

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 Strümpfer); and the more recently introduced positive psychology constructs. Lastly, the categorisation refer to research done on group and institutional level as well as interventions (which could facilitate optimisation on individual, group and institutional level).

The results of this research are presented in terms of this categorisation framework.

RESULTS

The following table and figures reflect the frequency of studies according to the categorisation framework, type of research, type of publication and research contributions of various universities.

Frequencies of studies regarding individuals, groups, institutions and interventions are presented in Table 1.

Table 1: Frequencies of studies regarding individuals, groups, institutions and interventions

Studies regarding individuals: valued subjective experiences and emotions		
Past	Present	Future
48	68	11
Studies regarding individuals: traits, states, skills, characteristics, virtues and strengths, constructs		
Early positive psychological constructs 461	Salutogenic constructs 404	Positive psychology constructs 111
Studies regarding groups, institutions and interventions		
Groups 13	Institutions 4	Interventions 74

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 (such as empowerment, flow, toughness and work-life balance), engagement was the most often investigated. Apart from this, psychological or emotional wellness or well-being and employee wellness/well-being were 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.

Results also reveal that South African researchers did extensive research on earlier positive psychology constructs like coping before the onset of the year 2000. Almost an equal number of studies were done on the traditional salutogenic constructs (such as hardiness, self-efficacy and learned resourcefulness). Sense of coherence and locus of control appear to be most popular. Of the newly studied positive psychology constructs (like psychological strengths, mastery, integrity and wisdom), emotional intelligence, spirituality and resilience have been most investigated.

As mentioned before by 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 1 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.

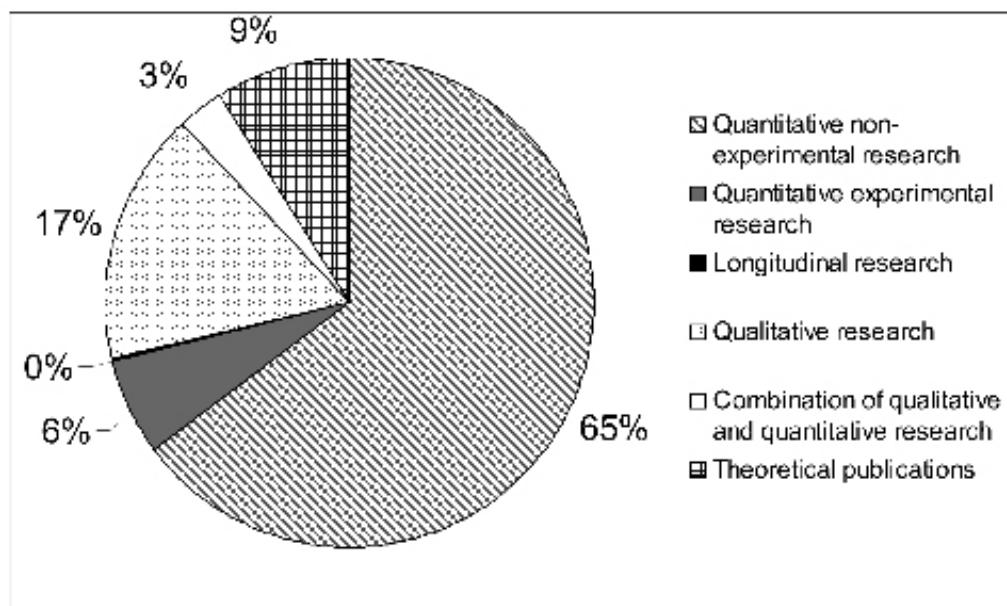


Figure 2: Studies categorised according to the type of research

Figure 2 indicates that the majority of research undertaken in South Africa is of a quantitative, nonexperimental 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, considering 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 on Master's and Doctoral level) usually have to be completed within a specified time. The pressure on researchers (academics) to publish their research findings does not encourage longitudinal research either.

Figure 3 presents the studies categorised according to the type of publication.

From Figure 3 it is evident that the highest frequency of research falls in the category of Completed Master's Dissertations, followed by articles in peer-reviewed journals. A total number of 116 studies are currently being done on Master's and Doctoral level.

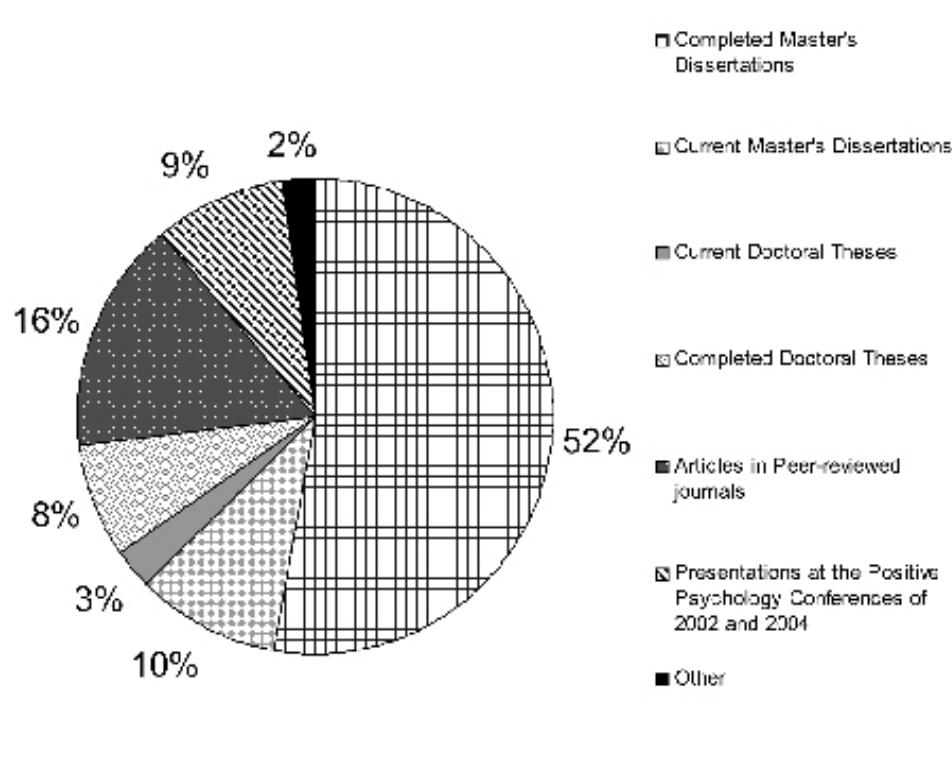


Figure 3: Studies categorised according to the type of publication

Notable from this figure is that South Africans are already engaged in 20 contracted research projects (as shown by Other in the figure). This includes research commissioned by institutions like the National Research Foundation (NRF) and universities, not for the purposes of postgraduate studies or publications in journals.

Figure 4 presents the research contributions of various universities.

Figure 4 shows that the North-West University conducts the most research in this field. It further seems that Unisa and the University of Johannesburg are also active in this regard. Next in line is the University of Stellenbosch, followed by the Universities of the Western Cape and Pretoria. It therefore seems that this paradigm was up until now most researched by the previously Afrikaans-dominated universities. A possible explanation for this trend might be that the most prominent South African authors in this science of strength, like Strümpfer (formerly from the University of Johannesburg, previously known as the Rand Afrikaans University), Wissing (University of North-West, previously known as PU for CHE), Rothmann (University of North-West, previously known as PU for CHE) and Cilliers (Unisa) are based at these universities.

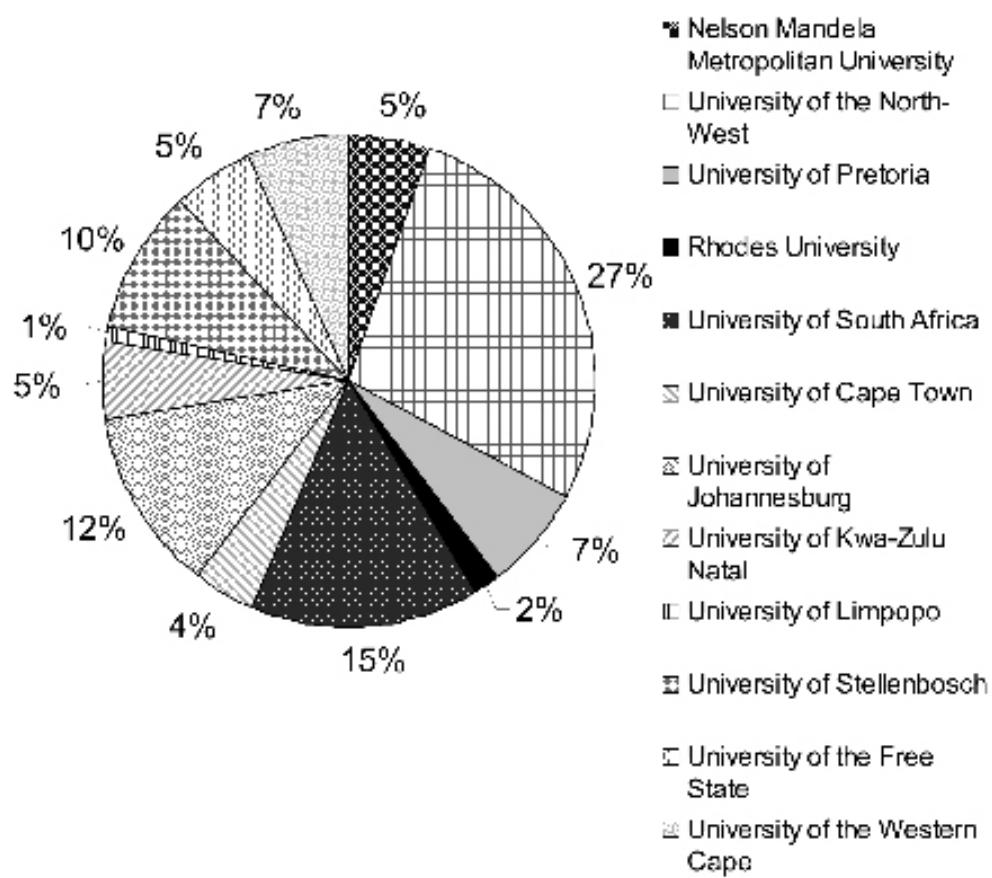


Figure 4: Studies categorised according to universities involved

CONCLUSIONS

The results reveal that the most 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, nonexperimental studies constitute the bulk of studies undertaken in this field.

In a review done by Strümpfer (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. The data collected for the purposes of this article could however 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 specific 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 future research in 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. Disappointingly, 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 not focused only 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.

Linley et al. (2006) strongly recommend that researchers build constituency 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 like the South African Police Service and the National Research Foundation.

The Ministry of Education (2001) comments on the fact that research is often not published in accredited journals or other formally recognised output measures. In accordance with this observation only approximately 150 articles were published in peer-reviewed journals by the end of 2005. However, it is clear from the results that numerous other research projects were undertaken. Through this, a broad scientific objective of the international field of positive psychology, namely to establish an expert knowledge-base useful for research and broad applications, was obtained in South Africa over the last 36 years.

It has long been recognised that the advancement of knowledge through scientific research is one of the major goals of universities. It seems that almost all universities in South Africa are currently participating, to differing degrees, in the advancement of knowledge in the field of positive psychology. However, this field of research appears to be dominated by historically white universities. The Education White Paper (1997)

explains that the distribution of research capacity in higher education institutions was skewed under apartheid and the development of research capacity severely limited. This goes a long way to explain the trend of low research output from the historically black institutions, as also revealed by the results of this article.

In conclusion, the results of this article reveal that South African universities and researchers are successfully contributing to the building of the new science of positive psychology.

RECOMMENDATIONS

Both Strümpfer (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 has 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 to enhance 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.

Numerous research findings in this field are not published, and this should receive urgent attention. Valuable information, which could have been applied for the benefit of this science, organisations and our communities, runs the risk of gathering dust somewhere, if not brought to the attention of the academic and professional world through publications. The Ministry of Education (2001) is of the opinion that one of the possible explanations for the low research output in South Africa might be the lack of accredited journals. The launch of the international *Journal of Positive Psychology* sets the scene for a similar initiative in South Africa.

The Ministry of Education (2001) is further of the opinion that the decline in research outputs and capacity can be attributed to the continued fragmentation and lack of co-ordination between researchers and institutions. Researchers in the field of positive psychology should actively redress the apparent fragmentation by planning joint ventures, broader research programmes and other forms of collaboration in their endeavours to broaden and built positive psychology.

LIMITATIONS

International publications of South African authors were not cited as only South African databases were searched.

Strümpfer (2005) and Linley et al. (2006) specifically warn that the science of strengths cannot be comprehensively described or any taxonomies 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. For the purposes of this article, the following terms are used interchangeably: positive psychology, employee wellness, fortology and science of strengths.

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