnaire and the test battery at home at their convenience, it is reasonable to accept that they had the necessary time to consider participation.

Authorisation for the use of the measures used in this study were obtained from the authors. By separating each participant's questionnaire from his or her informed consent form after data collection, confidentiality of data was ensured. The coding and capturing of data, were done anonymously. Captured data was stored on password protected databases in locked offices on the North-West University premises. In this current study, data analysis will be done on group scores and no participant will be identified during the analysis of the data or the reporting of the results. Responses will only be used as part of a group and only group scores will be used for analyses.

To understand people's goals and what gives meaning in their lives as aspects of well-being, the wording on the informed consent coincide with the present study's aims: *"We want to understand what people think about their lives and well-being, and how they experience happiness, well-being and meaningfulness. Therefore, we need your assistance and personal view."* This specific study aims to explore the patterns of /concordance of goals and meanings in the community domain of life and how different patterns of concordance are linked with demographic variables and indicators of well-being.

Please see Section 5.10 for more information on the Informed Consent procedure. See Section 5.12 for details on how privacy and confidentiality was ensured.

**Give a detailed description of:**

- **how data/biological sample storage was managed**
- **where and how data/biological samples were stored**
- **for how long it was stored**
- **who was responsible for storage?**
- **how it was ensured that no tampering occurred?**

**Management, storage and destruction of data.** The data integrity was and will be ensured as follows: The data from the Likert-type questionnaires were captured by Statistical Consultation Services who captures data twice and check for any

discrepancies, where after the electronic dataset was sent to the FORT3 principal investigator (PI) (Prof. Marié P. Wissing) and collaborator (Dr. Lusilda Schutte). The FORT3 PI/Collaborator collected the hard copies of the questionnaires from Statistical Consultation Services. The qualitative data was coded by one coder and checked by another coder who were both trained in the EHHI coding system and who signed confidentiality agreement forms. Any differences were discussed and if consensus could not be reached the FORT3 PI was involved to make a final decision.

In cases where codes did not exist for the response, this matter was taken up with the international EHHI team, who then added an appropriate code to the coding system. Once codes were finalised, the codes were captured twice independently by trained research interns who signed confidentiality agreement forms. Dr. L. Schutte (FORT3 collaborator) established a checking function in Excel to verify if the codes of the two instances of data capturing corresponded. The responses were capture again if any differences were flagged. This process was overseen and monitored by the FORT3 PI and collaborator. The coding and code checking were done on the hard copy versions of the questionnaires, which were handed to coders one pile at a time.

When the coder was done with the pile, it was handed back to the FORT3 PI/collaborator. Capturing of the codes was done on computers that are placed within a locked office on the premises of the North-West University and the data was locked in cupboards in that office for the duration of data capturing. The captured data was sent to the FORT3 PI and collaborator and the data was then removed from the computers of the data capturers. After data coding and capturing, the hard copies of the questionnaires were moved to cupboards in a locked office of the North-West University where it is stored. Access to the hard copies of the data is monitored by the FORT3 PI and collaborator. The FORT3 collaborator (Dr. Schutte), who has a master's degree in statistics and is competent and experienced in data management and data cleaning, merged the qualitative and quantitative data. The FORT3 PI and collaborator keep the electronic data on password-protected computers to ensure the integrity of the data. If any of them need to make a change to the data, this is communicated to the other in writing and the updated dataset is shared with the other so that both have the same latest version on their computers.

Should the need arise to share the full dataset with another person to assist with the data analyses (e.g., a statistical consultant from Statistical Consultation Services), the dataset, as stored on the computers of the PI and collaborator, will be sent to the relevant person who is, from his professional obligation, responsible to also safeguard the data integrity. Since all analyses for this study will be conducted by the FORT3 collaborator, the student researcher and other team members involved will only receive the output from the analyses. They will not have access to the original data. FORT3 data will be destroyed, as per North West University protocol, six years after the last publication from the data.

**Monitoring of research.** The supervising team, with the principal investigator of the FORT 3 project, will oversee and ensure that the research will be done of an ethical nature and the correct protocol will be followed by the student researcher. Section 4.6.10 describes the management, storage and destruction of data.

#### **Foreseeable risks for participants or researchers involved in using the previously collected data/biological samples?**

**Risks**

**Precautions**

<p>Participant: Although minimum risk was foreseen as the focus of the test battery was on positive aspects of human functioning, there was a small risk that some questions could elicit negative feelings. The participants could have ignored uncomfortable questions or withdraw from the study at any stage without consequence. For debriefing and referral, should it be needed, Psychologists were available to assist. No participant indicated a need for debriefing or referral</p> <p>Participants had the opportunity to reflect on the meaning, goals and relationships in their lives, created by the test battery and many reported positive experiences. No direct benefits for the participants were documented, but their contribution could bring about knowledge of psycho-social well-being and quality of life of other South Africans.</p> <p>Researchers, fieldworkers and assistants: Minimal risk is foreseen, but emotional responses from participants may impact negatively on researchers, assistants and fieldworkers.</p> <p><b>Participants:</b></p> <p><b>Researchers:</b></p>	<p>Although minimum risk was foreseen as the focus of the test battery was on positive aspects of human functioning, there was a small risk that some questions could elicit negative feelings. The participants could have ignored uncomfortable questions or withdraw from the study at any stage without consequence. For debriefing and referral, should it be needed, Psychologists were available to assist. No participant indicated a need for debriefing or referral.</p> <p>Researchers, fieldworkers and assistants also had access to counselors or psychologists should it be necessary.</p>
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**Will re-consent be necessary?**  
**If "Yes" motivate:**

- why
- for what
- how this re-consent will be obtained.

<b>Yes</b>	<b>No</b>	<b>Why?</b>	Not applicable
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<b>For what?</b>	Not applicable
		<b>How?</b>	Not applicable

[ATTACH A LETTER FROM THE STUDY LEADER/PI GIVING PERMISSION FOR THE USE OF THE DATA/BIOLOGICAL SAMPLES]

[ATTACH THE ETHICAL APPROVAL OF THE ORIGINAL STUDY]

[ATTACH THE INFORMED CONSENT DOCUMENTATION FOR RE-CONSENT (IF APPLICABLE)]

**Use of filed privileged information (if applicable)**

Filed privileged information may be used for research purposes with the research ethics committee *waiving informed consent*. Give a detailed description of the process under the following headings.

<b>The nature of the information to be used:</b>	
Not applicable	
<b>Process of obtaining permission/ethical approval for access:</b>	
Not applicable	
<b>Process of data collection:</b>	
Not applicable	
<b>Process of anonymization of the data:</b>	
Not applicable	
<b>Foreseeable risks for participants whose filed privileged information is being accessed:</b>	
<b>Risks</b>	<b>Precautions</b>
Not applicable	Not applicable

**Justifiability of statistical procedures**

Statistical consultation

Indicate how you ensured the suitability of the statistical procedures to be used in this study e.g. consultation or proof of expertise.

The study will make use of the SPSS and MPlus statistical analysis software programs as well as Excel and the data analysis will be done by the co-study leader, Dr. L. Schutte, who is a qualified statistician and has experience as a statistical consultant

Justification of sample size

Indicate how the sample size was determined e.g. power calculation or previously reported study designs.

The participants (N = 585) for this study were obtained from the FORT3 project. This number is adequate for the analyses conducted in the current study. In order to determine the sufficiency of the sample size, Different quantitative analyses that will be performed as described in Section 5.19.4 of the ethics application form, need to be taken into consideration, in order to determine the sufficiency of the sample size. This is considered adequate due to the fact that the frequency analysis is not subjected to a statistical test. The study is considered exploratory in nature and all the data available will be used, regarding the other analyses. At the interpretation of the results, if the sample sizes of specific demographic groups are small, it will be mentioned and taken into consideration. Small sample sizes will be identified and interpreted as limitations which in those cases interpretations will not be made.

## Method of randomisation (if applicable)

If randomisation is to be used in this study, please indicate the manner by which randomisation will be assured.

Not Applicable

## Statistical methodology

Describe the means by which the statistical analyses will be conducted i.e. descriptive statistics, comparisons to be made, specific statistical tests to be used and the manner in which co-variance will be corrected for.

Quantitative analyses will be conducted: 1. Cronbach's alpha will be used in preliminary analyses to determine whether all measures to be used in the present study, namely the PANAS, MHC-SF, MLQ and SWLS were reliable for the specific sample. IBM SPSS Statistics will be used to obtain these results. Total scores are generally considered to indicate internal consistency reliability when Cronbach's alpha scores exceed 0.7. Confirmatory factor analysis will also be used to check the factorial validity of the quantitative scales for this sample using M-plus.

2. The frequency of the community domain being mentioned as an important goal, the reason for an important goal, as something meaningful, and as a reason for something being meaningful, will be determined using IBM SPSS Statistics.

3. Using Microsoft Office Excel, the alignment patterns between goals (what and why) and meaningful things (what and why) within the community domain will be determined per person.

Four alignment patterns will be distinguished:

1 = The community domain was NEITHER mentioned in the participant's important goals or the reasons therefore, NOR in his/her meaningful things or motivations, therefore.

2 = The community domain was mentioned in BOTH the participant's important goals or the reasons therefore, AND in his/her meaningful things or motivations, therefore.

3 = The community domain WAS mentioned in his/her important goals or the reason therefore, BUT NOT in his/her meaningful things or motivations, therefore.

4 = The community domain WAS NOT mentioned in the participant's important goals or the reasons therefore, BUT IT WAS mentioned in his/her meaningful things or motivations, therefore.

4. Cross-tabulations and accompanying chi-square tests will be used to explore the associations between the alignment patterns and the demographic variables using IBM SPSS.

5. One-way ANOVA's will be performed using IBM SPSS where the scores on the SWLS, PANAS-PA, PANAS-NA, MLQ-P, MLQ-S, and MHC-SF total score will be compared for the four alignment pattern groups. Note that a separate ANOVA will be performed for each of the well-being scales or subscales. In other words, this step will involve six one-way ANOVA's.

6. Two-way ANOVA's will be performed using IBM SPSS where the scores on the SWLS, PANAS-PA, PANAS-NA, MLQ-P, MLQ-S, and MHC-SF total score will be compared for the four alignment pattern groups, the respective demographic variables (gender, age group, education level, standard of living, and marital status), and the interaction between alignment patterns and the respective demographic variables. Note that a separate ANOVA will be performed for each of the well-being scales or subscales and for each demographic variable. In other words, this step will involve  $6 \times 5 = 30$  two-way ANOVA's. .

Remember to save your document regularly as you complete it!

## SECTION 6: MATTERS THAT NECESSITATE ADDITIONAL INFORMATION

### Sec 6a: Vulnerable participants

Please complete this section if your study includes *minors, adults with incapacities, persons in dependent relationships e.g. prisoners, students, persons with physical disabilities, collectivities and research-naïve communities*. (Mark ALL options as “Yes” or “No” with X in the appropriate box – more than one option may be “Yes”).

Description	Yes	No
Minors	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Adults with incapacities	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Persons in dependent relationships e.g. prisoners	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Students	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Persons with physical disabilities	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Collectivities	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Research-naïve communities	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Specify: Not applicable		

#### Description

Give a detailed description of the vulnerable group by referring to:

- who they are?
- where they come from
- what makes them vulnerable.

Not applicable

Justification for inclusion

Explain the necessity for including this specific group of vulnerable people as human participants (subjects) indicating the *direct benefit to the participants themselves* or the *indirect benefit of an improved scientific understanding*.

Not applicable

Additional precautionary measures to reduce the risk of harm

Explain any additional precautionary measures you will take to reduce the possibility of harm.

Not applicable

Remember to save your document regularly as you complete it!

**Sec 6b: Infection, genetic modification and commercialisation of cell and tissue lines**

What will you be doing with the cell or tissue line?

Infection of the cell or tissue line	<input type="checkbox"/>
Genetic modification of the cell or tissue line	<input type="checkbox"/>
Commercialisation of the cell or tissue line	<input type="checkbox"/>

Number

How many cell and/or tissue lines will be used in the study?

Description	Number
Cell lines	0
Tissue lines	0

[OPEN UP THE APPROPRIATE AMOUNT OF SPACES IN SECTION 0 ACCORDING TO 0]

Product information

Provide detailed product information, so that the reviewers can evaluate the ethically justifiable use of the cell and tissue lines. Give the necessary details below.

*More information*

**Human origin and consent:**  
*For standard cell and/or tissue cultures from banks such as the ATCC consent already exists for general, ethically justifiable and medically related research.*

**Potential dangers and risks:**  
*Tissue banks such as the ATCC classify cell and/or tissue cultures as “bio safety level 1, 2 or 3”, depending on potential for infection with pathogens which may be harmful to man, or cancerous characteristics that would make growth in a person possible after undesirable, accidental inoculation. **NB!** These cell cultures may never be used in people.*

**Cell Line or Tissue Line**

Approved Name & Code	Description
Click here to enter text.	Click here to enter text.

Source / Origin / Supplier	Catalogue No.	Biosafety level?	
Click here to enter text.	Click here to enter text.	Level 1	<input type="checkbox"/>
		Level 2	<input type="checkbox"/>
		Level 3	<input type="checkbox"/>

**Method of Storage and Maintenance**

Click here to enter text.

Potential Dangers	Precautionary measures
Click here to enter text.	Click here to enter text.

**Other Relevant Information**

Click here to enter text.

To add additional tables, copy the whole table above (select, then press Ctrl + C), click here, press enter and then paste (Ctrl + V).

What is the infectious agent to be used (if applicable)?

Not applicable

Has the participant given informed consent for commercialisation of their cell line?

Yes	No	
<input type="checkbox"/>	<input type="checkbox"/>	If “Yes” attach a copy of the completed informed consent form
		If “No”, justify why not:
		Not applicable

Has a benefit sharing agreement been undertaken with the participant if commercialisation of their cell line is being undertaken?

If “Yes” attach the agreement. If “No” justify why this is the case.

<b>Yes</b>	<b>No</b>	If “Yes” attach a copy of the completed benefit sharing document
<input type="checkbox"/>	<input type="checkbox"/>	If “No”, justify why not:
		Not applicable

**Expertise and facilities**

Do you have the necessary expertise to work with the cell and/or tissue cultures? Provide full details. Mark “Yes” or “No” with X in the appropriate box. Provide additional details as requested.

<b>Yes</b>	<b>Details</b>	
<input type="checkbox"/>	<b>Principal investigator</b>	<b>Researchers/Students/Fieldworkers</b>
	Not applicable	Not applicable
<b>No</b>	<b>How do you plan to get the expertise required?</b>	
<input type="checkbox"/>	<b>Principal investigator</b>	<b>Researchers/Students/Fieldworkers</b>
	Not applicable	Not applicable

**Facilities**

Describe the facilities that are in place to work with the cell and/or tissue line.

Not applicable

**Biosafety**

Explain the measures you have in place to protect the safety of researchers/workers/the environment against the potential detrimental effects of the infection, genetic modification or commercialisation of the cell and/or tissue and waste. Also specify methods and safety measures for the disposal of cell and/or tissue cultures. If available, attach the standard operating procedures (SOPs) of these processes.

Not applicable

Remember to save your document regularly as you complete it!

**Sec 6c: Use of Drugs/Medicines**

Please complete this section if any drugs or medicines are used or administered in this study.

Number

How many types of drugs / medicines will be used in the study? If more than one dosage form or brand name of the same drug (active ingredient) is used, it must be counted and mentioned separately. Where applicable, placebos must also be mentioned and calculated.

Description of Drugs / medication	Dosage
Not applicable	Click here to enter text.

[OPEN UP THE APPROPRIATE AMOUNT OF SPACES IN SECTION 0 ACCORDING TO 0]

Product information

Provide detailed product information as requested

## Drug 1

Approved Pharmacological (Generic) Name	Brand Name(s) (if applicable)
Click here to enter text.	Click here to enter text.

Registered at the MCC-SA? <sup>1</sup>	If "Yes", MCC-SA Registration Number <sup>2</sup>	If registered at the MCC-SA, is this for the indications, dosages and administrations as used in this study? Provide details where necessary.
<b>Yes</b>	<b>No</b>	Click here to enter text.
<input type="checkbox"/>	<input type="checkbox"/>	Click here to enter text.

Accepted Dosage(s)	Accepted Administration Route(s)
Click here to enter text.	Click here to enter text.

Pharmacological Action, Therapeutic Effects & Indications	Side-effects, Precautions & Contra-indications
Click here to enter text.	Click here to enter text.

## Other Relevant Information

Click here to enter text.

## Proof of preclinical approval of the product

Click here to enter text.

To add additional tables, copy the whole table above (select, then press Ctrl + C), click here, press enter and then paste (Ctrl + V).

## Special authorisation for use in humans:

If any of the medication is not registered with the Medicine Control Council or, if it is registered but the study deals with indications for which it is not specifically registered, or if other doses, dosages, dosage forms or administration routes are used than what is registered, special approval must be obtained for the clinical test from the Medicine Control Council.

Has such special authorisation been obtained? Please mark with X in the appropriate box and complete further as applicable.

<b>Yes</b>	<b>No</b>	<b>Authorisation Number</b>	<b>Date of Authorisation</b>
<input type="checkbox"/>	<input type="checkbox"/>	Click here to enter text.	Click here to enter a date.

<sup>1</sup> MCC-SA = Medicine Control Council of South Africa.

<sup>2</sup> The MCC-SA registration number can be found on medicine product leaflets.

If “Yes” please upload a copy of the approval letter. If “No” please explain the manner in which you plan to go about obtaining approval before the study begins. **NB!** Final approval of the application by the HREC is dependent on the approval of the study by the Medicine Control Council. No study may continue before written approval is obtained.

If “No” type explanation here, or type “Not Applicable”.

[PLEASE UPLOAD MCC APPROVAL LETTER]

Explain the measures that will be in place to protect the workers, participants and the environment against the potential side-effects of the medicinal substances and waste (disposal).

Not applicable

Remember to save your document regularly as you complete it!

**Sec 6d: Use of drug delivery systems**

Please complete this section if any drug delivery systems are used or administered in this study.

Number

How many types of drug delivery systems will be used in the study? If more than one dosage form of a drug delivery system is used, it must be counted and mentioned separately.

Description of drug delivery system	Dosage
Click here to enter text.	Click here to enter text.

[OPEN UP THE APPROPRIATE AMOUNT OF SPACES IN SECTION 0 ACCORDING TO 0]

Drug delivery system information

Provide detailed drug delivery system information as requested.? If more than one drug delivery system is used, it must be counted and mentioned separately.

Drug delivery system 1

Approved Name  
 Click here to enter text.

Registered at the MCC-SA?	at	If "Yes", MCC-SA Registration Number	If registered at the MCC-SA, is this for the indications, dosages and administrations as used in this study? Provide details where necessary.
Yes	<input type="checkbox"/>	Click here to enter text.	Click here to enter text.
No	<input type="checkbox"/>		

Accepted Dosage(s)	Proof of Accepted Administration Route(s)
Click here to enter text.	Click here to enter text.

Side-effects	Contra-indications	Precautions
Click here to enter text.	Click here to enter text.	Click here to enter text.

Other Relevant Information  
 Click here to enter text.

To add additional tables, copy the whole table above (select, then press Ctrl + C), click here, press enter and then paste (Ctrl + V).

Special authorisation for use in humans

If any of the drug delivery systems are not registered with the Medicine Control Council or, if it is registered but the study deals with indications for which it is not specifically registered, or if other doses, dosages, dosage forms or administration routes are used than what is registered, special approval must be obtained for the clinical test from the Medicine Control Council. Has such special authorisation been obtained? Please mark with X in the appropriate box and complete further as applicable.

Yes	No	Authorisation Number	Date of Authorisation
<input type="checkbox"/>	<input type="checkbox"/>	Type no. here, or type "Not Applicable".	Click here to enter a date.

If "Yes" please upload a copy of the approval letter.

If “No” please explain the manner in which you plan to go about obtaining approval before the study begins.

**NB!** Final approval of the application by the HREC is dependent on the approval of the study by the Medicine Control Council. No study may continue before written approval is obtained.

If “No” type explanation here, or type “Not Applicable”.

[PLEASE UPLOAD MCC APPROVAL LETTER]

Explain the measures that will be in place to protect the workers, participants and the environment against the potential side-effects of the drug delivery system and waste (disposal).

Click here to enter text.

Remember to save your document regularly as you complete it!

**Sec 6e: Use of Food, Fluids or Nutrients**

Please complete this section if any food, fluids or nutrients (alone or in combination) are used or administered in this study. This also applies to dangers with abuse, whether or not it holds any potential danger for people, animals or the environment.

Note: This does not include the provision of a regular plate of food for maintenance during residence.

Number

How many kinds of food, fluids or nutrients will be used in the study?

*More information*

*If more than one dosage form or brand name of the food, fluids or nutrient is used, it must be counted and mentioned separately. Placebos are also included, except if the placebo treatment includes no administration.*

Description	Number
Food	0
Fluids	0
Nutrients / nutrient combinations	0

[OPEN UP THE APPROPRIATE AMOUNT OF SPACES IN SECTION 0 ACCORDING TO 0]

Product information:

Provide detailed product information, so that the reviewers can evaluate the ethically justifiable use of the food, fluids and nutrients.

Food, Fluid or Nutrient

Approved Name	Normal Quantities and Uses
Click here to enter text.	Click here to enter text.

Potential Dangers with Abuse	Contra-indications	Precautions
Click here to enter text.	Click here to enter text.	Click here to enter text.

Other Relevant Information & Literature References

Click here to enter text.

To add additional tables, copy the whole table above (select, then press Ctrl + C), click here, press enter and then paste (Ctrl + V).

Explain the measures that will be in place to protect the workers, participants and the environment against the potential detrimental effects of the food, fluids or nutrients and waste.

Click here to enter text.

Remember to save your document regularly as you complete it!

**Sec 6f: Use of Radio-Active Substances**

Description:

Where any radio-active substances are used in experiments or administered to participants, give full details thereof, including the isotopes and possible risks it may hold for the participants/researchers/workers/environment.

Click here to enter text.

Competence and licensing:

Do you have the necessary competence and licensing from the Department of Health at your disposal to work with radio-active substances? Mark “Yes” or “No” with X in the appropriate box. Provide the authorisation number if “Yes”.

<b>Yes</b>	<b>Details</b>	
<input type="checkbox"/>	<b>Study leader</b>	<b>Researchers/Students/ /Fieldworkers</b>
	Click here to enter text.	Click here to enter text.
	<b>Authorisation number</b>	Click here to enter text.
<b>No</b>	<b>How do you plan to get the expertise required?</b>	
<input type="checkbox"/>	<b>Study leader</b>	<b>Students/Researchers/Fieldworkers</b>
	Click here to enter text.	Click here to enter text.

Attach a copy of the approval certificate from the Radiation Control Officer.

[PLEASE UPLOAD THE APPROVAL LETTER FROM THE RADIATION CONTROL OFFICER]

Facilities

Describe the facilities and procedures to ensure safe use and disposal of the radio-active substances? Explain the measures you have in place to protect the safety of participants/researchers/workers/environment against the potential detrimental effects of the radio-active substances and waste. If applicable, also specify methods and safety measures for the disposal of radio-active contaminated body fluids and tissue.

Type here

Remember to save your document regularly as you complete it!

**Sec 6g: Use of Toxic Substances or Dangerous Substances**

Please complete this section if any toxic or dangerous substances are used or administered in this study. This also applies to dangers with abuse, whether or not it holds any potential danger for people, animals or the environment.

Number

How many toxic substances/dangerous substances will be used in the study?

Description	Number
Toxic substances	0
Other dangerous substances	0

Product information

Provide detailed product information, so that the reviewers can evaluate the ethically justifiable use of the toxic and dangerous substances.

**NB!** If more than one such substance is used, select and copy the whole table and paste as many tables underneath as is necessary.

Substance 1

Approved Name	Normal Uses & Dosages
Type here	Type here

Action & Effects/Dangers	Toxic	Contra-indications	Precautions
Type here		Type here	Type here

Other Relevant Information  
Type here

To add additional tables, copy the whole table above (select, then press Ctrl + C), click here, press enter and then paste (Ctrl + V).

Explain the measures that will be in place to protect the workers, participants and the environment against the potential detrimental effects of the toxic or dangerous substances and waste

<b>Possible detrimental effects</b>	<b>Precautions</b>
Type here	Type here

Remember to save your document regularly as you complete it!

**Sec 6h: Measuring instruments and questionnaires that need psychometric interpretation**

Please complete this section if any measuring instruments or validated questionnaires are used in this study that needs psychometric interpretation.

**NB!** Do not complete this section for any other types of questionnaires.

Name

Which psychometric measuring instruments and validated questionnaires will be used in the study?

**Description**  
The Meaning in Life Questionnaire (MLQ), and the Mental Health Continuum – short form (MHC-SF).) The Satisfaction with Life Scale (SWLS), the Positive Affect and Negative Affect Schedule (PANAS).

Information about the measuring instrument/questionnaire

Provide detailed information on the psychometric measuring instrument/questionnaire, so that the reviewers can evaluate the ethically justifiable use thereof.

**NB!** If more than one psychometric measuring instrument/questionnaire is used, select and copy the whole table and paste as many tables underneath as is necessary.

Psychometric measuring instrument/questionnaire

Approved Name	Normal Application
The Satisfaction with Life Scale (SWLS)	Participants own assessment of their global life satisfaction

Reliability	Validity
Within a South African sample $\alpha=0.70$ and $0.86$ for the English version (Wissing & van Eeden, 2002).	Within a South African sample good construct validity was determined for the English version (Wissing & van Eeden, 2002).

Psychometric measuring instrument/questionnaire	
Approved Name	Normal Application
Positive Affect and Negative Affect Schedule (PANAS)	A self-report measure measuring positive and negative affect.
Reliability	Validity
$\alpha=0.85$ for PA and $\alpha=0.89$ for NA within an adult population in the UK (Crawford & Henry, 2004).	Factorial and external evidence of convergent and discriminant validity was established (Watson et al., 1988; Crawford & Henry, 2004).

Psychometric measuring instrument/questionnaire

Approved Name	Normal Application
---------------	--------------------

Meaning in Life Questionnaire (MLQ)	A self-report measure assessing the presence of and search for meaning in life respectively
Reliability α=0.85 for MLQ – Presence subscale and α=0.84 for MLQ – Search subscale in a South African sample (Temane, Khumalo, & Wissing, 2014)	Validity Construct, convergent and discriminant validity of the MLQ was indicated in mainly Western student samples (Steger et al., 2006)

Other Relevant Information	
Psychometric measuring instrument/questionnaire	
Approved Name	Normal Application
Mental Health Continuum – Short form (MHC-SF)	Measuring positive mental health terms of three subscales, namely Social Wellbeing, Psychological Well-being and Emotional Well-being
Reliability α = 0.72 for the Setswana version of the scale (Keyes, et al., 2008)	Validity For a mainly Setswana-speaking group (Keyes, et al., 2008) construct, convergent and discriminant validity of the scale was found

Validation for target group:

Is the measuring instrument validated for the target group (e.g. for South African circumstances)? Provide full details. Please mark with X in the appropriate box and provide details.

Yes	No	Details
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>SWLS – Reliability and validity indicators will be calculated for the present sample. Wissing and van Eeden (2002) obtained sufficient reliability scores (alpha values between 0.70 and 0.86) and construct validity with the use of the English SWLS within a South African sample.</p> <p>PANAS – Reliability and validity indicators will be calculated for the present sample. Factorial and external evidence of convergent and discriminant validity was established within an adult population in the UK (Crawford &amp; Henry, 2004).</p> <p>MLQ – Reliability and validity indicators will be calculated for the present sample. Good validity was determined were Temane,</p>

Khumalo, and Wissing (2014) investigated the psychometric properties of the MLQ in a South African sample.

MHC-SF – Reliability and validity indicators will be calculated for the present sample. The Setswana version of this scale was validated by Keyes et al. (2008) and construct, convergent and discriminant validity of the scale was found for a mainly Setswana-speaking group. While the overall scale score was shown to be reliable, subscale scores were not reliable (Schutte & Wissing, 2017). In line with these findings, the present study will only make use of the overall scores of the MHC-SF.

Remember to save your document regularly as you complete it!

### **Sec 6i: Possible impact on the environment**

Please complete this section if the study to be undertaken will have any impact on the environment as determined by evaluation of the study using the risk level descriptor for environmental impact. If this section is to be completed, please ensure that a completed copy of the risk level descriptor for environmental impact is attached to the application that is submitted.

Please indicate the risk level of the current study in terms of environmental impact.

Category	Description	Select
0	<p><b>None</b>  <b>Effect on the environment:</b> Potential for incidental and/or transient changes to valued flora and fauna, ecosystem processes and structure, including ecosystem services; <b>or</b>  <b>Legal implications:</b> No legal implications. No need to apply for any environmental authorisations; <b>or</b>  <b>Potential impact on reputation of the NWU:</b> No discernible impact on reputation.</p>	<input checked="" type="checkbox"/>
1	<p><b>Mild</b>  <b>Effect on the environment:</b> Potential for acceptable, short term changes to valued flora and fauna, ecosystem processes and structure, including ecosystem services; <b>or</b>  <b>Legal implications:</b> Complaints for the public and/or regulator. No need to apply for any environmental authorisations; <b>or</b>  <b>Potential impact on reputation of the NWU:</b> Potential impact on reputation.</p>	<input type="checkbox"/>
2	<p><b>Medium</b>  <b>Effect on the environment:</b> Potential for acceptable, longer term changes to valued flora and fauna, ecosystem processes and structure, including ecosystem services; <b>or</b>  <b>Legal implications:</b> Departmental enquiry and correspondence. Environmental authorisation may be required; <b>or</b>  <b>Potential impact on reputation of the NWU:</b> Limited, reputation impacted with small number of people.</p>	<input type="checkbox"/>
3	<p><b>Severe</b>  <b>Effect on the environment:</b> Potential for <u>un</u>acceptable, short term changes to valued flora and fauna, ecosystem processes and structure, including ecosystem services; <b>or</b>  <b>Legal implications:</b> Notification of intent to issue a directive. Environmental authorisation required; <b>or</b>  <b>Potential impact on reputation of the NWU:</b> Reputation impacted with some stakeholders.</p>	<input type="checkbox"/>
4	<p><b>Very severe</b>  <b>Effect on the environment:</b> Potential for <u>un</u>acceptable, longer term changes to valued flora and fauna, ecosystem processes and structure, including ecosystem services; <b>or</b>  <b>Legal implications:</b> Withdrawal of permit. Environmental authorisation required; <b>or</b>  <b>Potential impact on reputation of the NWU:</b> Reputation impacted with significant number of key stakeholders.</p>	<input type="checkbox"/>
5	<p><b>Intolerable</b>  <b>Effect on the environment:</b> Potential for <u>irreversible</u> changes to valued flora and fauna, ecosystem processes and structure, including ecosystem services; <b>or</b>  <b>Legal implications:</b> Referral to the National Prosecuting Authority. Potential investigation by authority with prosecution and fines. Environmental authorisation required; <b>or</b>  <b>Potential impact on reputation of the NWU:</b> Reputation impacted with majority of key stakeholders.</p>	<input type="checkbox"/>

Explain the type of environmental impact that the study will have.

Not applicable

Name and explain *all the possible risks* for the environment that may occur during the research. Use the template included in the approved risk level descriptor document for studies with environmental impact to guide you into identifying all the possible types of risk as well as the probability and magnitude of harm. Please also include *all the precautions* that will be taken in order to mitigate the risks to the environment.

<b>Risks</b> (e.g. effect on environment, legal implications, potential impact on the reputation of the NWU, etc.).	<b>Precautions</b> (When describing these precautions be clear on how they will mitigate all the identified risks)
Not Applicable	Not applicable

Remember to save your document regularly as you complete it!

## SECTION 7: OTHER ETHICS EVALUATIONS AND RISK INSURANCE

### Sec 7a: Evaluation by other Research Ethics Committees

Please complete this section if this study has been or will be evaluated by any other research ethics committees, for example with multi-institutional studies. Provide information about all research ethics committees involved in the review and approval of this study.

Name of the Research Ethics Committee	Date of Approval/In Process	Contact Number or E-mail address of the research ethics committee	Approval no.
Not Applicable	Not applicable	Not applicable	Not applicable

Remember to save your document regularly as you complete it!

### Sec 7b: Risk Insurance

The North-West University has insurance at its disposal to cover the risk of claims against the University in case of damage to participants due to professional negligence – the maximum cover is currently R100 million per annum (all studies included). However, this is only available if studies are ethically approved and researchers have kept to the proposal.

Describe the potential risks to which the participants/researchers/assistants/field workers are going to be subject to in so far as complications may lead to summonses.

Type	Risks
Participants	Although the content of the questionnaire in the original FORT3 study relates to psychosocial well-being, some participants may have experienced a negative emotional response to some of the questions. No participants in the samples indicated a need for debriefing, where data had already been collected. Counsellors and psychologists were available for debriefing for those participants who might or may experienced a need for it.

Researchers	FORT 3: Minimal risk is foreseen with regard to participation in the study. However, some participants may have experienced/ may experience a negative emotional reaction which could impact on the researchers. The questionnaires relate to psychosocial well-being. The researchers could or can consult with the counsellors and psychologists who were or will be arranged for the debriefing
Assistants and/or field workers	FORT 3: Minimal risk is foreseen with regard to participation in the study. However, the questionnaires relate to psychosocial well-being, some participants may have experienced a negative emotional reaction which could impact on the assistants and/or fieldworkers. The assistants and/or fieldworkers could or can consult with the counsellors and psychologists who were or will be arranged for the debriefing should they find the need for it.
Others	<a href="#">Click here to enter text.</a>

These potential risks are covered by:

North-West University	<input checked="" type="checkbox"/>
Sponsor/s	<input type="checkbox"/>
Other: Specify: <a href="#">Click here to enter text.</a>	<input type="checkbox"/>

Is this insurance adequate (measured against the potential risks)?

Please mark with X in the appropriate box.

Yes	No	If "No", indicate what will be done to ensure that there is sufficient coverage?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<a href="#">Click here to enter text.</a>

Remember to save your document regularly as you complete it!

**SECTION 8: DECLARATIONS**

Applications and declaration are filled in and signed by:

Sec 8a: Study Leader

Sec 8b: Statistical Consultant

Sec 8c: Research Director

The pages with declarations and signatures must be **scanned** with this form.

[SCAN ALL SIGNED DECLARATIONS]

Health Research Ethics Application

<b>Study Leader</b> (Title, Initials and Surname)	<b>Study Title</b> (see § 0)
Miss. Amanda Cromhout	<b>Concordance between goals and meaning in the community domain of life: Associations with well-being and socio-demographic variables</b>

**NWU Ethics Number**  
NWU-?????-??-??

**Sec 8a: Study Leader**

Application and Declarations by Study Leader

I, the undersigned, hereby apply for approval of the research study as described in the preceding proposal and declare that:

The information in this application is, to the best of my knowledge, correct and that no ethical codes will be violated with the study;

I will make sure that the study is managed ethically justifiably from start to finish; In the case of human participants;

I will put it clearly to all participants that participation (including assent) in any research study is absolutely voluntary and that no pressure, of whatever nature, will be placed on any potential participant to take part;

I will put it clearly to all participants that any participant may withdraw from the study at any time and may ask that his/her data no longer be used in the study, without stating reasons and without fear of any form of prejudice;

every participant who takes part in the study will receive the accompanying form for informed consent and it will be ensured that every participant understands the information (including the process and risks) fully;

every participant will sign the informed consent in writing before the study commences, or a witness will stand in on behalf of the participant when the participant is illiterate;

- the written permission of the parent or legal guardians of all minor subjects will be obtained before the research commences;
- any foreseeable risk is restricted to the minimum, any permanent damage is avoided as far as possible and that appropriate precautions and safety measures are in place;
- confidentiality of all the information of all participants will be respected and ensured;
- I and all co-workers/assistants/field workers are appropriately qualified, capable and legally competent to implement the proposed studies/procedures/interventions;
- I will not deviate from the approved proposal and that I understand approval for the study will be cancelled if I deviate from the proposal without the approval of the Health Research Ethics Committee;
- the study is scientifically justifiable;
- where necessary, all contracts, permits and the applicable documents of relevance will be obtained before the research commences;
- I will ensure that all data/biological samples are stored safely and remain in the possession of the North-West University;
- I will report in writing any incidents or adverse events/serious adverse events that occur during the study without delay to the Health Research Ethics Committee;
- I undertake to respect intellectual property rights throughout and to avoid any form of plagiarism;
- I will obtain permission for amendments to the protocol and report annually (or more often for medium and high-risk studies) to the Health Research Ethics Committee on the prescribed monitoring report concerning progress of the study;
- I will notify the Health Research Ethics Committee should the study be terminated.

Name (Title, Full Names & Surname)	Qualifications
Dr. Lusilda Schutte	PhD in Psychology M. Sc. Statistics

Click here to enter a date.	
Signature	Date

Remember to save your document regularly as you complete it!

Health Research Ethics Application

<b>Study Leader</b> (Title, Initials and Surname)	<b>Study Title</b> (see § 0)
Miss. A. Cromhout	Concordance between goals and meaning in the community domain of life: Associations with well-being and socio-demographic variables

**NWU Ethics Number**  
NWU-?????-??-??

**Sec 8b: Statistical Consultant (If applicable)**

The statistician of the Statistical Consultation Service of the North-West University completes this section (where applicable).

Have you ascertained that the statistical analyses to be used in this study is justifiable according to your judgement?

Please mark with X in the appropriate box and provide details.

Yes	No	Remarks
<input checked="" type="checkbox"/>	<input type="checkbox"/>	The co-study leader, Dr. Lusilda Schutte, has a master’s degree in statistics and previously has worked for Statistical Consultation Services at North West University. Her experience is in the analysis conducted in this study. She also focusses in social statistics in her research. According to Dr. Schutte, the analysis conducted in this study is justifiable.

Name (Title, Full Names & Surname)	Qualifications
Dr. Lusilda Schutte	PhD in Psychology M. Sc. Statistics

	Click here to enter a date.
Signature	Date

Remember to save your document regularly as you complete it!

Health Research Ethics Application

<b>Study Leader</b> (Title, Initials and Surname)	<b>Study Title</b> (see § 0)
Miss. Amanda Cromhout	Concordance between goals and meaning in the community domain of life: Associations with well-being and socio-demographic variables

**NWU Ethics Number**  
NWU-?????-??-??

**Sec 8c: Research Director (School director if Education request)**

I, the undersigned, hereby declare that the above study has been reviewed by a Scientific/Proposal Committee and may proceed to the Health Research Ethics Committee and that the Study Leader/Researcher has enough physical facilities, equipment and money at his/her disposal to implement and complete the study.

Research Director:

The director of the research entity signs here.

Name (Title, Full Names & Surname)	Capacity	Director:
Dr. Petra Bester	Research AUTHeR	

	Click here to enter a date.
Signature	Date

**Remember to save your document regularly as you complete it!**

Credits

Compiled by the Faculty of Health Sciences Ethics Office for Research, Training and Support

**Approval letter of HREC application**

Ms A Cromhout  
Positive Psychology  
AUTHeR

Private Bag X6001, Potchefstroom  
South Africa 2520

Tel: 018 299-1111/2222  
Web: <http://www.nwu.ac.za>

**Health Sciences Ethics Office for Research,  
Training and Support**

**North-West University Health Research Ethics  
Committee (NWU-HREC)**  
Tel: 018-285 2291  
Email: [Wayne.Towers@nwu.ac.za](mailto:Wayne.Towers@nwu.ac.za)

21 May 2019

Dear Ms Cromhout

**APPROVAL OF YOUR APPLICATION BY THE NORTH-WEST UNIVERSITY  
HEALTH RESEARCH ETHICS COMMITTEE (NWU-HREC) OF THE  
FACULTY OF HEALTH SCIENCES**

**Ethics number: NWU-00010-19-S1**

Kindly use the ethics reference number provided above in all future correspondence or documents submitted to the administrative assistant of the North-West University Health Research Ethics Committee (NWU-HREC) secretariat.

**Study title: Concordance between goals and meaning in the community domain of life: Association with well-being and social-demographic variables**

**Study leader: Ms A Cromhout**

**Student: T Booyeen-22826319**

**Application type: Single study**

**Risk level: Minimal (monitoring report required annually)**

**Expiry date: 31 May 2020 (Monitoring report is due at the end of May annually until completion)**

You are kindly informed that after review by the NWU-HREC, Faculty of Health Sciences, North-West University, your ethics approval application has been successful and was determined to fulfil all requirements for approval. Your study is approved for a year and may commence from 21/05/2019. Continuation of the study is dependent on receipt of the annual (or as otherwise stipulated) monitoring report and the concomitant issuing of a letter of continuation. A monitoring report should be submitted two months prior to the reporting dates as indicated i.e. annually for minimal risk studies, six-monthly for medium risk studies and three-monthly for high risk studies, to ensure timely renewal of the study. A final report must be provided at completion of the study or the NWU-HREC, Faculty of Health Sciences must be notified if the study is temporarily suspended or terminated. The monitoring report template is obtainable from the Faculty of Health Sciences Ethics Office for Research, Training and Support at [Ethics-HRECMonitoring@nwu.ac.za](mailto:Ethics-HRECMonitoring@nwu.ac.za). Annually, a number of studies may be randomly selected for an internal audit.

The NWU-HREC, Faculty of Health Sciences requires immediate reporting of any aspects that warrants a change of ethical approval. Any amendments, extensions or other modifications to the proposal or other associated documentation must be submitted to the NWU-HREC, Faculty of Health Sciences prior to implementing these changes. These requests should be submitted to [Ethics-HRECApplies@nwu.ac.za](mailto:Ethics-HRECApplies@nwu.ac.za) with a cover letter with a specific subject title indicating, "Amendment request: NWU-XXXXX-XX-XX". The letter should include the title of the approved study, the names of the researchers involved, the nature of the amendment/s being made (indicating what changes have been made as well as where they have been made), which documents have been attached and any further explanation to clarify the amendment request being submitted. The amendments made should be indicated in **yellow highlight** in the amended documents. The **e-mail**, to which you attach the documents that you send, should have a **specific subject line** indicating that it is

an amendment request e.g. "Amendment request: NWU-XXXXX-XX-XX". This e-mail should indicate the nature of the amendment. This submission will be handled via the expedited process.

Any adverse/unexpected/unforeseen events or incidents must be reported on either an adverse event report form or incident report form to [Ethics-HRECIncident-SAE@nwu.ac.za](mailto:Ethics-HRECIncident-SAE@nwu.ac.za). The e-mail, to which you attach the documents that you send, should have a specific subject line indicating that it is a notification of a serious adverse event or incident in a specific project e.g. "SAE/Incident notification: NWU-XXXXX-XX-XX". Please note that the NWU-HREC, Faculty of Health Sciences has the prerogative and authority to ask further questions, seek additional information, require further modification or monitor the conduct of your research or the informed consent process.

The NWU-HREC, Faculty of Health Sciences complies with the South African National Health Act 61 (2003), the Regulations on Research with Human Participants (2014), the Ethics in Health Research: Principles, Structures and Processes (2015), the Belmont Report and the Declaration of Helsinki (2013).

We wish you the best as you conduct your research. If you have any questions or need further assistance, please contact the Faculty of Health Sciences Ethics Office for Research, Training and Support at [Ethics-HRECApply@nwu.ac.za](mailto:Ethics-HRECApply@nwu.ac.za).

Yours sincerely



Digitally signed by Wayne  
Towers  
Date: 2019.05.21  
22:15:45 +02'00'

Prof Wayne Towers  
Chairperson: NWU-HREC



Digitally signed  
by Prof Minnie  
Greeff  
Date: 2019.05.23  
21:31:01 +02'00'

Prof Minnie Greeff  
Head of Health Sciences Ethics  
Office for Research, Training and  
Support

#### **1.4 Summary**

Chapter 1 described the first phase towards the development of a research proposal that was approved by the Health Research Ethics Committee of the North-West University. This study could commence when all necessary approvals from different panels were obtained. The manuscript in article format on the concordance between goals and meaning in the community domain of life and their associations with well-being and socio-demographic variables will be presented in the Chapter 2.

## Chapter 2

### 2.1 Manuscript in Article Format

This mini-dissertation has been done in article format as indicated in the 2019 General Academic Rules (A4.3.2., A4.4.2., A4.10.5, and A4.10.8) of the North-West University. The manuscript and article style follow the requirements of the specific journal, The Journal of Positive Psychology, to which it will be submitted, with some exceptions – inter alia to ease the reading of this dissertation, including the numbering of pages and the use of font type Times New Roman. In addition, the relevant tables and figures are included in the text instead of adding them separately at the end of the manuscript and the manuscript is somewhat longer than the prescribed length for mini-dissertation purposes.

### 2.2 Guidelines to authors for The Journal of Positive Psychology

**“About the Journal:** The Journal of Positive Psychology is an international, peer-reviewed journal publishing high-quality, original research. Please see the journal's Aims & Scope for information about its focus and peer-review policy. Please note that this journal only publishes manuscripts in English.

The Journal of Positive Psychology accepts the following types of article:

#### **Peer Review**

Taylor & Francis is committed to peer-review integrity and upholding the highest standards of review. Once your paper has been assessed for suitability by the editor, it will then be single blind peer reviewed by independent, anonymous expert referees. Find out more about what to expect during peer review and read our guidance on publishing ethics.

#### **Preparing Your Paper**

##### **Structure**

Your paper should be compiled in the following order: title page; abstract; keywords; main text introduction, materials and methods, results, discussion; acknowledgments; declaration of interest statement; references; appendices (as appropriate); table(s) with caption(s) (on individual pages); figures; figure captions (as a list).

### **Word Limits**

Please include a word count for your paper.

A typical paper for this journal should be no more than 7500 words, inclusive of tables, references, figure captions, endnotes.

### **Style Guidelines**

Please refer to these quick style guidelines when preparing your paper, rather than any published articles or a sample copy.

Any spelling style is acceptable so long as it is consistent within the manuscript.

Please use single quotation marks, except where ‘a quotation is “within” a quotation’.

Please note that long quotations should be indented without quotation marks.

Section headings should be concise.

### **Formatting and Templates**

Papers may be submitted in Word or LaTeX formats. Figures should be saved separately from the text. To assist you in preparing your paper, we provide formatting template(s). Word templates are available for this journal. Please save the template to your hard drive, ready for use.

A LaTeX template is available for this journal. Please save the LaTeX template to your hard drive and open it, ready for use, by clicking on the icon in Windows Explorer.

If you are not able to use the template via the links (or if you have any other template queries) please contact us [here](#).

## References

Please use this reference guide when preparing your paper.

An EndNote output style is also available to assist you.

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## Checklist: What to Include

1. **Author details.** All authors of a manuscript should include their full name and affiliation on the cover page of the manuscript. Where available, please also include ORCiDs and social media handles (Facebook, Twitter or LinkedIn). One author will need to be identified as the corresponding author, with their email address normally displayed in the article PDF (depending on the journal) and the online article. Authors' affiliations are the affiliations where the research was conducted. If any of the named co-authors moves affiliation during the peer-review process, the new affiliation can be given as a footnote. Please note that no changes to affiliation can be made after your paper is accepted. Read more on authorship.
2. Should contain an unstructured abstract of **150 words**.
3. You can opt to include a **video abstract** with your article. Find out how these can help your work reach a wider audience, and what to think about when filming.
4. **Between 4 and 10 keywords.** Read making your article more discoverable, including information on choosing a title and search engine optimization.

5. **Funding details.** Please supply all details required by your funding and grant-awarding bodies as follows:

**For single agency grants**

This work was supported by the [Funding Agency] under Grant [number xxxx].

**For multiple agency grants**

This work was supported by the [Funding Agency #1] under Grant [number xxxx]; [Funding Agency #2] under Grant [number xxxx]; and [Funding Agency #3] under Grant [number xxxx].

6. **Disclosure statement.** This is to acknowledge any financial interest or benefit that has arisen from the direct applications of your research. Further guidance on what is a conflict of interest and how to disclose it.

7. **Data availability statement.** If there is a data set associated with the paper, please provide information about where the data supporting the results or analyses presented in the paper can be found. Where applicable, this should include the hyperlink, DOI or other persistent identifier associated with the data set(s). Templates are also available to support authors.

8. **Data deposition.** If you choose to share or make the data underlying the study open, please deposit your data in a recognized data repository prior to or at the time of submission. You will be asked to provide the DOI, pre-reserved DOI, or other persistent identifier for the data set.

9. **Geolocation information.** Submitting a geolocation information section, as a separate paragraph before your acknowledgements, means we can index your paper's study area accurately in JournalMap's geographic literature database and make your article more discoverable to others. More information.

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Concordance between goals and meaning in the community domain of life:

Associations with well-being and socio-demographic variables

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### Abstract

The present study aimed to explore patterns of alignment of important goals and meaningful things in life and their association with indicators of well-being and socio-demographic variables in the community domain of life. The qualitative responses of participants ( $N = 585$ ) to the questions on goals and meaning were transformed into quantitative data, implementing a coding system developed by Delle Fave et al. (2011). In this coding system, all verbal expressions of participants were assigned a basic code. Codes were then categorised and grouped into life domains, including the Community domain. The majority of participants did not mention community in any of their responses. Statistically significant associations between alignment patterns and scores on the Meaning in Life Questionnaire, Presence subscale, and the Mental Health Continuum - Short Form, Total scale, were found, where mentioning community in goals and meaning was associated with higher scores. Qualified support was found for the self-concordance model.

*Keywords:* concordance, meaning, goals, community, well-being, socio-demographic variables

Subject classification codes: Positive Psychology

150 words.

Concordance between goals and meaning in the community domain of life: Associations with well-being and socio-demographic variables

### **Hedonic and Eudaimonic Dimensions of Well-being**

According to the Mental Health Continuum model (Keyes, 1998, 2006) that distinguishes between languishing, moderate mental health, and flourishing, psycho-social well-being represents the upper end of the continuum (Temane, Khumalo, & Wissing, 2014). Positive psychology theories focus on psycho-social well-being constructs such as basic psychological needs and motivation (Deci & Ryan, 2000), hope (Snyder, 2002), purpose and meaning (Steger, Frazier, Oishi, & Kaler, 2006), and self-determination (Deci & Ryan, 2008). Two main perspectives are discerned, namely hedonic well-being (Kahneman, Diener, & Schwarz, 1999; Ryan & Deci, 2001) and eudaimonic well-being (Waterman 2008, 2014). The hedonic approach describes well-being in terms of evading pain and experiencing pleasure (Ryan & Deci, 2001), and the eudaimonic approach focuses on meaning, a person's self-realisation, and being fully functioning (Ryan & Deci, 2001; Waterman, 2008).

In the Mental Health Continuum model, Keyes (1998, 2002, 2007) discerns three components of mental well-being, namely emotional well-being (EWB), personal/psychological well-being (PWB), and social well-being (SWB), with EWB linking with the hedonic perspective and PWB and SWB associated with the eudaimonic perspective. EWB in this model includes positive emotions, interest in life, and life satisfaction. PWB includes self-acceptance, autonomy, personal growth, positive relations, environmental mastery, and purpose in life. Since SWB is specifically relevant to this study, each of the components of SWB will be described briefly. SWB consists of (a) social acceptance, which refers to the positive attitudes that the individual feels towards others; (b) social actualisation, which is the belief that society can grow into something better; (c) social contribution, which refers to the belief that daily activities of the individual community member contribute to

society and that the community values those activities; (d) social coherence, which involves the fact that the society works in a way that makes sense to the individual; and (e) social integration, referring to the reciprocal way people feel part of a community and the support and harmony shown towards and experienced from each other.

In the eudaimonic perspective, goals and meaning are considered core facets of well-being. These constructs were studied widely (e.g., Delle Fave, Brdar, et al., 2013; Hennecke & Brandtstädter, 2017; Russo-Netzer, 2018).

### **Goals and Meaning as Facets of Eudaimonic Well-being**

Previous research indicated that having goals and experiencing meaning are generally associated with higher levels of well-being (Fredrickson, 2013; Keyes et al, 2008; Schnell, Hoge, & Pollet, 2013; Van Schalkwyk & Wissing, 2013). The self-concordance model (Sheldon & Elliot, 1999) suggests that when individuals' goals and the things they perceive as meaningful in their lives are aligned, they will experience higher levels of well-being. Meaning and goals as core facets of eudaimonic well-being, as well as the self-concordance model, will now each be introduced.

### **Meaning**

The experience of meaning is essential to flourish (Russo-Netzer, 2018). Huta (2017) indicated that there is a difference between the experience of meaning and the experience of happiness, and that meaning experiences are about aspects such as congruence and connectedness. Russo-Netzer (2018) indicated that when meaning was prioritised, it was positively associated with aspects such as life satisfaction, sense of coherence, positive emotions, and presence of meaning. Ryff (1989) and Ryff and Singer (1998, 2008) identified purpose in life as one of the six dimensions of psychological well-being.

Frankl (1962, 1969) suggested that meaning in life is a primary force that motivates human behaviour, and that meaning can be found even amid suffering. According to Wong

(1998, 2011), the main components of meaning are purpose, understanding, responsible action, and enjoyment/evaluation. Wong (2012) referred to meaning as people's experience that there is reasonable consistency in their lives and their worlds, and that opportunities for fulfilment and connectedness will arise throughout one's lifetime in line with people's core values. In Steger's meaning model (2012), he distinguished between the presence of meaning, which refers to the person's subjective experience of the meaningfulness of his or her life, and the search for meaning, which refers to a person's striving to find meaning or acquire a better understanding of the meaning of their life. Experiencing meaning in life can be understood as having a sense of purpose, a life of significance and value, and a life that makes sense and is coherent (Heintzelman & King, 2014; Steger, 2012). Another perspective on meaning is the relationality-meaning model of well-being (Wissing, 2014; Wissing & Delle Fave, 2013) which distinguishes between meaning in life (i.e., where and when we acknowledge meaning in life), meaning of life (i.e., being attached to something ultimately valuable), and meaning to life (i.e., what we do to realise our values and how we express that towards our relations and activities).

### **Goals**

Goals and purpose can also be viewed as intertwined with eudaimonic well-being (Delle Fave, Brdar, et al., 2013; Liversage, 2015). Wilson, Wissing, Schutte, and Kruger (2018) indicated that goals and the underlying motivation for these goals for adults in deprived situations in an African context gave insight into how seemingly extrinsic material goals may be linked with interpersonal values. The participants in this study had to indicate the three most important goals in their lives and had to give reasons why these goals were important to them. Environmental considerations, meeting social needs, financial security, generative caring, and relational goals were themes that emerged from the data. The results implied that goal motivations were not simply intrinsic processes pointed at personal need

satisfaction, but that they had a strong interdependent emphasis rooted in existing relational ties.

Goals can be described as future outcomes that individuals want to achieve, maintain, or avoid (Gebhardt, 2006). Goals can guide behaviour and induce well-being (Monzani et al., 2015). Goals are linked with constructs such as purpose and meaning (Klinger, 2012), hope (Snyder, 2002), and self-determination (Deci & Ryan, 2001, 2008). MacLeod (2013) proposed that well-being is goal-based and is associated with how people approach life. When desired goals are achieved by directed actions, meaning will be the outcome (Park, 2010). A sense of well-being, self-esteem and satisfaction are derived from factors that increase the possibility of goal achievement (Brandtstädter, 2006). Klug and Maier (2015) indicated that successful goal-striving is associated with subjective well-being. Gray, Ozer, and Rosenthal (2017) suggested that the pursuit of personal goals can lead to increased well-being, meaning, and a psychologically fulfilling life.

### **The Self-Concordance Model**

Individuals will experience higher levels of psychological well-being if their goals and what they find meaningful are well-aligned (Sheldon & Elliot, 1999). In domains where people experience the gratification of psychological needs, they tend to create and pursue more self-concordant goals (Milyavskaya, Nadolny, & Koestner, 2014). Sheldon and Elliot (1999) contended that individuals commit to goals that reflect their values and interests and then put more constant effort into achieving those goals. When people select to pursue self-concordant goals, moving towards goal-achievement is fulfilling in itself (Sheldon & Elliot, 1999). Sheldon and Kasser (2001) indicated that the pursuit of goals for authentic, self-concordant reasons can result in greater goal-achievement and higher levels of well-being. There is little information about the concordance of goals and what is meaningful to people in

specific life domains, specifically also in the community domain of life, and how such alignment is associated with indicators of well-being and socio-demographic variables.

### **Community Domain of Life**

Most research has been conducted on individual aspects of well-being within communities, while neglecting the communal aspects of community well-being (Lee & Kim, 2016). Wiseman and Brasher (2008) suggested that factors such as social, economic, environmental, cultural, and political conditions can contribute to community well-being. Keyes and Lopez (2002) indicated the importance of social well-being for mental, emotional, and psychological well-being. Keyes (1998) indicates that social well-being (social coherence, social actualisation, social integration, social acceptance, and social contribution) is positively associated with an individual's happiness, generosity, optimism, life satisfaction, physical health as well as their perceptions of trust and safety within their communities. These social well-being dimensions were also associated with their levels of involvement in their communities (Keyes, 1998).

People are directed by aspects such as socio-cultural meaning patterns, cultural practices, upbringing, and personal and relational needs to achieve well-being (Kitayama, Karasawa, Curhan, Ryff, & Markus, 2010). In a study by Friedman et al. (2019), a community-based programme aimed at increasing levels of eudaimonic well-being in older adults showed increased levels of personal growth, positive relations, and self-acceptance. In their study on need fulfilment and social capital and how these provide a sense of community and well-being, Yetim and Yetim (2014) indicated that a sense of community and individual well-being were predicted by that need fulfilment, as well as variables of social capital. Theodori (2009) indicated that satisfaction and attachment to the community are associated with higher levels of individual well-being.

### **Socio-demographic Variables**

When dealing with socio-demographic variables, it must be kept in mind that context is important, since the influence of socio-demographic variables can vary from context to context. For example, Agrawal et al. (2011) found that socio-demographic variables such as gender, education, age, income, marital status, work status, and religion affected subjective well-being minimally in a sample from urban India. Koukouli, Valchonikoli, and Philalithis (2002) found associations between socio-demographic variables such as age, marital and employment status, and education and different levels of functioning. On the other hand, Delle Fave et al. (2011) suggested that cultural contexts and socio-demographic variables are to be considered if well-being is to be understood and enhanced. This is especially important when one considers the South African context where aspects such as socio-economic variables and cultural diversity influence the lives of South Africans.

The patterns of alignment of goals and meaning in the community domain of life and their associations with indicators of well-being and socio-demographic variables are greatly unexplored.

### **The Present Study**

Having goals to accomplish (Klug & Maier, 2015) and the experience of meaning in life (Martela & Steger, 2016; Steger et al., 2006; Wong, 2010) are associated with higher levels of well-being. According to the self-concordance model (Sheldon & Elliot, 1999), when individuals' goals and the things they experience as meaningful are aligned, they are likely to experience higher levels of well-being. There is a gap in knowledge on the concordance of goals and meaning in the community domain of life and how these are associated with indicators of well-being and socio-demographic variables. Four alignment patterns, as distinguished by Wissing, Carlquist, Martos, and Schutte (2017), were explored

in the community domain of life, namely: no-goal-no-meaning, both-goal-and-meaning, only-goal-no-meaning, and only-meaning-no-goal.

This study explored how these patterns of alignment of goals and meaning are linked with well-being indicators and socio-demographic variables as manifested in the community domain of life among adults in a South African context. Specifically, this study explored (a) the frequency of mentioning community as a goal or as a meaningful thing, or as a reason for a goal or meaningful thing, (b) the associations between alignment patterns and socio-demographic variables (c) the associations between alignment patterns and indicators of well-being, and (d) the interaction between alignment patterns and socio-demographic variables and their associations with well-being indicators. These findings will contribute to a better understanding of the different alignment patterns between goals and meaning and how they are associated with indicators of well-being and socio-demographic variables. This study may further contribute to the development of strategies to facilitate alignment of goals and meaning, while also considering the influence of socio-demographic variables, in order to enhance well-being in the community domain of life. ‘Concordance’ and ‘alignment’ will be used as synonyms in this study.

## **Method**

### **Research Design and Participants**

A mixed methods convergent parallel research design (cf. Creswell & Plano Clark, 2011; Plano Clark, 2017) was implemented. Participants ( $N = 585$ ) were recruited with the snowball method of data gathering. This involved an adult, multi-cultural, South African sample. For the present study, participants had to: (a) be South African citizens, (b) be 18 years of age or older, (c) have at least Grade 12 level of education, and (d) have sufficient skill in reading and writing English (as indicated by a grade 12 level of education), since questionnaires were administered in English. See Table 1 for the socio-demographic profile

of the sample. Where totals do not add up to a hundred percent, it is indicative of participants who did not answer the question.

Table 1

*Socio-demographic Data of Participants on the Community Domain of Life*

<b>Gender</b>					
<b>Male</b>			<b>Female</b>		
37.9%			61.9%		
<b>Age (<math>M = 42.15</math>; <math>SD = 11.508</math>)</b>					
<b>18-25</b>	<b>26-40</b>		<b>41-60</b>	<b>60+</b>	
8.7%	36%		52%	2.7%	
<b>Marital status</b>					
<b>Single</b>	<b>Married</b>	<b>Co-habiting</b>	<b>Divorced/ Separated</b>	<b>Widowed</b>	<b>Not indicated</b>
24.8%	62.7%	3.2%	5.8%	1.9%	1.5%
<b>Educational level</b>					
<b>Secondary</b>			<b>Tertiary</b>		
37.6%			61.7%		
<b>Standard of living</b>					
<b>Above average</b>	<b>Average</b>		<b>Below average</b>	<b>Not indicated</b>	
25.1%	65.8%		5.5%	3.6%	

## Measures

### Quantitative measures.

*Socio-demographic questionnaire.* Socio-demographic information such as age, gender, level of education, standard of living, and marital status was collected.

***Satisfaction with Life Scale (SWLS).*** The Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985) is a 5-item scale measuring a respondent's level of global life satisfaction as it is experienced on a cognitive level on a 7-point Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The items are positively worded and total scores between 5 and 35 are possible. The SWLS (Diener et al., 1985) showed good psychometric properties with a test-retest reliability score of .82 and sufficient internal consistency reliability (Cronbach's alpha = .87). In South-Africa, Wissing et al. (2010) found support for the validity and reliability of the Setswana version of the scale in a Setswana-speaking sample, with Cronbach's alpha values of .67 (Setswana-speaking group). For the present study, the scale had sufficient reliability with  $\alpha = .87$ .

***Positive-Negative Affect Schedule (PANAS).*** The PANAS (Watson, Clark, & Tellegen, 1988) consists of 20 items measuring positive affect (PA; 10 items, e.g., attentive, excited) and negative affect (NA; 10 items, e.g., jittery, distressed). Participants had to indicate the extent to which they felt a series of positive and negative emotions on a Likert-type scale ranging from 1 (*very slightly or not at all*) to 5 (*extremely*). A score between 10 and 50 for each subscale is possible. For the PA subscale, the internal consistency reliability was  $\alpha = .82$  and for the NA subscale  $\alpha = .84$ , in a study by Humboldt, Monteiro, and Leal, (2017) among a group of older adults (75 years of age or older). The scale had sufficient reliability in the current sample with a Cronbach's alpha value of .83 for the PA subscale and .89 for the NA subscale.

***The Meaning in Life Questionnaire (MLQ).*** The MLQ (Steger, Frazier, Oishi, & Kaler, 2006) is a 10-item questionnaire with the Search for Meaning (MLQ-S) and Presence of Meaning (MLQ-P) subscales of 5 items each. Statements are rated on a 7-point Likert-type scale ranging from 1 (*absolutely untrue*) to 7 (*absolutely true*) and one item (item 9) should be reversely scored. The MLQ-S (items 2, 3, 7, 8, and 10) measures the strength of an

individual's yearning to find meaning and the MLQ-P (items 1, 4, 5, 6 and 9) measures how meaningful participants feel their lives are at present (Schulenberg, Strack, & Buchanan, 2011). Steger et al. (2006) found that the MLQ had acceptable reliability ( $\alpha = .82$  for the MLQ-P and  $\alpha = .88$  for the MLQ-S) among a multi-cultural sample of North American students. Both subscales demonstrated discriminant and convergent validity and test-retest reliability over periods of a month to a year was established (Steger et al., 2006).

Temane, Khumalo, and Wissing (2014) found that the MLQ had good reliability for the MLQ-P ( $\alpha = .85$ ) and the MLQ-S ( $\alpha = .84$ ), as well as good construct and convergent validity in a multi-cultural sample of South African undergraduate students. Schutte, Wissing, Ellis, Jose, and Vella-Brodrick (2016) applied Rasch analysis to the MLQ and found good psychometric properties in a sample of adults from South Africa, Australia, and New Zealand, but indicated that the response categories may be too many. Schutte et al. (2016) further suggested that the presence of meaning subscale displayed poor targeting, with the majority of the sample scoring highly while the scale did not provide much information for such high levels of the construct. In the present study, the MLQ-P had a Cronbach's alpha value of .82 and the MLQ-S an alpha value of .89.

***Mental Health Continuum-Short Form (MHC-SF)***. The MHC-SF (Keyes, 1998, 2002, 2006; Keyes et al., 2008) is a 14-item scale that measures positive mental health. The scale comprises three subscales, namely Emotional Well-Being (EWB, items 1-3), Social Well-Being (SWB, items 4-8), and Psychological Well-Being (PWB, items 9-14). The frequency of each statement as it occurred in the past month is measured on a 6-point Likert-type scale, ranging from 0 (*never*) to 5 (*every day*). The scale showed internal consistency reliability ( $\alpha > .80$ ) and construct validity for a sample of USA adults (Westerhof & Keyes, 2010). In the Netherlands, Lamers, Westerhof, Bohlmeijer, ten Klooster, and Keyes (2011)

found sufficient Cronbach's alpha values for the MHC-SF-Tot ( $\alpha = .89$ ) the EWB ( $\alpha = .83$ ), the PWB ( $\alpha = .83$ ), and SWB ( $\alpha = .74$ ).

In South Africa, Keyes et al. (2008) found sufficient reliability (Cronbach's alpha = .74 for the total scale) for the Setswana version of the scale in a mainly Setswana-speaking sample. In a more recent South African study, Schutte and Wissing (2017) validated the Setswana, English, and Afrikaans versions of the MHC-SF. A three-factor, bifactor exploratory structural equation modelling (bifactor ESEM) model displayed the best fit. Omega coefficients above .70 showed sufficient reliability for the overall scale, but sub-scale reliabilities remained insufficient with omega values less than .65 (Schutte & Wissing, 2017), which means that a global mental health factor can be used and interpreted, but caution should be applied when using the subscales. The MHC-Tot had a Cronbach's alpha value of .89 for the present study.

### **Qualitative measures.**

*Semi-structured open-ended questions on goals and meaning.* Semi-structured open-ended questions were used. They were formulated consistent with the methodology used by Delle Fave et al. (2011) in the Eudaimonic-Hedonic Happiness Investigation. The questions on goals and meaning were: (a) "Please list the three most important future goals for you" followed by "For each of them, please specify why it is important" and (b) "Please list the three things that you consider most meaningful in your present life" followed by "For each of them, please specify why it is meaningful (try to be as specific as possible)".

### **Procedure and Ethical Considerations**

The study (ethics approval number NWU-00010-19-S1) is an affiliated study of the FORT3 research project (Wissing, 2008, 2012) that was approved by the North-West University Health Research Ethics Committee (HREC), ethics approval number NWU 00002-07-A2. This study used quantitative and qualitative data of the FORT3 research

project that were collected concurrently from 2011 to 2014. Qualitative data were transformed into quantitative data by implementing the international coding system developed by Delle Fave et al. (2011, 2013, 2016). Trained post-graduate students acted as fieldworkers under the research team's supervision. These fieldworkers collected data all over South Africa, using the snowball sampling method. The aims of the research project were explained to the participants. Written informed consent was obtained. Participants then completed the research battery at a time and place that they found convenient. The informed consent forms and questionnaires were submitted separately to ensure that participants could not be identified. Participation was voluntary, and participants could withdraw from the study without adverse consequences. Data were captured and used anonymously. Participants did not receive incentives for participation. Minimal risk was foreseen. Debriefing was available should any participant indicate a need for it. Participants were provided with the contact details of the researchers in case of any questions. The management, storage, and destruction of data were supervised by the FORT3 PI (third author) and collaborator (fourth author). The FORT3 PI and collaborator stored the electronic data on password-protected computers to ensure data integrity.

### **Data Analysis**

Existing data from the FORT3 research project was used.

#### **Qualitative Data Analysis and Trustworthiness**

The qualitative responses of participants were transformed into quantitative data, using the coding system developed by Delle Fave et al. (2011) for an international research project. A basic code was assigned to all verbal responses. Codes were then categorised and grouped into life domains, among others the Community domain of life, on which this study will focus. Only codes and categories grouped under the Community life domain are relevant for purposes of this study. For the South African data coding, verbal responses were coded by

one trained coder and checked by another trained coder. The coders were trained by the third author who is part of the core group who leads the EHHI project, and co-developed and oversees the international EHHI coding system. Both coders signed confidentiality agreements. Inconsistencies were discussed to see if consensus can be reached. If consensus could not be reached, the third author was involved in a discussion to allocate the final code. In a few cases, coding difficulties were discussed with the leading developer of the coding system, Prof. A. Delle Fave, who helped to decide if new codes needed to be added to the international coding system.

For the sake of consistency and trustworthiness, the data coding was done by one person and then only checked by another. Trustworthiness was ensured by complying with the requirements of (a) credibility, (b) transferability, (c) dependability, and (d) confirmability (Lincoln & Guba, 2013). (a) **Credibility** (referring to accuracy and validity). The inclusion criteria of the FORT3 project strengthened the quality and accuracy of the data. This required the participants to be a) 18 years of age and older and b) having at least a Grade 12 level of education, increasing the probability of having the necessary cognitive and reflective capacity to answer the questions. A trained coder assigned codes to the data, then another trained coder verified it. If there were any discrepancies the PI (Prof. Wissing) was consulted to assign a final code. If there were still any difficulties, the final decision was made by Prof Delle Fave who is a co-developer of the EHHI coding system. When considering structural coherence Delle Fave et al. (2011) and Delle Fave, Wissing, et al. (2013) have shown that the open-ended questions in the EHHI instrument resulted in rich and relevant data. Since South African data were included in previous international studies, it is expected that the data will be adequate for purposes of this study.

(b) **Transferability** (referring to applicability in other contexts). There was a variety with regard to the participants within the dataset in terms of socio-demographic variables

such as gender, age, educational level, standard of living, and marital status. A limitation was that the sample had only South Africans and only a certain selection of the population. This limits the transferability of the findings to other groups.

(c) **Dependability** (referring to repeatability of findings). In this coding system, all verbal expressions of participants were assigned a basic code. Codes were then categorised and grouped into life domains. For the South African data coding, verbal responses of the data were coded by one trained coder and these codes were then checked by another trained coder. Both coders signed confidentiality agreements. Inconsistencies were discussed to see if consensus could be reached. If consensus could not be reached, the FORT3 PI was involved in the discussion to allot the final code. In a few cases, coding difficulties were discussed with the international expert and co-developer of the coding system, Prof. A. Delle Fave, who added new codes to the international coding system, if required. It is therefore reasonable to conclude that dependability was ensured based on the processes being followed.

(d) **Confirmability** (referring to neutrality of findings). The coders who coded the qualitative data aimed for objectivity and repressed their own worldviews in order not to contaminate the process of interpretation of the data. Detailed instruction had to be adhered to through the whole process which contributed to neutrality. This new knowledge or these insights gained from the themes will then be matched with existing theory. The following additions can be added in accordance with Tracy's (2010) criteria for confirmability: **Worthy topic:** The exploration of the alignment between goals and meaningful facets and the associations thereof with the socio-demographic variables and well-being indicators, is relevant to individuals. Better understanding of this matter has the potential to increase well-being in many different groups such as the community domain of life. **Significant contribution:** A possible contribution of such a study can be the generation of insight and knowledge for a better understanding of the concordance of meaning and goals and the

associations thereof with well-being and socio-demographic variables. This can serve as a basis for further research, exploring and utilising the results to enhance well-being.

### **Quantitative Data Analysis and Validity and Reliability**

The coded (quantified) qualitative data and the quantitative data from the socio-demographic and well-being questionnaires were combined to conduct the following analyses:

- a. Using IBM SPSS Statistics, Cronbach's alpha values were calculated for the SWLS, PANAS, MLQ, and MHC-SF total scales. Values of .70 or higher suggest adequate internal consistency reliability.
- b. Using IBM SPSS Statistics, the frequency with which the Community domain was mentioned as an important goal, the reason for an important goal, as something meaningful, and as a reason for something being meaningful were calculated.
- c. The alignment patterns between goals (what and why) and meaningful things (what and why) within the Community domain were determined per person using Microsoft Office Excel, distinguishing four alignment patterns (Wissing et al., 2017):
  - i. The Community domain was neither mentioned in the participant's important goals and the reasons therefore, nor in his/her meaningful things and motivations therefore.
  - ii. The Community domain was mentioned in both the participant's important goals and the reasons therefore, and in his/her meaningful things and motivations therefore.

- iii. The Community domain was mentioned in his/her important goals and the reasons therefore, but not in his/her meaningful things and motivations therefore.
  - iv. The Community domain was not mentioned in the participant's important goals and the reasons therefore, but it was mentioned in his/her meaningful things and motivations therefore.
- d. One-way ANOVAs were conducted to compare the scores on the SWLS, PANAS-PA, PANAS-NA, MLQ-P, MLQ-S, as well as the MHC-SF total score for the four alignment pattern groups. A separate ANOVA was performed for each of the well-being scales or subscales.
  - e. Two-way ANOVAs were conducted to compare the scores on the SWLS, PANAS-PA, PANAS-NA, MLQ-P, MLQ-S, and MHC-SF for the four alignment patterns, the socio-demographic variables (gender, age group, education level, standard of living, and marital status), and the interaction between alignment patterns and socio-demographic variables. For each of the socio-demographic variables, a separate two-way ANOVA was performed for each well-being scale or subscale Omega squared effect sizes were calculated to determine practical significance.

## **Results**

The following results will be presented: Firstly, the frequencies of goals and meaning in the Community domain of life; secondly, the associations between alignment patterns and socio-demographic variables; thirdly, the associations between alignment patterns and well-being; and fourthly, the interactions between alignment patterns and socio-demographic variables in their associations with well-being indicators.

### **Frequencies of Goals and Meaning in the Community Domain of Life**

The frequencies with which community was mentioned as a goal or a meaningful thing, or as a reason for a goal or a meaningful thing are presented in Table 2.

Table 2

*Frequencies of Goals and Meaning in the Community Domain (N = 585)*

<b>Frequency</b>	<b>Goal</b>	<b>Reason for goal</b>	<b>Sources of Meaning</b>	<b>Reason for Sources of Meaning</b>
0	90.3 %	85.5 %	94.5 %	88.9 %
1	8.2 %	9.1 %	4.8 %	5.0 %
2	0.7 %	2.4 %	0.5 %	1.0 %
3	0.3 %	0.5 %	-	0.3 %
Missing	0.5 %	2.6 %	0.2 %	4.8 %
<b>Total</b>	100 %	100 %	100 %	100 %
<b>Sum of 1,2,3</b>	9.2 %	12 %	5.3 %	6.3 %

*Note:* Frequency 0 = no mention of community in response to the applicable question, 1 = indicated community once in response to the applicable question, 2 = indicated community twice in response to the applicable question, 3 = indicated community three times in response to the applicable question.

In total, 429 (78.1%) participants did not mention community in response to the goals or meaning questions, 13 (2.4%) mentioned it at both the goals and meaning questions, 68 (12.4%) mentioned it in response to the questions on goals but not meaning, and 39 (7.1%) mentioned it in response to the questions on meaning but not goals. It is clear from Table 2 that the no-goal-no-meaning alignment pattern was the most common. Less prominent was the goal-but-no-meaning alignment pattern, followed by the meaning-but-no-goal alignment pattern, and least prominent was the both-goal-and-meaning alignment pattern. Notably, a larger number of participants referred to community as a goal (9.2%) or a reason for a goal (12%) than as source of meaning (5.3%), or a reason for a source of meaning (6.3%).

### **Associations between Alignment Patterns and Socio-demographic Variables**

The chi-square test is based upon the assumption that observations are independent and that all expected cell counts are large enough. The expected cell count should be five or

more (Field, Miles, & Field, 2018). In this study, the observations were independent and the cell count exceeded five for all categories of the gender variable only. For all other socio-demographic variables, at least one of the categories had an expected cell count of less than 5. Results of the other socio-demographic variables should therefore be interpreted with caution. The alignment patterns of goals and meaning and their associations with socio-demographic variables are presented in Figure 1.

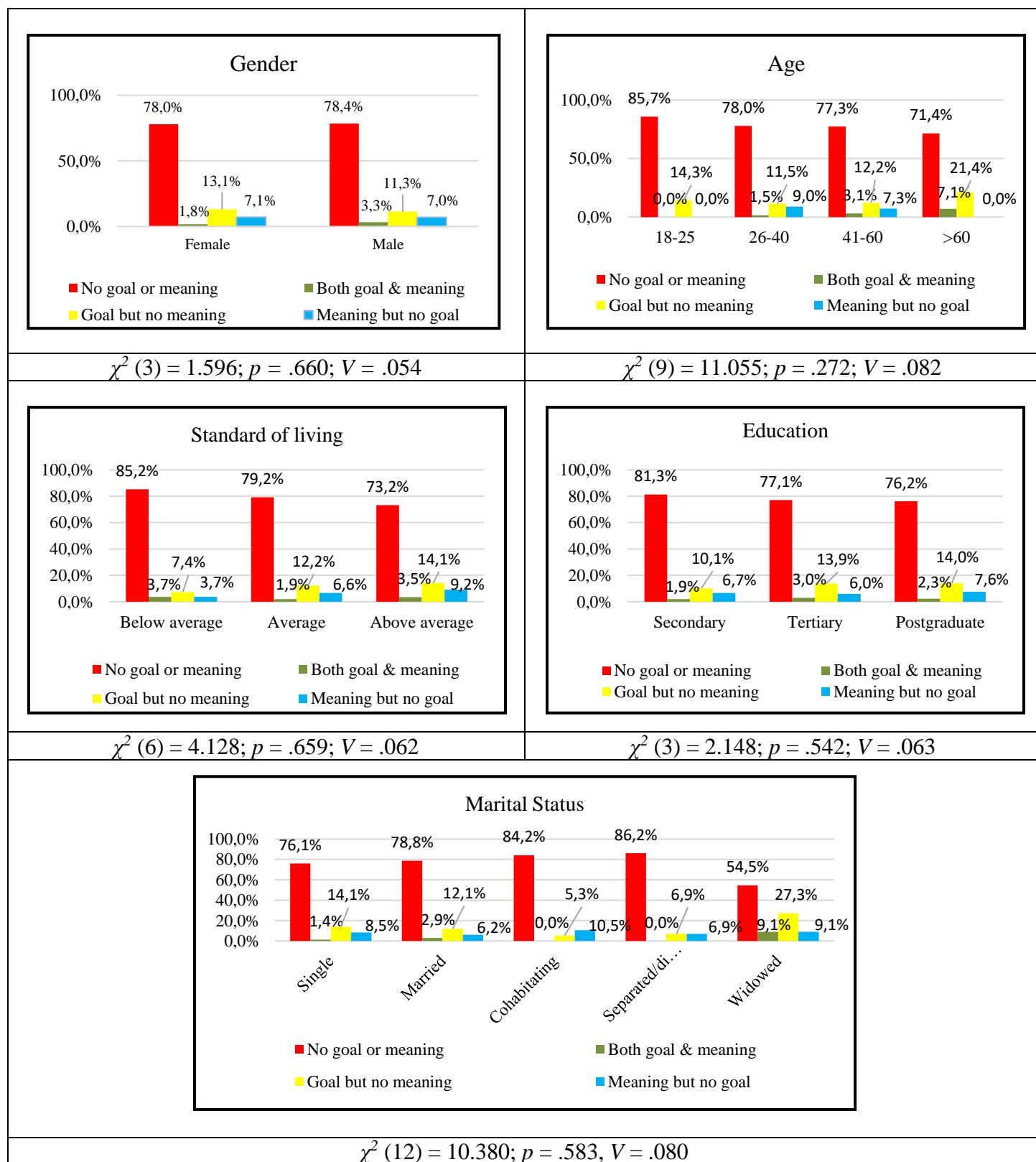


Figure 1. Alignment patterns of goals and meaning in the community domain in association with socio-demographic variables.

Statistically significant associations between alignment patterns and socio-demographic variables are indicated by  $p < .05$ . Practical significance was determined by considering Cramer's  $V$  as effect size. According to David and Sutton's (2004) guidelines, Cramer's  $V$  is interpreted as follows: very low association = 0-0.19; low association = 0.20-0.39; modest association = 0.40-0.69; high association = 0.70-0.89; and very high association = 0.90-1. No statistically significant associations were found for any of the socio-demographic variables. In all cases, Cramer's  $V$  indicated that these associations were of minor practical significance.

### **Association between Alignment Patterns and Well-being**

One-way ANOVA tests are based on three assumptions, namely: independency of observations; normal distribution of the outcome variable in each group; and homogenous variances in the groups being compared (Field et al., 2018). The observations were independent in this study. The well-being variables were not normally distributed as indicated by the Shapiro-Wilk test of normality. Homogeneity of variances was confirmed by Levene's test for all the well-being variables, except for the PANAS-PA. Due to deviations from the assumptions, the non-parametric Kruskal-Wallis test that accounts for deviations from normality and homogeneity of variances was run to confirm the findings of the one-way ANOVA. The findings were confirmed in all cases; therefore, only the results of the ANOVA are presented.

The significance of associations between the alignment patterns and the well-being scores, as indicated by one-way ANOVA tests, are presented in Table 3. The  $\omega^2$  (Omega square) effect size is also presented in the table where  $\omega^2 = 0.01$  indicates a small effect,  $\omega^2 = 0.06$  indicates a medium effect and  $\omega^2 = 0.14$  indicates a large effect (Field et al., 2018).

Table 3

*Associations between Alignment Patterns and Well-being*

Scale	<i>F</i>	<i>df</i> <sub>1</sub> , <i>df</i> <sub>2</sub>	<i>P</i>	$\omega^2$
SWLS	1.331	3,554	.263	.002
PANAS-PA	1.408	3,545	.239	.002
PANAS-NA	1.517	3,545	.209	.003
MLQ-P	4.139	3,544	<b>.006</b>	.017
MLQ-S	0.871	3,544	.456	-0.001
MHC-SF-tot	3.069	3,502	<b>.026</b>	.012

*Note.* SWLS = Satisfaction with Life Scale; PANAS-PA = Positive and Negative Affect Schedule-Positive Affect; PANAS-NA = Positive and Negative Affect Schedule-Negative Affect; MLQ-P = Meaning in Life Questionnaire-Presence; MLQ-S = Meaning in Life Questionnaire-Search; MHC-SF-tot = Mental Health Continuum-Short Form Total. The results displayed in bold indicate statistical or practical significance.

There were statistically significant differences between the well-being scores for the different alignment patterns for the MLQ-P ( $p = .006$ ) and the MHC-SF Total ( $p = .026$ ).

Associations were, however, not of practical significance for the MLQ-P ( $\omega^2 = .017$ ) or the MHC-SF Total ( $\omega^2 = .012$ ). The scores are visually depicted in Figure 2.

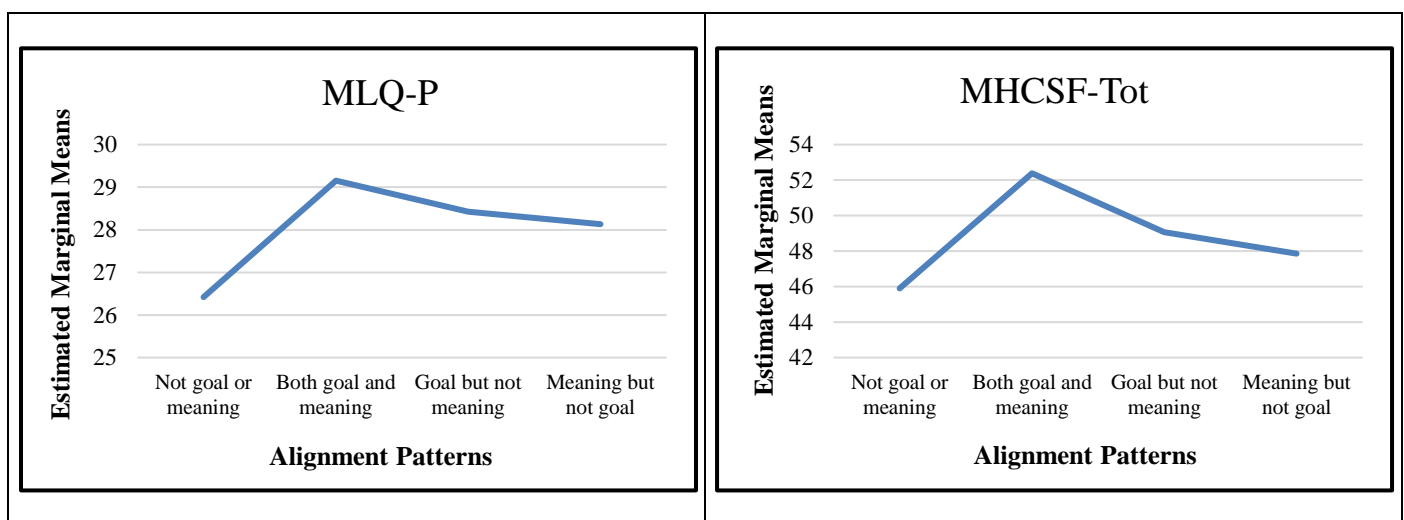


Figure 2. Estimated marginal mean scores for alignment patterns for the MLQ-P and the MHC-SF Total.

From Figure 2 it is evident that, for both the MLQ-P and the MHC-SF-tot, the group that mentioned community in their responses to both the goal and meaning questions scored the highest on well-being, followed by the group that mentioned community in response to the goal questions but not the meaning questions, then followed by the group who mentioned community in response to the questions on meaning but not the goal questions. The group with the lowest score on both measures was the group who did not mention community at all. The inverse pattern was found for the PANAS-NA. Mean plots for non-significant associations between alignment patterns and well-being are indicated in Figure A1 in Appendix A.

### **Interactions between Alignment Patterns and Socio-demographic Variables in their Association with Well-being**

Two-way ANOVA tests are based on three assumptions, namely: independency of observations; normal distribution of the outcome variable in each group; and homogenous variances in the groups being compared (Field et al., 2018). The observations were independent in this study. The well-being variables were not normally distributed as indicated by the Shapiro-Wilk test of normality. The assumption of homogeneity of variances held in most, but not all instances. There is currently no non-parametric test available that can be conducted to confirm the findings of the parametric two-way ANOVA. The findings were therefore interpreted with caution, particularly where group sizes were small.

Table 4 indicates the interactions between alignment patterns and socio-demographic variables in their association with well-being. The effect size  $\omega^2$  (omega squared) is also shown in the table, where  $\omega^2 = 0.01$  indicates a small effect,  $\omega^2 = 0.06$  indicates a medium effect; and  $\omega^2 = 0.14$  indicates a large effect (Field et al., 2018). Although the main effects are also displayed in the table, the focus will be on significant interaction effects.

Table 4

*Interactions between alignment patterns and socio-demographic variables in their association with well-being*

Scale	Main effect 1: Alignment pattern				Main effect: Demographic variable				Interaction effect			
	<i>F</i>	<i>df<sub>1</sub>, df<sub>2</sub></i>	<i>p</i>	$\omega^2$	<i>F</i>	<i>df<sub>1</sub>, df<sub>2</sub></i>	<i>p</i>	$\omega^2$	<i>F</i>	<i>df<sub>1</sub>, df<sub>2</sub></i>	<i>p</i>	$\omega^2$
<b>Gender</b>												
SWLS	1.084	3,540	.355	0.000	1.089	1,540	.297	0.000	0.268	3,540	.849	-0.004
PANAS-PA	1.314	3,541	.269	0.002	0.507	1,541	.477	-0.001	0.398	3,541	.754	-0.003
PANAS-NA	1.711	3,541	.164	0.004	1.094	1,541	.296	0.000	0.349	3,541	.790	-0.004
MLQ-P	3.986	3,540	<b>.008</b>	0.016	0.72	1,540	.397	-0.001	0.312	3,540	.817	-0.004
MLQ-S	1.043	3,540	.373	0.000	2.899	1,540	.089	0.003	1.447	3,540	.228	0.002
MHC-SF-Tot	3.122	3,498	<b>.026</b>	0.012	0.595	1,498	.441	-0.001	0.767	3,498	.513	0.001
<b>Age</b>												
SWLS	.164	3,535	.921	-0.004	.570	3,535	.635	-0.002	1.014	6,535	.415	0.000
PANAS-PA	.415	3,536	.742	-0.003	.949	3,536	.416	0.000	.331	6,536	.920	-0.007
PANAS-NA	2.124	3,536	.096	0.006	.551	3,536	.648	-0.002	.906	6,536	.490	-0.001
MLQ-P	1.722	3,535	.161	0.004	.157	3,535	.925	-0.005	.459	6,535	.839	-0.006
MLQ-S	2.047	3,535	.106	0.006	1.778	3,535	.150	0.004	1.460	6,535	.190	0.005
MHC-SF-Tot	2.114	3,493	.098	0.007	.253	3,493	.859	-0.004	.746	6,493	.613	-0.003
<b>Standard of Living</b>												
SWLS	2.284	3,517	.078	0.006	12.164	2,517	<b>.000</b>	0.037	2.562	6,517	<b>.019</b>	0.015
PANAS-PA	.975	3,518	.404	0.000	.982	2,518	.375	0.000	1.113	6,518	.354	0.001
PANAS-NA	1.515	3,518	.210	0.003	1.767	2,518	.172	0.003	0.896	6,518	.497	-0.001
MLQ-P	2.644	3,517	.049	0.009	1,058	2,517	.348	0.000	1.136	6,517	.340	0.001
MLQ-S	.531	3,517	.661	-0.003	3.522	2,517	.030	0.009	.775	6,517	.590	-0.002
MHC-SF-Tot	1.776	3,479	.151	0.005	.218	2,479	.804	-0.003	1.138	6,479	.339	0.002
<b>Educational level</b>												
SWLS	1.252	3,537	.290	0.001	.399	1,537	.528	-0.001	.561	3,537	.641	-0.002
PANAS-PA	1.143	3,538	.331	0.001	2.868	1,538	.091	0.003	.568	3,538	.636	-0.002
PANAS-NA	.881	3,538	.450	-0.001	4.014	1,538	.046	0.005	.664	3,538	.574	-0.002
MLQ-P	2.977	3,537	<b>.031</b>	0.010	5.287	1,537	.022	0.008	.658	3,537	.578	-0.002
MLQ-S	.765	3,537	.514	-0.001	12.468	1,537	<b>.000</b>	0.020	1.152	3,537	.328	0.001
MHC-SF-Tot	2.167	3,496	.091	0.007	.001	1,496	.977	-0.002	.568	3,496	.636	-0.003
<b>Marital Status</b>												
SWLS	1.562	3,522	.198	0.003	3.601	4,522	<b>.007</b>	0.018	1.558	10,522	.116	0.010
PANAS-PA	1.179	3,523	.317	0.001	.661	4,523	.619	-0.002	1.361	10,523	.195	0.007
PANAS-NA	1.472	3,523	.221	0.003	1.721	4,523	.144	0.005	1.744	10,523	.068	0.013
MLQ-P	1.901	3,522	.128	0.005	.671	4,522	.650	-0.003	1.115	10,522	.348	0.002
MLQ-S	1.775	3,522	.151	0.004	1.11	4,522	.351	0.001	1.762	10,522	.065	0.014
MHC-SF-Tot	1.73	3,483	.160	0.004	1.034	4,483	.389	0.000	.857	10,483	.574	-0.003

*Note.* SWLS = Satisfaction with Life Scale; PANAS-PA = Positive and Negative Affects Schedule-Positive Affect; PANAS-NA = Positive and Negative Affect Schedule-Negative Affect; MLQ-P = Meaning in Life Questionnaire-Presence; MLQ-S = Meaning in Life Questionnaire-Search; MHC-SF-tot = Mental Health Continuum-Short Form-Total. The results displayed in **bold** indicate statistical significance.

There was only one statistically significant interaction effect and that was between the alignment patterns and *standard of living* in the case of the SWLS ( $p = .019$ ). Note that this interaction was of small practical significance ( $\omega^2 = 0.015$ ). This interaction is graphically depicted in Figure 3. From the figure, it is clear that the group with a below average standard of living displayed a different pattern compared to the other two groups. Note, however, that only 5.5% of the sample indicated that their standard of living was below average. The sample sizes of the different alignment patterns for this socio-demographic group were very small and do not justify strong interpretations or conclusions. No other significant interactions were detected. For completeness, all other interaction plots are shown in the Appendix in Figures B1 to B4.

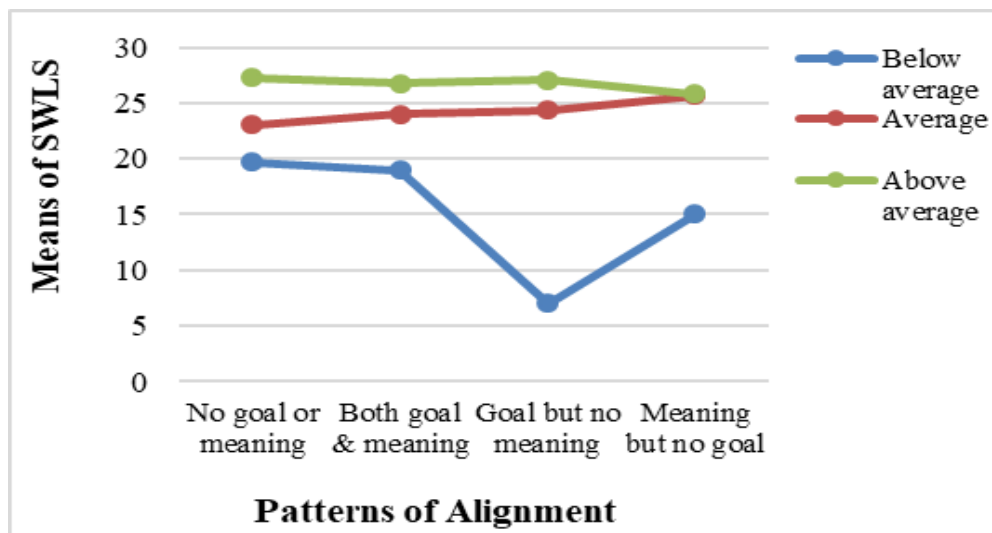


Figure 3. Standard of living: Significant interactions between alignment patterns and socio-demographic variables in association with well-being.

### Discussion

This study aimed to explore patterns of alignment of important goals and meaningful things in life as manifested in the community domain, and their associations with socio-

demographic variables and indicators of well-being. The four alignment patterns that were explored are: no-goal-no-meaning, both-goal-and-meaning, only-goal-no-meaning, and only-meaning-no-goal mentioned per participant in the community domain of life. Specifically, this study explored (a) the frequency of mentioning community as a goal or as a meaningful thing, or as a reason for a goal or meaningful thing, (b) the associations between alignment patterns and socio-demographic variables (c) the associations between alignment patterns and indicators of well-being, and (d) the interaction between alignment patterns and socio-demographic variables and their associations with well-being indicators.

### **Frequencies of Goals and Meaning in the Community Domain of Life**

In the exploration of the frequency of the different alignment patterns, it became clear that very few participants had community aspects in mind when mentioning the three most important current goals and meaningful things in their lives. More than 90% did not mention community in their indicated goals or the things that are meaningful to them. Slightly more participants mentioned community as a goal or a reason for a goal than participants mentioning it as one of the three most important meaningful things or a reason for something that is meaningful. It may also be that more people view community as a goal or something that is meaningful, but that community is not high on people's priority lists, at least not in the first three important matters (Wissing, Schutte, & Wilson, 2019). This can be further explored with qualitative interviews.

The explanation for the finding that community is such a low priority for participants in a South African context is not straightforward. It may be that there is a tendency towards individualisation where own interests are more important, or that people do not care about or are less dependent on others, or live past each other in the present-day busy life.

It may also be that participants feel threatened in the current South African contexts with its extremely high crime rates, prompting people to retreat into their homes, other safe

places, and inner circles. It may also be that people's need for relatedness are fulfilled in their (more immediate) interpersonal relationships, and therefore community is not such a high priority. This is in line with self-determination theory (Deci & Ryan, 2015) which postulates that the satisfaction of basic psychological needs only becomes an intentional goal when one or more of these needs (relatedness, competence, autonomy) are not satisfied. However, people are still dependent on each other to fulfil certain needs and in that way, community may have been a means to an end. Maya-Jariego and Holgado (2019) indicated that residents in a community need each other and find well-being in the greater good towards the community. Lambert et al. (2013) found that meaning in life will be enhanced if people have a sense of belonging.

There may, of course, also be other unknown reasons for the results. This phenomenon of neglect of community aspects in most important goals and meaningful things is wider than the South African context. Similar findings were reported by Delle Fave et al. (2011) in a study across several countries. It will be of value if the current findings are further explored in collectivist versus individualist cultures, as it can be expected that community and group interests will be more important for people belonging to collectivistic cultures than for people belonging to individualistic cultures (cf. Eaton & Louw, 2000; Uchida & Ogihara, 2012). It also needs to be further explored whether there are differences between urban and rural contexts and in different age groups with larger samples or with qualitative methodologies (cf. Wilson, Wissing, & Schutte, 2018).

### **Associations between Alignment Patterns and Socio-Demographic Variables**

No significant associations were found between alignment patterns and socio-demographic variables. This is interesting as associations could perhaps be expected with regard to different age or income groups. The small number of participants in sub-groups might have been a problem and further research with larger samples can be considered.

### **Association between Alignment Patterns and Well-Being**

Some significant associations were found between alignment patterns and indicators of well-being. Participants with the both-goal-and-meaning pattern exhibited higher levels of presence of meaning in their lives (as measured by the MLQ-P), or higher levels of general well-being (as measured by the total score of the MHC-SF covering multiple facets) than participants with any other pattern of alignment. In other words, people whose goals and meaning are aligned in the community domain of life tend to have statistically significant higher levels of presence of meaning and general high well-being. This is in line with qualitative findings that flourishers are more involved in communities than languishers (cf. Liversage, 2016; Wissing, Schutte, Liversage, Entwisle, Gericke, & Keyes, 2019). This is also in line with Sirgy, Widgery, Lee, and Grace (2010) who found that there is a positive association between well-being and commitment to community. The results relate to the positive association with community orientation and well-being, even if low numbers of participants have that orientation, and that community orientation and interconnection will promote the greater good of the community (Wissing, Schutte, & Wilson, 2019). According to Wissing et al. (2019), interconnectedness enhances quality of life and people's meaning in life. They described a meaning and relatedness well-being model where meaning and relatedness are essential facets that interact with community, interpersonal and more levels of relatedness that are knotted together with cultural and biological contexts to create well-being (Wissing et al., 2019). The current finding of a statistically significant association between the both-goal-and-meaning alignment pattern and indications of well-being as measured by the MLQ-P and MHC-SF provides some support for the concordance model of Sheldon and Elliot (1999).

However, in the present study, these statistically significant findings were found to be of very low practical significance as indicated by Cramer's V. Therefore, findings should be

seen as tentative and not conclusive. This is an area where further research with qualitative approaches will be valuable for understanding well-being in social contexts.

### **Interactions between Alignment Patterns and Socio-demographic Variables in their Association with Well-being**

A statistically but not practically significant interaction was found between alignment patterns and standard of living in their association with satisfaction with life as measured with the SWLS. In this case, it was specifically the below average income group that mentioned goals but no meaning in the community domain of life, who had the lowest satisfaction with life. However, due to the small sample size of all alignment patterns except for the no-goal-no-meaning pattern and the small sample size of the subsample with below average standard of living, conclusions cannot be drawn. Conclusions will only be justified if the current findings replicate in other and larger samples.

Although more definite conclusions cannot be drawn from the results due to small sample and effect sizes, this study contributed by indicating that community was more often prioritised as a goal or a reason for a goal, than as a source of meaning or a reason for a source of meaning. This study provided some support for the self-concordance model (Sheldon & Elliot, 1999) by indicating that people experienced higher levels of presence of meaning and general well-being when their goals and what they found meaningful in the community domain of life was aligned. Furthermore, the below average income group who mentioned community as a goal but not a source of meaning experienced the lowest levels of life satisfaction. Interventions aimed at enhancing well-being in the community domain of life may focus on informing participants of the importance of community for well-being on individual and community levels. Such understanding may potentially help participants to align goals and sources of meaning which, in turn, may lead to increased levels of well-being.

### **Conclusion**

There were no statistically significant associations in the community domain of life between alignment patterns and socio-demographic variables (gender, education, standard of living, education, and marital status). There were statistically significant associations between alignment patterns and some indicators of well-being (presence of meaning in life as measured by the MLQ-P and overall positive mental health as measured by the MHC-SF-Tot). A statistically significant interaction between alignment patterns and standard of living in their association with satisfaction with life was shown. Community well-being research had been neglected in favour for more individual well-being research (Lee & Kim, 2016). Wissing et al. (2019) built the meaning and relatedness well-being model in recent years to demonstrate that relatedness and meaning intertwined with connectedness on ecosystem, intrapersonal, interpersonal, social, and community levels will have a positive outcome on well-being. Some very interesting tendencies were found in the present study, but all of these need to be further explored in larger samples, different cultural groups (such as more collectivist versus individualist), and different contexts (such as urban versus rural) before substantive inferences can be drawn. In-depth qualitative interviews and focus groups may also be valuable for finding possible explanations for the current tendencies found. The present findings provide some support for the self-concordance model (Sheldon & Elliot, 1999) and point towards the importance of having one's goals and sources of meaning aligned in order to experience higher levels of well-being.

### **Limitations, Recommendations, and Future Research**

The importance of the relationship between goals and meaningful things and the alignment with well-being measurements to promote eudaimonic well-being are influenced by a number of socio-cultural, personal, and individual factors (Sheldon, Corcoran, & Prentice, 2019). Thus, a replication of this study in a variety of contexts is necessary to better

understand how the concordance of goals and meaning is associated with various socio-demographic variables and indicators of well-being. This study used a convenience sample and the results can therefore not be generalised. From the large study sample ( $N = 585$ ), the sub-groups were very small in some instances, thus the results must be interpreted with caution. The use of larger samples is recommended. In the present study, participants were a multicultural adult sample. In this regard, the findings might differ in other culturally diverse samples and it is recommended that this study be replicated in such groups. Maya-Jariego and Holgado (2019) found that the community must be ready for interventions and actions taken in the community. The community must understand constructs of new interventions and ideas even if it is professionally led or grassroots interventions. The findings of this study may be considered when developing and implementing future well-being interventions, particularly with regard to aligning individuals' goals and the things they find meaningful in order to increase their levels of well-being.

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### **Conflict of Interest Declaration**

The authors have no conflict of interest to declare.

## References

- Agrawal, J., Murthy, P., Philip, M., Mehrotra, S., Thennarasu, K., John, J., Girish N., Thippeswamy V., Isaac, M. (2011). Socio-demographic correlates of subjective well-being in urban India. *Social Indicators Research*, *101*(3), 419–434.  
<https://doi.org/10.1007/s11205-010-9669-5>
- Assi, J., Lucchini, M., & Spagnolo, A. (2012). Mapping patterns of well-being and quality of life in extended Europe. *International Review of Economics*, *59*(4), 409–430.  
<https://doi.org/10.1007/s12232-012-0147-z>
- Bartle, P. (2014, 12 January), What is community? A sociological perspective. Retrieved from: <https://edadm821.files.wordpress.com/2010/11/what-is-community>
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, *117*(3), 497–529. <https://doi.org/10.1037/0033-2909.117.3.497>
- Baumeister, R. F., Vohs, K. D., Aaker, J. L., & Garbinsky, E. N. (2013). Some key differences between a happy life and a meaningful life. *The Journal of Positive Psychology*, *8*, 505-516. doi:10.1080/17439760.2013.830764
- Blasi, E., Nucera, M., Cicatiello, C., & Franco, S. (2013). Socio-demographic components of eudaimonic well-being: A survey in an Italian province. *Social Indicators Research*, *113*(1), 451–470. <https://doi.org/10.1007/s11205-012-0104-y>
- Brandtstädter, J. (2006). Adaptive resources in later life: tenacious goal pursuit and flexible goal adjustment. In M. Csikszentmihalyi & I. S. Csikszentmihalyi (Eds.). *A life worth living: Contributions to positive psychology*. (pp. 143–164). Trier, Germany: Oxford University Press.

Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research (Third; International student; ed.)*. Thousand Oaks, California: SAGE

Publications Inc. Cogent. <https://doi.org/10.1080/2331186X.2017.1287391>

Deci, E., & Ryan, R. (2008) Self-determination theory: A macro theory of human motivation, development and health. *Canadian Psychology*, 49(3), 182-185.

<http://doi.org/10.1037/a0012801>

Deci, E. L., & Ryan, R. M. (2015). Self-Determination Theory. In *International Encyclopaedia of the Social & Behavioural Sciences: (2<sup>nd</sup> ed., 21, pp. 486–491)*.

Elsevier Inc. <https://doi.org/10.1016/B978-0-08-097086-8.26036-4>

Delle Fave, A., Brdar, I., Freire, T., Vella-Brodrick, D., & Wissing, M. P. (2011). The eudaimonic and hedonic components of happiness: qualitative and quantitative findings. *Social Indicators Research*, 100(2), 185–207.

<https://doi.org/10.1007/s11205-010-9632-5>

Delle Fave, A., Brdar, I., Wissing, M. P., Araujo, U., Castro Solano, A., Freire, T., ... Soosai-Nathan, L. (2016). Lay definitions of happiness across nations: The primacy of inner harmony and relational connectedness. *Frontiers in Psychology*, 7(30). 1-12

<https://doi.org/10.3389/fpsyg.2016.00030>

Della Fave, A. D., Brdar, I., Wissing, M. P., & Vella-Brodrick, D. A. (2013). Sources and motives for personal meaning in adulthood. *Journal of Positive Psychology*, 8(6), 517–529. <https://doi.org/10.1080/17439760.2013.830761>

Delle Fave, A., Wissing, M. P., Brdar, I., Vella-Brodrick, D., & Freire, T. (2013). Cross-cultural perceptions of meaning and goals in adulthood: Their roots and relation with happiness. In A. Waterman (Ed.), *The best within us. Positive Psychology Perspectives on Eudaimonic Functioning* (pp 227-248). Washington DC: American Psychological Association.

- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction with Life Scale. *Journal of Personality Assessment*, 49(1), 71–75.  
[http://doi.org/10.1207/s15327752jpa4901\\_13](http://doi.org/10.1207/s15327752jpa4901_13)
- Eaton, L., & Louw, J. (2000). Culture and self in South Africa: Individualism–collectivism predictions. *The Journal of Social Psychology*, 140(2), 210–217. <https://doi.org/10.1080/00224540009600461>
- Field, A., Miles, J., & Field, Z. (2018). *Discovering Statistics Using IBM SPSS Statistics*. *Statistics* (Vol. 58, pp. 262–276). SAGE Publications Ltd.  
[https://doi.org/10.1111/insr.12011\\_21](https://doi.org/10.1111/insr.12011_21)
- Folkman, S. (2012). *The Oxford Handbook of Stress, Health, and Coping*. (pp. 1–488). Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780195375343.001.0001>
- Frankl, V. E. (1962). Psychiatry and man’s quest for meaning. *Journal of Religion and Health*, 1(2), 93–103. <https://doi.org/10.1007/BF01532076>
- Frankl, V. E. (1969). *The will to meaning: Foundation and applications of logotherapy*. New York, NY: New American Library.
- Fredrickson, B. L. (2013). Positive Emotions Broaden and Build. *Advances in Experimental Social Psychology*, 47, 1–53. <https://doi.org/10.1016/B978-0-12-407236-7.00001-2>
- Friedman, E., Ruini, C., Foy, C., Jaros, L., Love, G., & Ryff, C. D. (2019). Lighten UP! A community-based group intervention to promote eudaimonic well-being in older adults: a multi-site replication with six-month follow-up. *Clinical Gerontologist*, 1(2), 1-11. DOI: 10.1080/07317115.2019.1574944
- Gebhardt, W. (2006). Contextualizing health behaviours: The role of personal goals. In *Self-regulation in health behaviour* (pp. 27-44). Chichester, UK: John Wiley & Sons.

- Gray, J. S., Ozer, D. J., & Rosenthal, R. (2017). Goal conflict and psychological well-being: A meta-analysis. *Journal of Research in Personality, 66*, 27–37.  
<https://doi.org/10.1016/J.JRP.2016.12.003>
- Hannah Arendt Quotes. (n.d.). BrainyQuote.com. Retrieved January 28, 2019, from BrainyQuote.com Web site:  
[https://www.brainyquote.com/quotes/hannah\\_arendt\\_401906](https://www.brainyquote.com/quotes/hannah_arendt_401906)
- Harvey, L. (2015). Beyond member-checking: a dialogic approach to the research interview. *International Journal of Research and Method in Education, 38*(1), 23–38.  
<https://doi.org/10.1080/1743727X.2014.914487>
- Heintzelman, S. J., & King, L. A. (2014). Life is pretty meaningful. *American Psychologist, 69*(6), 561–574. <https://doi.org/10.1037/a0035049>
- Hennecke, M., Brandstätter, V. (2017). Means, ends, and happiness: The role of goals for subjective well-being. In: Robinson M., Eid M. (Eds.), *The Happy Mind: Cognitive Contributions to Well-Being*. Springer, Cham.
- Humboldt, S., Monteiro, A., & Leal, I. (2017). Validation of the PANAS: A measure of positive and negative affect for use with cross-national older adults. *Review of European Studies, 9*(2), 10. <https://doi.org/10.5539/res.v9n2p10>
- Huta, V. (2017). Meaning as a subjective experience. *Journal of Constructivist Psychology, 30*(1), 20–25. <https://doi.org/10.1080/10720537.2015.1119088>
- Jason, L. A., Glantsman, O., O'Brien, J. F., & Ramian, K. N. (2019). Introduction to the field of community psychology. In L. A. Jason, O. Glantsman, J. F. O'Brien, & K. N. Ramian (Eds.), *Introduction to Community Psychology: Becoming an agent of change*. Montreal, Canada: Rebus Press.
- Kahneman, D., Diener, E., & Schwarz, N. (1999). *Well-being: The foundations of hedonic psychology*. (pp. 330–350). New York, NY: Russell Sage Foundation.

- Kern, M. L., Waters, L. E., Adler, A., & White, M. A. (2015). A multidimensional approach to measuring well-being in students: Application of the PERMA framework. *Journal of Positive Psychology, 10*(3), 262–271.  
<https://doi.org/10.1080/17439760.2014.936962>
- Keyes, C. L. M. (1998). Social well-being. *Social Psychology Quarterly, 61*(2), 121–140.  
<https://doi.org/10.2307/2787065>
- Keyes, C. L. M. (2002). The Mental Health Continuum: From languishing to flourishing in life. *Journal of Health and Social Behaviour, 43*(2), 207.  
<https://doi.org/10.2307/3090197>
- Keyes, C. L. M. (2006). The subjective well-being of America's youth: Toward a comprehensive assessment. *Adolescent & Family Health, 4*(1), 3–11.  
<https://doi.org/10.1055/s-0030-1249816>
- Keyes, C. L. M. (2007). Promoting and protecting mental health as flourishing: A complementary strategy for improving national mental health. *American Psychologist, 62*(2), 95–108. <https://doi.org/10.1037/0003-066X.62.2.95>
- Keyes, C. L. M., & Lopez, S. J. (2002). Towards a science of mental health: Positive directions in diagnosis and intervention. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 45-59). New York: Oxford University Press.
- Keyes, C. L. M., Wissing, M., Potgieter, J. P., Temane, M., Kruger, A., & van Rooy, S. (2008). Evaluation of the mental health continuum-short form (MHC-SF) in Setswana-speaking South Africans. *Clinical Psychology and Psychotherapy, 15*(3), 181–192. <https://doi.org/10.1002/cpp.572>
- King, L. A. (2008). Interventions for enhancing subjective well-being. In M. Eid & R. J. Larsen (Eds.), *The science of subjective well-being* (pp. 431–448). New York, NY: The Guilford Press.

Kitayama, S., Karasawa, M., Curhan, K. B., Ryff, C. D., & Markus, H. R. (2010).

Independence and interdependence predict health and well-being: Divergent patterns in the United States and Japan. *Frontiers in Psychology*, (SEP).

<https://doi.org/10.3389/fpsyg.2010.00163>

Kitayama, S., & Markus, H. R. (2000). The pursuit of happiness and the realization of

sympathy: Cultural patterns of self, social relations, and well-being. In E. Diener & E.

M. Suh (Eds.), *Culture and subjective well-being* (pp. 113-161). Cambridge, MA, US:

The MIT Press.

Klinger, E., (2012). The search for meaning in evolutionary goal-theory perspective. In *The*

*human quest for meaning: Theories, research and application*. (pp. 23-55). New

York: Routledge/Taylor & Francis Group.

Klug, H. J. P., & Maier, G. W. (2015). Linking goal progress and subjective well-being: A

meta-analysis. *Journal of Happiness Studies*, 16(1), 37–65.

<https://doi.org/10.1007/s10902-013-9493-0>

Koukoulis, S., Vlachonikolis, I., & Philalithis, A. (2002). Socio-demographic factors and self-

reported functional status: the significance of social support. *BMC Health Services*

*Research*, 2(1), 20. <https://doi.org/10.1186/1472-6963-2-20>

Lambert, N. M., Stillman, T. F., Hicks, J. A., Kamble, S., Baumeister, R. F., & Fincham, F.

D. (2013). To belong is to matter: Sense of belonging enhances meaning in

life. *Personality and Social Psychology Bulletin*, 39(11), 1418–

1427. <https://doi.org/10.1177/0146167213499186>

Lamers, S., Westerhof, G., Bohlmeijer, E., ten Klooster, P., & Keyes, C. (2011). Evaluating

the psychometric properties of the mental health continuum-short form (MHC-SF).

*Journal of Clinical Psychology*, 67(1), 99-110. <http://doi:10.1002/jclp.20741>

- Lee, S. J., & Kim, Y. (2016). Structure of well-being: An exploratory study of the distinction between individual well-being and community well-being and the importance of intersubjective community well-being. In Y., Kee, S. J. Lee, S. J. & R. Phillips, (Eds.). *Social Factors and Community Well-Being* (pp. 13–37). Switzerland. Springer. <https://doi.org/10.1007/978-3-319-29942-6>
- Lincoln, Y. S., & Guba, E. G. (2013). *The constructivist credo*. (pp. 1-208). Walnut Creek, CA: Left Coast Press Inc.
- Liversage, C. (2016). Goals and levels of psycho-social well-being: An exploratory study. (Master's dissertation). North-West University, Potchefstroom: GP. <https://repository.nwu.ac.za/handle/10394/18965>.
- MacLeod, A. (2013). Goals and plans: Their relationship to well-being. In A. Efklides, D. Moraitou, A., *A positive psychology perspective on quality of life*. 51, (pp. 33–50). New York, NY, US: Springer Science. <https://doi.org/http://dx.doi.org/10.1007/978-94-007-4963-4>
- Martela, F., & Steger, M. F. (2016). The three meanings of meaning in life: Distinguishing coherence, purpose, and significance. *Journal of Positive Psychology*, 11(5), 531–545. <https://doi.org/10.1080/17439760.2015.1137623>
- Maya-Jariego, I., Holgado, D. (2019). Community interventions. In L. A. Jason, O. Glantsman, J. F. O'Brien, & K. N. Ramian (Eds.), *Introduction to Community Psychology: Becoming an agent of change*. Montreal, Canada: Rebus Press.
- Mellor, D., Stokes, M., Firth, L., Hayashi, Y., & Cummins, R. (2008). Need for belonging, relationship satisfaction, loneliness, and life satisfaction. *Personality and Individual Differences*, 45(3), 213–218. <https://doi.org/10.1016/j.paid.2008.03.020>

- Merriam, S. B. (2016). Gender equity and community well-being. In Y. Kee, S. J. Lee, & R. Phillips (Eds.), *Social factors and community well-being* (pp. 71–85). Switzerland: Springer International Publishing
- Milyavskaya, M., Nadolny, D., & Koestner, R. (2014). Where do self-concordant goals come from? The role of domain-specific psychological need satisfaction. *Personality and Social Psychology Bulletin, 40*(6), 700–711.  
<https://doi.org/10.1177/0146167214524445>
- Monzani, D., Steca, P., Greco, A., D'Addario, M., Pancani, L., & Cappelletti, E. (2015). Effective pursuit of personal goals: The fostering effect of dispositional optimism on goal commitment and goal progress. *Personality and Individual Differences, 82*, 203–214. <https://doi.org/10.1016/j.paid.2015.03.019>
- Nolen-Hoeksema, S., & Rusting, C. L. (1999). Gender differences in well-being. In D. Kahneman, E. Diener, & N. Schwarz (Eds.), *Well-being: The foundations of hedonic psychology*. (pp. 330–350). New York, NY: Russell Sage Foundation.
- Park, C. L. (2010). Making Sense of the Meaning Literature: An Integrative Review of Meaning Making and Its Effects on Adjustment to Stressful Life Events. *Psychological Bulletin, 136*(2), 257–301. doi: 10.1037/a0018301
- Pavot, W., & Diener, E. (1993). Review of the satisfaction with life scale. *Psychological Assessment, 5*(2), 164–172. <https://doi.org/10.1037/1040-3590.5.2.164>
- Pavot, W., & Diener, E. (2008). The Satisfaction with Life Scale and the emerging construct of life satisfaction. *Journal of Positive Psychology, 3*(2), 137–152.  
<https://doi.org/10.1080/17439760701756946>
- Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology, 52*(1), 141–166. <https://doi.org/10.1146/annurev.psych.52.1.141>

- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, 57(6), 1069–1081. <https://doi.org/10.1037/0022-3514.57.6.1069>
- Ryff, C. D., & Singer, B. H. (1998). The role of purpose in life and personal growth in positive human health. In P.T.P. Wong & P. S. Fry (Eds.), *The human quest for meaning: A handbook of psychological research and clinical applications*. (pp. 213–235). Mahwah, NJ: Lawrence Erlbaum Associates.
- Ryff, C. D., & Singer, B. H. (2008). Know thyself and become what you are: A eudaimonic approach to psychological well-being. *Journal of Happiness Studies*, 9(1), 13–39. <https://doi.org/10.1007/s10902-006-9019-0>
- Russo-Netzer, P., Schulenberg, S. E. & Batthyany, A. (2016). Clinical perspectives on meaning: understanding, coping and thriving through science and practice. *Clinical Perspectives on Meaning : Positive and Existential Psychotherapy*, 1. [https://doi-org.nwulib.nwu.ac.za/10.1007/978-3-319-41397-6pass:\[\\_\]1](https://doi-org.nwulib.nwu.ac.za/10.1007/978-3-319-41397-6pass:[_]1)
- Russo-Netzer, P. (2018). Prioritizing meaning as a pathway to meaning in life and well-being. *Journal of Happiness studies*, 20(6), 1863-1891. <https://doi.org/10.1007/s10902-018-0031-y>
- Schnell, T., Höge, T., & Pollet, E. (2013). Predicting meaning in work: Theory, data, implications. *The Journal of Positive Psychology*, 8(6), 543–554. <https://doi.org/10.1080/17439760.2013.830763>
- Schulenberg, S. E., Strack, K. M., & Buchanan, E. M. (2011). The meaning in life questionnaire: psychometric properties with individuals with serious mental illness in an inpatient setting. *Journal of Clinical Psychology*, 67(12), 1210–1219. <https://doi.org/10.1002/jclp.20841>

- Schutte, L., & Wissing, M. (2017). Clarifying the factor structure of the mental health continuum short form in three languages: A bifactor exploratory structural modeling approach. *Society and Mental Health, 7*, 215686931770779.  
10.1177/2156869317707793
- Schutte, L., Wissing, M. P., & Ellis, S. M. (2018). Problematic factorial validity of three language versions of the Basic Psychological Needs Scale (BPNS): Why and what are the implications? *Journal of Happiness Studies, 19*(4), 1175–1194.  
<https://doi.org/10.1007/s10902-017-9861-2>
- Schutte, L., Wissing, M. P., Ellis, S. M., Jose, P. E., & Vella-Brodrick, D. A. (2016). Rasch analysis of the Meaning in Life Questionnaire among adults from South Africa, Australia, and New Zealand. *Health and Quality of Life Outcomes, 14*(1), 12.  
<http://doi:10.1186/s12955-016-0414-x>
- Seligman, M. E., & Csikszentmihalyi, M. (2000). Special issue on happiness, excellence, and optimal human functioning. *American Psychologist, 55*(1), 5-183.
- Sheldon, K. M., & Elliot, A. J. (1999). Goal striving need satisfaction, and longitudinal well-being: The self-concordance model. *Journal of Personality and Social Psychology, 76*(3), 482–497. <https://doi.org/10.1037/0022-3514.76.3.482>
- Sheldon, K. M., & Kasser, T. (2001). Goals, congruence, and positive well-being: New empirical support for humanistic theories. *Journal of Humanistic Psychology, 41*(1), 30–50. <https://doi.org/10.1177/0022167801411004>
- Schnell, T., Höge, T., & Pollet, E. (2013). The Journal of Positive Psychology: Dedicated to furthering research and promoting good practice Predicting meaning in work: Theory, data, implications. *The Journal of Positive Psychology, 8*(06), 543–554.  
<https://doi.org/10.1080/17439760.2013.830763>

- Snyder, C. R. (2002). Hope Theory: Rainbow in Minds. *Psychological Inquiry*, 13(4), 276–321. <https://doi.org/10.1207/S15327965PLI1304>
- Steger, M. F. (2012). Experiencing meaning in life: Optimal functioning at the nexus of well-being, psychopathology, and spirituality. In P. T. P. Wong (Ed.), *Personality and clinical psychology series. The human quest for meaning: Theories, research, and applications* (pp. 165-184). New York, NY, US: Routledge/Taylor & Francis Group.
- Steger, M. F., Frazier, P., Oishi, S., & Kaler, M. (2006). The meaning in life questionnaire: Assessing the presence of and search for meaning in life. *Journal of Counselling Psychology*, 53(1), 80–93. <https://doi.org/10.1037/0022-0167.53.1.80>
- Temane, L., Khumalo, I. P., & Wissing, M. P. (2014). Validation of the Meaning in Life Questionnaire in a South African context. *Journal of Psychology in Africa*, 24(1), 51-60. [doi.org/10.1080/14330237.2014.904088](https://doi.org/10.1080/14330237.2014.904088)
- Theodori, G. L. (2009). Examining the effects of community satisfaction and attachment on individual well-being. *Rural Sociology*, 66(4), 618–628. <https://doi.org/10.1111/j.1549-0831.2001.tb00087.x>
- Tracy, S. J. (2010). Qualitative quality: Eight “big-tent” criteria for excellent qualitative research. *Qualitative inquiry*, 16(10), 837-851.
- Uchida, Y., & Ogihara, Y. (2012). Personal or interpersonal construal of happiness: A cultural psychological perspective. *International Journal of Wellbeing*, 2(4), 354-369. [doi:10.5502/ijw.v2.i4.5](https://doi.org/10.5502/ijw.v2.i4.5)
- Van Schalkwyk, I., & Wissing, M.P. (2013). Evaluation of a program to enhance flourishing in adolescents. In M. P. Wissing (Ed.), *Well-being research in South Africa* (pp. 581-606). Dordrecht, The Netherlands: Springer.
- Waterman, A. S. (2008). Reconsidering happiness: A eudaimonist’s perspective. *Journal of Positive Psychology*, 3(4), 234–252. <https://doi.org/10.1080/17439760802303002>

- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: the PANAS scales. *Journal of personality and social psychology*, 54(6), 1063.
- Westaway, M. S., Maritz, C., & Golele, N. J. (2003). Empirical testing of the satisfaction with life scale: a South African pilot study. *Psychological Reports*, 92(2), 551–554. <https://doi.org/10.2466/pr0.2003.92.2.551>
- Westerhof, G. J., & Keyes, C. L. M. (2010). Mental illness and mental health: The two continua model across the lifespan. *Journal of Adult Development*, 17(2), 110-119. <http://doi:10.1007/s10804-009-9082-y>
- Wilson, A., Wissing, M. P., Ndima, L., & Somhlaba, N. Z. (2018). Representations of hope, goals, and meaning from lay person's perspectives in two African contexts. *Journal of Humanistic Psychology*. <https://doi.org/10.1177/0022167818785070>
- Wilson, A., Wissing M. P., & Schutte, L. (2018). "We help each other": Relational patterns among older individuals in South African samples. *Applied Research in Quality of Life*, 1-20. DOI: 10.1007/s11482-018-9657-5
- Wilson, A., Wissing, M. P., & Schutte, L. & Kruger, I. M. (2018). Understanding goal motivations in deprived contexts: Perspectives of adults in two rural South African communities, *Applied Research in Quality of Life*, p. 1-17. Springer Netherlands. <http://doi:10.1007/s11482-017-9583-y>
- Wiseman, J., Brasher, K. (2008). Community well-being in an unwell world: Trends, challenges, and possibilities. *Journal of Public Health Policy*, 29(3), 353-366. Palgrave Macmillan Ltd., London, UK. DOI:10.1057/jphp.2008.16
- Wissing, M. (2008/2012). *The prevalence of levels of psychosocial health: dynamics and relationships with biomarkers of (ill) health in South African social contexts*

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- Wissing, M. P. (2014). Meaning and relational well-being: A reflection on the state of the art and a way forward. *Journal of Psychology in Africa, 24*(1).
- Wissing, M. P., Carlquist, E., Martos, T., & Schutte, L. (2017, September). *Do goals walk the talk of meaning in well-being?* Presentation in symposium: In their own voices: Lay people's perceptions and dimensions of well-being facets across world regions. Annual conference on "Quality of life: Towards a better society". Innsbruck, Austria.
- Wissing, M. P., & Delle Fave, A. (2013). Meaning and relational well-being: Towards a model. Paper presented at the Second Conference on Positive Psychology (CPPC) in Brno, Czech Republic.
- Wissing, M. P., Schutte, L., Liversage, C., Entwisle, B., Gericke, & Keyes, C. (2019). Important goals, meanings and relationships in flourishing and languishing states: Towards patterns of well-being. *Applied Research in Quality of Life* (in press). DOI: 10.1007/s11482-019-09771-8
- Wissing, M.P., Schutte, L., & Wilson Fadji, A. (2019) Cultures of positivity: Interconnectedness as a way of being. In: Eloff I. (eds) *Handbook of Quality of Life in African Societies*. International Handbooks of Quality-of-Life. Springer, Cham
- Wissing, M. P., Thekiso, S. M., Stapelberg, R., Van Quickelberge, L., Choabi, P., Moroeng, C., Nienaber, A., Temane, Q. & Vorster, H. H (2010). Validation of three Setswana measures for psychological well-being. *SA Journal of Industrial Psychology, 36*(2). <https://doi.org/10.4102/sajip.v36i2.860>
- Wong, P. T. (1998). Implicit theories of meaningful life and the development of the personal meaning profile. Lawrence Erlbaum Associates Publishers. In P. T. P. Wong & P. S.

Fry (Eds.), *The human quest for meaning: A handbook of psychological research and clinical applications* (pp. 111-140). Mahwah, NJ: Erlbaum.

Wong, P. T. P. (2010). Meaning therapy: An integrative and positive existential psychotherapy. *Journal of Contemporary Psychotherapy: On the Cutting Edge of Modern Developments in Psychotherapy*, 40(2), 85–93. <https://doi.org/10.1007/s10879-009-9132-6>

Wong, P. T. (2011). Positive psychology 2.0: Towards a balanced interactive model of the good life. *Canadian Psychology*, 52(2), 69 - 81.

Wong, P. T. P. (2012). *Acceptance & well-being: A meaning-management perspective*. Paper presented at the Australian Positive Psychology Conference 2012, Wollong.

Yetim, N., & Yetim, Ü. (2014). Sense of community and individual well-being: A research on fulfilment of needs and social capital in the Turkish community. *Social Indicators Research*, 115(1), 93–115. <https://doi.org/10.1007/s11205-012-0210-x>

Appendix A: Association between alignment patterns and well-being

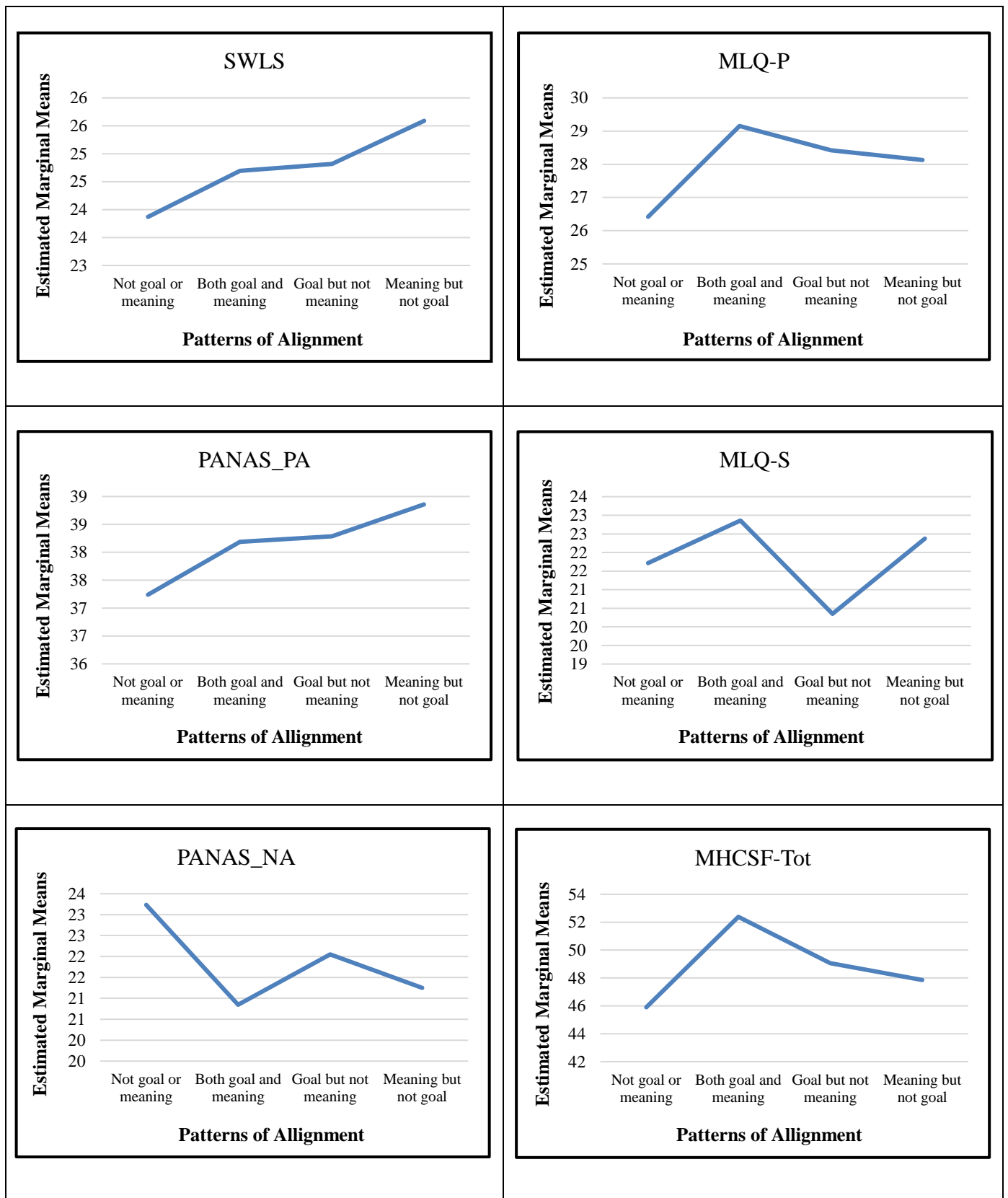


Figure A1. Plots of estimated marginal mean scores on the well-being scales for the different alignment patterns

Appendix B: Interaction between alignment patterns, socio-demographic variables and well-being

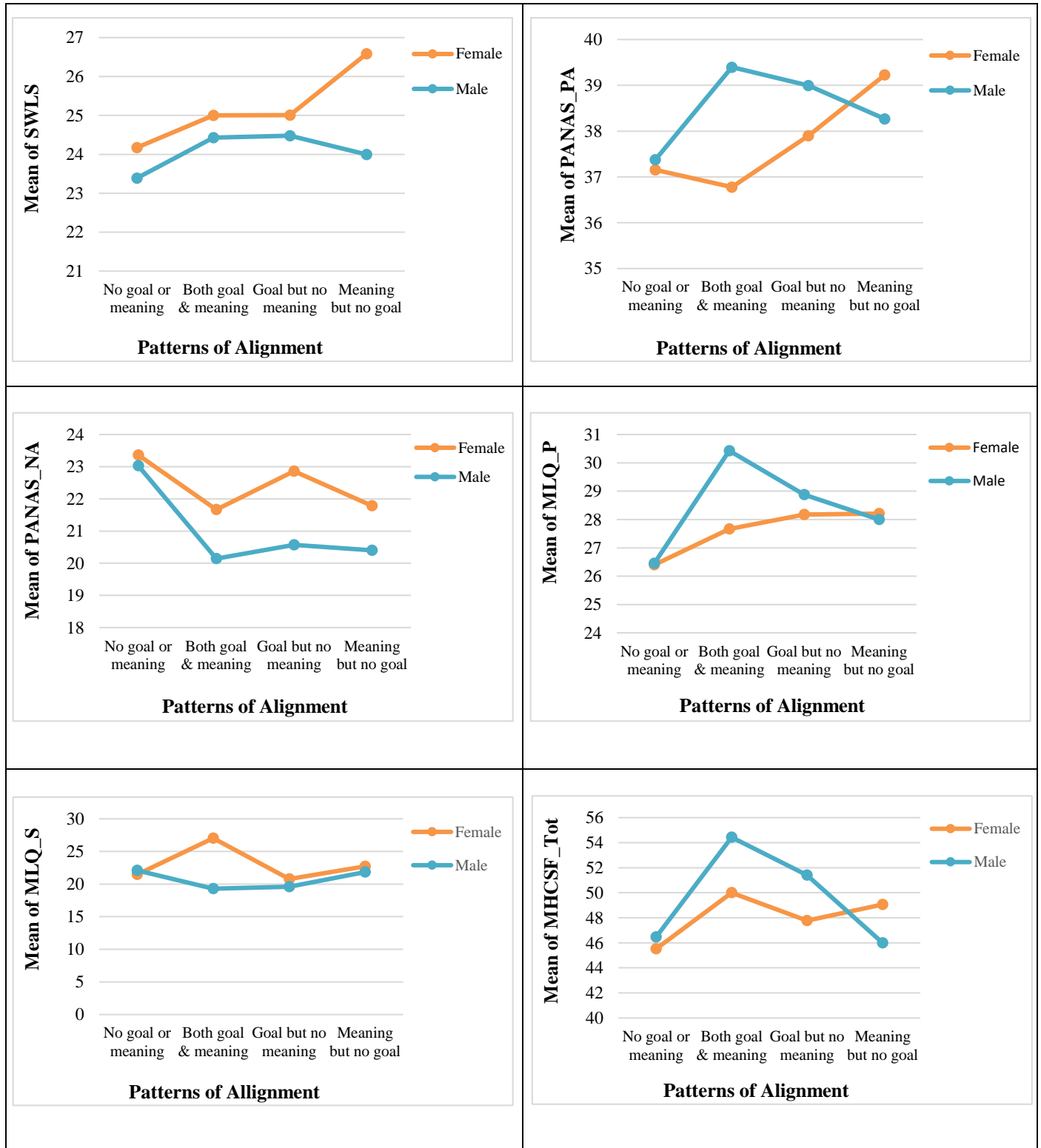


Figure B1. Interaction plots for gender and alignment patterns in their associations with the different well-being measures

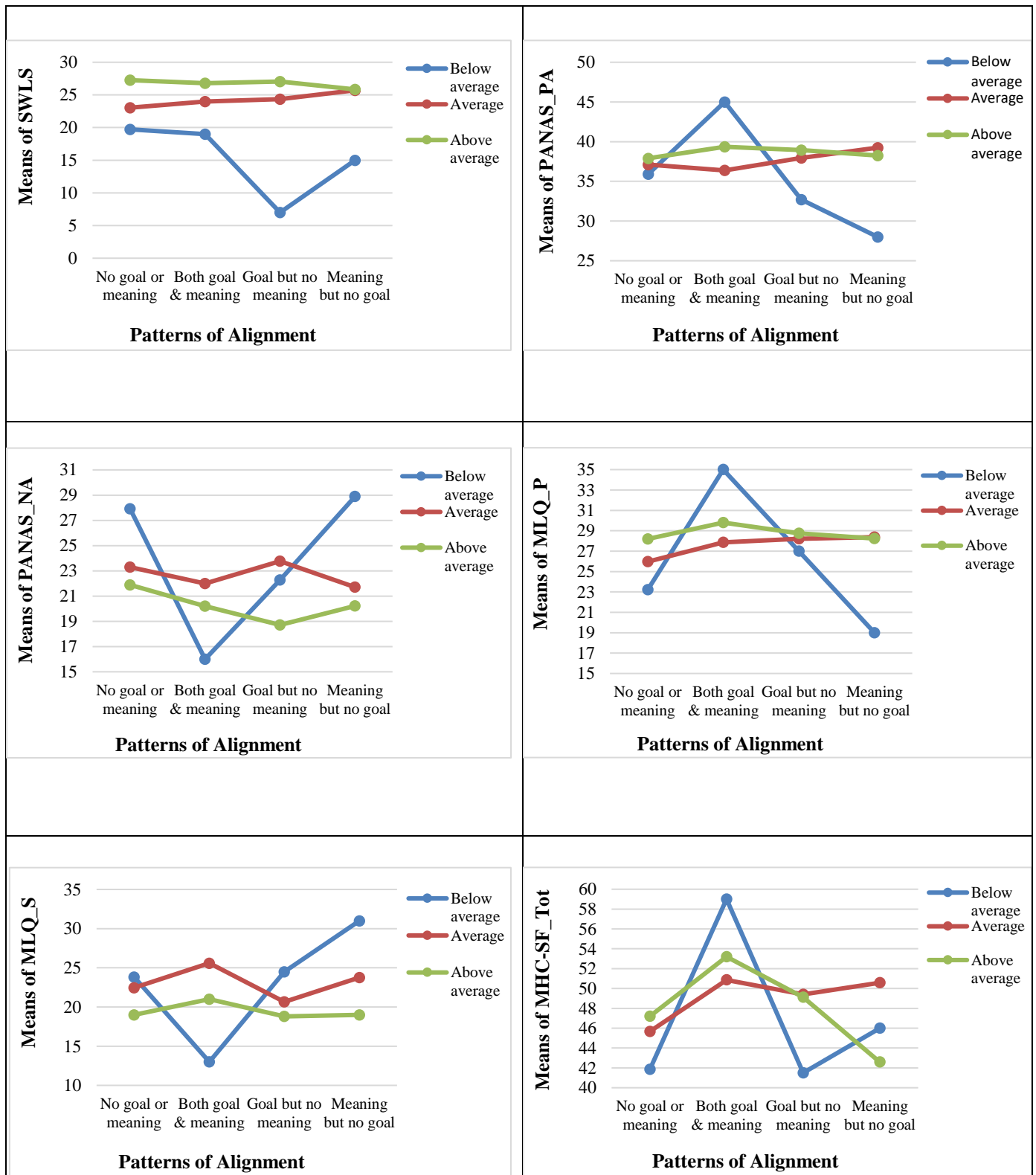


Figure B2. Interaction plots for standard of living and alignment patterns in their associations with the different well-being measures

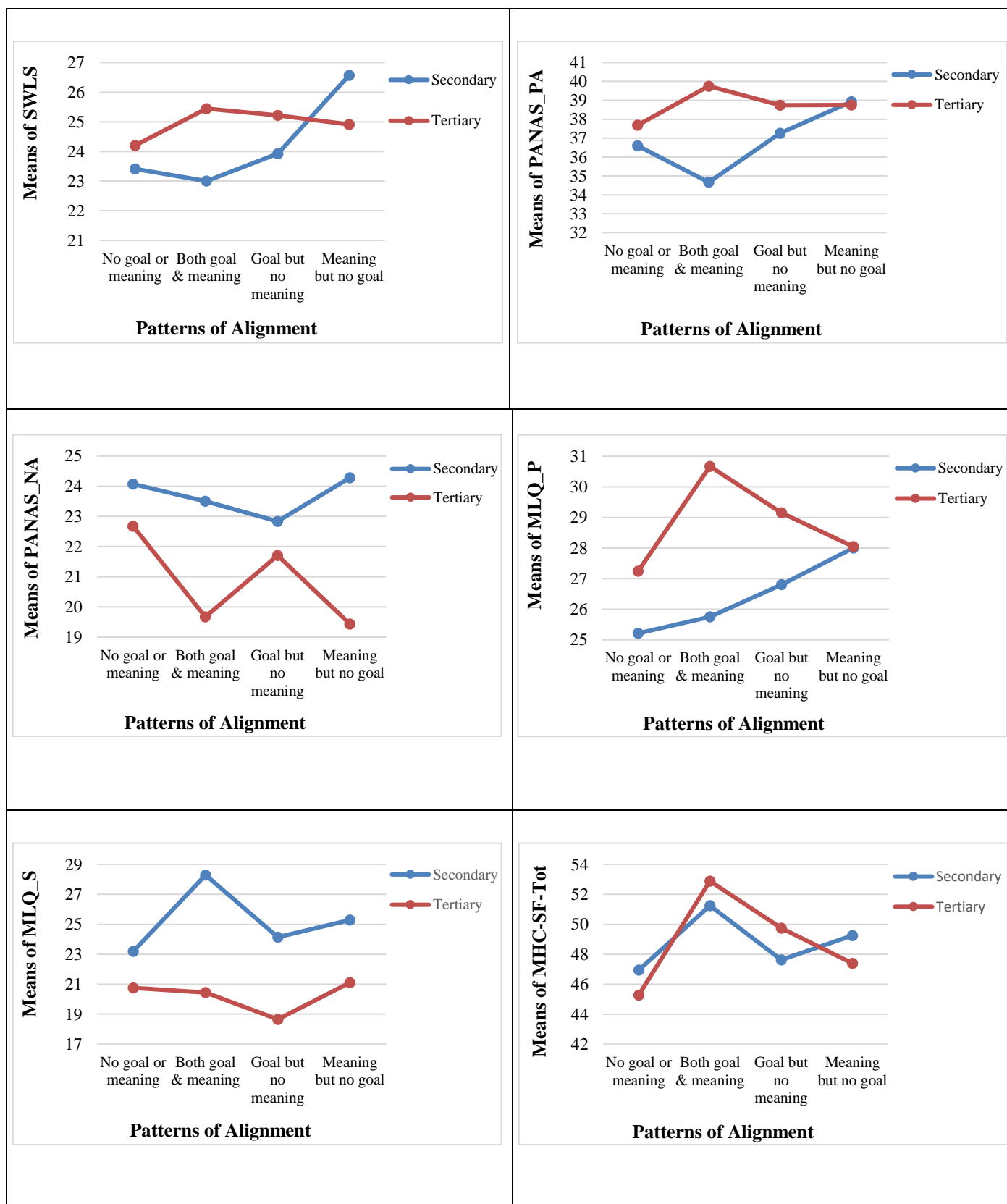


Figure B3. Interaction plots for education and alignment patterns in their associations with the different well-being measures

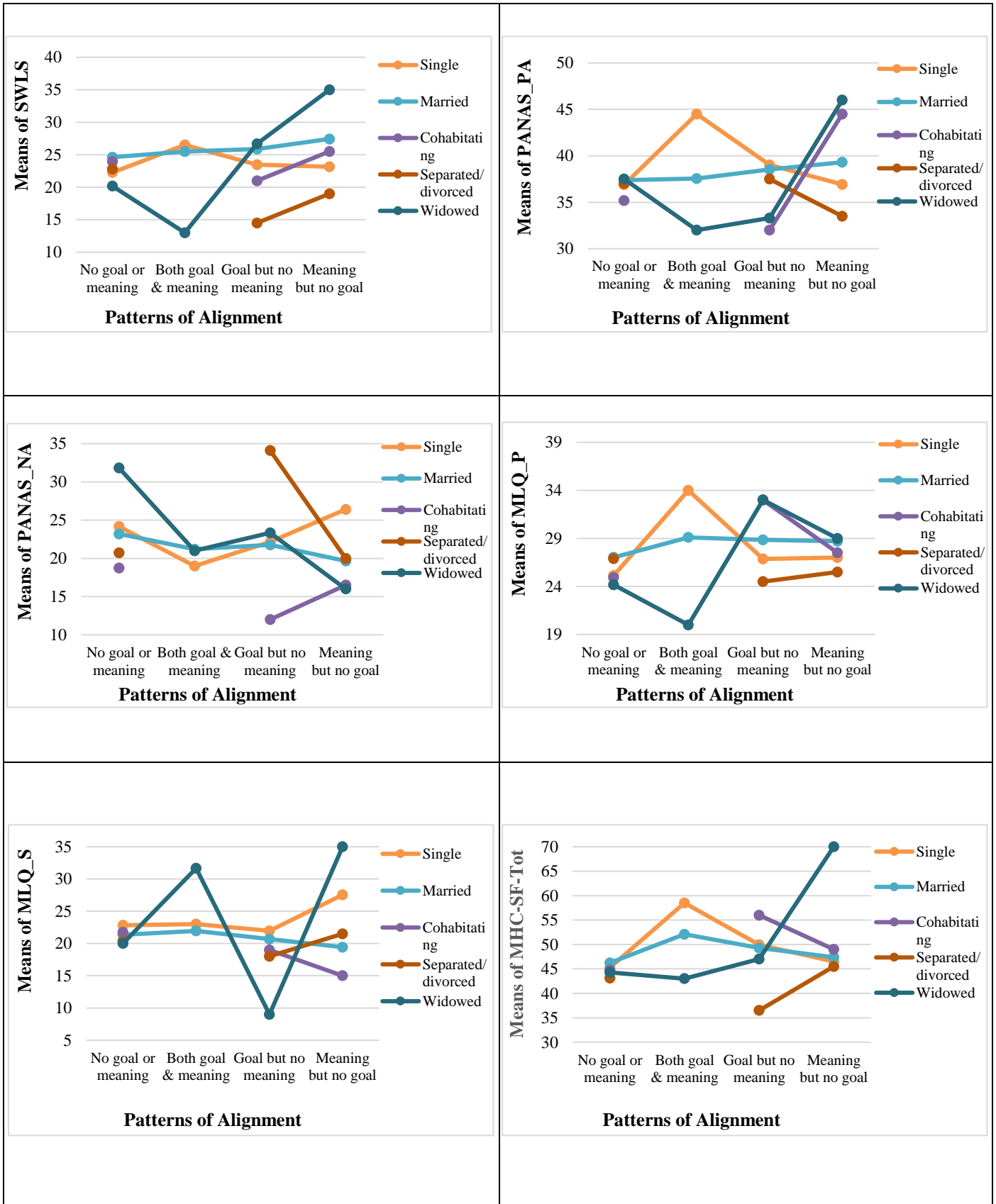


Figure B4. Interaction plots for marital status and alignment patterns in their associations with the different well-being measures

### Chapter 3

#### Conclusion, Implications, and Reflection

##### Summary and Conclusion

The purpose of the study was to explore patterns of alignment of important goals and meaningful things in life and their association with indicators of well-being and socio-demographic variables in the community domain of life. Patterns of alignment as discerned by Wissing, Carlquist, Martos, and Schutte (2017) were the following: no-goal-no-meaning, both-goal-and-meaning, only-goal-no-meaning, and only-meaning-no-goal.

The no-goal-no-meaning alignment pattern occurred most often in the community domain of life, indicating that community may either not have been important for a large portion of the participants or that community connectedness is expressed in diverse ways (Wissing, Schutte, & Wilson, 2019). Alternatively, community was important, but was just not one of the three most important goals or meaningful things for participants. This may be indicative of a tendency towards individualisation, that people are less dependent on each other or live past each other in the business of life, that people's need for relatedness is fulfilled in other community contexts, or that high crime rates in South Africa force people to retreat into safer inner circles. However, community was mentioned more often as a goal or as a reason for a goal than as a source of meaning or a reason for a meaning. It may be because people are still dependent on each other to fulfil certain needs and in that way, community may be a means to an end. This is in line with self-determination theory (Deci & Ryan, 2000) which postulates that the satisfaction of basic psychological needs only becomes a goal in itself when one or more of these needs (relatedness, competence, autonomy) are not satisfied.

No statistically significant associations between alignment patterns and socio-demographic variables were detected in this study. Statistically significant differences in

scores on the MLQ-P and MHC-SF-total were observed for the different alignment groups. The both-goal-and-meaning alignment pattern occurred more frequently than the other alignment patterns among participants who scored high on these measures, indicating that the participants whose goals and meaningful things were aligned experienced higher levels of presence of meaning and general well-being. A statistically significant interaction effect was observed between the alignment patterns and standard of living as a socio-demographic variable in the association with the SWLS. However, group sizes were small, and interpretations of results should be used with caution. The present findings provided preliminary support for the self-concordance model of Sheldon and Elliot (1999).

### **Implications for Research and Practice**

On a theoretical level, the results contributed to a better understanding of the different alignment patterns between goals and what people find meaningful in the community domain of life, and how these patterns are associated with socio-demographic variables and well-being indicators. These findings are particularly important considering that research on community well-being is sparse. Community well-being research has been neglected in favour for more individual well-being research (Lee & Kim, 2016). For this reason, it would be of value to replicate this study in other groups and contexts in order to gain a better understanding of how the alignment patterns of goals and meaning are associated with socio-demographic variables and indicators of well-being in various contexts, especially since communities have shared values and beliefs that have particular meanings among the members (Bartle, 2014). As cultures vary in their levels of well-being (Diener et al., 2018), a one-size-fits-all approach to interventions aimed at increasing levels of well-being in the community domain may not be suitable or effective. For this reason, interventions may be adjusted, or new interventions may be designed for a specific group. The alignment of goals and meaning can also be applied in smaller contexts such as small community groups,

church, work, and sport groups in order to enhance well-being for the community. However, it will be necessary to first get clarification on the context and the things that are valued as meaningful in the community context before people's goals can be aligned with these meaningful things. This alignment of goals and meaning may, in turn, contribute to well-being in the larger community.

### **Reflection**

It was an overwhelming but marvellous journey to take baby steps into the world of academia. I have seen the masters at work and my admiration for them has grown immensely. My journey has taught me kindness towards myself and others. It taught me inquisitiveness to expand my knowledge. Research is a tedious task done by people that become influencers. I had the opportunity to dip my toe into this world that took me down the rabbit hole of getting the correct reading material, ask questions, and become more familiar with the dynamics of constructs such as goals and meaning in the field of community well-being. The meaning and relatedness well-being model (Wissing et al., 2019), with meaning and relatedness as its main components, was especially important on a personal level as my work involves working with communities. This model assumes that there are dynamic interactions on different levels, for example, the community level, within the context of biological and cultural situatedness (Wissing et al., 2019).

In my second year of study I became very ill and spent time in hospital. I could therefore not complete my master's degree on the planned date. I recognised the power of health and then, with the kind support of my knowledgeable supervisors, had to restart the process of reading, learning, and writing with determination and self-discipline. Along this process was a team of academics that supported me in my studies with their expertise, knowledge, kindness, and strict rules to abide by. I would like to take this understanding of well-being and flourishing to the communities that I work and live in, to enhance their

experiences with well-being, freedom, and social courage, and to help them to align their goals and sources of meaning to experience higher levels of well-being and flourishing.

## References

- Bartle, P. (2014, 12 January), What is community? A sociological perspective. Retrieved from. <https://edadm821.files.wordpress.com/2010/11/what-is-community.pdf>
- Deci, E.L., & Ryan, R. M. (2000) The "What" and "Why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227-268. DOI: 10.1207/S15327965PLI1104\_01
- Diener, E., Oishi, S., & Tay, L. (2018). Advances in subjective well-being research. *Nature Human Behaviour*, 2(4), 253–260. <https://doi.org/10.1038/s41562-018-0307-6>
- Lim, Y. J. (2014). Psychometric characteristics of the Korean Mental Health Continuum-Short-Form in an adolescent sample. *Journal of Psychoeducational Assessment*, 32(4), 356–364. <https://doi.org/10.1177/0734282913511431>
- Sheldon, K. M., & Elliot, A. J. (1999). Goal striving need satisfaction, and longitudinal well-being: The self-concordance model. *Journal of Personality and Social Psychology*, 76(3), 482–497. <https://doi.org/10.1037/0022-3514.76.3.482>
- Wissing, M. (2008/2012). *The prevalence of levels of psychosocial health: dynamics and relationships with biomarkers of (ill) health in South African social contexts (FORT3)*. Research project with ethical approval registered at the North-West University.
- Wissing, M. P., Carlquist, E., Martos, T., & Schutte, L. (2017). *Do goals walk the talk of meaning in well-being?* Presentation in symposium: In their own voices: Lay people's perceptions and dimensions of well-being facets across world regions. Annual Conference on “Quality of Life: Towards a better Society”. Innsbruck, Austria.