

AN OVERVIEW OF RESEARCH ON POSITIVE PSYCHOLOGY IN SOUTH AFRICA

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The paradigm of positive psychology was publicly launched by Martin Seligman in his Presidential Address to the American Psychology Association in 1998. Since then, the scientific study of optimal human functioning gained new momentum. This article provides an overview of research on positive psychology in South Africa. The article explores general trends and the main developments in the field, internationally as well as nationally. South African research in the paradigm of positive psychology was categorised according to a framework developed for the purposes of this article. Results indicate frequencies of South African research undertaken over the last 36 years. Possible future directions for research in the field are pointed out and integrated with recommendations from prominent South African and international authors.

Keywords: coping; fortigenesis; fortology; positive psychology; salutogenesis; science of strengths; wellbeing; wellness

In the opening article of the recently launched Journal of Positive Psychology, Linley, Joseph, Harrington, and Wood (2006) ask questions such as 'What is positive psychology? Where has it come from? Where is it now? Where is it going?' in an attempt to review the progress and possible future direction of the field. The purpose of this article is to find answers to the latter two questions, but specifically from a South African perspective. This article reviews research done in the field of positive psychology¹ in South Africa and attempts to point to possible future directions for research in the field in South Africa, integrated with recommendations made by Strumpfer (2000), Wissing (2000), Cowen and Kilmer (2002), Seligman, Steen, Park, and Peterson (2005), and Linley et al. (2006).

A definition of positive psychology

Linley et al. (2006), after reviewing a number of definitions of positive psychology, came to the conclusion that there are certain core themes and consistencies, but also differences in emphasis and interpretation. They provided their own definition:

Positive psychology is the scientific study of optimal human functioning. At the meta-psychological level, it aims to redress the imbalance in psychological research and practice by calling attention to the positive aspects of human functioning and experience. At the pragmatic level, it is about understanding the wellsprings, processes and mechanisms that lead to desirable outcomes. (Linley et al., 2006, p. 5) As positive psychology is not clearly defined as yet, note should be taken of the need to understand the meta-psychological level at which it functions.

Historical background

Even though the paradigm of positive psychology was publicly launched in 1998 by Martin Seligman (1999) in his Presidential Address to the American Psychological Association (APA), it has a research tradition that goes back decades (Linley & Joseph, 2004). The Greek philosopher Aristotle's treatises on eudaimonia already reflect interest in what is good about humans and their lives and in optimal human functioning (Linley & Joseph, 2004). Within the very origins of modern psychology, James (in his writings of 1902, 1987) was interested in optimal human functioning and the role that transcendent experiences may play in stimulating this, as shown in his writings on 'healthy mindedness'. Since then, Jung (1933) investigated how people can become all that they can be through individuation, Jahoda (1958) asked questions about what might constitute mental health, and Allport (1961) echoed the theme of Jung within his work on the mature individual. Some of the other forerunners of positive psychology are from the paradigm of humanistic psychology, which studied the fully functioning person (Rogers, 1961), self-actualisation, and healthy individuals (Maslow, 1968) (cf. Linley & Joseph, 2004; Linley et al., 2006). An article by Strumpfer (2005) titled 'Standing on the shoulders of giants: Notes on early positive psychology (psychofortology)' provides a comprehensive overview of the contribution of these authors, and other diverse contributions of predecessors and well-known authors in the paradigm of positive psychology. However, these contributions have remained isolated from one another and lacked any shared language or common identity (Linley & Joseph, 2004). Seligman (in Linley et al., 2006) also realised that psychology had largely neglected some of its pre-World War II missions to cure mental illness, help people to lead more productive and fulfilling lives, and identify and nurture high talent. Instead, psychology has been largely dominated by a pathogenic paradigm, and as stated by Strumpfer (2005), psychologists' main activities centred on the assessment and treatment of pathos (suffering). Based on this, Seligman decided to use his APA presidency to initiate a shift in psychology's focus towards a more positive psychology (Seligman, 1999).

Positive psychology activities internationally

After the public launch of the new field of positive psychology, the field flourished and the work of researchers such as Csikszentmihalyi, Diener, Jamieson, Peterson, and Valiant, who also form the Positive Psychology Steering Committee, was consolidated. Other notable researchers who have contributed considerably since then include Snyder and Lopez who edited one of the first books in the field, namely the Handbook of Positive Psychology (Snyder & Lopez, 2002); Peterson (Peterson & Seligman, 2004) who headed up the Values-in-Action (VIA) project and developed the VIA classification of strengths and virtues; Frederickson (2001) who is known for her work on positive emotions; Haidt (Greene & Haidt, 2002) who investigated positive moral emotion and elevation; and Segerstrom (2001) who contributed to the field by investigating the beneficial effects of optimism on physical health (cf. Linley et al., 2006). Delle Fave (2006) has become well known for her work on subjective experiences of quality of life. Kahneman was also the first positive psychologist to be awarded a Nobel Prize (Seligman, 2004). This is by no means an exhaustive list of all the prominent authors in the field.

The work of these and other researchers culminated in the publication of numerous positive psychology books, 16 special journal issues since 2000, and the establishment of positive psychology networks that span the globe. The Journal of Positive Psychology was launched in 2006. Other accomplishments that mark the extremely rapid progress of the field are undergraduate, graduate, and even high school courses on positive psychology the world over, Positive Psychology Centres at several major universities, and active websites and list servers (see Seligman, 2004 and Seligman et al., 2005, for a full review of these and other accomplishments). At the recent 3rd European Conference on Positive Psychology, held in July 2006 in Portugal, attending members were challenged to contemplate, in the next two years, the current place of positive psychology — whether it should grow into a science on its own or whether it should be included in the broader field of psychology. This also reflects the views expressed by Linley et al. (2006) in their review of positive psychology.

Positive psychology activities in South Africa

Similar to the strands of positive psychology mentioned above, researchers in South Africa focused on self-actualisation in the late 1970s and 1980s (cf. Harmse, 1980; Van Zyl, 1979). The first prominent acknowledgement of a new field of study in South Africa was done by Strumpfer in 1990 in his article *Salutogenesis: A new paradigm, based on the work of Antonovsky (1987) regarding the core construct of salutogenesis, namely sense of coherence*. In 1995 Strumpfer proposed that the construct of salutogenesis (meaning the origin of health) should be broadened from an emphasis on health only to include strengths as well, and subsequently coined the term *fortology* (meaning the origin of strengths) (Strumpfer, 1995). Wissing and Van Eeden (1997, p. 5) went a step further and contended 'that in this domain, not only the origins of psychological well-being should be studied, but also the nature, manifestations and consequently ways to enhance psychological well-being and develop human capacities'. They therefore suggested the emergence of a new sub-discipline which they called *psychofortology* (Wissing & Van Eeden, 1997).

Other activities that mark progress in the field of positive psychology in South Africa include the First South African National Wellness Conference held in Port Elizabeth in 2000 and the 1st and 2nd South African Work Wellness Conferences held in Potchefstroom in 2002 and 2004 respectively, culminating in the South African Conference on Positive Psychology: Individual, Social and Work Wellness, held in Potchefstroom in 2006. The directed research programmes and units of Psychofortology and Work Wellness were also initiated at the North-West University and are currently involved in international and trans-university research projects, funded by the National Research Foundation (NRF) of South Africa.

Review of progress in the field

In 2002 Cowen and Kilmer reviewed the American Psychologist special issue on positive psychology, published in January 2000. In their critique, they mentioned limitations of the contributions to the special edition. First, they mentioned that the contributions were relatively insulated from closely related prior work in primary prevention and wellness enhancement. This issue has been addressed by several authors since the publication of Cowen and Kilmer's (2002) critique (cf. Linley et al., 2006; Seligman et al., 2005; Strumpfer, 2005). Second, they mentioned that the contributions lacked a cohesive foundational theoretical framework (which will be discussed in more detail under the sub-heading 'Data analysis and interpretation'). Last, they noted that the contributions focused largely on a prime adult, cross-sectional approach, which does not sufficiently reflect key life history and developmental pathways and the determinants of specific outcomes. In this regard, they suggest that research should focus centrally on key developmental determinants of early positive outcomes and should also use a longitudinal framework to investigate and identify factors and pathways that favour the maintenance of positive outcomes.

In 2005, Seligman et al. published an article titled 'Positive psychology progress: Empirical validation of interventions' in which they suggest future directions for research specifically related to interventions that increase individual happiness. They also add that the measurement of positive states needs more research, and that researchers should develop better behaviour-based, domain-specific assessment tools. In the most comprehensive review as yet, Linley et al. (2006) propose the following pertinent issues for consideration in the research and practice of positive psychology: a need to synthesise the positive and the negative; to continue to build on historical antecedents; to integrate research findings across levels of analysis (e.g., integrating findings of neuroscience with related psychological findings); to build a constituency with powerful stakeholders; and to be sensitive to the implications of description versus prescription.

Similar to the review of Linley et al. (2006), South African researchers also reviewed the field of positive psychology and suggested directions for the way forward. In his 'Psychofortology: Review of a new paradigm marching on', Strumpfer (2000) suggested that, in disentangling fortigenic and pathogenic factors, it is exceedingly important to think in terms of the systems perspective that suggests models that take into consideration contextual factors, timing and life-course variables, and the compass of impacting variables. He also mentioned that, although instrumentation and validation studies on measurements of positive psychological constructs are important, the research should be broadened to investigate complex phenomena. In this regard, he suggested that qualitative investigations are also of fundamental importance. He concluded with ten suggestions on particular areas of individual and group functioning that can be investigated along fortological lines. Some of these suggestions include constructive, fortologically orientated youth work, fortigenic aspects of life transitions, relating fortigenic factors to health care costs, fortigenic aspects of small group and team processes, and research on specific constructs such as wisdom and flow.

Wissing (2000), in her presentation titled 'Wellness: Construct clarification and a framework for future research and practice', indicated that research on wellness can be broadly categorised into three phases. Stage 1 research (prior to 2000) was primarily focused on protective environmental factors and enabling resources. Stage 2 research (in 2000) focused on intra-personal factors and characteristics of wellness. Stage 3 research should (after 2000) focus more on processes that facilitate wellness. She ended her discussion with 18 challenging questions for research in the field of positive psychology. Since then, another five years have passed and we can ask 'Where are we now?' in the field of positive psychology in South Africa.

Aims

The aims of this article are to provide an overview of general trends and main developments in the field, internationally as well as nationally; to report on research in the field of positive psychology in the South African context; to point out possible areas of neglect; and finally to recommend possible directions for future South African research.

Method, Design

A systematic review (Petticrew & Roberts, 2006) was done in order to synthesise research evidence. In this process, the boundary of this review was defined to include only documented research in the field of positive psychology in South Africa. The inclusion/exclusion criteria were set to guide the data collection. All studies were appraised in terms of their relevance for inclusion in the database and their conformity to the inclusion criteria. The data were synthesised by using the categorisation framework developed for this purpose. As a form of researcher triangulation, comments from both an international and a national expert in the field of positive psychology, respectively Csikszentmihalyi and Wissing, were considered.

Data collection

A search was done by means of the South African Bibliographic Information Network (SABINET), an online information technology service. The earliest references found on this electronic database date back to 1970; therefore only studies over the past 36 years were included. Databases consisting of current and completed research projects in South Africa were searched. This includes articles from peer-reviewed South African journals; online full-text articles from peer-reviewed South African journals; listed, current, and completed unpublished doctoral theses and master's dissertations at South African universities; conference presentations from the 2nd South African Work Wellness conference held in 2004 and the South African Conference on Positive Psychology held in 2006; and funded research projects as documented on the Nexus database. Since all these databases only reflect South African publications, international publications of South African authors are not reflected in the results of this article.

Keywords for the search were focused on both the macro-level and micro-level and included the following: positive psychology, salutogenesis, fortigenesis, psychofortology, positive mental health, subjective well-being, employee wellness or well-being, emotional wellness or well-being, social wellness or well-being, sense of coherence, locus of control, self-efficacy, hardiness, learned resourcefulness, resilience, potency, character strengths, signature strengths, emotional intelligence, hope, optimism, mindfulness, self-regulation, gratitude, toughness, wisdom, spirituality, flow, happiness, positive emotions or emotionality, self-actualisation, self-determination, engagement, appreciative enquiry, eustress, coping, mastery, fully functioning personality, agency, strength, and ego-resiliency.

Data analysis and interpretation

One of the aims of this article is to provide a review of research being done in South Africa in the field of positive psychology. In order to do this, this field needs to be explored and its taxonomy established. Since Strumpfer (2005) pointed out that positive psychology in fact stands on the shoulders of giants, as discussed above, the scope of this investigation was broadened to include constructs also related to aspects of human optimal functioning. A clear and appropriate framework is needed to categorise the many divergent constructs in comprehensive and logical clusters. International research provided some possible classification systems, but these could not fulfil the requirements of such a comprehensive framework as was required for this research. South African literature was reviewed and additional classifications were utilised to add to the international classification systems.

International classification systems of positive psychology construct

The new paradigm of positive psychology stands at a crossroads (Linley et al., 2006) and offers a grand integrative vision that could change the face of psychology. This is reflected in a variety of perspectives on how the field can be defined, and in the uncertainty about appropriate classification systems. Linley et al. (2006) point out that positive psychology does not have a taxonomic influence and that the challenge is now to expand a classification context in order to synthesise the diverse states, traits, and outcomes in relation to each other. These domains of psychological strengths should be clearly understood in relation to and in interaction with each other. In terms of formalising the new field of positive psychology, different views from a few forerunners of the field represent efforts to define its taxonomy and scope since its inception in 2000 (c.f., Linley et al., 2006; Seligman & Csikszentmihalyi, 2000; Strumpfer, 2005; Wissing, 2000). Seligman and Csikszentmihalyi (2000) initially defined the field of positive psychology at the subjective level as comprising (a) valued subjective experiences, namely past (well-being, contentment, and satisfaction), present (flow and happiness), and future (hope and optimism); and (b) individual and group levels, namely at an individual level positive individual traits (capacity for love and vocation, courage, interpersonal skill, aesthetic sensibility, perseverance, forgiveness, originality, future mindedness, spirituality, high talent, and wisdom) and at a group level civic virtues and the institutions that move individuals toward better citizenship (responsibility, nurturance, altruism, civility, moderation, tolerance, and work ethic). A few years later, Peterson and Seligman (2004) suggested that positive psychology focuses on three related topics and used more or less the same broad clusters, namely the study of positive subjective experiences, the study of positive individual traits, and the study of institutions that enable positive experiences and positive traits. One year later, Seligman et al. (2005) described positive psychology as an umbrella term for the study of positive emotions, positive character traits, and enabling institutions. From these slightly different descriptions of the field of positive psychology, it is evident that uncertainty still exists as to the boundaries and constructs of this new field. As a new and growing field of psychology, it needs to define its roots

and solidify its taxonomy. In this context, Seligman and Csikszentmihalyi (2000, p. 5) describe the aims of positive psychology as follows: ‘... to begin to catalyse a change in the focus of psychology from preoccupation only with repairing the worst things in life to also building positive qualities’. Linley et al. (2006) are of the opinion that positive psychology should also focus on well-being, health, and optimal functioning. This is in line with Strumpfer’s (2005) reasoning about the building blocks of positive psychology. The aim of Strumpfer’s (2005) study was also to look at research on positive psychology in the broader context.

The challenge in this article was to find an appropriate categorisation framework to effectively group the numerous aspects and concepts that fall under the broad terms of the three major (currently related, but distinct) families of health-oriented alternatives, namely primary prevention, wellness-enhancement, and — most recently — positive psychology (Cowen & Kilmer, 2002). Peterson and Seligman (2004), however, are of the opinion that positive psychology should be distinguished from the humanistic psychology of the 1960s and 1970s and from the positive thinking movement in its reliance on empirical research to understand people and the lives they lead. They cite numerous good examples of on-going psychological research that fit under the positive psychology umbrella, but admit that the new field lacks a common vocabulary that agrees on the positive traits and allows psychologists to move among instances of them. This need for a common classification system and vocabulary led to the development of a handbook that classifies character strengths and virtues. The publication of the January 2000 edition of the *American Psychologist* on positive psychology elicited both praise and critique. A need explicitly expressed by Cowen and Kilmer (2002), as mentioned previously, is for the development of a comprehensive, overall guiding theory of positive psychology and the outcomes that are central to such a theory. They therefore criticised the lack of a cohesive foundational theoretical framework and listed the more than 60 (presumably central) positive psychology outcomes addressed in only 16 articles in the *American Psychologist* of January 2000. These positive psychology target outcome variables were not grouped or clustered in any particular manner, and the need for a proper classification system is therefore emphasised. They are of the opinion that relevant dependant variables should be clearly defined and interrelationships and co-occurrences among them established. In doing so, the more than 60 different variables will be condensed to a finite number of clearly defined factors whose relationships and relevance to positive outcomes are self-evident. This, they claim, could help to promote desired outcomes pragmatically, parsimoniously, and functionally.

One concern that framed the inception of a classification project was the question of how one can define the concepts of ‘strength’ and ‘highest potential’ (Peterson & Seligman, 2004); these questions eventually led to the publication of *Character Strengths and Virtues: A Handbook and Classification* (CVS) (Peterson & Seligman, 2004). The CVS serves as a ‘manual of the sanities’ (p. 4) and describes and classifies 24 strengths that enable human thriving and make the good life possible. They believe that character strengths are the bedrock of the human condition and that strength-congruent activity represents an important route to the psychological good life. They also believe that the CVS and the classification

of character is an important step toward a common vocabulary of measurable positive traits, and trust that this classification will provide psychologists with ways of thinking about strengths, naming them, and measuring them. These character strengths are categorised in terms of six overarching virtues (Peterson & Seligman, 2004) that almost every culture across the world endorses, namely, wisdom, courage, humanity, justice, temperance, and transcendence. Under each virtue particular strengths were identified that meets certain criteria (see Seligman et al., 2005, p. 411 for a full description of criteria and also Peterson & Seligman, 2004, pp. 10–32).

Linley et al. (2006) proposed a pragmatic level of what psychologists do in terms of their research and their practice. They distinguish between four levels of analysis for positive psychology, in addition to the meta-psychological aspects that can act as a way of understanding the remit of positive psychology and how different elements can relate to each other.

They describe the four levels of analysis as follows (pp. 7–8):

- (a) The wellsprings of interest in positive psychology may be defined as the precursors and facilitators of the processes and mechanisms. They include things such as the generic foundations of well-being, and the early environmental experiences that allow the development of strengths and virtues.
- (b) The processes of interest to positive psychology may be defined as those psychological ingredients (e.g., strengths and virtues) that lead to the good life, or equally the obstacles to leading a good life, for example a life of meaning and fulfilment (King, Eells, & Burton, 2004; King & Napa, 1998). Positive psychology should seek to understand the factors that facilitate optimal functioning as much as those that prevent it.
- (c) The mechanisms of interest to positive psychology may be defined as those extra-psychological factors that facilitate (or impede) the pursuit of a good life. For example, these mechanisms may be personal and social relationships, working environments, organisations and institutions, communities, and the broader social, cultural, political, and economic systems in which our lives are inextricably embedded.
- (d) The outcomes of interest to positive psychology may be defined as those subjective, social, and cultural states that characterise a good life. Here we may think of factors such as happiness, well-being, fulfilment, and health (at the subjective level), positive communities and institutions that foster good lives (at the interpersonal level), and political, economic, and environmental policies that promote harmony and sustainability (at the social level).

Linley et al.'s (2006) classification system did not provide a workable method to effectively capture the data for the present study, as the system is too broad and does not include listings of specific constructs. A more exact and clear-cut framework was therefore developed for categorisation purposes in the present study.

South African classification systems of positive psychology construct

Strumpfer (1990) linked the five constructs of sense of coherence, hardiness, potency, stamina, and learned resourcefulness to the salutogenic paradigm and so provided a useful frame of reference and guidelines for future research in South Africa. In similar fashion, Strumpfer (1995) elaborated on his previous classification and, based on the views of Antonovsky (1991), included self-efficacy and locus of control in the salutogenic constructs. After the term fortigenesis (Strumpfer, 1995) was introduced in South Africa, he focused on related constructs (Strumpfer, 2003) and listed engagement, meaningfulness, subjective well-being, positive emotions, and proactive coping as fortigenic constructs (under the general heading of resilience). He also refers to restorative places, flow activities, interpersonal flourishing, and Balint groups.

Wissing (2000) is of the opinion that there are many gaps in our knowledge of wellness, and expressed a need for the development of a sound scientific foundation for the discipline of positive psychology. One of these gaps is the identification of categories of constructs to use for clustering purposes related to the field of positive psychology. These observations are echoed by, for example, Cowen and Kilmer (2002) and Linley et al. (2006). Wissing (2000), in her overview of the construct clarification of wellness and her proposed framework for future research and practice, explained that wellness promotion refers, on a practical and empirical level, to the enhancement of strengths on individual, group, and community levels in various contexts. She mentioned broad overarching constructs related to the hypothesised main components of wellness (physical, emotional, cognitive, spiritual, social, behavioural, occupational, and ecological) and positive traits (sense of coherence, positive self-esteem, humour, flow, resilience, wisdom, and optimistic expectations) as well as positive personality traits (dispositional optimism, self-organisation, self-directedness, adaptiveness, wisdom, and exceptional performance). This overview by Wissing (2000) is in line with the basic views of Seligman and Csikszentmihalyi (2000). In her paper, the broad constructs and more specific concepts were randomly listed without a clear indication of where they fit in or belong in the wide spectrum of positive psychology-related categories of constructs. This again stresses the need for a clear classification system.

Strumpfer (2000) commented on the January 2000 American Psychologist and referred to the range of constructs, ways of thinking, and practical applications in the era of fortology and positive psychology. He pointed to the diversity of the fields of psychofortology and related disciplines represented by the published articles. Strumpfer (2000) was of the opinion that the paradigm of positive psychology, as well as the newly named sub-discipline of psychofortology, is evolving rapidly. Similar views are again expressed by Linley et al. (2006).

Strumpfer (2005) refers to the work of Digman (1997) and proposes a conceptual model as a means of integrating contributions of numerous 'giants' in the field of the strengths paradigm. This conceptual model consists of the socialisation factor (a) and the personal growth (b) factor (for a complete list of constructs falling under these factors see Strumpfer, 2005). A third factor referring to spirituality or religiousness needs to be added in order to ensure a holistic model. This classification system was considered but not used in the present investigation as it did not allow for a sufficiently detailed categorisation of all related concepts and constructs.

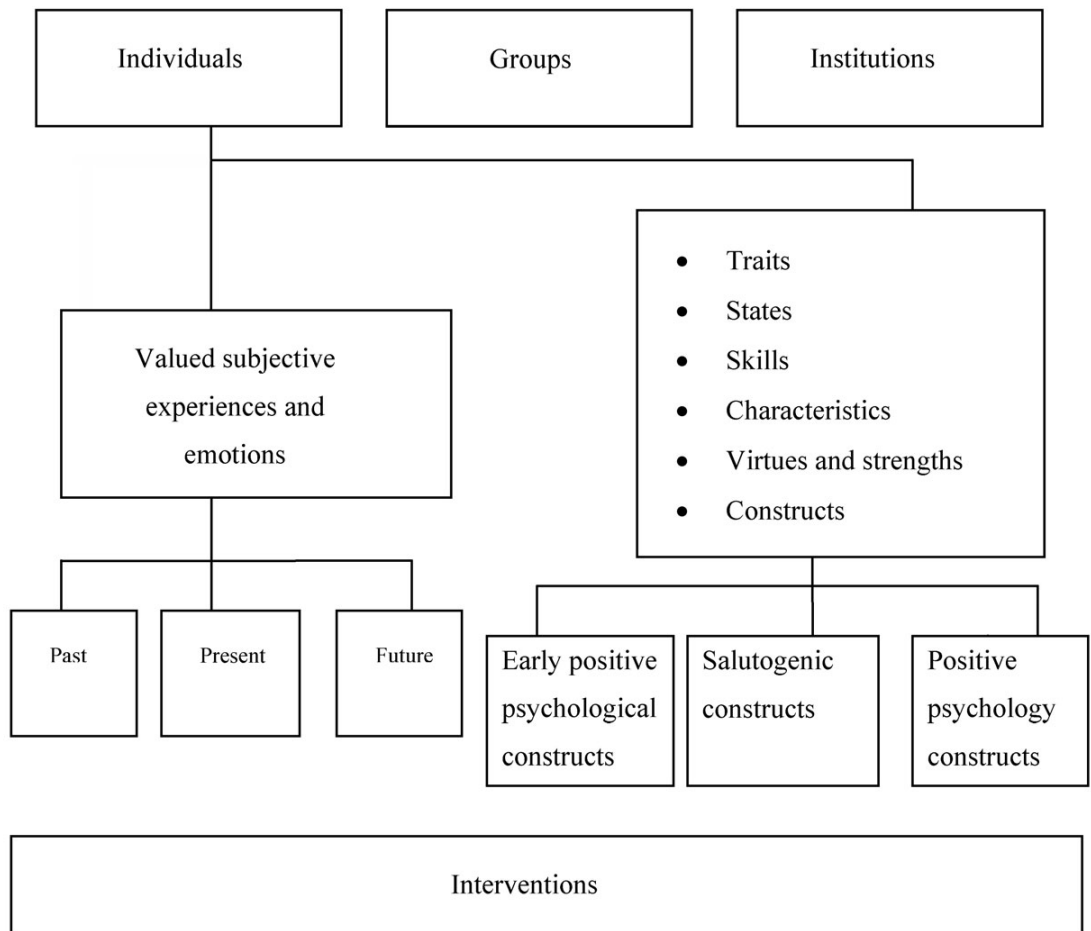
The categorisation framework used in this article

Literature on positive psychology points to a variety of broad theories, models, and fields that indicate a trend to optimise human strengths. The science of strengths and optimisation can include references to optimal human functioning, holistic and subjective well-being, salutogenesis, fortigenesis, psychofortology (more generally referred to as fortology), primary prevention (coping), wellness enhancement, and positive psychology. This science of strengths investigates states, traits, outcomes, psychological strengths, constructs, positive qualities, virtues, variables, and concepts in individuals, groups, and institutions.

For categorisation purposes, it was necessary to combine existing theoretical frameworks and classification systems (as discussed above) into a more comprehensive compilation for categorisation purposes. In conceptualising a workable categorisation framework, the three fields of positive psychology (Seligman, 2002; Seligman & Csikszentmihalyi, 2000) formed the basis for the categorisation framework in this article. The framework is shown in Figure 1. First, there are studies related to individuals, groups, and institutions. Second, on the individual level, valued subjective experiences and emotions (in the past, present, and future as defined by Seligman & Csikszentmihalyi, 2000) were differentiated from positive individual traits, states, skills, characteristics, virtues, strengths, and constructs.

These were subsequently categorised into early positive psychological constructs (constructs already extensively investigated during the eighties and early nineties before the formal announcement of the term and field of study of positive psychology); salutogenic constructs (according to the 1990 and 1995 conceptualisation of Strumpfer); and the more recently introduced positive psychology constructs. Finally, the categorisations refer to research done on group and institutional level as well as interventions (which could facilitate optimisation on individual, group, and institutional level).

Figure 1. Categorisation framework used in this article



The results of this study are presented in terms of this categorisation framework. Descriptive statistics were used to present the findings.

RESULTS

The following tables and figure reflect the frequency of studies according to the categorisation framework and type of research, as well as frequencies of studies done within three pre-defined time clusters. Frequencies of studies regarding valued subjective experiences and emotions on an individual level are presented in Table 1.

Table 1. Studies about individuals: valued subjective experiences and emotions (N=27)

Past	<i>f</i>	Present	<i>f</i>	Future	<i>f</i>
Employee wellness/ well being	14	Empowerment	3	Hope	4
Psychological/emotional		Engagement	20	Optimism	7
wellness/ well being	20				
Satisfaction with life	3	Eustress	4		

Subjective well being	11	Flourishing	1	
		Flow	11	
		Fully functioning person	2	
		Happiness	9	
		Mindfulness/meaningfulness	5	
		Positive emotionality	1	
		Positive emotions	4	
		Positive mental health	4	
		Quality of life	1	
		Toughness	2	
		Work life balance	1	
TOTAL	48		68	11

From Table 1 it can be seen that most of the studies in the category of valued subjective experiences were related to present experiences. Of these present experiences, engagement was most often investigated. Apart from this, psychological or emotional wellness or well-being was most frequently researched in the category of past valued subjective experiences. Hope and optimism were the only two experiences studied in the category of future valued subjective experiences. Frequencies of studies regarding individual traits, states, skills, characteristics, virtues and strengths, as well as constructs are presented in Table 2.

Table 2. Studies about individuals: traits, states, skills, characteristics, virtues and strengths, as well as constructs (N = 976)

Early positive psychological constructs	f	Salutogenic constructs	f	Positive psychology constructs	f
Agency	4	Hardiness	21	Emotional intelligence	47
Coping	424	Learned	19	Gratitude	1
Self-actualisation	33	Locus of control	129	Humour	1
		Potency	7	Integrity	1
		Self efficacy	67	Mastery	1
		Sense of coherence	135	Psychological strengths	4
		Stamina	0	Resilience	17
				Self-regulation	5
		Fortology	2	Spirituality	25
		Salutogenesis	24	Uniqueness seeking	1
				Wisdom	2
				Positive psychology	6
Total	461		404		111

It is evident from Table 2 that South African researchers did extensive research on earlier positive psychology constructs such as coping before the onset of the year 2000. Almost an equal number of studies were done on the traditional salutogenic constructs of which sense of coherence and locus of control appear to be most popular. Of the newly studied positive psychology constructs, emotional intelligence, spirituality, and resilience have been most frequently investigated. Apart from the individual characteristics studied, a number of theoretical publications also appeared regarding salutogenesis, fortology, and positive psychology as new fields of investigation. Frequencies of studies on groups, institutions, and interventions are presented in Table 3.

Table 3. Studies about groups (N =13), institutions (N = 4), and interventions (N=74)

Groups	f	Institutions	f	Interventions	f
	13		4		74

According to Seligman and Csikszentmihalyi (2000), individual aspects, groups, and institutions should be investigated in positive psychology. A very small number of studies have been done on groups and institutions in South Africa. However, it seems from Table 3 that South African researchers have instead been focusing on interventions that enable positive experiences and positive traits.

Figure 2 presents the studies categorised according to the type of research.

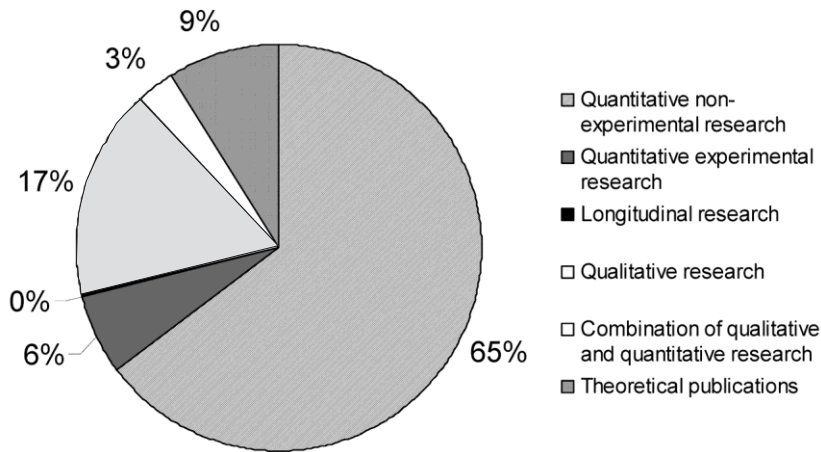


Figure 2. Studies categorised according to the type of research (N=851)

Figure 2 indicates that the majority of research undertaken in South Africa is of a quantitative, non-experimental nature. This is to be expected, seeing that a new field of investigation requires descriptive research before causality or other relationships can be explored. It is, however, somewhat alarming that a minimal number of qualitative studies has been undertaken thus far, seeing that this is a very good strategy for conducting exploratory research. It is perhaps not surprising that only one longitudinal research project could be traced because most research projects (especially at master's and doctoral level) usually have to be completed within a specified time. The pressure on researchers (academics) to publish does not encourage longitudinal research either. In order to investigate the development trends in more detail, the following three tables report on the frequency of studies, done within three pre-defined time clusters. The three time clusters reflect research on earlier positive psychology constructs (1970–1990), salutogenesis and fortigenesis (1991–2000), and positive psychology constructs (2001–2006). Table 4 reflects studies on valued subjective experiences and emotions on the individual level in the three pre-defined time clusters.

Table 4. Studies about individuals: valued subjective experiences and emotions

	Past			Present			Future				
	1970-1990	1991-2000	2001-2006	1970-1990	1991-2000	2001-2006	1970-1990	1991-2000	2001-2006		
Employee wellness/well Being	1	6	7	Empowerment	0	0	3	Hope	0	1	3
Psychological/ emotional wellness/well being	0	5	12	Engagement	0	0	16	Optimism	0	0	7
Satisfaction with life	0	0	3	Eustress	1	3	0				
Subjective well being	1	2	7	Flourishing	0	0	1				
				Flow	1	3	6				
				Fully functioning person	0	2	0				
				Happiness	3	3	3				
				Mindfulness/ meaningfulness	0	1	3				
				Positive emotionality	1	0	0				
				Positive emotions	0	2	2				
				Positive mental health	2	2	0				
				Quality of life	0	0	1				
				Toughness	0	3	0				
				Work life balance	0	0	1				
Total	2	13	29		8	19	36		0	1	10

From Table 4 it can be seen that research about valued subjective experiences became more popular during the nineties, but the majority of studies were undertaken after 2000. Under 'past valued subjective experiences and emotions', psychological/ emotional wellness/well-being was most frequently investigated, under 'present valued subjective experiences and emotions', engagement was most frequently investigated, while optimism featured most prominently under 'future valued subjective experiences and emotions'.

Table 5 reflects studies on individual traits, states, skills, characteristics, virtues and strengths, as well as constructs in the three pre-defined time clusters.

Table 5. Studies about individuals: traits, states, skills, characteristics, virtues and strengths, constructs

Early positive psychological Constructs	1970	1991	2001	Salutogenic constructs	1970	1991	2001	Positive psychology	1970	1991	2001
	1990	2000	2006		1990	2000	2006		1990	2000	2006
Agency	0	2	2	Hardiness	5	12	2	Emotional Intelligence	0	7	21
Coping	19	199	153	Learned resourcefulness	0	14	4	Graduate	0	1	0
Self-actualisation	2	21	5	Locus of control	18	61	40	Humour	0	1	0
				Potency	0	7	0	Integrity	0	0	1
				Self efficacy	8	29	25	Mastery	0	1	0
				Sense of coherence	1	51	65	Psychological strength	0	0	5
				Stamina	0	0	0	Resilience Self-regulation	0	6	11
				Fortology	0	1	0	Spirituality	1	9	10
				Salutogenesis	1	9	8	Uniqueness seeking	0	0	1
								Wisdom	0	0	2
								Positive psychology	0	0	6
Total	21	222	160		33	184	144		2	27	57

Table 5 shows that early positive psychological constructs, specifically coping, were mostly investigated during the nineties. Surprisingly, the trend continues into the new millennium and it seems that it is still a popular construct to research. Locus of control was the construct most frequently investigated before salutogenesis became popularly known in psychology in South Africa. Currently, sense of coherence seems to be the main construct that is investigated within this paradigm. As expected, very little research was done in South Africa on positive psychology constructs before the formal introduction of this field.

In Table 6, frequencies of studies regarding groups, institutions, and interventions in the three pre-defined time clusters are reported.

Table 6. Studies about groups, institutions, and interventions

Groups				Institutions				Interventions			
1970-1990	1991-2000	2001-2005		1970-1990	1991-2000	2001-2006		1970-1990	1991-2000	2001-2006	
1	3	7		0	0	4		9	25	33	
Total	1	3	7	Total	0	0	4	Total	9	25	33

From Table 6 it can be seen that studies on groups, institutions, and interventions that facilitate the enhancement of psychological well-being and develop human capacities indicate a growing trend and stronger focus in more recent years.

CONCLUSIONS

The results reveal that most of the research thus far has been done on individual characteristics, states, traits, skills, virtues and strengths, as well as constructs. Fewer studies focused on valued subjective experiences. Of these valued subjective experiences, engagement, flow, and psychological and emotional wellness or well-being led to most research initiatives. It seems that South African researchers are also actively investigating the effectiveness of interventions that could facilitate wellness. The results further indicate that quantitative, non-experimental studies constitute the bulk of studies undertaken in this field. The earliest study captured on the electronic database dates back to 1973. Coping emerged as a relevant field to explore in the early eighties. This gradually led to investigations into salutogenesis, which was researched mostly in the nineties. South African researchers kept track of the worldwide launch of the field of positive psychology and directed their research initiatives accordingly. In 2000, Wissing summarised research in the science of strengths in three broad stages as discussed above. The results of this article confirm the focus of research in the three stages mentioned. First, this investigation shows that, before 2000, most research done in South Africa was in the field of coping, which ties in with the enabling resources as mentioned by Wissing (2000). Second, the results reveal that the bulk of research done around the year 2000 relates to individual characteristics, states, traits, skills, virtues and strengths, and constructs, which again seems similar to the intra-personal factors referred to by Wissing (2000). She proposed that research after the year 2000 should focus more on processes that facilitate wellness. In this regard, the results indicate that, although some studies investigated institutions and interventions that facilitate wellness, researchers in South Africa did not pursue this direction of research actively enough.

In a similar review done by Strumpfer (2000), he recommended that research should focus more on the complexity of phenomena as well as contextual factors that influence them. In this regard, he suggested that research should be undertaken from a systems perspective as well as from a qualitative stance. He also suggested specific lines of research related to group functioning. The studies reported on in this article proved to be lacking in terms of both qualitative research and studies related to group functioning. However, the data collected for the purposes of this article could not reveal any trends regarding a systems perspective used or even contextual factors taken into account. Internationally, Cowen and Kilmer (2002) critiqued the January 2000 American Psychologist edition as mentioned before. In their observations, they argued that the articles published in that edition lacked a theoretical framework.

They were of the opinion that much more acknowledgement should be given to prior work in the field. This sentiment was echoed by Linley et al. (2006) when they suggested that the future of positive psychology should continue to pay attention to historical antecedents. It seems that South African research

instinctively started off by investigating historical constructs from the humanistic paradigm that can be seen as one of the foundational aspects of the science of strengths. Cowen and Kilmer (2002) specifically mentioned the lack of focus on developmental pathways to wellness in the published articles. It is disappointing that research in South Africa might also currently deserve this criticism, considering the lack of longitudinal research undertaken thus far. Seligman et al. (2005) provide future directions of research specifically related to interventions that increase individual happiness. A number of studies have been done in South Africa on interventions. However, it seems that these interventions are aimed at a much broader array of constructs and are not only focused on individual happiness. We could not comment in this research on South Africa's progress regarding the development of better behaviour-based or domain-specific assessment tools of positive states, as Seligman et al. (2005) suggested should be addressed.

In the most recent comprehensive review of positive psychology as a field, Linley et al. (2006) recommend that future research should attempt to integrate across levels of analysis. The latest work of Strumpfer (2006a) clearly adheres to this recommendation, as it addresses the role of genetics, the behavioural approach system, natural killer cells, and dopamine in relation to positive emotions and positive emotionality. Linley et al. (2006) also strongly recommend that researchers should build constituencies with powerful stakeholders. Some of the studies included in the database that was used for this article point to collaboration between researchers and important stakeholders in South Africa such as the South African Police Service and the National Research Foundation.

RECOMMENDATIONS

In a recent publication, Strumpfer (2006b) suggests that interpersonal flourishing is an area of fortigenesis that has received too little attention in the past, and most research still seems to be strongly focused on individualistic functioning. Wissing, Temane, Wissing, Khumalo, and Van Eeden (2006) are doing some pioneering work in this area. However, this seems to be an area of investigation that has opened up challenges to researchers that can be pursued further. Both Strumpfer (2000) and Wissing (2000) have urged that qualitative research is necessary to explore the field of fortology. However, from our results, it seems that only a limited number of qualitative studies have been done so far. Future research can definitely still explore the field from a qualitative point of view.

If researchers would like to adhere to recommendations made by Wissing and Van Eeden (1997) that fortology should also explore manifestations of well-being and ways of enhancing psychological well-being, more longitudinal research projects are desperately needed. This was echoed by Cowen and Kilmer (2002) when they suggested that key developmental determinants of early positive outcomes should be investigated using a longitudinal framework. In the same spirit as that displayed by Linley et al. (2006), these recommendations should be seen as descriptive and not necessarily prescriptive.

LIMITATIONS

Limitations of this systematic review include the following. International publications of South African authors were not cited as only South African databases were searched. Treatises done by, for instance, Registered Counsellors as part of a B Psych degree were not included as these treatises usually do not appear on national databases. As such, it is acknowledged that the range of material might have been limited by the inclusion criteria used. As studies with significant results are more likely to lead to multiple publications, it is possible that several publications listed and included represent the same study.

Strumpfer (2005) and Linley et al. (2006) specifically warn that the science of strengths cannot be comprehensively described or any taxonomy constructed without taking into account the negative or more pathogenically orientated factors as well. This can be seen as a specific limitation of this research, seeing that only positive factors were listed and reported on.

NOTE

1. The following terms are used interchangeably in this article: fortigenesis, fortology, positive psychology, and science of strengths.

REFERENCES

- Allport, G. W. (1961). *Patterns and growth in personality*. New York: Holt, Rinehart & Winston.
- Antonovsky, A. (1987). *Unravelling the mystery of health: How people manage stress and stay well*. San Francisco, CA: Jossey-Bass.
- Antonovsky, A. (1991). The structural sources of salutogenic strengths. In C. L. Cooper & R. Payne (Eds), *Personality and stress: Individual differences in the stress process*, (pp. 67–104). New York: Wiley.
- Cowen, E. L., & Kilmer, R. P. (2002). 'Positive Psychology': Some plusses and some open issues. *Journal of Community Psychology*, 30(4), 449–460.
- Delle Fave, A. (2006, July). Subjective experience and the development of complexity. Keynote paper presented at the 3rd European Conference on Positive Psychology, Braga, Portugal.
- Digman, J. M. (1997). Higher order factors of the Big Five. *Journal of Personality and Social Psychology*, 73, 1246–1256.
- Frederickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist*, 56, 218–226. Greene, J., & Haidt, J. (2002). How (and where) does moral judgment work? *Trends in Cognitive Science* 6, 517–523.
- Harmse, P. J. H. (1980). The role of anxiety, self-image and self-actualization in the achievement motivation of managers. Unpublished master's dissertation, Rand Afrikaans University, Johannesburg.
- Jahoda, M. (1958). *Current concepts of positive mental health*. New York: Basic Books. James, W. (1987). Pragmatism: A new name for some old ways of thinking. In B. Kuklick (Ed.), *William James: Writings 1902–1910* (pp. 479–624). New York: Library of America.
- Jung, C. G. (1933). *Modern man in search of a soul*. (W. S. Dell & C. F. Baynes, Trans.). New York: Harcourt Brace Jovanovich.
- King, L. A., Eells, J. E., & Burton, C. M. (2004). The good life, broadly and narrowly considered. In P. A. Linley & S. Joseph (Eds.), *Positive psychology in practice* (pp. 35–52). Hoboken, NJ: Wiley.
- King, L. A., & Napa, C. K. (1998). What makes a life good? *Journal of Personality and Social Psychology*, 75, 156–165.

Linley, P. A., & Joseph, S. (2004). Applied positive psychology: A new perspective for professional practice. In P. A. Linley & S. Joseph (Eds.), *Positive psychology in practice* (pp. 3–12). Hoboken, NJ: Wiley.

Linley, P. A., Joseph, S., Harrington, S., & Wood, A. M. (2006). Positive psychology: Past, present and (possible) future. *The Journal of Positive Psychology*, 1(1), 3–16.

Maslow, A. H. (1968). *Toward a psychology of being*. New York: Van Nostrand.
Peterson, C., & Seligman, M. E. P. (2004). *Character strengths and virtues: A handbook and classification*. Washington, DC: American Psychological Association.

Petticrew, M., & Roberts, H. (2006). *Systematic reviews in the social sciences: A Practical guide*. Oxford: Blackwell.

Rogers, C. R. (1961). *On becoming a person: A therapist's view of psychotherapy*. Boston, MA: Houghton Mifflin.

Segerstrom, S. C. (2001). Optimism, goal conflict, and stressor-related immune change. *Journal of Behavioural Medicine*, 24, 441–467.

Seligman, M. E. P. (1999). The president's address. *American Psychologist*, 54, 559–562.
Seligman, M. E. P. (2002). Positive psychology, positive prevention, and positive

Therapy. In C. R. Snyder & S. J. Lopez. (Eds.), *Handbook of positive psychology* (pp. 3–9). New York: Oxford.

Seligman, M. E. P. (2004). Foreword. In P. A. Linley & S. Joseph (Eds.), *Positive psychology in practice* (pp. xi–xiii). Hoboken, NJ: John Wiley.

Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55(1), 5–14.

Seligman, M. E. P., Steen, T. A., Park, N., & Peterson, C. (2005). Positive psychology progress: Empirical validation of interventions. *American Psychologist*, 60(5), 410–421.

Snyder, C. R., & Lopez, S. J. (Eds.). (2002). *Handbook of positive psychology*. New York: Oxford University Press.

Strumpfer, D. J. W. (1990). Salutogenesis: A new paradigm. *South African Journal of Psychology*, 20, 45–52.

Strumpfer, D. J. W. (1995). The origins of health and strength: From 'salutogenesis' to 'fortigenesis'. *South African Journal of Psychology*, 25, 81–89.

Strumpfer, D. J. W. (2000). Psychofortology: Review of a new paradigm marching on. Retrieved June 7, 2005, from <http://www.general.rau.ac.za/psych>

Strumpfer, D. J. W. (2003). Resilience and burnout: A stitch that could save nine. *South African Journal of Psychology*, 33(2), 69–79.

Strumpfer, D. J. W. (2005). Standing on the shoulders of giants: Notes on early positive psychology (Psychofortology). *South African Journal of Psychology*, 35(1), 21–45.

Strumpfer, D. J. W. (2006a). Positive emotions, positive emotionality, and their contribution to fortigenic living: A review. *South African Journal of Psychology*, 36, 144–167.

Strumpfer, D. J. W. (2006b). The strengths perspective: Fortigenesis in adult life. *Social Indicators Research*, 77, 11–36.

Van Zyl, F. J. (1979). The change in attitudes of a group of central control room operators with regard to increasing automatisation in the cement industry. Unpublished master's dissertation, Graduate School of Business, University of South Africa, Johannesburg.

Wissing, M. P. (2000, May). Wellness: Construct clarification and a framework for future research and practice. Paper presented at the First South African National Wellness Conference, Port Elizabeth, South Africa.

Wissing M., Temane, M., Wissing, J., Khumalo, T., & van Eeden, C. (2006, July). Diversity in patterns of interpersonal well-being. Paper presented at the Third European Conference on Positive Psychology, Braga, Portugal.

Wissing, M. P., & van Eeden, C. (1997, September). Psychological well-being: A fortigenic conceptualisation and empirical classification. Paper presented at the Annual Congress of the Psychological Society of South Africa, Durban, South Africa.