Research article

The Best that I Can Be: A Case for a Strengths-Based Approach during the First-Year Experience

Henry D. Mason*

Abstract
More South African research is needed that examines the application of positive psychology to assist students in navigating the stressful first-year experience by identifying, developing and applying signature strengths. This article reports on a mixed methods study that investigated the efficacy of a strengths-based development programme presented to a sample of 55 first-year university students (mean age = 19.77, SD = 1.50, female = 60%). Quantitative data were collected in a pre- and post-intervention manner using the Personal Growth Initiative Scale, the Subjective Happiness Scale, the Satisfaction with Life Scale and the Strengths Use and Deficit Improvement Questionnaire. Qualitative data were collected in individual semi-structured interviews (n = 12, age range = 18-22). Significant changes between the pre- and post-test scores emerged when comparing the quantitative data. The qualitative analysis pointed to aspects that participants regarded as beneficial to the efficacy of the strengths-based programme. Collectively, the data integration suggested that the intervention had a positive impact on participants’ sense of well-being and contributed to enhancing the first-year experience. Limitations and areas for further research conclude the discussion.

Keywords
first-year experience; positive psychology; strengths use; well-being

Introduction
In the late 1990s a paradigm shift occurred in the field of psychology with the conceptualisation and introduction of positive psychology (PP) (Seligman & Csikszentmihalyi, 2000). PP refers to a multi-level (individual, group, organisation and society) and multi-domain (personal life, education and work) perspective that focuses on the advancement of the good life (increasing positive emotions), engaged life (more significant commitment to important activities and goal pursuit, e.g. meaningful work), and the meaningful life (dedication to a goal or aspiration beyond the self and the trivial) (Wissing, Potgieter, Guse, Khumalo & Nel, 2014). Internationally, PP has gained popularity in the education context through the subfield of positive education (Seligman, 2011; Seligman & Adler, 2018).

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Positive education emphasises individual strengths and personal motivation to promote active learning for the 21st century (Seligman & Adler, 2018). Positive education-based programmes and interventions have yielded encouraging results in international school settings (Adler, Seligman, Tetlock & Duckworth, 2016). The application of positive education-based interventions may also prove beneficial in higher education contexts.

Higher education is widely regarded as stressful for students (Mason, 2017). Research has indicated that the first-year experience (FYE) is typically fraught with numerous developmental, academic and psychological challenges amongst other things (Scott, 2018). The stressful nature of the FYE can negatively impinge on students’ levels of well-being and exacerbate un-wellness (Anderson, 2016; De Villiers, 2014). This, in turn, can lead to burnout, dropout and lack of academic success amongst student populations (Lewin & Mawoyo, 2014; Scott, 2018).

One of the responsibilities of student affairs services is to assist students in dealing effectively with the challenges associated with the FYE (Scott, 2018). However, many developmental and support initiatives are articulated from deficit-based perspectives (Boughey & McKenna, 2016). Hence, student affairs services often emphasise what is wrong with students (Lewin & Mawoyo, 2014) to the exclusion of drawing on their strengths and talents to concretise a sense of resilience, agency and realistic hope for the future (Bowers & Lopez, 2010; Cilliers, 2014). The former is particularly relevant when considering that students present with unique journeys that are significantly influenced by a wide range of issues including their histories and the context within which they find themselves.

A strengths-based focus serves as the antithesis of a deficit-based approach and aims to assist students in addressing challenges from the vantage point of their unique perspectives (Peterson & Seligman, 2004). The concept of strengths, which forms the bedrock of PP and positive education, refers to pre-existing capacities that predispose persons to particular ways of thinking, feeling and behaving (Linley, 2008).

International research has reported on the positive and empowering effects of strengths-based approaches in higher education settings (Bowers & Lopez, 2010; Yeager, Fisher & Shearon, 2010). For example, PP interventions in higher education have been associated with higher levels of engagement, better academic performance and greater community involvement (Durlak, Weissberg, Dymnicki, Taylor & Schellinger, 2011; Yeager et al., 2010).

Notwithstanding reported benefits, few South African studies have considered the potential value of PP and strengths-based university intervention programmes (Chigeza, De Kock, Roos & Wissing, 2018; De Villiers, 2014; Seligman & Adler, 2018). Moreover, the South African literature on the topic of applying PP to FYE intervention programmes is almost non-existent (Chigeza et al., 2018; Cilliers, 2014; Melato, 2014). Research on strengths-based intervention programmes is also needed to assess its impact and efficacy in enhancing well-being amongst student populations (De Villiers, 2014; Seligman, Steen, Park & Peterson, 2005). Moreover, developing needs-driven programmes to focus on empowering students within the South African higher education context is warranted (Chigeza et al., 2018; Melato, 2014).
In light of these arguments, PP appears to be a promising approach to assist students, especially during the FYE, to draw on their own, unique strengths in navigating the labyrinth of university stressors (Wissing et al., 2014). Consequently, a strengths-based developmental programme (‘the Programme’) was developed and presented to a group of first-year students at a South African university. The Programme was aimed at assisting participants in enhancing strengths use and well-being to deal effectively with challenges during the FYE.

This article reports on a mixed methods study that empirically evaluated the efficacy of the Programme amongst a sample of first-year students at a South African university. The following two research questions guided the study: What was the effect of the Programme on participants’ well-being and use of strengths? What aspects of the Programme did participants experience as beneficial and could inform and direct further programme development?

It will be argued that strengths-based programmes can enhance students’ levels of well-being in the face of challenges experienced during the FYE. As a conceptual contribution, this article offers guidelines on developing a strengths-based programme for first-year students.

The article commences with a review of the literature and a discussion of the Programme. Then, the research method is presented. Next, the findings from the mixed methods study are discussed. In conclusion, the key findings are summarised.

**Literature Review**

To position this article within the current body of knowledge, this literature review discusses the concepts of strengths and the strengths approach, after which the FYE is discussed.

**A strengths approach**

The field of PP focuses on what is best about people (Seligman & Csikszentmihalyi, 2000). The concept of strengths is a fundamental pillar of PP (Linley, 2008). The central thesis advocated by proponents of the strengths approach is that all humans possess a combination of talents, knowledge and skills that they are naturally good at (Wissing et al., 2014).

Conceptualisations of strengths have been proposed by Clifton and colleagues (Clifton & Harter, 2003; Hodges & Clifton, 2004), Peterson and Seligman (2004) and Linley (2008). The study being reported on is based on the conceptualisation of strengths that was set forth by Peterson and Seligman (2004).

Peterson and Seligman (2004) argue that strengths are stable yet malleable capacities and virtues that induce people to act in certain ways. Within this conceptualisation, Dahlsgaard, Peterson and Seligman (2005) distinguish between six virtues (wisdom, courage, love, justice, temperance and transcendence) that are divided into 24 strengths (cf. Peterson & Seligman, 2004).

The Values in Action Inventory of Strengths Survey (VIA survey) was subsequently developed to assist persons in identifying their unique strength profiles (Peterson & Seligman, 2004). The 24 strengths can be described in the rank order in which they
are realised and used by persons. While some strengths may remain unrealised, realised strengths can serve to invigorate persons with stamina, optimism and resilience (Dahlsgaard et al., 2005; Wissing et al., 2014).

An increased interest in PP interventions that focus on the development of strengths has emerged in recent years. The concept of a PP intervention refers to a series of intentional activities, such as a psychoeducational programme, aimed at fostering positive thoughts, feelings and behaviours (Biswas-Diener, 2010; Rashid, 2015).

There is consensus amongst researchers that strengths-based interventions ought to focus on three general phases, namely (1) assisting persons in discovering their strengths; (2) integrating strengths through reflection and discussions; and (3) assisting persons in consciously using their strengths in daily life (Biswas-Diener, 2010; Clifton & Harter, 2003; Quinlan, Swain & Vella-Brodrick, 2012). Empirical data suggest that strengths-based interventions can help participants to enhance general levels of well-being, optimism and resilience (Seligman et al., 2005), reduce indicators of psychological distress, such as depression and anxiety (Sin & Lyubomirsky, 2009), and boost performance within organisational and higher education settings (Adler et al., 2016; Bowers & Lopez, 2010; Clifton & Harter, 2003; Durlak et al., 2011).

In light of the above arguments, a strengths-based approach seems particularly fitting for assisting students in navigating the stressful FYE.

The first-year experience

The South African higher education system is characterised by high dropout and low success (DHET, 2017). Alienation and a lack of epistemic access are two major factors that have contributed to the low retention and high dropout rates amongst South African students (CHE, 2017). Regarding alienation, students have expressed concern that they feel estranged from the higher education context (Scott, 2018). Whereas access to higher education has increased in the recent past, it has not always been accompanied by the mechanisms and support required for success (Scott, 2017).

In this regard, Morrow (2009) refers to epistemic access: the capacity to augment physical admission to university with the skills, knowledge and support to access academic knowledge. The key to epistemic access is adequate preparation (Scott, 2017). However, a significant proportion of South African university students come from disadvantaged schools, are not first-language English speakers, experience socioeconomic challenges and are first-generation students (Scott, 2017). It is against this backdrop that adequate support during the FYE is paramount (Nyar, 2018).

FYE programmes focus on supporting students during their first year of university, thereby championing the realisation of their educational goals (Scott, 2018). Additionally, FYE programmes aim to bridge the articulation gap between students’ expectations of university and reality when they enter university (Nyar, 2018). Examples of FYE programmes are awareness and orientation campaigns (Wilson-Strydom, 2015), academic literacy support (Jaffer & Garraway, 2016), social engagement (Nelson & Low, 2011) and offering generic psychoeducational support programmes (Jama, 2018).
To date, there has not been much research on the value of a strengths-based FYE programme for students (Chigeza et al., 2018; Melato, 2014). Not only can such programmes enhance students’ well-being, but they can also contribute to social engagement and assist in developing problem-solving skills – both areas that deserve attention amongst first-year students (Nyar, 2018; Scott, 2018; Yeager et al., 2010). The significance of this article lies not only in evaluating the efficacy of the Programme, but also in offering detailed information on a strengths-based programme that can be tailored to diverse settings.

The Strengths-Based Student Development Programme

The overarching goals of the Programme were to assist students in creating awareness of their unique strengths, applying these strengths to address stressors amidst the FYE, and identifying avenues for further development of existing strengths while simultaneously cultivating new strengths. The Programme was presented over a 12-week timeframe comprising one two-hour contact session per week. It consisted of five interwoven phases, namely pre-assessment, discovery, intervention, action and post-assessment. An overview of the Programme is shown in Table 1.

Table 1: Overview of the Programme

<table>
<thead>
<tr>
<th>Phase</th>
<th>Weeks</th>
<th>Focus</th>
<th>Interventions</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Pre-assessment</td>
<td>One</td>
<td>Pre-assessment</td>
<td>• Three good things</td>
<td>Seligman et al., 2005</td>
</tr>
<tr>
<td>2. Discovery</td>
<td>Two to four</td>
<td>Discover strengths</td>
<td>• Three good things</td>
<td>Seligman et al., 2005</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Strength introductions</td>
<td>Biswas-Diener, 2010</td>
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<td></td>
<td></td>
<td></td>
<td>• VIA survey</td>
<td>Peterson &amp; Seligman, 2004</td>
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<td></td>
<td></td>
<td></td>
<td>• Gratitude visit</td>
<td>Seligman et al., 2005</td>
</tr>
<tr>
<td>3. Intervention</td>
<td>Five to six</td>
<td>Goal setting</td>
<td>• Three good things</td>
<td>Seligman et al., 2005</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>• Goal setting</td>
<td>Lock &amp; Latham, 2002</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Identify signature strengths</td>
<td>Biswas-Diener, 2010</td>
</tr>
<tr>
<td>4. Action and</td>
<td>Seven to eleven</td>
<td>Goal striving</td>
<td>• Three good things</td>
<td>Seligman et al., 2005</td>
</tr>
<tr>
<td>accountability</td>
<td></td>
<td></td>
<td>• Goal striving</td>
<td>Biswas-Diener, 2010</td>
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<td></td>
<td></td>
<td></td>
<td>• PP movies</td>
<td>Niemiec &amp; Wedding, 2014</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>• Best Self assignment</td>
<td>King, 2001</td>
</tr>
<tr>
<td>5. Post-assessment</td>
<td>Twelve</td>
<td>Post-assessment</td>
<td>• Three good things</td>
<td>Seligman et al., 2005</td>
</tr>
</tbody>
</table>

Every contact session commenced with participants completing the Three Good Things exercise. Specifically, participants were instructed to write down three things that had gone well for them during the past week and then explain why those things happened. Fredrickson (2004) and Seligman et al. (2005) reported positive effects of the Three Good Things exercise on participants’ level of well-being.
In the course of week 1, all participants completed the quantitative measures (see section on data collection) and a brief overview of the Programme was provided. Next, the discovery phase of the Programme was presented.

During the discovery phase (weeks 2 to 4) participants first engaged in strengths-based introductions. Biswas-Diener (2010) explains that strength introductions afford participants the opportunity to tell a short story about a time when they used their strengths to great effect. The strength introductions set the stage for owning and appreciating strengths (Biswas-Diener, 2010). Additionally, participants worked in groups of six to eight and established expectations and rules for engagement.

All participants completed the VIA survey to identify their main character strengths (Peterson & Seligman, 2004). Once they had received feedback on the VIA survey, reflective group discussions were facilitated. Examples of reflective questions were: What are your thoughts, feelings and perspectives on your VIA results? Do these results confirm what you know about yourself? Do the results surprise you? The purpose of the reflective discussion was to assist participants in developing a deeper understanding and appreciation of their strengths and to serve as a primer for the next phase, namely the intervention phase.

Lastly, participants were encouraged to conduct a gratitude visit in week 4 of the Programme. More precisely, they were instructed to write and deliver a letter of gratitude to a person to whom they were grateful, but whom they had never thanked appropriately. Previous research reported beneficial effects of the gratitude visit on participants' reported levels of well-being (Seligman et al., 2005).

The central tasks that were completed during the intervention phase (weeks 5 and 6) included identifying stressors and challenges that students experience within the higher education context, exploring how strengths could assist them in addressing challenges, and delving into specific ways and strategies on how strengths could help in addressing stressors and concerns. In addition, participants were supported in identifying their top five signature strengths. These were then used as guiding principles and values to set one academic and one personal goal. The learning during this phase was strengthened with group discussions and designing and presenting posters. The literature suggests that people who align their goals with signature strengths tend to report higher levels of life satisfaction and positivity (Quinlan et al., 2012; Rashid, 2015).

During phase four of the Programme, namely the action and accountability phase (weeks 7 to 11), participants actively engaged in goal-striving (Quinlan et al., 2012). The remaining contact sessions were used to follow up on participants’ goal-striving progression and challenges that were experienced, celebrate positive happenings and offer social support to fellow students. This was based on literature indicating that people tend to be more successful in achieving goals when goal-striving strategies are encouraged through social support and accountability (Locke & Latham, 2002).

During this phase, participants also watched and reflected on two strengths-based films, namely The Pursuit of Happyness (Smith & Mucciono, 2006), and The Fault in our Stars (Godfrey & Boone, 2014). Participants were requested to watch the films and to focus on
identifying underlying strengths expressed by the main characters. The inclusion of the films in the Programme also served as inspiration and to facilitate a deeper appreciation of the value of strengths as resources in dealing with challenges in novel ways (Niemiec & Wedding, 2014).

There was no contact session in week 11, but participants spent time completing the Best Self assignment (King, 2001). In this assignment, participants were requested to visualise themselves at some point in the future and imagine the best versions of themselves. Then they were instructed to write down the details of this best possible version of themselves, what activities and goals they would be engaged in and the strengths that they would exhibit and need to develop. Lastly, participants were requested to create a personal development plan to embody the best possible version of themselves in the future. There is strong empirical evidence that supports the beneficial effects of the Best Self assignment on enhancing well-being and strengths (King, 2001; Meevissen, Peters & Alberts, 2011). The facilitator of the Programme read and offered constructive feedback on the Best Self assignment.

The post-intervention assessment was completed in week 12. Arrangements were made for individual consultation sessions, if required, following completion of the Programme.

Research Method

Research design

A sequential explanatory mixed methods research design was adopted to conduct this study (Creswell, 2014). First, a quasi-experimental one-group-before-and-after research design was used to evaluate the efficacy of the Programme using quantitative data (Creswell, 2014). Then, qualitative data were analysed to shed light on the aspects of the Programme that participants regarded as essential and beneficial (Henning, Van Rensburg & Smit, 2011). Finally, the two strands of data were integrated to explain the findings (Creswell, 2014).

Research context

The study was conducted at a large South African residential university. The student population is diverse and resembles the broader South African demographics (Statistics South Africa, 2016). For practical reasons such as logistical constraints, challenges in gaining access to students and limited research funding, data were collected from only one of the specific university’s nine campuses.

Sample

A nonprobability convenient and voluntary sample of 55 first-year South African students participated in the study (men = 22, women = 33, mean age = 19.77, age range = 18–23, SD = 1.50) (Creswell, 2014). All participants were enrolled for the first year of academic studies and registered for a student development programme at the mentioned South
African university. An open invitation to participate in the study was sent to all students in the specific group. All identified students agreed to participate in the quantitative phase of the study; a total of 12 students agreed to participate in the qualitative phase of the study (men = 4, women = 8, age range = 18-22).

Data collection and procedure

Quantitative data collection

A variety of quantitative measures was used to assess well-being and strengths use of participants in a pre- and post-intervention format. Specific measures to evaluate well-being included the Personal Growth Initiative Scale (PGI) (Robitschek, 1998), the Subjective Happiness Scale (SHS) (Lyubomirsky & Lepper, 1999), and the Satisfaction with Life Scale (SWLS) (Diener, Emmons, Larson & Griffin, 1985). In addition, the Strengths Use and Deficit Improvement Questionnaire (SUDIQ) (Van Woerkom, Mostert, Els, Bakker, De Beer & Rothmann, 2016) was used to assess participants’ use of strengths. Additionally, participants self-reported on demographic variables. These measures are described next.

• Personal Growth Initiative Scale

The PGIS is an empirical measure of a person’s motivation to engage in self-change and personal learning. For this study, the PGIS provided evidence on how motivated participants were to attend the Programme. The PGIS comprises nine items (e.g. “I take charge of my life” and “I have a plan for making my life more balanced”) that are rated on a Likert scale ranging from 1 (strongly disagree) to 6 (strongly agree) (Robitschek, 1998). Robitschek (1998) reported acceptable to good internal consistency coefficients ranging from 0.78 to 0.80. Mason (forthcoming) reported an internal consistency value of 0.76 on the PGIS amongst a sample (N = 235) of South African university students.

• Subjective Happiness Scale

The SHS comprises four items and presents as a sound psychometric measure ($\alpha = 0.79-0.94$) of well-being (Lyubomirsky & Lepper, 1999). Respondents rate four items on Likert scales, each ranging from 1 to 7 (e.g. “In general, I consider myself: (1) not a very happy person, to (7) a very happy person.”) Total scores are summed and divided by four; hence, total scores can vary between 1 (low) and 7 (high) (Lyubomirsky & Lepper, 1999). Mason (forthcoming) reported an internal consistency value of 0.72 on the SHS amongst a sample of South African university students (N = 235).

• The Satisfaction with Life Scale

The SWLS is a 5-item measure of a person’s subjective evaluation of life satisfaction (e.g. “In most ways my life is close to my ideal”) (Diener et al., 1985). Participants respond to a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree). Cronbach’s alpha coefficients indicate that the measure is psychometrically sound in international and South African contexts ($\alpha = 0.67-0.87$) (Diener et al., 1985; Wissing, Wissing, Du Toit & Temane, 2008).
• *Strengths Use and Deficit Improvement Questionnaire*

In its original format the SUDIQ has four subscales (Van Woerkom et al., 2016). However, only the Strengths Use Behaviour (SUB) subscale was adapted to measure strengths use in this study. The SUDIQ was developed for use in organisational contexts. Hence, the items were adapted for use in the university context. For example, the item “I use my strengths at work” was adapted to “I use my strengths when performing tasks” (Stander & Mostert, 2013). Participants are requested to indicate responses on a 7-point Likert scale ranging from 0 (almost never) to 6 (almost always). The SUDIQ and SUB subscales present with excellent psychometric properties within a South African setting ($\alpha = 0.93-0.96$) (Stander & Mostert, 2013; Van Woerkom et al., 2016).

**Qualitative data collection**

Qualitative data were collected using individual semi-structured interviews. The interviews, each approximately an hour in duration, were audio-recorded and transcribed verbatim.

The following five broad interview questions guided the interview process: How do you enact signature strengths in your daily life? What was your experience of the Programme? What did you learn from the Programme and what could you do more of in your daily life? What was good about the Programme? What was not good about the Programme?

Additional probing questions (e.g. “Can you provide an example from your own experience to illustrate your response?”), requests for additional information (e.g. “You raised an interesting point, please tell me more”) and probing techniques (e.g. summarising and reflecting on participants’ responses) were used to illuminate participants’ lived experiences. Probing questions were not purposefully leading, but instead focused on allowing participants to offer an account of their qualitative understanding and experience of attending the Programme.

Terre Blanche, Durrheim and Painter (2006) explain that saturation is typically reached in an exploratory study featuring a homogeneous sample, such as this study, after 6-8 sampling units are collected or when the new material does not add new insights to the qualitative interpretation. In this study, data saturation was reached after completing nine interviews. However, because 12 participants had agreed to take part in the interview process, all were included in the data analysis process.

**Data analysis**

**Quantitative data analysis**

Descriptive (mean, standard deviation and percentages) and inferential statistics (paired sample $t$-test and Cohen’s $d$ for effect size) were used to analyse the quantitative data (Cohen, 1992; Field, 2013). The internal consistency of the measuring instruments was calculated using Cronbach’s alpha (Field, 2013). The software programme SPSS version 25 was used to facilitate the quantitative data analysis process.
Qualitative data analysis

The software programme Atlas.ti, version 7 was used to manage the qualitative data analysis process. Thematic analysis, consisting of five interrelated steps, namely (1) familiarisation, (2) inducing themes, (3) coding, (4) elaboration and (5) interpretation and checking, served as a guide to analyse the interview transcriptions qualitatively (Henning et al., 2011).

Lincoln and Guba’s (1985) guidelines for qualitative research were adopted to enhance the trustworthiness of the findings. The following measures were implemented to strengthen the trustworthiness: memo writing, immersion in the data, using an audit trail, and fully describing the research method and procedure. Using verbatim quotes to substantiate the qualitative interpretation contributed to ensuring the rigour of the study (Lincoln & Guba, 1985).

Research ethics

The university where data were collected granted permission to conduct the study (Ref. #: 2014/07/004). All participants gave individual written informed consent. Identifying information (e.g. surnames, names and student numbers) was treated confidentially and the quantitative and qualitative data were anonymised prior to the data analysis. No course credit or financial benefits were offered for participation.

Results and Discussion

The results from the empirical study are discussed in the following sections. Firstly, the quantitative results are presented, and then the qualitative findings are discussed. Lastly, an integrated perspective of the findings is presented.

Quantitative results

A comparison between the pre- and post-Programme scores is presented in Table 2.

Table 2: Paired t-test results

<table>
<thead>
<tr>
<th>Scale</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>df</th>
<th>t-value</th>
<th>p-value</th>
<th>Effect size (d)</th>
<th>Cronbach’s alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>PGIS</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-test</td>
<td>55</td>
<td>38.73</td>
<td>7.15</td>
<td>54</td>
<td>3.41</td>
<td>0.0012**</td>
<td>0.46</td>
<td>0.77</td>
</tr>
<tr>
<td>Post-test</td>
<td>55</td>
<td>41.60</td>
<td>5.11</td>
<td>54</td>
<td>0.0137*</td>
<td>0.0193*</td>
<td>0.49</td>
<td>0.72</td>
</tr>
<tr>
<td>SHS</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-test</td>
<td>55</td>
<td>4.34</td>
<td>1.17</td>
<td>54</td>
<td>2.55</td>
<td>0.0193*</td>
<td>0.38</td>
<td>0.86</td>
</tr>
<tr>
<td>Post-test</td>
<td>55</td>
<td>4.88</td>
<td>1.01</td>
<td>54</td>
<td>2.70</td>
<td>0.0193*</td>
<td>0.38</td>
<td>0.86</td>
</tr>
<tr>
<td>SWLS</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Pre-test</td>
<td>55</td>
<td>22.93</td>
<td>7.34</td>
<td>54</td>
<td>2.70</td>
<td>0.193</td>
<td>0.38</td>
<td>0.86</td>
</tr>
<tr>
<td>Post-test</td>
<td>55</td>
<td>25.42</td>
<td>5.48</td>
<td>54</td>
<td>7.16</td>
<td>0.0002**</td>
<td>1.26</td>
<td>0.84</td>
</tr>
<tr>
<td>SUB</td>
<td></td>
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</tr>
<tr>
<td>Pre-test</td>
<td>55</td>
<td>25.20</td>
<td>5.11</td>
<td>54</td>
<td>7.16</td>
<td>0.0002**</td>
<td>1.26</td>
<td>0.84</td>
</tr>
<tr>
<td>Post-test</td>
<td>55</td>
<td>30.70</td>
<td>3.42</td>
<td>54</td>
<td>7.16</td>
<td>0.0002**</td>
<td>1.26</td>
<td>0.84</td>
</tr>
</tbody>
</table>

Note: PGIS – Personal Growth Initiative Scale; SHS – Subjective Happiness Scale; SWLS – Satisfaction with Life Scale; SUB – Strengths Use Behaviour; *p < 0.05 – statistically significant; **p < 0.01 – statistically significant
As is evident in Table 2, the quantitative measures presented with acceptable to good internal consistencies (Field, 2013). There were significant differences between pre- and post-Programme scores. Regarding the specific quantitative scales, a statistically significant change was detected between the pre- and post-test scores on the PGIS ($t(54) = 3.41, p < 0.01$). This implies that participants’ reported scores on the PGIS were significantly higher following participation in the Programme.

The PGIS serves as an operational measure to assess people’s intrapersonal skills regarding the intention to change, grow and embrace ongoing learning (Robitschek, 1998). Thus, it can be inferred that participants’ willingness to engage in self-change and personal development was enhanced through their participation in the Programme. The effect size for this analysis was found to represent a medium effect ($d = 0.46$) (Cohen, 1992). An effect size of 0.46 suggests that, amongst other things, if 100 students had to attend the Programme, 17 more students would have a favourable outcome compared to if they had received a control treatment (Cohen, 1992; Field, 2013).

Positive changes were detected between the two well-being measures, namely SHS ($t(54) = 2.55, p < 0.05$) and SWLS ($t(54) = 2.70, p < 0.05$). Based on the results from the SHS, it can be deduced that participants reported significantly more positive affect following the Programme (Fredrickson, 1999). However, while the SHS offers an indication of the frequency of subjectively evaluated positive affect, it does not indicate the sources (Diener, 2013). Qualitative data could shed more light on the features of the Programme that proved to enhance well-being.

The result from the SWLS indicates that participants experienced greater life satisfaction after attending the Programme. This result is important when considering that the FYE is particularly stressful and can negatively impinge on students’ sense of belonging, academic performance and psychological functioning (Nyar, 2018; Scott, 2018). Higher levels of well-being, as assessed via the SHS and SWLS, are associated with creative problem-solving, resourcefulness and goal achievement (Diener, 2013). According to Fredrickson’s (2004) broaden and build perspective, the experience of positive emotions and life satisfaction is a necessary condition to create a resilient and flourishing life, even in the face of challenges. Thus, these positive outcomes suggest that participants may be better prepared to address the challenges posed during the FYE compared to if they did not attend the Programme.

Notwithstanding the statistically significant results, the effect size analyses indicated medium effects on the SHS ($d = 0.49$) and SWLS ($d = 0.38$). When considering a counterfactual scenario, the effect sizes suggest that there is a 64% chance that a person picked at random from a treatment group (e.g. attended the Programme) will have a higher score than a person picked who did not attend the Programme. Furthermore, to have one more favourable outcome in the treatment group compared to the control group, eight people would have to attend and complete the Programme (Cohen, 1992; Field, 2013).

Regarding the pre- and post-assessment assessment comparison on the SUB, the $t$-test was found to be statistically significant ($t(54) = 7.16, p < 0.01$). Thus, participants reported notable positive changes in the use of strengths after attending the Programme. Research has linked strength use with higher levels of well-being, lower incidence of psychological
distress, and better academic performance (Seligman et al., 2005). Consequently, it could be expected that participants would be better able to address academic-related challenges after attending the Programme. Qualitative data could offer a more nuanced perspective on students’ experiences.

The effect size for the analysis on the SUB (d=1.26) was found to exceed Cohen’s (1992) convention for a large effect (d=0.80). This finding implies that, amongst other things, 90% of a treatment group would be above the mean of a control group. Additionally, an estimated 50% of students who attend the Programme would experience a positive outcome compared to if they failed to attend the Programme (Cohen, 1992; Field, 2013).

Qualitative findings

After the quantitative phase of the study, a central question emerged, namely ‘What aspects of the Programme did participants find beneficial?’ It was with this question in mind that I approached the qualitative data. Through thematic analysis, four themes emerged: (1) a broadened horizon, (2) social support, (3) accountability and (4) mindset.

Table 3 serves as a summative index of the four themes. The frequency of participants’ references to the particular themes is also displayed in Table 3.

Counting codes in qualitative research is controversial (Hannah & Lautsch, 2011). In this article, the decision to count qualitative codes was related to the purpose of the qualitative phase of the mixed methods study, namely to explore aspects of the Programme that participants regarded as beneficial. Consequently, it was deemed relevant to indicate that the aspects contributing value to the Programme were steeped in a rigorous and dispassionate analysis of the qualitative, while, at the same time, not losing sight of the participants’ rich lived experiences.

Table 3: Major themes and frequencies of responses

<table>
<thead>
<tr>
<th>Themes</th>
<th>Female participants n (% of N)</th>
<th>Male participants n (% of N)</th>
<th>Total N (100%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A broadened horizon</td>
<td>6 (50%)</td>
<td>4 (33%)</td>
<td>10 (83%)</td>
</tr>
<tr>
<td>Social support</td>
<td>6 (50%)</td>
<td>3 (25%)</td>
<td>9 (75%)</td>
</tr>
<tr>
<td>Accountability</td>
<td>5 (42%)</td>
<td>4 (33%)</td>
<td>9 (75%)</td>
</tr>
<tr>
<td>Mind-set</td>
<td>8 (67%)</td>
<td>3 (25%)</td>
<td>11 (92%)</td>
</tr>
</tbody>
</table>

*Note: ‘% of N’ means gender percentage of the row frequency of responses.*

In the next section, the qualitative themes are discussed. Due to space limitations, only selected verbatim quotes are included to substantiate the interpretations. The frequency of responses to a specific theme is indicated. For example, 6/12 indicates that 50% of participants referred to a specific thematic idea. The referencing system in parenthesis denotes participant number (e.g. P#1 for Participant 1), gender (m = male, f = female) and age (e.g. 18 denotes 18 years of age) and is indicated as follows (P#1, f, 19).
Qualitative themes

The qualitative analysis suggested that four factors contributed to the efficacy of the Programme: (1) broadened horizons, (2) social support, (3) accountability and (4) mindset. These four themes are now discussed.

The first theme, broadened horizons, was endorsed by 83% of the qualitative sample. This theme captured the notion that participants’ worldviews were expanded through their participation in the Programme.

Participant 4, a 20-year-old woman, reflected on how her worldview was broadened: “… through this programme, I have been taken so far out of my comfort zone that I doubt I will ever find my way back … it is a good thing … my understanding of myself and others have stretched beyond what I imagined. I now view myself as a more enlightened person.”

Another participant added, “I have learned that people are more than their weaknesses. We all have strengths and talents. By developing strengths, we can overcome struggles and be stronger people” (P#7, f, 19).

Participant 11 agreed and voiced the opinion that “The three right things [reference to the Three Good Things exercise] was very nice … made me see difficulties in life through optimistic eyes” (P#11, m, 20).

These qualitative references to personal growth are consistent with literature regarding the development of strengths. Specifically, Seligman (2011) explains that awareness of strengths can have a positive effect on a person’s sense of self. Others have noted that the development of strengths can invigorate people with harmonious energy, enhance engagement and dedication in the pursuit of important goals, and inspire personal development (Biswas-Diener, 2010; Peterson & Seligman, 2004). Thus, the qualitative data suggest that raising awareness regarding strengths challenged participants to incorporate a novel and empowering view of themselves: “… because I have come to understand another dimension of myself, I can do better in future” (P#1, f, 19).

The second theme, social support, indicated that the majority of participants (75%) developed significant insight into their strengths based on meaningful connections with other participants in the Programme. One participant explained as follows: “…working in groups and discussing these issues … helped me to understand strengths from many angles” (P#10, m, 19).

Developmental psychologists have indicated that establishing meaningful interpersonal connections is a vital developmental task amongst persons in the late adolescent and young adulthood stage – students in their first year of university often fall within this age bracket (Arnett, 2000; Nelson & Low, 2011). Moreover, group-based discussions appeared to have assisted participants in establishing a network of social support, as Participant 6, a 22-year-old woman, explained: “…the group sessions helped us to discuss problems we were facing … like how difficult it is to make friends, or dealing with difficult subjects….” The social interaction around the PP films was also regarded as beneficial: “Analysing the movies helped me to learn more about my life and stress … enjoyed sharing the deeper aspects of the movie with my group …
made me feel part of the group” (P#7, f, 19). The importance of social interaction and support in developing strengths has been well-documented in the extant literature (Dahlsgaard et al., 2005; Durlak et al., 2011; Lewin & Mawoyo, 2011).

The literature on the FYE indicates that students often struggle with feelings of social isolation and dealing with demanding academic content (Nyar, 2018; Scott, 2018). Not only did the Programme assist students by adopting a strengths-based view (“…I feel more confident to solve problems because I now know what my strengths are and how to use them…” P#11, m, 20), but it also connected participants to a network of other students who share similar challenges amidst the FYE (“…knowing that other students experience the same stress that I do, makes me feel that it’s okay to worry…” P#4, f, 20). Consequently, creating an affirmative space where students could discuss strengths in the context of FYE challenges emerged as an essential feature of the Programme that may contribute to its efficacy.

A third theme that emerged from the qualitative analysis (9/12) was accountability. During the first contact session (see Table 3), participants engaged in group activities and developed and presented expectations for participation in the Programme. The majority of the groups highlighted accountability as a critical element in their lists of expectations. The qualitative analysis echoed participants’ sentiments expressed in their expectations. The following quote substantiates this interpretation: “I never missed a session because I knew my group members counted on me. They needed me to be there … we were a team and I had a duty” (P#9, m, 18).

Nelson and Low (2011) relate accountability to self-management. They explain that self-management embodies a set of emotional skills in managing personal performance healthily and productively (Nelson & Low, 2011). Not only is self-management related to agency and a significant predictor of academic success, but also features as a critical element of epistemic access (Morrow, 2009; Nelson & Low, 2011). Thus, the emphasis on accountability from a peer versus an authoritarian perspective was indicated as an element that contributed to the efficacy of the Programme.

The fourth theme was entitled ‘mindsets’. The majority of participants (11/12) explained that the Programme assisted in changing their view of university life from one of fear and uncertainty (“When I arrived at university, I felt overwhelmed and uncertain. All I was thinking was ‘I can’t do this’. I was afraid”, P#6, f, 22), to one of challenge (“University is difficult, but after these classes [reference to the Programme] I know I can deal with the pressure … I have discovered strengths that I didn’t know existed … feel happy” P#2, f, 20). Dweck’s (2006) theory of mindsets appears helpful in explaining participants’ perspectives.

Dweck (2006) differentiates between a fixed mindset (entity theory of intelligence) and a growth mindset (incremental theory of intelligence). Persons who adopt a fixed mindset assume that they have limited skills, talents and abilities. Additionally, they hold on to the view that they lack the ability to engage in self-directed change. In contrast, persons who act from the perspective of a growth mindset espouse the notion that they can develop the capacities, such as strengths, required to address problems and pursue noteworthy life goals (Dweck, 2006).
According to the participants, the Programme facilitated a shift from a fixed mindset to a growth mindset. The following quote bears this out: “The biggest change for me was the trust that I can develop and become a better version of myself” (P#8, m, 20). Thus, the shift from a reactive and fear-based mindset to a proactive and engaged view of life assisted participants in navigating the challenges associated with the FYE: “Being the best that I can be, is how I now approach stressors at university … I can overcome difficulties by using my strengths … and developing strengths” (P#10, m, 19).

Integration of quantitative and qualitative data

Mixed methods research designs aim to integrate quantitative and qualitative data to provide a more nuanced answer to a research question (Creswell, 2014). This article reports an investigation into the efficacy of the Programme in enhancing strengths use and well-being amongst participating first-year students.

The quantitative data indicated that the Programme served as an efficacious approach to assist first-year students in enhancing self-change behaviours focused on personal growth, well-being and strengths use (see Table 2). The findings were statistically significant and presented with medium effect sizes on the PGIS ($t=3.41, p<0.05, d=0.46$), SHS ($t=2.55, p<0.05, d=0.49$) and SWLS ($t=2.70, p<0.05, d=0.38$). However, the effect size on strengths use ($d=1.26$) was interpreted as large, indicating a significant practical effect (Cohen, 1992).

Qualitative data were collected and analysed to explore what aspects of the Programme participants found beneficial. Four themes emerged following the analysis (see Table 3). Collectively, the qualitative data suggested that raising awareness regarding strengths within a social support structure, and accompanied by peer accountability, assisted participants in understanding that strengths are not static, but instead that strengths are dynamic capacities that can be developed to address challenges that could occur as part of the FYE. Participant 5, an 18-year-old woman, captured the essence of this argument by stating, “[M]y top strength [on the VIA survey] was creativity … creativity means I can find new ways of dealing with problems.” In a follow-up question from the interviewer (“Can you give an example of how creativity has assisted you in dealing with a problem at university?”), she responded, “Being creative stops me from being stuck. I have options. Problems, like the workload, bad relationships, or tests and exams … I approach them as opportunities to develop my strengths. They make me stronger … it’s like the quote: ‘I am the master of my soul and king of my ship.’”

In conclusion: the quantitative data indicated that the Programme achieved the aim of enhancing well-being and encouraging strengths use. The qualitative illuminated the aspects that contributed towards the efficacy of the Programme.

Conclusion

This article reported on a mixed methods study on the efficacy of a strengths-based development programme (‘the Programme’). The quantitative data indicated statistically significant changes between pre- and post-Programme scores. The effect size analyses pointed to medium effects on some of the quantitative scales (PGIS, SHS and SWLS).
However, a significant impact \( (d = 1.26) \) was calculated regarding strengths use. The quantitative findings indicated that the Programme was efficacious in enhancing well-being and strengths use. The qualitative analysis suggested that a focus on strengths and personal development, social support and accountability, and an emphasis on empowering mindsets are essential aspects to include in psycho-educational stress-management programmes.

This study offers noteworthy contributions to the field. First, it has addressed a primarily overlooked area in the Southern African literature, namely adopting a strengths-based approach to supporting students during the FYE within the higher education context. Second, based on the gap in the literature, the Programme was developed. Detailed information on the Programme was provided. This strengths-based programme can be adapted and tailored to diverse contexts, based on students’ needs. Third, the mixed methods evaluation indicates that the Programme could assist university students in adopting empowering mindsets in the face of challenges. Fourth, the article sets the tone for further use and application of PP and strengths-based approaches within the student affairs and FYE contexts.

Notwithstanding the positive findings, the study had some limitations. First, this was a cross-sectional study that focused on a small sample at one university in South Africa. Hence, the external validity of the study does not allow for generalisation of findings. It is recommended that future studies adopt a longitudinal design and include more extensive and diverse samples from various contexts to enhance generalisability. Furthermore, due to the quasi-experimental nature of the quantitative phase of the study, causality cannot be inferred. More empirically sound causal inferences could have been drawn if a true experimental study, comprising control and experimental groups, were conducted. A third limitation is that the study was conducted principally from a positivistic perspective to assess the efficacy of the Programme. Thus, the nuanced complexities that surround the FYE were not explored. The qualitative component of the study focused exclusively on aspects of the Programme that participants found beneficial. Hence, the qualitative phase of the study did not take structural or cultural aspects outside of participants’ experiences during the Programme into account. It is, therefore, strongly advised that further qualitative research be conducted to offer a more in-depth exploration of first-year students’ journeys and experiences, as well as the influence of diverse contexts and histories on their experiences. Moreover, research is needed that explores the assumptions of approaches such as PP with an African context critically.

Despite the noted limitations, the data presented in this article offer a strong case for further research to explore the use of strengths-based approaches amongst first-year university students. It is hoped that this study could serve as a catalyst for further practice-based research to assist students in developing their strengths to become the best that they can be.
References


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