

# Adapting and validating the Strengths Use and Deficit Improvement Questionnaire for educators in Gauteng

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## COMMENTS

The reader is reminded of the following:

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## DECLARATION

I, Rachéle Paver, hereby declare that Adapting and validating the Strengths Use and Deficit Improvement Questionnaire for educators in Gauteng is my own work and that the views and opinions expressed in this work are my own and relevant literature references as shown in the references.

Furthermore, I declare that the contents of this research study will not be submitted for any other qualification at any other tertiary institution.

A handwritten signature in black ink, appearing to read 'Rachéle Paver', is written over a light blue rectangular background.

Rachéle Paver

December 2013

## DECLARATION FROM THE LANGUAGE EDITOR

**I hereby declare that the dissertation** Adapting and validating the Strengths Use and Deficit Improvement Questionnaire for educators in Gauteng **by Rachéle Paver, was edited by me.**

A handwritten signature in blue ink that reads "El Diedericks". The "El" is written inside a large, hand-drawn circle.

Dr Elsabé Diedericks

December 2013

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“The task ahead of you is never as great as the power behind you.”

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## SUMMARY

**Title:** Adapting and validating the Strengths Use and Deficit Improvement Questionnaire for educators in Gauteng

**Key terms:** Strengths Use and Deficit Improvement Questionnaire, perceived organisational support for strengths use, perceived organisational support for deficit improvement, proactive behaviour towards strengths use, proactive behaviour towards deficit improvement, validation, Gauteng educators, positive psychology.

Education is essential in providing future human capital that is much needed to build a sustainable, competitive economy. However, the importance of a quality education is often underestimated. In order to enhance working conditions of educators, it seems essential to investigate the role of the positive psychology paradigm by means of developing teachers' areas of deficiencies and capitalising on their strengths in order for them to reach their full potential and flourish. The current study aimed to adapt and validate the recently developed Strengths Use and Deficit Improvement Questionnaire (SUDIQ) in an attempt to make it suitable for educators.

The general objective of this research study was to establish the psychometric properties of the SUDIQ by means of confirmatory factor analysis (CFA), convergent, discriminant and empirical validity. A cross-sectional field survey design and a convenience sample of educators from several educational institutions in the Gauteng Province (N = 502) was utilised to gather the data. CFA was used to test the factorial validity of the adapted SUDIQ scale. In order to prove convergent and discriminant validity, the relationships between the SUDIQ dimensions and similar theoretical constructs (job resources, strengths use, psychological capital, proactive behaviour and person-job fit) as well as constructs postulated to be unrelated to the SUDIQ dimensions (age and education) were determined. Finally, the relationship between the SUDIQ dimensions with vigour, dedication, emotional exhaustion and depersonalisation was determined by using multiple regression analysis.

The results confirmed that the SUDIQ comprised a four-factor structure. These four factors were perceived organisational support for strengths use, perceived organisational support for deficit improvement, proactive behaviour towards strengths use and proactive behaviour towards deficits improvement. These dimensions were positively related to the scales such as

the strengths use scale, autonomy, supervisor and colleague support, psychological capital, proactive behaviour, and person-job fit. Anticipated perceived organisational support for deficit improvement and proactive behaviour towards strengths use and proactive behaviour towards deficit improvement were unrelated to age. The scales were also relatively weakly related to education. Furthermore, the results revealed that perceived organisational support for strengths use, proactive behaviour towards strengths use and proactive behaviour towards deficit improvement were significant predictors of both vigour and dedication. However, it was found that the only SUDIQ dimension that predicted emotional exhaustion and depersonalisation was proactive behaviour toward strengths use.

Recommendations were made to be applied in practice, as well as for future research.

## OPSOMMING

**Titel:** Die aanpassing en validering van die ‘Strengths Use and Deficit Improvement Questionnaire’ vir onderwysers in Suid-Afrika.

**Sluteltermes:** ‘Strengths Use and Deficit Improvement Questionnaire’, waargenome organisasie ondersteuning vir die gebruik van sterkpunte, waargenome organisasie ondersteuning vir die verbetering van tekortkominge, pro-aktiewe gedrag ten opsigte van die gebruik van sterkpunte, pro-aktiewe gedrag ten opsigte van die ontwikkeling van tekortkominge, validering, Suid-Afrikaanse onderwysers, positiewe sielkunde.

Onderwys is noodsaaklik in die voorsiening van ‘n toekomstige werksmag wat kan bydra tot die bou van ‘n volhoubare, mededingende ekonomie. Die belangrikheid van hoë gehalte onderwys word dikwels onderskat. Om die werksomstandighede van onderwysers te verbeter, blyk dit belangrik te wees om die rol van die positiewe sielkunde paradigma te ondersoek deur die verbetering van onderwysers se tekortkominge en die benutting van hul sterkpunte, om hul sodoende in staat te stel om hul volle potensiaal te bereik en te floreer. Die huidige studie is daarop gerig om ‘n nuut ontwikkelde skaal, genaamd die ‘Strengths Use and Deficit Improvement Questionnaire’ (SUDIQ), aan te pas en te valideer sodat dit geskik sal wees vir gebruik met onderwysers.

Die algehele doelwit van hierdie navorsingstudie was om die psigometriese eienskappe vir die SUDIQ vas te stel deur middel van bevestigende faktorontleding, konvergerende, diskriminante en empiriese geldigheid. ‘n Kruisdeursneenavorsingsbenadering en ‘n beskikbaarheidsteekproef van onderwysers vanuit verskeie opvoedkundige instellings in die Gautengprovinsie (N = 502) is gebruik om die data in te samel. Bevestigende faktorontleding is aangewend om die faktorale geldigheid van die aangepaste SUDIQ skaal te bepaal. Om konvergerende geldigheid te bewys, is die verhoudings tussen die SUDIQ-dimensies en soortgelyke teoretiese konstruksies (poshulpbronne, gebruik van sterkpunte, psigologiese kapitaal, pro-aktiewe gedrag en persoon-posgeskiktheid), asook konstruksies waarmee geen verband met die SUDIQ-dimensies (ouderdom en opvoeding) verwag is nie, ondersoek. Laastens, is die verhouding tussen die SUDIQ-dimensies en ywer, toewyding, emosionele uitputting, en depersonalisasie bepaal deur die gebruik van meervoudige regressie-ontleding.

Die resultate bevestig dat die SUDIQ uit 'n vier-faktorstruktuur bestaan. Hierdie vier faktore staan bekend as waargenome organisasie ondersteuning vir die gebruik van sterkpunte, waargenome organisasie ondersteuning vir die verbetering van tekortkominge, pro-aktiewe gedrag ten opsigte van die gebruik van sterkpunte en pro-aktiewe gedrag ten opsigte van die ontwikkeling van tekortkominge. Hierdie dimensies is positief verwant aan skale soos die gebruik van sterkpunte skaal, outonomie, ondersteuning van toesighouer en kollegas, psigologiese kapitaal, pro-aktiewe gedrag, en persoon-posgeskiktheid. Waargenome organisasie ondersteuning vir die verbetering van tekortkominge, pro-aktiewe gedrag ten opsigte van die gebruik van sterkpunte en pro-aktiewe gedrag ten opsigte van die ontwikkeling van tekortkominge het geen verband met ouderdom getoon nie. Hierdie skale het ook 'n redelike swak verband met onderwys getoon. Verder het die resultate getoon dat waargenome organisasie ondersteuning vir die gebruik van sterkpunte, pro-aktiewe gedrag ten opsigte van die gebruik van sterkpunte en pro-aktiewe gedrag ten opsigte van die verbetering van tekortkominge betekenisvolle voorspellers van beide ywer en toewyding is. Die enigste SUDIQ-dimensie wat emosionele uitputting en depersonalisasie voorspel het, was pro-aktiewe gedrag ten opsigte van die gebruik van sterkpunte.

Aanbevelings wat in die praktyk asook in toekomstige navorsing toepas kan word, is gemaak.

# **CHAPTER 1**

## **INTRODUCTION**

The purpose of this mini-dissertation is to establish the psychometric properties of an adapted version of the Strengths Use and Deficit Improvement Questionnaire (SUDIQ) for educators in Gauteng. Through the use of confirmatory factor analysis, convergent, discriminant and empirical validity, the aim is to establish a scale that is valid, reliable and applicable to educators in the South African context.

This chapter consists of a problem statement, as well as an overview of previous empirical research done on the strengths use and improvement of deficits, both from an organisational and individual perspective. An explication of the research questions, research objectives and research hypotheses is given, followed by a discussion of the research methodology. Lastly, the layout of the chapters and a summary of this chapter will be given.

### **1.1 PROBLEM STATEMENT**

Education holds the key to a nation's development and prosperity. It empowers people with the knowledge and skills needed to alleviate high unemployment, extreme poverty and inequality (United Nations Educational, Scientific and Cultural Organization, 2013). Education can also unlock a country's potential by providing people with the opportunity to improve their social, cultural and economic status (Federal Ministry for Economic Cooperation and Development, 2010). An essential step in developing a high quality education system is to understand the factors that influence the excellence of educators. There is strong evidence to believe that recruiting the right teachers with the right preparation and qualifications is of utmost importance (Berry, Hoke, & Hirsch, 2013). However, regarded equally important, teachers must have sufficient working conditions in place in order to teach effectively. Factors that influence teachers' workplace conditions are, amongst others, constantly escalating job demands, such as pupil misbehaviour, poor learner standards and an immense workload (Marais & Meier, 2010; Modisaotsile, 2012; Mokhele, 2011). This is exacerbated by insufficient resources (Mestry, Hendricks, & Bisschoff, 2009) - poor workplace conditions have been associated with low levels of employee engagement, organisational commitment, job satisfaction and high levels of stress, burnout and turnover (Field, 2011; Jackson & Rothmann, 2005; Vazi, Ruiter, Van den Borne, Martin, Dumont, & Reddy, 2013). Therefore, in order to provide quality education, an urgent need exists for

better working conditions that foster outcomes such as engagement, job satisfaction and decreased levels of burnout among educators.

One way of attaining a workforce abounding with committed and flourishing educators is to have a comprehensive understanding of their strengths and weaknesses. Grasping the importance thereof will enable schools to make informed decisions on how to groom educators to achieve their full potential. Providing educators with opportunities to improve themselves may be seen as a key source of competitive advantage (Wellins, Bernthal, & Phelps, 2005); empowering schools to face challenges of this day and age.

Most often, a prodigious amount of time and money goes into the development of people. Based on the postulation that the utmost potential for performance improvements lies in the weaknesses of individuals, most practices follow a deficit-based approach (DBA) in developing employees (Buckingham & Clifton, 2001). A DBA is primarily grounded in the belief that in order for employees to flourish and achieve their ultimate potential, organisations should devote their efforts toward developing employees' weaknesses or inadequacies (Buckingham & Clifton, 2001).

Educational institutes aim to bridge the gap between teachers' current abilities and those necessary to deliver expected results by means of performance appraisals, training, development, coaching and other methods (Kapofi, 2002; Monde, 2006; Taut, Santelices, Araya, & Manzi, 2010). Schools that invest in developing their employees, reap benefits such as increased employee effectiveness (Carroll, 2007), enhanced job performance (Cheah, 2012), increased levels of teachers' commitment (Caishun & Zongjie, 2004) and reduced turnover rates (Carroll, 2007). From an individual perspective, all educators ought to have areas of development. Provided that these areas of development are identified, nurtured and channelled appropriately, it will not only contribute to their inventory of personal competencies, but also unequivocally impact students' performance and academic achievement (Marzano, Pickering, & Pollock, 2001).

For decades, people and organisations have praised the effects and outcomes of a DBA. However, Luthans (2002) raised the concern that a DBA is rooted in a negatively oriented perspective, and could emphasise counterproductive elements such as stress, ineffective leadership, destructive conflict, unethical behaviour and dysfunctional attitudes. Criticism regarding the dominance of a problem-focused perspective has also been raised. According to Kretzmann and Mcknight (1993), interventions take place after difficulties have already been

identified, instead of working to prevent problems from occurring in the first place. Likewise, even though the development of individuals' weaknesses has been linked to significant outcomes, one should bear in mind that it will never become their greatest asset (Linley, 2008), implying that emphasising the negative does not assure the presence of the positive, optimal functioning and well-being of employees.

Since the turn of the millennium, the rise of a subtle yet significant philosophical approach, referred to as a strengths-based approach (SBA), originated. Instead of identifying areas of weakness, and isolating points of failure, psychologists began to realise that a more balanced approach that considers both the positive and negative aspects of human functioning should be applied (Luthans & Youssef, 2007). A SBA has developed from the positive psychology paradigm. Positive psychology first occurred in the late 1990s, accentuating what is right with people in contrast to what is wrong with people (the preoccupation of psychology). According to Gable and Haidt (2005), positive psychology is the study of the conditions and processes that contribute to the flourishing or optimal functioning of people, groups and institutions. Peterson and Seligman (2004) aimed to establish a universal classification of strengths of character, but their work remains one of a number of ways to define and categorise strengths. They defined strengths as moral traits, traits of character that people can acquire and build. Furthermore, they believe that talents and skills are inborn gifts that can be refined to some degree. Buckingham and Clifton (2001) adopted a common definition which describes strength as the ability to provide consistent, near-perfect performance. They believe that strength consists of three elements – talents, skills and knowledge and that people are born with talents, but skills and knowledge can be learned.

Over the last few years the Gallup Organisation has focused on analysing and studying employee behaviour. Their work has contributed greatly to the groundwork of the SBA. It found numerous noteworthy associations between employees who use their natural skills, talents and strengths and increased levels of hope and engagement, enhanced levels of independence and competence, increased positive affect, vitality, and self-esteem and greater well-being (Linley, Garcea, Hill, Minhas, Trenier, & Willars, 2010; Madden, Green, & Grant, 2011; Proctor, Maltby, & Linley, 2011; Wood, Linley, Maltby, Kashdan, & Hurling, 2010). Furthermore, Seligman, Steen, Parks, and Peterson (2005) also reported that individuals who use their strengths more are happier and experience reduced feelings of depression. According to Clifton and Harter (2003), individuals who use their strengths are more

productive. These findings are also coherent with the happy-productive thesis, which states that happy employees are more productive (Zelenski, Murphy, & Jenkins, 2008).

According to Harter, Schmidt, and Hayes (2002), creating an opportunity for employees to use their strengths is a core predictor of workplace engagement and a range of other positive organisational outcomes. The Corporate Leadership Council (2002) found that emphasising employee strengths in performance reviews increased performance by 36.4%. Linley and Harrington (2006) also established that a SBA will not only benefit the organisation, but also the employee, in that employees who use their strengths experience increased positive emotions and are better able to achieve the goals they set, ultimately providing the organisation with loyal, productive and satisfied employees (Henry & Henry, 2007).

The increasing attention in empirical examinations on the topic of positive psychology and a SBA has led to the development of several theoretical frameworks and classification systems. The most popular and commonly used frameworks include the Values in Action Inventory of Strengths (VIA-IS; Peterson & Seligman, 2004), StrengthsFinder (Rath, 2007), and Realise2 (Linley, Nielsen, Gillett, & Biswas-Diener, 2010). The overall purpose of these scales is to assist individuals in discovering and understanding their talents and strengths. Despite the fact that considerable research has indicated the value of identifying one's strengths, Wood et al. (2010) raised the concern that the focus of these theoretical frameworks is merely on the *possession* of strengths instead of the degree to which people *use* their strengths. According to Linley and Harrington (2006), the differentiation between these two perspectives is crucial. They believe that when individuals *utilise* their strengths, they experience a feeling of superiority and excellence, they feel capable of achieving things, and are actively striving towards fulfilling their potential.

Govindji and Linley (2007) in an endeavour to address this gap, presented the first scale to measure strengths *use* rather than strengths *occurrence*, entitled the Strengths Use Scale (SUS). The self-report SUS consists of 19 items. The purpose of the scale is to assess generic strengths use. More specifically, it measures the extent to which people apply their strengths in a variety of settings. Gaining significant interest, several studies have confirmed the relationship between capitalising on one's strengths and vitality, greater self-esteem, sustainable well-being and reduced levels of perceived stress (Govindji & Linley, 2007; Wood et al., 2010). Even though the SUS obtained good psychometric properties (Govindji & Linley, 2007); some limitations should be acknowledged. Firstly, a sample of college

students was used to validate the scale. Therefore, the findings cannot be generalised to the population as a whole or to employees working in organisations. Furthermore, focus was placed specifically on the degree to which individuals use their strengths, excluding the role of weaknesses (Wood et al., 2010).

According to Peterson and Seligman (2003), by replacing a one-sided perspective (an obsession with what is wrong) with another one-sided perspective (an exclusive focus on what is right) is not a move forward. A better approach to individual growth recognises that both strengths and weaknesses have an appropriate place in learning and development. However, research in this regard is hampered by the absence of a measuring instrument specifically aimed at assessing both the use of strengths and the development of deficits. In response to this predicament, Van Woerkom, Mostert, Els, Rothmann Jr and Bakker (in process) have developed the Strengths Use and Deficit Improvement Questionnaire (SUDIQ) as a measure to assess four dimensions. Two dimensions focus on the perceived support from the organisation to support strengths use and deficit development, while the other two dimensions focus on individual proactive behaviour towards strengths use and deficit improvement.

In order to explain the descent of perceived organisational support for strengths use and deficit improvement, one has to firstly consider the Job Demand-Resources theoretical framework (JD-R model). According to the JD-R model, workplace conditions are determined by two factors, namely job demands and job resources (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). Job demands refer to aspects that require effort and are associated with physiological and psychological costs, such as fatigue; whereas job resources foster personal growth, learning, development, and have motivational qualities. Job resources are those physical, social, or organisational aspects of the job that (a) are functional in achieving work-related goals, (b) reduce job demands and the associated physiological and psychological costs, and (c) stimulate personal growth and development (Bakker, Demerouti, & Schaufeli, 2003).

According to Schaufeli and Bakker (2004), the availability of job resources leads to organisational commitment and work engagement. Job resources, due to their (intrinsic and extrinsic) motivational potential, empower employees to meet their goals. In turn, employees may become more committed to their jobs, because they derive fulfilment from them (Hackman & Oldham, 1980). Previous studies (Bakker et al., 2003; Hakanen, Bakker, &

Schaufeli, 2006) have shown that several job resources (e.g., colleague and supervisor support) lead to work engagement. Schaufeli, Salanova, González-Romá, and Bakker (2002) defined work engagement as a positive, fulfilling, work-related state of mind that is characterised by vigour, dedication, and absorption. Vigour is characterised by high levels of energy and mental resilience while working; the willingness to invest effort in one's work; and persistence also in the face of difficulties. Dedication is characterised by a sense of significance, enthusiasm, inspiration, pride and challenge (Schaufeli et al., 2002). Absorption is experienced by individuals who are happily engrossed in their work. Even though it can be seen as a relevant aspect of work engagement, it plays a less significant role and should rather be regarded as a consequence of engagement. Therefore, only the 'core' concepts vigour and dedication were used in predicting engagement (Schaufeli & Bakker, 2004).

In an attempt to contribute to previous empirical studies based on the JD-R model, considerable research has been done on a term called perceived organisational support (POS; Eisenberger, Fasolo, & Davis-LaMastro, 1990). POS is defined by Eisenberger et al. (1990) as the extent to which employees perceive their organisations to care about their well-being as well as the degree to which employees perceive their organisation to value their contributions. Organisational support has on several occasions been classified as a job resource (Jackson, Rothmann, & Van de Vijver, 2006; Rothmann, Mostert, & Strydom, 2006). As such, perceptions of organisational support have been positively related to aspects such as work attendance (Eisenberger, Huntington, Hutchison, & Sowa, 1986), job performance (Eisenberger, et al., 1990), job satisfaction (Eisenberger, Cummings, Armeli, & Lynch, 1997), and commitment to the organisation (Wayne, Shore, & Liden, 1997). Employees may perceive their organisations as being supportive in numerous ways. According to literature, the most prominent forms of perceived organisational support include POS for creativity (Zhou & George, 2001), POS for innovation (Henkin & Holliman, 2009) and POS for employees' personal development (Hung & Mondejar, 2001).

Contributing to preceding research done on POS, Van Woerkom et al. (in process) have established two additional forms called POS for strengths use and POS for deficit improvement. POS for strengths use is described by Van Woerkom et al. (in process) as the degree to which employees are encouraged by their organisation to use and capitalise on their strengths. Previous research found that when organisations support their employees in terms of using their strengths and making the most of their talents, it may lead to more productive work units, with less employee turnover (Clifton & Harter, 2003; Lopez, Hodges, & Harter,

2005). Likewise, employees who capitalise on their strengths are inclined to perform well when doing tasks, as their performance takes less effort, learning is quicker and sustained, and they are more interested in the activity, leading to deeper satisfaction and human flourishing (Govindji & Linley, 2007). Linley et al. (2010) also found that people who use their strengths are far more likely to achieve their goals; as a result contributing to the organisational objectives. It is evident that POS for strengths use will not only aim at encouraging employees to meet their goals; it will consequently contribute to the bottom-line of the organisation as well, and can therefore be deemed as a job resource.

In a similar vein, POS for deficit improvement can therefore also be regarded as a job resource (Van Woerkom et al., in process). Since human resource departments often follow a DBA, employees are assessed on their ability to do their required work, compared to their expected capability. By means of training and development the necessary knowledge, skills and abilities are obtained. In doing so, not only will the organisation reap the benefits and achieve its objectives, but employees will also gain a sense of accomplishment (Behn, 2006).

In order to explain the origin of the two individual dimensions of the SUDIQ, namely proactive behaviour towards strengths use and deficit improvement, one has to place emphasis on the definition of proactive behaviour. Parker, Williams, and Turner (2006) described proactive behaviour as taking self-initiated and future-oriented action, intentionally, in order to change and improve the situation or oneself. Frese, Fay, Hilburger, Leng, and Tag (1997) explained that employees who display personal initiative, are action-directed, goal-driven, seek new challenges and are persistent in the face of obstacles are regarded as being proactive. Some illustrative types of proactive behaviours that have been recognised include, amongst others, actively adapting to new working conditions (Ashford & Black, 1996), taking responsibility to bring about change (Morrison & Phelps, 1999), self-initiated role expansions (Parker, Wall, & Jackson, 1997) and proactively solving problems and implementing ideas (Parker et al., 2006).

In addition to these types of proactive behaviour, proactive behaviour towards strengths use and proactive behaviour towards deficit improvement can be seen as two additional forms of proactive behaviour. Van Woerkom et al. (in process) propose that employees who are constantly seeking opportunities to utilise their strengths and actively pursuing ways to improve themselves, also display a form of proactive behaviour. Proactive behaviour towards strengths use is therefore referred to as employees' self-starting behaviour directed towards

using their strengths in the workplace. On the other hand, employees who have the intention of changing or improving themselves or a work situation may also display proactive behaviour in terms of deficit improvement. When employees partake in training and development programmes, they are vigorously taking action to improve their competencies, which in turn can bring about the desired change. The benefits of development programmes include gaining skills, knowledge and abilities to complete assigned duties, developing skills required to achieve organisational goals, motivation to achieve higher standards, overall efficiency and promotional opportunities (Mahapatro, 2010), but most importantly contributing to organisational success. Therefore, proactive behaviour towards deficit improvement is described as employees' self-starting behaviour directed towards developing areas of deficit, weakness or flaw in the workplace (Van Woerkom et al., in process).

The SUDIQ has been validated amongst employees from a heterogeneous, random sample across different industries in South Africa (Van Woerkom et al., in process) as well as amongst a sample of sport coaches (Stander & Mostert, 2013).

By means of adapting the SUDIQ, educational institutes and teachers can be directed toward a better understanding of the benefits associated with strengths use and deficit improvement, encouraged from an individual and organisational perspective. The aim of this study is thus to determine if the positive capacities of the SUDIQ play a role in increasing the work engagement and reducing the level of burnout experienced by educators. To ensure the SUDIQ is valid, reliable and practically relevant in a sample of educators, good psychometric properties for the adapted version of the SUDIQ have to be established.

Based on the above statement of the research problem, the following research questions are formulated:

- How are perceived organisational support towards strengths use, perceived organisational support towards deficit improvement, proactive behaviour towards strengths use and proactive behaviour towards deficit improvement amongst educators conceptualised according to literature?
- Is the adapted SUDIQ valid and reliable in a sample of educators? More specifically, can the following be established?
  - Factorial validity;
  - Convergent validity with other theoretically similar constructs (i.e. strengths use, job resources, psychological capital, proactive behaviour and person-job fit);

- Discriminant validity with those constructs from which it is supposed to differ (i.e. age and education); and
- Empirical validity with appropriate outcomes (work engagement and burnout).
- What recommendations can be made for future research and practice?

## **1.2 RESEARCH OBJECTIVES**

The research objectives are divided into the following, namely a general objective and specific objectives.

### **1.2.1 General Objective**

The general objective of this research is to determine whether an adapted version of the newly developed Strengths Use and Deficit Improvement Questionnaire SUDIQ is valid and reliable, using confirmatory factor analysis, convergent, discriminant and empirical validity.

### **1.2.2 Specific Objectives**

The specific objectives of this research are to:

- Determine how perceived organisational support towards strengths use, perceived organisational support towards deficit improvement, proactive behaviour towards strengths use and proactive behaviour towards deficit improvement amongst educators are conceptualised according to literature.
- Determine whether the adapted SUDIQ is valid and reliable in a sample of educators; more specifically pertaining to the following:
  - Factorial validity;
  - Convergent validity with other theoretically similar constructs (i.e. strengths use, job resources, psychological capital, proactive behaviour and person-job fit);
  - Discriminant validity with those constructs from which it is supposed to differ (i.e. age and education); and
  - Empirical validity with appropriate outcomes (work engagement and burnout).
- Make recommendations for future research and practice.

### **1.3 RESEARCH HYPOTHESES**

The following hypotheses are formulated:

H1: The SUDIQ consists of four distinct factors.

H2: The four factors of the SUDIQ are reliable ( $\alpha \geq 0.70$ ).

H3: The four SUDIQ dimensions are related to theoretically similar constructs (strengths use, job resources, psychological capital, proactive behaviour and person-job fit).

H4: The four SUDIQ dimensions are unrelated to age and education.

H5: The four SUDIQ dimensions significantly predict vigour and dedication.

H6: The four SUDIQ dimensions significantly predict emotional exhaustion and depersonalisation.

### **1.4 RESEARCH METHOD**

The research method consists of two phases, namely a literature review and an empirical study. The results will be presented in the form of a research article. A brief literature review will be conducted to gain insight into previous research done on the relationship between strengths use and deficit improvement, and the level of engagement and burnout of educators. This paragraph focuses on the literature that is relevant to the empirical study that will be conducted.

#### **1.4.1 Literature Review**

The psychometric properties such as reliability, factorial, convergent, discriminant and empirical validity of an adapted version of the newly developed Strengths Use and Deficit Improvement Questionnaire (SUDIQ) will be established. Articles that have been published between 1991 and 2011 that are relevant to the study are obtained by doing computer searches via databases such as Academic Search Premier; Business Source Premier; PsycInfo; EbscoHost; GoogleScholar; Google Books; Emerald; ProQuest; SACat; SAePublications and Science Direct. The main journals that will be consulted due to their relevance to the topic of interest are: Journal of Occupational Health Psychology, Journal of Managerial Psychology, Journal of Educational Psychology, Journal of Positive Psychology, Scandinavian Journal of Work Environment and Health, South African Journal of Psychology, Review of General Psychology, Work & Stress, International Coaching Psychology Review, Journal of Applied Psychology, The Coaching Psychologist, Computers

in Human Behavior, Journal of Organizational Behavior, Social Indicators Research, Management Dynamics, South African Journal of Industrial Psychology, Administrative Science Quarterly, Journal of Cross-Cultural Psychology, Journal of Happiness Studies, American Psychologist, and Personality and Individual Differences.

### **1.4.2 Research Design**

A cross-sectional survey design will be used to collect the data and to attain the research objectives. Cross-sectional designs will be used to observe a group of people at a particular point in time, for a short period, such as a day or a few weeks (Du Plooy, 2002). Due to economical and time effectiveness, this approach is ideal for this study. A quantitative study will be done. According to Struwig and Stead (2001), research that is quantitative in nature is a form of conclusive research involving large representative samples and data collection procedures that are structured.

### **1.4.3 Research Participants**

For the purpose of this study, convenience sampling will be used. The data will be collected amongst employees from the education sector in the Gauteng province ( $N = 502$ ). The aim is to include educational institutions that comprise of primary and secondary as well as Afrikaans, English and bilingual schools. The sample group will represent different genders, marital statuses, ages and racial groups (African, White, Coloured and Indian). One of the requirements will be that the participant has to be an educator at a school. It is essential that participants have a good command of the English language in order to complete the questionnaire successfully.

### **1.4.4 Measuring Instruments**

*Biographical information.* A questionnaire to determine the biographical characteristics of the participants will be utilised. Characteristics such as year of birth, gender, home language, race, level of education, household status (marital and parental status), years working in the school and current position are asked in this questionnaire.

*Strengths Use and Deficit Improvement.* The adapted Strengths Use and Deficit Improvement Questionnaire (SUDIQ; Van Woerkom et al., in process) will be used to measure perceived organisational support for strengths use, perceived organisational support for deficit improvement, proactive behaviour towards strengths use, and proactive behaviour towards

deficit improvement. Eight items will be used to measure each of these constructs, with the exception of proactive behaviour towards strengths use which will be measured by nine items. Examples include: “This school uses my strengths” (perceived organisational support for strengths use;  $\alpha = 0.96$ ), “This school emphasises the development of my weak points” (perceived organisational support for deficit improvement;  $\alpha = 0.93$ ), “I use my strengths” (proactive behaviour towards strengths use;  $\alpha = 0.94$ ), and “I have a development plan that aims to better my weaknesses” (proactive behaviour towards deficit improvement;  $\alpha = 0.94$ ; Van Woerkom et al., in process). This scale will be scored on a seven-point frequency scale (1 = never, 7 = almost always).

*Strengths Use.* The Strengths Use Scale (Govindji & Linley, 2007) will be used to measure the use of strengths. This is a 14-item self-report scale, designed to measure individual strengths use. Sample items include: “I am able to use my strengths in lots of different ways” ( $\alpha = 0.87$ ; Govindji & Linley, 2007). This measure uses a 7-point Likert scale response format (1 = strongly disagree, 7 = strongly agree).

*Job Resources.* Job resources will be measured by using items from the Questionnaire on the Experience and Evaluation of Work (QEEW; Van Veldhoven, Meijman, Broersen, & Fortuin, 2002). Three job resources will be assessed, namely autonomy (four items), supervisor support (four items) and colleague support (four items). Example items include: “Do you have freedom in carrying out your work activities?” (autonomy), “Do you get on well with your supervisor?” (supervisor support), “If necessary, can you ask your colleagues for help?” (colleague support). Van Veldhoven et al. (2002) reported sufficient Cronbach alpha coefficients for autonomy ( $\alpha = 0.82$ ), the relationship with the supervisor ( $\alpha = 0.82$ ), and relationships with colleagues ( $\alpha = 0.71$ ). Job resources items will be scored on a four-point frequency scale (1 = never, 4 = always).

*Psychological Capital.* The Psychological Capital Questionnaire (PsyCap; Luthans, Youssef, & Avolio, 2007) will be used to measure self-efficacy, hope, resilience and optimism. It consists of 24 items, each of the four components are measured by six items adapted from each of the following scales: (a) self-efficacy (Parker, 1998); (b) hope (Snyder, Ybasco, Borders, Babyak, & Higgins, 1996); (c) resilience (Wagnild & Young, 1993); and (d) optimism (Scheier & Carver, 1985). Sample items from each of the subscales include: “I feel confident helping to set targets/goals in my area of work” (self-efficacy); “If I should find myself in a jam at work, I could think of many ways to get out of it” (hope); “I usually

manage difficulties one way or another at work” (resilience); and “I always look on the bright side of things regarding my job” (optimism). The Cronbach’s alpha coefficients have been reported as 0.77 for self-efficacy, 0.71 for hope, 0.74 for resilience and 0.82 for optimism (Luthans et al., 2007). The PsyCap questionnaire will be scored on a 6-point Likert-type scale (1 = strongly disagree, 6 = strongly agree).

*Proactive Behaviour.* Proactive behaviour will be assessed with a scale which Belschak, Den Hartog, and Fay (2010) adapted from a Personal Initiative Scale (Frese, et al., 1997), and the Proactive Personality Scale (Crant, 2000). The alpha coefficient for the scale was reported at 0.80 (Belschaket al., 2010). Proactivity will be measured by 11 items. Example items include: “At work, I personally take the initiative to acquire new knowledge that will help the company”, and “At work, I personally take the initiative to find new approaches to execute my tasks so that I can be more successful”. Responses will be given on a seven-point scale (1 = disagree strongly to 7 = agree strongly).

*Person-Job Fit.* A four-item measure adapted from Saks and Ashforth (1997) will be to assess whether participants feel they fit with their jobs. Examples of the items are: “My knowledge, skills and abilities match the requirements of my job”, and “My job is a good match for me”. The internal reliability of the ratings has been established as 0.85 (Saks & Ashford, 1997). Items will be scored on a 5-point scale (1 = strongly disagree, 5 = strongly agree).

*Engagement.* The Utrecht Work Engagement Scale (UWES) (Schaufeli et al., 2002) will be used to measure vigour and dedication. The UWES will be scored on a seven-point frequency scale, (0 = never, 6 = everyday). This is a 10-item self-report scale, sample items include: “At school, I feel bursting with energy” ( $\alpha = 0.92$ ; Schaufeli et al., 2002). The Cronbach alpha coefficients varies from  $\alpha = 0.84$  for the vigour component and  $\alpha = 0.89$  for the dedication subscale (Schaufeli & Bakker, 2003).

*Burnout.* The Maslach Burnout Inventory – Educators Survey (MBI-ES; Maslach, Jackson, & Leiter, 1996) will be used to determine emotional exhaustion (nine items) and depersonalisation (five items). Items will be scored on a 7-point frequency rating scale (0 = never, 6 = daily). Example items include: “I feel emotionally drained at school” ( $\alpha = 0.59$ ; Maslach et al., 1996). Acceptable reliability scores have also been obtained by Maslach et al. (1996) for emotional exhaustion ( $\alpha = 0.90$ ) and depersonalisation ( $\alpha = 0.79$ ).

### **1.4.5 Research Procedure**

Permission to gather data will be obtained from the head of education in Gauteng, as well as from the involved principals from the respective participating schools. Each principal will receive a letter explaining the purpose of the study. A hard copy of the questionnaire will be handed out to the participants. Participants will take approximately 40 minutes to complete the questionnaire. Respondents are given three weeks to complete the questionnaires. A reminder of completion will be sent to the relevant principals a week before the questionnaires are collected. Once all the data have been collected, the data analysis will be conducted. Participation will be voluntary and emphasis will be placed on anonymity and confidentiality. Authorisation from the respective principals will be obtained to permit the use of data for research purposes.

### **1.4.6 Statistical Analysis**

In order to analyse the data, both the SPSS (SPSS Inc., 2011) and the Mplus programs (Muthén & Muthén, 2008-2010) will be used. Confirmatory factor analyses (CFA) will be utilised to determine the factorial validity of the scales. The robust maximum likelihood (MLR) estimator will be used to accommodate the lack of multivariate normality in the item distribution and the covariance matrix will be used for input (Muthén & Muthén, 2007). To determine the goodness of model fit, the following fit indices will be considered:  $\chi^2$  statistic, the Comparative Fit Index (CFI), the Tucker-Lewis Index (TLI), the Root Mean Square Error of Approximation (RMSEA) and the Standardized Root Mean Square Residual (SRMR). Acceptable fit for the CFI and TLI is considered at a value of 0.90 and above (Hoyle, 1995; Byrne, 2010). An RMSEA value of 0.05 or less indicates a good fit. However, values of 0.08 and less are also considered to indicate acceptable model fit (Cudeck & Browne, 1993). The cut-off point for SRMR will be set at smaller than 0.05 (Hu & Bentler 1999). It should nevertheless be noted that these cut-off points should only be considered as guidelines, as very little consensus concerning the values for adequate fit has been reached (Lance, Butts, & Michels, 2006). To compare the fit of competing models, the Akaike information criterion (AIC) and sample adjusted Bayesian information criterion (BIC) will be used.

Descriptive statistics will be used to analyse the data. The rho coefficients ( $\omega_h$  - the proportion variance explained by the factor divided by the total variance (Wang & Wang, 2012); and the Cronbach alpha coefficients will be used (Clark & Watson, 1995) to establish the internal consistency of the constructs. Correlation coefficients will be utilised to establish

the relationship between variables. The value will be set at a 95% confidence interval level ( $p \leq 0.05$ ), to indicate statistical significance. Practical significance of the correlation coefficients will be set at a cut-off point of 0.30 (medium effect), and 0.50 (large effect, Cohen, 1988).

In order to determine the variance predicted in the dependent variables (vigour, dedication, emotional exhaustion and depersonalisation) by the independent variables (the four SUDIQ dimensions), multiple regression analyses will be conducted.

#### **1.4.7 Ethical Considerations**

For this study to be successful, research that is fair and ethical should be conducted. Other vital issues to address include voluntary participation, informed consent, doing no harm, confidentiality and the maintenance of privacy (Salkind, 2009). A review of the research proposal has been done by the North-West University's ethical committee.

### **1.5 OVERVIEW OF THE CHAPTERS**

In Chapter 2 the findings of the research objectives will be discussed in the form of a research article. Chapter 3 deals with the conclusions, limitations and recommendations of this research study.

### **1.6 CHAPTER SUMMARY**

In this chapter the following were presented, namely the problem statement, research objectives and the research hypotheses. The measuring instruments and the research method used in the study were also explained, followed by a brief overview of the chapters.

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## **CHAPTER 2**

### **RESEARCH ARTICLE**

# **Adapting and validating the Strengths Use and Deficit Improvement Questionnaire for educators in Gauteng**

## **Abstract**

**Orientation:** No scale specifically applicable to educators within the South African context is available to measure their perceptions of how they or their school utilise strengths and improve deficits.

**Research Purpose:** To determine whether an adapted version of the newly developed Strengths Use and Deficit Improvement Questionnaire (SUDIQ) is valid and reliable.

**Motivation for the Study:** Valuable insights regarding strengths use and deficit improvement for both the educator and educational institutions could be gained from an adapted and validated SUDIQ.

**Research Design, Approach and Method:** A cross-sectional research approach was used. A convenient sample ( $N = 502$ ) of educators in Gauteng was used. Confirmatory factor analysis, convergent, discriminant and empirical validity were used to determine the validity and reliability of the SUDIQ.

**Main Findings:** A four-factor structure was established for the adapted SUDIQ. Relationships between the SUDIQ dimensions and similar theoretical constructs were positive and significant. Perceived organisational support for strengths use, proactive behaviour towards strengths use and proactive behaviour towards deficit improvement significantly predicted engagement, whilst only proactive behaviour towards strengths use predicted burnout.

**Practical Implications:** Educational institutions can benefit from gaining insight into how individuals perceive strengths use and deficit improvement from a personal and organisational perspective.

**Contribution/Value-add:** This study adds value to the limited research on using strengths and improving deficits from both an organisational and individual perspective and possible outcomes, specifically amongst educators, within the South African context.

**Key terms:** Strengths Use and Deficit Improvement Questionnaire, perceived organisational support for strengths use, perceived organisational support for deficit improvement, proactive behaviour towards strengths use, proactive behaviour towards deficit improvement, validation, Gauteng educators, positive psychology.

## **INTRODUCTION**

It is widely acknowledged that the provision of quality education is one of the greatest challenges South Africa is facing in the twenty-first century. Education plays a significant role in the endeavour to create a sustainable society – it empowers people with the knowledge and skills much needed to shape a better future (United Nations Educational, Scientific and Cultural Organization; UNESCO, 2010). However, teachers in South Africa are faced with serious challenges such as the scourge of violence, racism, the absence of classroom discipline, job overload, low teacher morale, teacher absenteeism, low salaries, reduced job satisfaction as well as a tremendous lack of resources, facilities and qualified enthusiastic teachers (Hall, Altman, Nkomo, Peltzer, & Zuma, 2005; Van Bijl & Oosthuizen, 2007; Van den Aardweg & Van den Aardweg, 1988; Viljoen & Rothmann, 2009). It is regarded as nearly impossible to have efficiency, effectiveness and provide quality education under such circumstances. Therefore, an urgent need exists for an approach that can impact the work environment of educators.

Throughout the course of life, people have been taught that in order to flourish and excel, they have to remediate their weaknesses (Taylor, 2012). From a young age, children are overwhelmed by parents and teachers constantly focused on correcting their misbehaviour, inadequacies and failures (Bear, 2005). As people set foot in the workplace, again they are faced by organisations gravitating toward fixing their deficiencies, applying the so-called deficit-based approach (DBA; Buckingham & Clifton, 2001). According to Clifton and Harter (2003), a DBA focuses on aspects within an organisation that are not working satisfactorily and on aspects that employees need to develop. These weaknesses are then improved by means of various training and development methods. Coaching and training interventions therefore aim at creating an educated workforce, enabling employees to perform their work with confidence at more efficient and productive levels, by concentrating on development areas (Gillham & Seligman, 1999).

Opposing the DBA, Seligman, Steen, Park, and Peterson (2005) are of the opinion that fixing one's weaknesses will never lead to greatness. Agreeing with this statement, Buckingham (2007) believed that deficits are so deeply ingrained in a person's being, that the process of change will not only be incredibly difficult, but also terribly draining. People often diminish their strengths by struggling valiantly to develop their deficiencies, resulting in nothing more than numerous mediocre skills. To redress the imbalance of a preoccupation with negative

behaviour, Seligman (2002) suggested a shift toward a positive psychology paradigm. In line with this paradigm, a movement has emerged around the idea of a strengths-based approach (SBA). A SBA is described as an effort towards sustainable well-being through the identification and implementation of employees' strengths and qualities (Peterson & Seligman, 2004). According to Gable and Haidt (2005), creating an opportunity for employees to use their strengths is a core predictor of a flourishing and optimal functioning workforce. In a similar vein, Linley and Harrington (2006) established that a SBA will not only benefit the employees, but also the organisation, in that employees who use their strengths are loyal, productive, experience increased positive emotions and are better able to achieve the goals they set, ultimately contributing to the success of the organisation (Henry & Henry, 2007).

The rapidly increasing interest in positive topics has led to the development of theoretical frameworks and classification systems of strengths. The most commonly utilised strength identification instruments include the Values in Action Inventory of Strengths (VIA-IS), developed by Peterson and Seligman (2004), the Clifton StrengthsFinder, initiated by Gallup pioneer Don Clifton (Rath, 2007), and the Realise2 based on the research of Linley, Nielsen, Gillett, & Biswas-Diener (2010). The general aim of these scales is to assist individuals in discovering where their greatest potential for building strengths lies.

While previous research has confirmed the relationship between the *possession* of strengths and well-being, it seems necessary to investigate whether the *use* of strengths may lead to beneficial outcomes (Wood, Linley, Maltby, Kashdan, & Hurling, 2011). Although the mere identification of strengths has led to substantial outcomes (Linley & Harrington, 2006; Lopez, Hodges, & Harter, 2005), Biswas-Diener, Kashdan, and Minhas (2011) are of the opinion that it is the unblocked *use* of strengths that would propose the most benefits. In a study conducted by Seligman et al. (2005), some participants were encouraged to identify what their strengths were, while others were instructed to make use of their strengths on a daily basis. A comparison between these two groups suggested that participants who intentionally utilised their strengths, exhibited significant long-lasting improvements in happiness.

Since the purported benefits of capitalising on one's strengths remain in doubt, Govindji and Linley (2007) presented the first scale to assess strengths use rather than strengths occurrence, called the Strengths Use Scale (SUS). Whilst the SUS may be a useful tool for future research, some gaps can be identified. The SUS was validated amongst college

students and can therefore not necessarily be generalised to working individuals. It also exclusively focuses on the use of strengths and thus excludes the measurement of the development of deficits.

Peterson and Seligman (2003) stated that focusing on developing strengths in isolation is not ideal and that the negative aspects of human functioning should also be considered. Therefore, an integrated, holistic approach, emphasising the use of strengths as well as the development of deficits is crucial (Aspinwall & Staudinger 2003; Rust, Diessner, & Reade, 2009). However, in literature no measuring instruments could be found that measure both strengths use and deficit improvement simultaneously; thus representing a need to develop such a scale. In response to this limitation, Van Woerkom, Mostert, Els, Rothmann Jr, and Bakker (in process) developed the Strengths Use and Deficit Improvement Questionnaire (SUDIQ). The purpose of this scale is to measure the extent to which employees perceive their organisations as supporting them in using their strengths and improving their deficits, as well as the degree to which employees themselves take initiative to capitalise on their strengths and develop their deficiencies. The SUDIQ has successfully been validated amongst employees from across various industries in South Africa (Van Woerkom et al., in process) as well as amongst a sample of sport coaches (Stander & Mostert, 2013).

Teachers are faced with ever-rising expectations and constantly increasing demands. However, the unprecedented challenges are not accompanied by an equivalent availability of resources. This study aims to assist educational institutions to gain a better understanding of the benefits associated with capitalising on teachers' strengths *and* developing their deficits. Similarly, teachers are encouraged to take ownership of creating better working conditions by means of understanding the significant value of using their strengths and improving their areas of development, and most importantly, applying these principles. In order to assist teachers in this regard, it could add much value to adapt the SUDIQ and to determine the validity and reliability of the adapted version. This study will therefore contribute to previous empirical research and additionally aim to determine if the positive capacities of the SUDIQ can play a role in increasing the work engagement and reducing the level of burnout in teachers.

Based on the above statement of the research problem, the objective of this study was to test the factorial, convergent, discriminant and empirical validity of the SUDIQ.

## **LITERATURE REVIEW**

### **Perceived organisational support for strengths use and deficit improvement**

Substantial research has been done on the idea of perceived organisational support (POS) as a means of increasing employee engagement and job satisfaction. Eisenberger, Fasolo, and Davis-LaMastro (1990) defined POS as employees' general belief of the extent to which organisations cherish their contributions and display commitment toward their workers. POS is generally understood as an organisation's contribution to a reciprocity dynamic relationship with its employees, as employees have the tendency to perform better in order to reciprocate received rewards and favourable treatment. Former research has verified that POS increases employees' sensed obligation to contribute to reaching the organisation's goals (Shore & Tetrick, 1991), intensifies employees' affective commitment towards the organisation (Rhoades, Eisenberger, & Armeli, 2001), and strengthens their expectation that improved performance will be rewarded (Eisenberger et al., 1990). Furthermore, POS has been linked to supervisor support (Malatesta, 1995; Shore & Tetrick, 1991), job satisfaction (Aquino & Griffeth, 1999; Eisenberger, Cummings, Armeli, & Lynch, 1997), increased employee work performance (Eisenberger et al., 1990), and reduced levels of absenteeism and employee turnover (Eisenberger, Huntington, Hutchison, & Sowa, 1986; Lui, 2004).

Organisations play an imperative role in harnessing the development of their employees, as they represent a key leverage point in supporting employees to actively capitalise on their strengths and improve their areas of development. When employees perceive their organisations as deliberately promoting a working environment that cultivates the effective deployment of strengths and development of deficiencies, it could build a fierce loyalty and infectious enthusiasm amongst employees towards their organisation. Therefore, contributing to former research on the idea of POS, two additional forms known as perceived organisational support for strengths use (POSSU) and perceived organisational support for deficit improvement (POSDI) have been acknowledged (Van Woerkom et al., in process). POS for strengths use can be described as the degree to which employees perceive their organisation to encourage them to use and improve their strengths, whereas, POS for deficit improvement is regarded as an employee's perception of formal and informal policies, practices and procedures within the organisation, purposefully intended to develop his or her weaknesses (Van Woerkom et al., in process).

It is necessary to mention the role of the Job Demands-Resources model (JD-R model), as it contributed to the origin of the abovementioned constructs. The JD-R model proposes that working conditions can be categorised as job demands and job resources (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). Job demands are described as the physical, psychological, social, or organisational aspects that require continuous physical and/or psychological effort or skills (Bakker & Demerouti, 2007). On the other hand, job resources refer to those physical, psychological, social or organisational characteristics that are functional in achieving work objectives, reduce job demands, and stimulate personal growth, learning and development (Bakker, Demerouti, De Boer, & Schaufeli, 2003). Job resources have previously been linked to work outcomes such as employee motivation, well-being and work engagement (Bakker et al., 2003; Hakanen, Bakker, & Schaufeli, 2006; Hakanen, Perhoniemi, & Toppinen-Tanner, 2008).

Employees who perceive their organisation as supportive of making the most of their talents, and by means of training and development interventions aim to improve their deficiencies are more likely to achieve their goals, and as a result contribute to organisational objectives (Linley, Nielsen, Gillett, & Biswas-Diener, 2010). POS for strengths use and deficit improvement can be regarded as job resources, as it vanquishes job demands and most importantly contributes to a working environment that is conducive to attaining organisational goals (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009).

### **Proactive behaviour toward strengths use and deficit improvement**

When employees display personal initiative, are action-directed, goal-driven, seek new challenges and are persistent in the face of obstacles, they can be described as proactive (Frese, Fay, Hilburger, Leng, & Tag, 1997). Parker, Williams, and Turner (2006) also describe proactive behaviour as taking self-initiated and future-oriented action intentionally to change and improve a current undesirable situation or oneself. Proactive behaviour has been found to lead to positive individual and organisational outcomes, such as performing core tasks better (Thompson, 2005), increased overall job performance (Grant, Parker, & Collins, 2009), individual innovation (Seibert, Kreimer, & Crant, 2001), and greater team learning and team performance (Druskat & Kayes, 2000).

Bearing in mind the aforementioned definition of proactive behaviour, it is evident that employees who constantly seek opportunities to utilise their strengths and are actively pursuing ways to improve themselves also display a form of proactive behaviour. Likewise,

employees who partake in training and development programmes are vigorously taking action to improve their shortages, with the intention of bringing about desired change. Two additional forms of proactive behaviour have been identified as proactive behaviour towards strengths use (PBSU) and proactive behaviour towards deficit improvement (PBDI; Van Woerkom et al., in process). Proactive behaviour towards strengths use is defined as employees' self-starting behaviour directed towards using their strengths in the workplace; whereas, proactive behaviour towards deficit improvement is described as employees' self-starting behaviour directed towards improving their deficiencies in the workplace (Van Woerkom et al., in process).

### **The development, validity and reliability of the SUDIQ**

With the rise of positive psychology, increasing interest in the topic has led researchers to develop applicable theoretical frameworks and classification systems. However, a great concern in empirical science still remains the lack of a measuring instrument focusing on the extent to which employee strengths and talents are being utilised, *and* the degree to which their discrepancy is being addressed, from both an organisational and individual perspective. This gap was addressed by Van Woerkom et al. (in process) who developed the Strengths Use and Deficit Improvement Questionnaire (SUDIQ).

The process of developing the SUDIQ included construct conceptualisation, item generalisation, evaluation, development and refinement. The initial pool of items used in the item generation and evaluation phase was investigated to determine appropriateness within the South African context. Inappropriate items were removed from the pool, and items regarded as appropriate were thoroughly investigated prior to their inclusion. During a pilot study, exploratory factor analyses were conducted, where four factors were extracted by means of a scree plot and eigen values ( $N = 241$ ). Finally, a four-factor model was confirmed with confirmatory factor analysis in a heterogeneous sample across different trades ( $N = 699$ ; Van Woerkom et al., in process). These four factors were labelled perceived organisational support for strengths use, perceived organisational support for deficit improvement, proactive behaviour towards strengths use and proactive behaviour towards deficit improvement. Likewise, Stander and Mostert (2013) adapted and validated the SUDIQ amongst a sample of sport coaches; the results again supported a four-factor structure. For the purpose of this study an adapted version of the SUDIQ, applicable to educators in South African context,

was used. To ensure that the scale is valid and practically relevant in a sample of educators, similar results are expected.

**Hypothesis 1:** The Strengths Use and Deficit Improvement Questionnaire consists of four distinct factors, namely perceived organisational support for strengths use, perceived organisational support for deficit improvement, proactive behaviour towards strengths use and proactive behaviour towards deficit improvement.

The SUDIQ has obtained respectable reliability scores from previous studies. Van Woerkom et al. (in process) reported the following Cronbach alphas, namely perceived organisational support for strengths use,  $\alpha = 0.96$ ; perceived organisational support for deficit improvement,  $\alpha = 0.93$ ; proactive behaviour towards strengths use,  $\alpha = 0.94$ ; and proactive behaviour towards deficit improvement,  $\alpha = 0.94$ . In the study of Stander and Mostert (2013), similar results were reported, namely perceived organisational support for strengths use,  $\alpha = 0.96$ ; perceived organisational support for deficit improvement,  $\alpha = 0.94$ ; proactive behaviour towards strengths use,  $\alpha = 0.93$ ; and proactive behaviour towards deficit improvement,  $\alpha = 0.94$ .

**Hypothesis 2:** The four factors of the SUDIQ are reliable ( $\alpha \geq 0.70$ ).

### **Convergent validity: Relationships with similar variables**

The validity of a measurement is of paramount importance, as it influences the accuracy of applying and interpreting the findings. One way to determine the validity of a scale is to consider its convergent validity, that is, the extent to which two measures of constructs that are expected to be theoretically related are in fact related (Carmines & Zeller, 1979; Westen & Rosenthal, 2003). It is postulated that significant correlations will be evident between constructs of the SUDIQ and similar theoretical constructs such as strengths use, job resources (autonomy, supervisor support and colleague support), psychological capital (self-efficacy, hope, resilience and optimism), proactive behaviour and person-job fit.

#### *Strengths use*

The purpose of the Strengths Use Scale is to measure the extent to which people apply their strengths in the workplace (Govindji & Linley, 2007). Even though these two scales share underlying content- and instrument-related facets, a distinctive feature between these two

scales is that the SUS is restricted to individual perspectives of strengths use only. Nevertheless, it is proposed that the SUS will be related to the four SUDIQ constructs.

*Job Resources (autonomy, supervisor support and colleague support)*

As mentioned above, because of the nature of perceived organisational support for strengths use and perceived organisational support for deficit improvement, these can be considered as job resources. It is thus postulated that perceived organisational support for strengths use and perceived organisational support for deficit improvement will be related to other job resources such as autonomy, supervisor support and colleague support. This supposition is based on the Conservation of Resources (COR) theory, stating that job resources have a tendency of influencing one another, acting together as a resource pool (Hobfoll, 1998).

From an individual perspective, employees who vigorously aim to develop their strengths and weaknesses are likely to feel competent and confident in their ability to perform well (Brown, Ganesan, & Challagalla, 2001; Rath, 2007). When employees successfully accomplish a task at hand, it is expected that they will feel adequate enough to function autonomously and independently. Furthermore, supervisor support and colleague support have traditionally taken on a somewhat evaluative role, providing support from a rather negative perspective; resulting in emphasising employees' weaknesses and what they are unable to do, rather than using a strengths-based approach focused on capacity building (Hamilton & Finnerty, 2005; Snyder, Sympson, Ybasco, Borders, Babyak, & Higgins, 1996).

According to the Strength Deployment Inventory (Porter, 1996), effectively deploying one's strengths may result in more positive and powerful working relationships. Further emerging research also suggests that employees, who proactively focus on discovering their strengths and weaknesses and actively aim to improve themselves, may have less strenuous and mutually beneficial long term relationships with their supervisors and colleagues (Flaxington, 2013; Porter, 1996). Likewise, supervisors who motivate their employees to improve their strengths and deficits cultivate a working environment where successes are celebrated, triggering a snowball effect which may in turn build even stronger relationships.

Previous literature confirming these proposed relationships includes Stander and Mostert (2013) and Van der Merwe and Mostert (in process), postulating that job resources such as autonomy, supervisor and colleague support are positively related with a strengths-based and deficit-based approach.

*Psychological capital (PsyCap; self-efficacy, hope, resilience and optimism)*

Self-efficacy is what Bandura (1997) describes as the certainty individuals have in their own abilities to achieve a specific goal. Employees who develop their strengths and weaknesses stimulate their level of self-efficacy, enabling them to complete persuasive tasks. Similarly, organisations that encourage employees to capitalise on their strengths as well as develop their deficits are in reality boosting employees' levels of self-efficacy, providing them with confidence to reach mutual goals (Stajkovic & Luthans, 1998).

Hope is often referred to as a motivational state comprising both a sense of willpower and a sense of belief in one's abilities (Luthans & Jensen, 2002; Snyder, 2000). When individuals or human resource departments emphasise the use and development of strengths and deficits of employees, enhanced levels of willpower and confidence in their abilities, in other words, hope, is likely to occur. Furthermore, according to Luthans and Jensen (2002), by acknowledging strengths and weaknesses in past experiences and accomplishments, individuals are likely to be persistent and determined, consequently generating hope for the future.

Resilience refers to a person's psychological capacity to rebound from adversity, conflict or failure (Luthans, 2002). It can be developed through strength-focused and deficit-focused strategies relevant to the workplace (Masten, 2001). The Broaden-and-Build theory (Fredrickson, 2004) explains why both strength-based and deficit-based focuses could have a positive impact on resilience. Employees and organisations that focus on strengths use and deficit improvement, contribute to the well-being of people; it is expected that those with great levels of well-being will experience additional positive emotions. According to the Broaden-and-Build theory, positive emotions assist in gaining a variety of other resources, such as physical resources, social resources and psychological resources. By building on existing personal resources, it is expected that one will build several effective coping resources in order to manage negative life experiences (Tuguda & Fredrickson, 2004). These findings are also in line with the Conservation of Resources theory (COR; Hobfoll, 1998; 2002). The underlying principle of the COR theory is that individuals seek to create opportunities that will aid them in retaining, protecting and building their resources (Hobfoll & Shirom, 2001).

Finally, optimism is defined by Scheier and Carver (1985) as a general expectation that good outcomes will occur and that desired outcomes will be achieved. Employees who actively

deploy their strengths, manage to reduce the intensity of their problems; while at the same time raising the sense that problems can be solved (Clark, 1998). Similarly, when employees are encouraged to make use of their strengths and talents in the workplace, they could acquire more positive expectations, enabling them to cope with problems and adversity.

### *Proactive behaviour*

The proactive behaviour scale measures the degree to which individuals take an active self-starting approach to work (Grant & Ashford, 2008). The process of taking initiative in developing one's strengths and deficiencies according to the requirements of one's job, is known as job crafting. Job crafting has been described by Grant and Ashford (2008), as a form of discretionary behaviour that is driven by the employee rather than by management. It is postulated that job crafting is positively correlated with self-initiated behaviours that employees can exhibit at work to use their strengths and develop their deficits. Likewise, organisations that implement strategies to encourage employees to effectively deploy their strengths and develop their weaknesses are provoking employees to display proactive behaviour.

### *Person-job fit*

Person-job fit is generally described as the match between individual knowledge, skills and abilities, organisational demands of an individual and what is provided by the organisation (O'Reilly, Chatman, & Caldwell, 1991). From a SBA, the underlying philosophy of person-job fit is that manpower utilisation will be maximized when the passions and talents of an employee match those required by his or her vocation (Owens & Jewell, 1969; Park & Peterson, 2007). According to White (2009), deploying one's strengths holds the advantage of capitalising on brilliances and well-honed skills, and performing exceptionally in one's required work-activities. However, person-job fit can also occur amongst employees who are regarded as incongruent to their required job, as inadequacies, deficiencies and shortages can be addressed by means of training and development interventions. Collaboration between employees and their human resource departments is vital in developing the aptitudes, skills, knowledge and abilities of employees, to augment their productivity, efficiency and organisational performance; and in turn, their skills and knowledge may grow into harmony with the requirements of their working environment (Boon & Den Hartog, 2011).

Therefore, the next hypothesis derives as follows:

**Hypothesis 3:** The four SUDIQ dimensions are related to theoretically similar constructs, including strengths use, job resources, psychological capital, proactive behaviour and person-job fit.

**Discriminant validity: Relationships with unrelated variables**

Significant value regarding the validity of the SUDIQ can be gained by empirically demonstrating discriminant validity (Campbell, 1959). Because research on the SUDIQ is just emerging, very limited published studies are available to empirically demonstrate its discriminant validity in relation to other established constructs. However, it is expected that the SUDIQ dimensions will be unrelated to age and education.

**Hypothesis 4:** The four SUDIQ constructs are unrelated to age and education.

**Empirical validity: The relationship with engagement and burnout**

It seems important to examine the empirical validity of a scale as it illustrates how the SUDIQ is related to other constructs and behaviours within the same nomological net (Cronbach & Meehl, 1955). Previous literature has confirmed the relationship between a strengths- and deficit-based approach with important outcomes such as engagement and burnout (Abdullah, Ahsan, & Alam, 2009; Harter, Schmidt, & Hayes, 2002; Linley et al., 2010; Van Woerkom et al., in process; Wood et al., 2010). In order to contribute to the empirical evidence already found, it is necessary to investigate whether the SUDIQ dimensions will explain more variance to vigour, dedication, emotional exhaustion and depersonalisation.

Work engagement, as defined by Schaufeli and Bakker (2004), is a positive, fulfilling, work-related state of mind, characterised by vigour, dedication, and absorption. Vigour is explained as individuals who consistently have high levels of energy and mental resilience whilst working (Schaufeli, Salanova, González-Romá, & Bakker, 2002). Dedication suggests that employees are strongly involved in their work and experience feelings of significance, enthusiasm, and challenge. Absorption is experienced by individuals who are fully concentrating and happily engrossed in their work. Absorption is considered to be a relevant aspect of work engagement, but plays a less central role; it can rather be seen as a

consequence of engagement, therefore, only the 'core' concepts vigour and dedication are used (Schaufeli & Bakker, 2004).

Furthermore, burnout is defined as a psychological response to work stress that is characterised by emotional exhaustion, depersonalisation, and reduced feelings of personal accomplishment (Maslach, 1982). Emotional exhaustion refers to physical- and emotional depletion, resulting from excessive job and/or personal demands and continuous stress (Wright & Cropanzano, 1998). Depersonalisation often occurs in response to the aforementioned emotional exhaustion and is described by a process whereby employees detach from their jobs and begin to develop callous or uncaring attitudes toward their jobs, their performance, and those associated with the work.

Linley and Harrington (2006) believe that when employees are provided with opportunities to capitalise on their strengths and develop their weaknesses, not only do they result in employees feeling adequate and competent; these opportunities also assist them with coping with job demands, while contributing to achieving organisational goals (Xanthopoulou et al., 2009). According to the Conservation of Resources theory, people strive to obtain, retain and protect their resources, suggesting that, employees who perceive their organisation as being supportive of utilising their strengths and developing their deficiencies, are likely to build a pool of new resources (Hobfoll 2002); ultimately contributing to more positive outcomes (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007).

Similarly, Clifton and Harter (2003) are of the opinion that the nature of positive emotions that are released when employees successfully complete work-activities (whether employees are naturally good at performing the task, or developed the necessary skills in order to accomplish the task), motivates employees to further improve their strengths as well as their weaknesses. Finally, to explain the relationship between perceived organisational support for strengths use and deficit improvement, the JD-R model proposed that sufficient job resources form the breeding ground for both increased levels of engagement as well as reduced levels of burnout (Bakker et al., 2003; Bakker & Demerouti, 2007).

From an individual perspective, it is believed that employees who effectively deploy their strengths and manage their deficits are inclined to perform their tasks well, as their performance takes less effort, learning is quicker and they are more interested in the activity which leads to deeper satisfaction (Govindji & Linley, 2007). Consequently, employees who utilise their strengths may yield feelings of confidence, self-efficacy and self-esteem (Linley

& Harrington, 2006); such a state of mind will consequently lead to increased levels of work engagement and simultaneously reduce levels of upcoming stress (Proctor, Maltby, & Linley, 2011; Wood et al., 2011). In a similar vein, employees who aim to improve their weaknesses by means of training, not only gain a positive state of mind characterised by feelings of fulfilment and satisfaction; they are also provided with growth opportunities within their career. Consequently, employees might perceive their working environment as less stressful, experiencing greater levels of work engagement with reduces levels of burnout (Proctor et al., 2011). Van Woerkom et al. (in process) have previously conducted a study of which the results revealed that perceived organisational support for strengths use, perceived organisational support for deficit improvement, proactive behaviour towards strengths use and proactive behaviour towards deficit improvement were positively related to work engagement and negatively related to burnout. Similarly, Stander and Mostert (2013) found a positive correlation between work engagement and organisational and individual strengths use as well as individual deficit improvement. It is therefore anticipated that the four SUDIQ constructs will explain additional variance to both engagement (vigour and dedication) and burnout (emotional exhaustion and depersonalisation).

***Hypothesis 5:*** The four SUDIQ dimensions predict vigour and dedication.

***Hypothesis 6:*** The four SUDIQ dimensions predict emotional exhaustion and depersonalisation.

## **RESEARCH DESIGN**

### **Research Approach**

A cross-sectional survey design was used to collect the data and to attain the research objectives. Cross-sectional designs are used to observe a group of people at a particular point in time, for a short period, such as a day or a few weeks (Du Plooy, 2002). Due to economical and time effectiveness, this approach was ideal for this study. The study was of a quantitative nature. According to Struwig and Stead (2001), quantitative studies are a form of conclusive research involving large representative samples and structured data collection procedures.

## **RESEARCH METHOD**

### **Research Participants**

For the purpose of this study, a sample ( $N = 502$ ) was collected of educators from the Gauteng Province in South Africa. The educational institutions comprised of primary and secondary as well as Afrikaans, English and bilingual schools. The sample group represented different genders, marital statuses, ages and racial groups (African, White, Coloured and Indian). One of the requirements was that participants had to be an educator at a school. The characteristics of the participants are displayed in Table 1.

Table 1

*Characteristics of the Participants (N = 502)*

<b>Item</b>	<b>Category</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Gender	Male	105	20.9
	Female	397	79.1
Age (in years)	70 – 79	1	0.2
	60 – 69	32	6.4
	50 – 59	126	25.1
	40 – 49	126	25.1
	30 – 39	87	17.3
	20 – 29	115	22.9
	10 – 19	2	0.4
Home Language	Afrikaans	342	68.1
	English	105	20.9
	Ndebele	3	0.6
	Xhosa	9	1.8
	Zulu	12	2.4
	Sepedi	13	2.6
	Sotho	1	0.2
	Tswana	4	0.8
	siSwati	1	0.2
	Tsonga	3	0.6
	Other	8	1.6
Race	White	420	83.7
	African	54	10.8
	Coloured	8	1.6
	Indian	16	3.2
	Other	2	0.4
Education	Grade 11(Standard 9)	1	0.2
	Grade 12 (Matric)	22	4.4
	College Diploma	77	15.3
	Technicon Diploma	32	6.4
	University degree (e.g., BA, BCom, BEd)	230	45.8
	Postgraduate degree (Honours, Masters, or Doctorate)	110	21.9

Table 1 continues

*Demographic Characteristics of the Participants (N = 502)*

Household Situation	Single, without children living at home	75	14.9
	Single, with children living at home	37	7.4
	Married/living with a partner, without children living at home	125	24.9
	Married/living with a partner, with children living at home	220	43.8
	Living with parents	29	5.8
	Other (please specify)	9	1.8
	Language of School	English	266
Afrikaans		170	33.9
Combined		66	13.1
Type of School	Public	441	87.8
	Private	61	12.2
School Phase	Primary	260	51.8
	Secondary	188	37.5
	Combined	43	8.6
	Other	11	2.2

*Note.* Where percentages do not sum to a 100, it is due to missing values

The sample consisted of 397 females (79.1%) and 105 males (20.9%). The average age was 43 (SD = 12.47). Most of the participants were either Afrikaans (68.1%) or English (23.6%) speaking. The sample consisted of predominantly White (83.7%) participants. The majority of respondents had either a university degree (45.8%), a postgraduate degree (Honours, Master's or Doctorate) (21.9%), or a college diploma (15.3%). Participants who are married/living with a partner with children living at home contributed to 43.8% of the sample. In total, 441 of the respondents indicated that they were employed at a public school (87.8%) and 61 at a private school (12.2%). The majority of the respondents participating in the study were teaching at a primary school (51.8%). Finally, a total of 1081 questionnaires were distributed amongst teachers, of which 502 usable questionnaires were returned (response rate of 47%).

### Measuring Instruments

*Biographical information.* A questionnaire was utilised to determine the biographical characteristics of the participants. Characteristics such as year of birth, gender, home

language, race, level of education, household status (marital and parental status), years working in the school and current position were asked in this questionnaire.

*Strengths Use and Deficit Improvement.* The adapted Strengths Use and Deficit Improvement Questionnaire (SUDIQ, Van Woerkom et al., in process) was used to measure perceived organisational support for strengths use, perceived organisational support for deficit improvement, proactive behaviour towards strengths use and proactive behaviour towards deficit improvement. Eight items were used to measure each of these constructs, with the exception of PBSU that was measured by nine items. Examples include: “This school uses my strengths” (POSSU;  $\alpha = 0.96$ ), “This school emphasises the development of my weak points” (POS DI;  $\alpha = 0.93$ ), “I use my strengths” (PBSU;  $\alpha = 0.94$ ), and “I have a development plan that aims to better my weaknesses” (PBDI;  $\alpha = 0.94$ ; Van Woerkom et al., in process). This scale was scored on a seven-point frequency scale (1 = never, 7 = almost always).

*Strengths Use.* The Strengths Use Scale (Govindji & Linley, 2007) was used to measure the use of strengths. This is a 14-item self-report scale, designed to measure individual strengths use. Sample items include: “I am able to use my strengths in lots of different ways” ( $\alpha = 0.87$ ; Govindji & Linley, 2007). Respondents used a 7-point Likert scale response format (1 = strongly disagree, 7 = strongly agree).

*Job resources.* Job resources were measured by using items from the Questionnaire on the Experience and Evaluation of Work (QEEW; Van Veldhoven, Meijman, Broersen, & Fortuin, 2002). Three job resources were assessed, namely autonomy (four items), supervisor support (four items) and colleague support (four items). Example items include “Do you have freedom in carrying out your work activities?” (autonomy), “Do you get on well with your supervisor?” (supervisor support), “If necessary, can you ask your colleagues for help?” (colleague support). Van Veldhoven et al. (2002) reported sufficient Cronbach alpha coefficients for autonomy ( $\alpha = 0.82$ ), the relationship with the supervisor ( $\alpha = 0.82$ ) and relationships with colleagues ( $\alpha = 0.71$ ). Job resources items were scored on a four-point frequency scale (1 = never, 4 = always).

*Psychological Capital.* The Psychological Capital Questionnaire (PsyCap; Luthans, Youssef, & Avolio, 2007) was used to measure self-efficacy, hope, resilience and optimism. It consists of 24 items; each of the four components was measured by six items adapted from each of the

following scales: (a) self-efficacy (Parker, 1998) (b) hope (Snyder et al., 1996); (c) resilience (Wagnild & Young, 1993); and (d) optimism (Scheier & Carver, 1985). Sample items from each of the subscales included: “I feel confident helping to set targets/goals in my area of work” (self-efficacy); “If I should find myself in a jam at work, I could think of many ways to get out of it” (hope); “I usually manage difficulties one way or another at work” (resilience) and “I always look on the bright side of things regarding my job” (optimism). The Cronbach alpha coefficients were reported as 0.77 for self-efficacy, 0.71 for hope, 0.74 for resilience and 0.82 for optimism (Luthans et al., 2007). The PsyCap questionnaire is scored on a 6-point Likert-type scale (1 = strongly disagree, 6 = strongly agree).

*Proactive Behaviour.* Proactive behaviour was assessed with a scale which Belschak, Den Hartog, and Fay (2010) adapted from a Personal Initiative Scale (Frese et al., 1997), and the Proactive Personality Scale (Crant, 2000). The alpha coefficient for the scale was reported at 0.80 (Belschak, Den Hartog, & Fay, 2010). Proactivity was measured by 11 items. Example items included “At work I personally take the initiative to acquire new knowledge that will help the company” and “At work I personally take the initiative to find new approaches to execute my tasks so that I can be more successful”. Responses were given on a seven-point scale (1 = disagree strongly to 7 = agree strongly).

*Person-Job Fit.* A four-item measure adapted from Saks and Ashforth (1997) was used to assess whether participants feel they fit with their jobs. Examples of the items are: “My knowledge, skills and abilities match the requirements of my job” and “My job is a good match for me”. The internal reliability of the ratings was 0.85 (Saks & Ashford, 1997). Items were scored on a 5-point scale (1 = strongly disagree, 5 = strongly agree).

*Engagement.* The Utrecht Work Engagement Scale (UWES) (Schaufeli et al., 2002) was used to measure vigour and dedication. The UWES is scored on a seven-point frequency scale, ranging from 0 to 6 (0 = never, 6 = always). A 10-item self-report scale was used, sample items included: “At school, I feel bursting with energy” ( $\alpha = 0.92$ ; Schaufeli et al., 2002). The Cronbach alpha coefficients varied from  $\alpha = 0.84$  for the vigour component and  $\alpha = 0.89$  for the dedication subscale (Schaufeli & Bakker, 2003).

*Burnout.* The Maslach Burnout Inventory – Educators Survey (MBI-ES; Maslach, Jackson, & Leiter, 1996) was used to determine emotional exhaustion (nine items) and depersonalisation (five items). Items were scored on a 7-point frequency rating scale (0 = never, 6 = everyday). Example items include: “I feel emotionally drained at school” ( $\alpha = 0.59$ ; Maslach et al.,

1996). Acceptable reliability scores have been obtained by Maslach et al (1996) for emotional exhaustion ( $\alpha = 0.90$ ) and depersonalisation ( $\alpha = 0.79$ ).

### **Research Procedure**

The data used in this study was gathered over the course of two months (August 2013 to September 2013). Permission to gather data was obtained from the head of education in Gauteng, as well as from the involved principals from the respective participating schools. Each principal received a letter explaining the purpose of the study. A hard copy of the questionnaire was handed out to the participants. Respondents took approximately 40 minutes to complete the questionnaire. Participants were given three weeks to complete the questionnaires. A reminder of completion was sent to relevant principals a week before the questionnaires were collected. Once all the data had been collected, the data analysis was conducted. Participation was voluntary and emphasis was placed on anonymity and confidentiality. Authorisation from the respective principals was obtained to permit the use of data for research purposes.

### **Statistical Analysis**

In order to analyse the data, both the SPSS program (SPSS Inc., 2011) and the Mplus program (Muthén & Muthén, 2008-2010) were used. Confirmatory factor analyses (CFA) were utilised to determine the factorial validity of the scales. The robust maximum likelihood (MLR) estimator was used to accommodate the lack of multivariate normality in the item distribution and the covariance matrix was used for input (Muthén & Muthén, 2007). To determine the goodness of model fit, the following fit indices were considered:  $\chi^2$  statistic, the Comparative Fit Index (CFI), the Tucker-Lewis Index (TLI), the Root Mean Square Error of Approximation (RMSEA) and the Standardized Root Mean Square Residual (SRMR). Acceptable fit for the CFI and TLI is considered at a value of 0.90 and above (Hoyle, 1995; Byrne, 2010). An RMSEA value of 0.05 or less indicates a good fit. However, values of 0.08 and less are also considered to indicate acceptable model fit (Cudeck & Browne, 1993). The cut-off point for SRMR was set at smaller than 0.05 (Hu & Bentler 1999). It should nevertheless be noted that these cut-off points should only be considered as guidelines, as very little consensus concerning the values for adequate fit has been reached (Lance, Butts, & Michels, 2006). To compare the fit of competing models, the Akaike information criterion (AIC) and sample adjusted Bayesian information criterion (BIC) were used.

Descriptive statistics were used to analyse the data. The rho coefficients ( $\omega_h$  - the proportion variance explained by the factor divided by the total variance; Wang & Wang, 2012) and the Cronbach alpha coefficients were used (Clark & Watson, 1995) to establish the internal consistency of the constructs. The SPSS program was utilised to establish the correlation coefficients between variables. It was decided to set the value at a 95% confidence interval level ( $p \leq 0.05$ ), to indicate statistical significance. Practical significance of the correlation coefficients were set at a cut-off point of 0.30 (medium effect), and 0.50 (large effect, Cohen 1988).

In order to determine the variance predicted in the dependent variables (vigour, dedication, emotional exhaustion and depersonalisation) by the independent variables (the four SUDIQ dimensions), multiple regression analyses were conducted.

## RESULTS

### **Preliminary Analyses (factorial validity of variables in the nomological net)**

After analysing the factor structures of all the scales, some problematic items were identified in the Psychological Capital Questionnaire. The loadings of items 13, 20 and 23 of this scale were not significant and well below the cut-off point of 0.40. These items were therefore deemed not suitable for inclusion in further analyses.

The results of the factorial validity of the measuring instruments utilised in the study supported a one-factor model for strengths use ( $\chi^2 = 1034.54$ ;  $df = 77$ ;  $p = 0.00$ ; CFI = 0.84 and TLI = 0.81; RMSEA = 0.16; SRMR = 0.06; AIC = 16320.47; BIC = 16497.65); a three-factor model for job resources ( $\chi^2 = 270.83$ ,  $df = 51$ ;  $p = 0.00$ ; CFI = 0.94 and TLI = 0.92; RMSEA = 0.09; SRMR = 0.05; AIC = 11782.93; BIC = 11947.46); a four-factor model for psychological capital, (self-efficacy, hope, resilience and optimism), ( $\chi^2 = 595.85$ ;  $df = 183$ ;  $p = 0.00$ ; CFI = 0.92 and TLI = 0.91; RMSEA = 0.07; SRMR = 0.06; AIC = 26294.51; BIC = 26585.59); a one-factor model for proactive behaviour ( $\chi^2 = 597.19$ ;  $df = 44$ ;  $p = 0.00$ ; CFI = 0.84 and TLI = 0.80; RMSEA = 0.16; SRMR = 0.06; AIC = 15010.99; BIC = 15150.20) and a four-factor model for engagement and burnout (vigour, dedication, emotional exhaustion and depersonalisation) ( $\chi^2 = 956.36$ ;  $df = 269$ ;  $p = 0.00$ ; CFI = 0.87 and TLI = 0.86; RMSEA = 0.07; SRMR = 0.07; AIC = 43314.78; BIC = 43656.49).

## Factorial Validity of the SUDIQ

The factorial validity of the SUDIQ was investigated by means of CFA. First, the proposed model was tested that consisted of four correlated factors, namely perceived organisational support for strengths use, perceived organisational support for deficit improvement, proactive behaviour towards strengths use and proactive behaviour towards deficit improvement. In order to test whether alternative models did not provide more plausible explanations for the observed inter-item covariance matrix, competing models were tested. Model 2 comprised of a one-factor model including all the dimensions of the SUDIQ, namely perceived organisational support for strengths use and deficit improvement and proactive behaviour towards strengths use and deficit improvement. Alternative Model 3 proposed two higher-order factors, strengths use (consisting of perceived organisational support for strengths use and proactive behaviour towards strengths use) and deficit improvement (consisting of perceived organisational support for deficit improvement and proactive behaviour towards deficit improvement). Alternative Model 4 also consisted of two factors, namely strengths use and deficit improvement by the organisation (consisting of perceived organisational support for strengths use and perceived organisational support for deficit improvement), and strengths use and deficit improvement by the individual (consisting of proactive behaviour towards strengths use and proactive behaviour towards deficit improvement). The results are displayed in Table 2.

Table 2

### *Fit Statistics for the Hypothesised and Alternative Models*

Model	$\chi^2$	Df	p	CFI	TLI	RMSEA	SRMR	AIC	BIC
Model 1	1605.32	489	0.00	0.93	0.93	0.07	0.04	39149.56	39592.51
Model 2	8941.20	495	0.00	0.48	0.45	0.18	0.16	46473.44	46891.08
Model 3	6771.10	494	0.00	0.62	0.59	0.16	0.16	44305.33	44727.19
Model 4	5381.13	494	0.00	0.70	0.68	0.14	0.11	42915.37	43337.23

$\chi^2$ =chi-square; df=degrees of freedom; p=statistical significance; CFI=comparative fit index; TLI=Tucker-Lewis Index; RMSEA=root mean square error of approximation; SRMR=standardized root mean square residual; AIC=Akaike information criterion; BIC=Bayesian information criterion

As can be seen in Table 2, the CFI value of Model 1 was larger than 0.90 and the TLI value above 0.90 cut-off point. RMSEA is above 0.05 and the SRMR is 0.04. Model 1 therefore shows a reasonable model fit and can be considered a plausible explanation for the observed inter-item covariance matrix. It also fitted the data significantly better compared to Model 2

( $\Delta\chi^2 = 7335.887$ ;  $\Delta df = 6$ ;  $p < 0.05$ ), Model 3 ( $\Delta\chi^2 = 5165.78$ ;  $\Delta df = 7$ ;  $p < 0.05$ ) and Model 4 ( $\Delta\chi^2 = 3775.81$ ;  $\Delta df = 7$ ;  $p < 0.05$ ). Therefore, the hypothesised model (Model 1) consisted of four factors, namely perceived organisational support for strengths use (eight items), perceived organisational support for deficit improvement (eight items), proactive behaviour towards strengths use (nine items) and proactive behaviour towards deficit improvement (eight items). These results offer support for Hypothesis 1.

In Table 3, the standardised factor loadings and communalities (variance explained) of the hypothesised model (Model 1) are presented.

Table 3

*Factor Loadings, Significance and Variance Explained*

<b>Model</b>	<b>Standardised loading</b>	<b>R<sup>2</sup></b>
<b>Perceived organisational support for strengths use</b>		
POSSU 1	0.79	0.62
POSSU 2	0.84	0.71
POSSU 3	0.88	0.78
POSSU 4	0.90	0.80
POSSU 5	0.92	0.84
POSSU 6	0.91	0.82
POSSU 7	0.94	0.88
POSSU 8	0.90	0.80
<b>Perceived organisational support for deficit improvement</b>		
POSDI 1	0.74	0.55
POSDI 2	0.83	0.69
POSDI 3	0.87	0.75
POSDI 4	0.86	0.74
POSDI 5	0.86	0.75
POSDI 6	0.78	0.62
POSDI 7	0.84	0.71
POSDI 8	0.79	0.62
<b>Proactive behaviour towards strengths use</b>		
PBSU 1	0.63	0.40
PBSU 2	0.77	0.59
PBSU 3	0.75	0.56
PBSU 4	0.81	0.65
PBSU 5	0.80	0.65
PBSU 6	0.79	0.62
PBSU 7	0.89	0.79
PBSU 8	0.88	0.77
PBSU 9	0.88	0.78
<b>Proactive behaviour towards deficit improvement</b>		
PBDI 1	0.81	0.65
PBDI 2	0.87	0.76
PBDI 3	0.87	0.75
PBDI 4	0.90	0.81
PBDI 5	0.77	0.60
PBDI 6	0.84	0.71
PBDI 7	0.88	0.77
PBDI 8	0.79	0.62

Table 3 shows that all the percentages of variance explained by the items were sufficient ( $R^2 > 0.50$ ; Hair, Black, Babin, Anderson, & Tatham, 2006), except for PBSU1 ( $R^2 = 0.40$ ) with factor loadings above 0.60.

The correlations between the four SUDIQ dimensions and other variables to determine the convergent validity and discriminant validity are presented in Table 4 below. Means are not reported in Table 4. All means were zero because the latent variables were standardised.

Table 4

*Correlations between the SUDIQ Dimensions and Other Constructs*

Dimension	SD	A	$\omega_h$	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. POSSU	1.02	0.97	0.97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2. POSDI	1.13	0.94	0.95	0.52**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3. PBSU	0.72	0.94	0.94	0.62**	0.38*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4. PBDI	0.98	0.95	0.94	0.36*	0.66**	0.49*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5. Strengths-use	0.80	0.96	0.95	0.50**	0.33*	0.65**	0.43*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6. Autonomy	0.65	0.81	0.82	0.40*	0.19	0.26	0.18	0.32*	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7. Supervisor Support	0.80	0.90	0.90	0.31*	0.25	0.19	0.21	0.22	0.64**	-	-	-	-	-	-	-	-	-	-	-	-	-
8. Colleague Support	0.58	0.88	0.88	0.19	0.12	0.19	0.19	0.25	0.63**	0.67**	-	-	-	-	-	-	-	-	-	-	-	-
9. Self-efficacy	0.64	0.87	0.87	0.32*	0.20	0.39*	0.31*	0.47*	0.36*	0.14	0.18	-	-	-	-	-	-	-	-	-	-	-
10. Hope	0.59	0.87	0.87	0.41*	0.26	0.50**	0.38*	0.57**	0.35*	0.25	0.19	0.72**	-	-	-	-	-	-	-	-	-	-
11. Resilience	0.15	0.81	0.81	0.26*	0.14	0.38*	0.27	0.48*	0.22	0.09 <sup>+</sup>	0.13	0.71**	0.72**	-	-	-	-	-	-	-	-	-
12. Optimism	0.74	0.81	0.81	0.35*	0.25	0.49*	0.34*	0.53**	0.25	0.19	0.20	0.58**	0.79**	0.72**	-	-	-	-	-	-	-	-
13. Proactive Behaviour	1.00	0.92	0.92	0.40*	0.32*	0.54**	0.45*	0.55**	0.33*	0.24	0.27	0.55**	0.54**	0.49*	0.45*	-	-	-	-	-	-	-
14. Person-Job Fit	0.38	0.86	0.89	0.48*	0.33*	0.40*	0.30*	0.43*	0.27	0.28	0.25	0.30*	0.48*	0.29	0.45*	0.34*	-	-	-	-	-	-
15. Vigour	0.91	0.70	0.71	0.33*	0.28	0.37*	0.31*	0.51**	0.37*	0.31*	0.32*	0.45*	0.61**	0.40*	0.62**	0.51**	0.56**	-	-	-	-	-
16. Dedication	0.96	0.71	0.73	0.37*	0.31*	0.39*	0.37*	0.52**	0.37*	0.33*	0.29	0.38*	0.58**	0.30*	0.52**	0.47*	0.66**	0.95**	-	-	-	-
17. Emotional Exhaustion	1.21	0.91	0.91	-0.22	-0.17	-0.23	-0.15	-0.30*	-0.29	-0.26	-0.25	-0.26	-0.47*	0.26	-0.45*	-0.29	-0.45*	-0.53**	-0.53**	-	-	-
18. Depersonalisation	0.86	0.75	0.77	-0.20	-0.13	-0.22	-0.09 <sup>+</sup>	-0.24	-0.29	-0.28	-0.24	-0.24	-0.39*	0.27	-0.33*	-0.32*	-0.38*	-0.52**	-0.61**	0.79**	-	-
19. Age	12.47			0.11 <sup>+</sup>	0.00 <sup>+</sup>	0.06 <sup>+</sup>	-0.01 <sup>+</sup>	0.08 <sup>+</sup>	-0.13	-0.04 <sup>+</sup>	-0.11	0.14	-0.00 <sup>+</sup>	0.07 <sup>+</sup>	0.08 <sup>+</sup>	0.11	0.06 <sup>+</sup>	0.08	0.14 <sup>+</sup>	-0.05 <sup>+</sup>	-0.04 <sup>+</sup>	-
20. Education				-0.11	-0.23	-0.06 <sup>+</sup>	-0.14	-0.11	0.01 <sup>+</sup>	0.15	0.07 <sup>+</sup>	0.00 <sup>+</sup>	-0.09 <sup>+</sup>	-0.06 <sup>+</sup>	-0.12	-0.08 <sup>+</sup>	-0.20	-0.14	-0.12	0.12	0.14*	0.00

<sup>+</sup> =  $p \geq 0.05$  statistically significant

\* =  $r \geq 0.30$  is practically significant (medium effect); \*\*  $r \geq 0.50$  is practically significant (large effect).

Beyond assessing the factor structure of the SUDIQ scale, it was also important to empirically examine its convergent and discriminant validity. A correlation matrix was generated of discriminators with the four SUDIQ dimensions and other variables (reported in Table 4). As seen in Table 4, the internal consistencies of all the scales are acceptable ( $\alpha$  and  $\omega_h \geq 0.70$ ), implying that all scales used in this study are reliable. Relationships between the four SUDIQ dimensions and other theoretical constructs were as follows: Perceived organisational support for strengths use was strongly related to perceived organisational support towards deficit improvement, proactive behaviour towards strengths use and strengths use; and moderately related to proactive behaviour towards deficit improvement, autonomy, supervisor support, self-efficacy, hope, resilience, optimism, proactive behaviour, person-job fit, vigour and dedication. Perceived organisational support for deficit improvement had a significant relationship (with large effect) with proactive behaviour towards deficit improvement, and a significant relationship (with medium effect) with proactive behaviour towards strengths use, strengths use, proactive behaviour, person-job fit and dedication. Proactive behaviour towards strengths use had a strong correlation with strengths use, hope and proactive behaviour as well as a medium correlation with proactive behaviour towards deficit improvement, self-efficacy, resilience, optimism, person-job fit, vigour and dedication. Finally, proactive behaviour towards deficit improvement correlated significantly with a medium effect with strengths use, self-efficacy, hope, optimism, proactive behaviour, person-job fit, vigour and dedication.

As postulated, no practically significant relationships were reported between the age of participants and the four SUDIQ dimensions. Furthermore, the education of the participants was also practically unrelated to any of the SUDIQ constructs. Thus, Hypotheses 3 and 4 were confirmed.

### **Multiple Regression Analysis**

To determine whether the four dimensions of the SUDIQ, POSSU, POSDI, PBSU and PBDI predict engagement (vigour and dedication) and burnout (emotional exhaustion and depersonalisation), multiple regression analyses using the enter method, were performed. The results are reported in Tables 5, 6, 7 and 8.

Table 5

*Multiple Regression Analysis with Vigour as Dependent Variable*

Mode		Unstandardised Coefficients		Standardised Coefficients	<i>T</i>	<i>p</i>	<i>F</i>	<i>R</i>	<i>R</i> <sup>2</sup>
1		B	SE	BETA					
1	(Constant)	2.66	0.24		11.32	0.00*	15.22	0.33	0.11
	POSSU	0.09	0.05	0.12	2.10	0.04*			
	POSDI	0.00	0.04	-0.00	-0.01	0.99			
	PBSU	0.19	0.06	0.16	2.70	0.01*			
	PBDI	0.20	0.05	0.13	2.25	0.03*			

\*Statistically significant  $p \leq 0.05$

Table 5 summarises the regression analysis with POSSU, POSDI, PBSU and PBDI as predictors of vigour. A statistically significant model was produced ( $F = 15.22$ ;  $p = 0.00$ ), which accounted for 11% of the variance in vigour. More specifically, it seems that POSSU ( $\beta = 0.09$ ;  $t = 2.10$ ;  $p \leq 0.05$ ), PBSU ( $\beta = 0.19$ ;  $t = 2.70$ ,  $p \leq 0.05$ ) and PBDI ( $\beta = 0.20$ ;  $t = 2.25$ ;  $p \leq 0.05$ ) predict vigour. POSDI was the only dimension that was not a significant predictor of vigour.

Table 6

*Multiple Regression Analysis with Dedication as Dependent Variable*

Mode		Unstandardised Coefficients		Standardised Coefficients	<i>T</i>	<i>p</i>	<i>F</i>	<i>R</i>	<i>R</i> <sup>2</sup>
1		B	SE	BETA					
1	(Constant)	2.43	0.25		9.88	0.00*	24.48	0.41	0.17
	POSSU	0.14	0.05	0.17	3.08	0.00*			
	POSDI	0.00	0.04	0.00	-0.00	0.99			
	PBSU	0.17	0.07	0.14	2.57	0.01*			
	PBDI	0.18	0.05	0.19	3.34	0.00*			

\*Statistically significant  $p \leq 0.05$

Table 6 summarises the regression analysis with POSSU, POSDI, PBSU and PBDI as predictors of dedication. Again, a statistically significant model was produced ( $F = 24.48$ ;  $p = 0.00$ ), which accounted for 17% of the variance in dedication. More specifically, it seems that POSSU ( $\beta = 0.14$ ;  $t = 3.08$ ;  $p \leq 0.05$ ), PBSU ( $\beta = 0.17$ ;  $t = 2.57$ ,  $p \leq 0.05$ ) and PBDI ( $\beta =$

0.18;  $t = 3.34$ ;  $p \leq 0.05$ ) predict dedication. Again, POSDI was the only dimension that did not predict dedication.

Table 7

*Multiple Regression Analysis with Emotional Exhaustion as Dependent Variable*

Mode 1		Unstandardised Coefficients		Standardised Coefficients	<i>T</i>	<i>p</i>	<i>F</i>	<i>R</i>	<i>R</i> <sup>2</sup>
		B	SE	BETA					
1	(Constant)	4.62	0.37		12.35	0.00*	7.15	0.23	0.05
	POSSU	-0.09	0.07	-0.07	-1.21	0.23			
	POSDI	-0.07	0.07	-0.06	-1.01	0.31			
	PBSU	-0.23	0.10	-0.14	-2.33	0.02*			
	PBDI	-0.02	0.08	-0.02	-0.25	0.80			

\* Statistically significant  $p \leq 0.05$

Table 7 summarises the regression analysis with POSSU, POSDI, PBSU and PBDI as predictors of emotional exhaustion. A statistically significant model was produced ( $F = 7.15$ ;  $p = 0.00$ ), which accounted for only 5% of the variance in emotional exhaustion. More specifically, it seems that only PBSU ( $\beta = -0.23$ ;  $t = -2.33$ ,  $p \leq 0.05$ ) predicts emotional exhaustion.

Table 8

*Multiple Regression Analysis with Depersonalisation as Dependent Variable*

Mode 1		Unstandardised Coefficients		Standardised Coefficients	<i>T</i>	<i>p</i>	<i>F</i>	<i>R</i>	<i>R</i> <sup>2</sup>
		B	SE	BETA					
1	(Constant)	3.17	0.37		8.59	0.00*	4.50	0.19	0.04
	POSSU	-0.07	0.07	-0.06	-1.03	0.30			
	POSDI	-0.05	0.07	-0.05	-0.77	0.44			
	PBSU	-0.24	0.10	-0.15	-2.43	0.02*			
	PBDI	0.08	0.08	0.06	0.95	0.34			

\* Statistically significant  $p \leq 0.05$

Table 8 summarises the regression analysis with POSSU, POSDI, PBSU and PBDI predictors of depersonalisation. A statistically significant model was produced ( $F = 4.50$ ;  $p = 0.00$ ), which accounted for 4% of the variance in depersonalisation. As with exhaustion, it seems that only PBSU ( $\beta = -0.24$ ;  $t = 2.43$ ,  $p \leq 0.05$ ) predicts depersonalisation. Based on these results, partial support was found for Hypotheses 5 and 6.

## DISCUSSION

Several instruments have been valuable in measuring the *possession* of human strengths; however, little empirical research exists on the actual *utilisation* of strengths. Current measuring instruments are also limited to a one-sided strength perspective, disregarding the role of deficits. To contribute to closing this gap, the SUDIQ was developed to measure the organisation's support for strengths use and deficit development as well as the individual's proactive behaviour towards strengths use and deficit development. By means of adapting the SUDIQ for teachers within the South African education context, substantial value can be gained to assist educators to implement changes towards ultimate transformation of their challenging working environment (Spaul, 2012).

The primary purpose of this study was to provide psychometric support for the adapted version of SUDIQ in the education environment. To accomplish these aims, confirmatory factor analysis, convergent, discriminant and empirical validity were utilised amongst a sample of educators.

Firstly, this study aimed to provide evidence that the adapted SUDIQ comprises four factors, including perceived organisational support for strengths use, perceived organisational support for deficit improvement, proactive behaviour toward strengths use and proactive behaviour toward deficit improvement. Four competing models were tested to substantiate the first hypothesis, including 1) a four-factor model (the hypothesised model); 2) a one-factor model, including all the dimensions of the SUDIQ; 3) a two-factor model, distinguishing between strengths use and deficit improvement; and 4) a two-factor model differentiating between organisational and individual factors. The proposed four-factor structure proved to have the best model fit, corresponding with results obtained by Van Woerkom et al. (in process) and Stander and Mostert (2013). The results suggest that although the four components which manifest the core construct of the SUDIQ are related to one another, they are also seemingly distinct from one another, implying that all four constructs contribute to their own subscale, as well as to the overall measure of the SUDIQ.

To ensure the adapted SUDIQ constructs were reliable and applicable in a sample of educators, Cronbach alpha values were examined. Reliable scores were attained for perceived organisational support for strengths use ( $\alpha = 0.97$ ); perceived support for organisational deficit improvement ( $\alpha = 0.94$ ); proactive behaviour towards strengths use ( $\alpha = 0.94$ ) and proactive behaviour towards deficit improvement ( $\alpha = 0.95$ ). Similar findings were reported

by Van Woerkom et al. (in process) and Stander and Mostert (2013), who reported Cronbach alphas of above 0.90 for all four scales. These results substantiate Hypothesis 2. However, one has to consider that Cronbach alpha values exceeding 0.90 are regarded as high (Clark & Watson, 1995). When variables are too highly related, difficulties regarding the segmentation analysis may occur and should be interpreted with caution. Bearing in mind that the development of the SUDIQ is only in its initial stages, the findings are deemed acceptable. However, a comprehensive analysis is required to refine the work that has already been done.

With the intention of calculating the reliability of constructs, alpha and omega coefficients were used. The alpha coefficient has been known to be one of the most widely used indicators of the reliability of constructs (Cronbach, 1951). However, due to its inaccurate estimate of internal consistency and in some cases a gross overestimate of the correlation between test scores (Revelle & Zinbarg, 2009; Schmitt, 1996; Sijtsma, 2009), other alternatives were considered. Omega coefficients were regarded to provide additional information and were therefore included in the study. Internal consistencies of all the scales, as estimated by Omega coefficients, were acceptable ( $\omega > 0.70$ ), implying that all the scales used in this study were reliable.

The next objective was to investigate the convergent validity of the adapted SUDIQ, by determining the relationship between the four SUDIQ dimensions and other theoretically related constructs (Cozby, 2009). A Pearson correlation analysis was conducted to confirm a degree of convergence between the SUDIQ dimensions and strengths use, psychological capital, proactive behaviour and person-job fit. The findings provided extensive support for Hypothesis 3.

The results of the Pearson correlations revealed a significant relationship between the SUDIQ constructs and strengths use. The findings suggest that educators who draw on their strengths (as determined by the Strengths Use Scale), are more likely to perceive their educational institutions to draw on their strengths and weaknesses, as well as adopt a proactive behaviour to improve their own talents and deficits.

The greater majority of the psychological capital constructs (self-efficacy, hope, resilience and optimism) were found to have statistically and practically significant relationships with the SUDIQ dimensions. These results indicate that educators, who perceive their school as being supportive of using their strengths and aiming to develop their deficits while personally improving their strengths and weaknesses, may also experience self-efficacy, providing them

with confidence to complete persuasive tasks (Stajkovic & Luthans, 1998). Likewise, the occurrence of hope amongst teachers is related to their efforts of capitalising on their strengths and developing their deficits (Luthans & Jensen, 2002). It was evident that the only SUDIQ dimension significantly related to resilience was proactive behaviour towards strengths use. This finding suggests teachers who actively deploy their strengths are likely capable of building psychological capacity to rebound from adversity, conflict or failure (Luthans, 2002); conversely, when they accumulate effective coping strategies they will similarly capitalise on their strengths. According to Clark (1998), the awareness of one's strengths and weaknesses corresponds with one's levels of optimism. Thus, the improvement of one's strength or weakness may reduce the intensity of how one experiences one's problems; just as optimism may impact on the extent to which one capitalises on one's strengths and develops one's weaknesses.

As expected, proactive behaviour was found to be significantly related to the SUDIQ dimensions. Therefore, when educators take initiative to develop their strengths and deficiencies according to the demands of their job, job crafting occurs. Such teachers are pursuing endeavours to align their responsibilities with their talents and discrepancies. Likewise, when strategies are implemented at schools intending to encourage employees to develop their strengths and weaknesses, teachers will tend to display proactive behaviour.

A significant relationship was found between SUDIQ constructs and person-job fit. This finding indicates that high levels of strengths and deficiencies development are correlated with high levels of person-job fit amongst educators. As educators' knowledge, skills and abilities in terms of strengths and weaknesses improve, they are likely to feel more at ease with factors pertaining to their jobs. In a similar vein, when teachers have the impression that they are suited for a position, they are likely to develop their strengths and deficits accordingly.

It was anticipated that the SUDIQ dimensions will be unrelated to age and education, offering evidence of discriminant validity. As hypothesised, age of participants and the four SUDIQ dimensions were indeed not practically related, although statistical significance was found between age and perceived organisational support for strengths use. Furthermore, the education level of participants was also practically unrelated to any of the SUDIQ dimensions. However, statistically significant relationships were reported between education and perceived organisational support for strengths use, perceived organisational support for

deficit improvement and proactive behaviour towards deficit improvement. However, these relationships were not very strong. Thus, Hypothesis 4 was confirmed.

Finally, multiple regression analysis was used to test whether the SUDIQ dimensions predicted vigour, dedication, emotional exhaustion and depersonalisation. It is evident that perceived organisational support for strengths use, proactive behaviour toward strengths use and proactive behaviour toward deficit improvement predicted both vigour and dedication. The results of the multiple regression analysis indicate that the SUDIQ dimensions predicted 11% of the variance in vigour and 17% of the variance in dedication. A similar trend has been confirmed by evidence from previous empirical studies suggesting that employee engagement is directly related to the deployment of strengths (Buckingham, 2007; Rath, 2007). These findings are also in line with a study done by Gallup Press (Brim & Asplund, 2009) that found that 61% of employees, who perceived their organisations as supporting them to focus on their strengths, were engaged in the workplace.

These findings imply that educators who discover, develop and apply their strengths and deficiencies to their teaching activities are likely to experience a sense of accomplishment and optimal levels of achievement in their work. As a result, when teachers deploy their strengths and manage their deficits, feelings of self-efficacy, competence and self-esteem regarding their skills and abilities will occur (Linley & Harrington, 2006; Proctor, Maltby, & Linley, 2011). According to Bakker (2010), feelings of self-efficacy, competence and self-esteem will result in higher levels of work engagement. In a similar vein, when schools deliberately intend to assist their employees in finding ways to using and improving their strengths and shortages, feelings of mastery and self-actualisation (Linley & Harrington, 2006) are likely to lead to increased levels of engagement.

It is, however, evident that perceived organisational support for deficit improvement did not contribute to the variance explained in either vigour or dedication. A plausible explanation for this finding may be that when management of educational institutes implement training and development initiatives, they are in reality intending to fix their employees' weaknesses. As these areas of development are not regarded as teachers' natural skills and abilities, an endeavour to improve these skills may result in frustration and exhaustion, instead of engagement. Similar to these findings, Stander and Mostert (2013) found that perceived organisational support for deficit improvement did not explain any significant variance in predicting work engagement.

The only SUDIQ dimension that predicted emotional exhaustion and depersonalisation was proactive behaviour toward strengths use. This relationship has previously been confirmed by Langelaan, Bakker, Schaufeli, and Van Doornen (2006), who found that by capitalising on one's strengths, positive emotions are elicited and as a result reduced levels of burnout are experienced. It is expected that when teachers are able to capitalise on their strengths while performing work activities, feelings of fulfilment and satisfaction will reduce their experience of burnout. Unexpectedly, neither perceived organisational support for strengths use, perceived organisational support for deficit improvement, nor proactive behaviour towards deficit improvement explained significant variance in emotional exhaustion or depersonalisation.

These findings can be explained in the light of the demand-control model (DCM; Karasek, 1979). The basic proposition of the DCM is that high work demands tend to result in high levels of employee stress; however, high levels of control pertaining to one's job will help buffer the stress caused by high work demands and in turn lower the levels of work stress experienced by employees. Therefore, it can be argued that perceived organisational support for strengths use and perceived organisational support for deficit improvement are not regarded as aspects teachers have control over, and as a consequence thereof educators may experience high levels of job strain (e.g., job-related anxiety, exhaustion, and dissatisfaction). Furthermore, criticism regarding the DCM has been raised. De Jonge, Mulder, and Nijhuis (1999) reasoned that all job demands and job resources are not applicable to all occupations; and in certain working environments totally different resources prevail. Therefore, perceived organisational support for strengths use may not be as functional in coping with the challenging demands educators are faced with, and reducing the levels of teacher burnout, as other job resources such as autonomy, supervisor and colleague support.

Furthermore, when employees spend a great amount of time and effort on improving their weaknesses, negative thoughts such as frustration, stress and feelings of inadequacy may occur (Fredrickson, 2004); as it takes them longer to perform expected tasks and work activities are more challenging seeing that these skills and abilities have to be learnt and are not regarded as a natural talent. When educational institutes or educators utilise a deficit-based approach, they may feel less confident in performing their jobs, contributing to their levels of stress. Although stress and burnout are regarded as two distinct constructs, they are also strongly related (Schaufeli & Enzmann, 1998).

In essence, these findings confirm that the adapted version of the SUDIQ can be deemed as valid, reliable and applicable within educational settings, which may have important implications for future research and practice.

### **Practical Implications**

This study aimed to assist educational institutions, to gain a better understanding of the benefits of encouraging teachers to capitalise on their strengths and develop their deficits. Another important contribution is to raise awareness of whether educators are using their strengths in order to perform optimally in the classroom, consequently impacting on the quality of education. When educators as well as schools invest time in improving their strengths and deficits, better work outcomes such as work engagement, increased commitment, better job performance, and reduced turnover can be achieved (Caishun & Zongjie, 2004; Carrol, 2007; Cheah, 2012); ultimately contributing to the country's education system and enabling students to compete in a challenging global market (Marzano, Pickering, & Pollock, 2001).

Furthermore, specifically focusing on the educator, people often depend on characteristics such as optimism, self-efficacy and resilience to cope with the demands of their job, neglecting their strengths and talents and the option to improve their deficits. People are generally inclined to focus on the negative, and often spend a great amount of time and effort on improving their deficits, rather than improving their strengths. This study therefore attempts to make individuals aware of their strengths as well as areas of development, emphasising the importance of balancing these two aspects. Knowledge of the positive outcomes of utilising one's strengths and improving one's deficits, such as increased feelings of happiness and fulfilment, enhanced performance, motivation, positive emotions, work engagement and job satisfaction, can also be gained (Peterson et al, 2006; Strunk, Adler, & Hollars, in press). When educators are happy, engaged and satisfied with their job, it is likely to spill over to students and have a positive effect on their learning experience (Upczak, 2011).

In terms of the industrial psychology field, research pertaining to the role of strengths use, together with deficit improvement is still relatively new and unexplored. This study therefore aims to contribute to the field as well as previous literature regarding educators, especially within a South African context.

## **Limitations and Recommendations**

Certain limitations of this study are worth mentioning, of which the first one is that the present research study was conducted amongst a sample consisting exclusively of educators. Likewise, the majority of the sample comprised white, Afrikaans-speaking females. As these results cannot be generalised to the general population, it is suggested that future studies consider heterogeneous samples. A non-probability, convenience sampling method was utilised in this research study, consequently participants partaking in the study varied across different educational institutions in the same geographical location. Future research should consider participants from multiple locations. Issues regarding the self-report questionnaires that were utilised in this study include accessing subjective factors, which may be influenced by a variety of factors and can play an essential role in the obtained results. Moreover, the variables of a self-report questionnaire could lead to common method variance between predictor variables and outcome variables (Malhotra, Kim, & Patil, 2006). Although, the means of addressing this problem are restricted (Salkind, 2009), it is suggested that less biased measures should be utilised in future research efforts.

The use of a cross-sectional research design has restricted the study from exploring causal statements about the expected relationships. Considering that this is a relatively new field, it is essential to further validate the hypothesised causal relationships and possible consequences such as engagement and burnout. Finally, since the instrument is currently only available in English, several concerns can be raised. Language may be regarded as a possible barrier, as certain items may be prone towards misunderstanding. South Africa is known for its uniquely diverse population, together with a history of unfair, biased and discriminatory assessment instruments (Foxcroft, Paterson, Le Roux, & Herbst, 2004). It is therefore imperative that future research should focus on translating the scale into various languages.

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## **CHAPTER 3**

### **CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS**

The conclusions that are provided in this chapter arise from the general and specific objectives of the study. The limitations of the study will also be discussed, followed by recommendations for future research.

#### **3.1 CONCLUSIONS**

In recent decades, research following a holistic approach concentrating on both strengths and deficit has been limited. However, some empirical evidence has indicated a number of potential work environment and motivational determinants of educators influenced by either a strengths- or deficit-based approach. It therefore is admissible to investigate the role of a strengths and deficits approach in the workplace of educators. This study could provide educators and their educational institutions with a new understanding of the importance of using teachers' strengths and developing their deficits, and the impact thereof on important work outcomes such as engagement en burnout.

The general objective of this study was to validate an adapted version of the Strengths Use and Deficit Improvement Questionnaire (SUDIQ) for educators; more specifically, to determine whether the SUDIQ is regarded as a valid and reliable scale, suitable for educators through the use of confirmatory factor analysis, convergent, discriminant and empirical validity.

The first specific objective of this study was to, according to literature, conceptualise perceived organisational support towards strengths use, perceived organisational support towards deficit improvement, proactive behaviour towards strengths use and proactive behaviour towards deficit improvement amongst educators.

The conceptualisation of perceived organisational support for strengths use and perceived organisational support for deficit improvement is derived from the Job Demands-Resources (JD-R) model (Demerouti & Bakker, 2011). The JD-R model suggests that the working environment comprises job demands and job resources (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). Job demands are those physical, psychological, social or organisational aspects that involve continuous physical and/or psychological effort or skills (Bakker & Demerouti, 2007). Conversely, job resources refer to those physical, psychological, social or

organisational characteristics that are functional in achieving work objectives, reducing job demands and stimulating personal growth, learning and development (Bakker, Demerouti, De Boer, & Schaufeli, 2003). Job resources have previously been linked to work outcomes such as employee motivation, well-being and work engagement (Bakker et al., 2003; Hakanen, Bakker, & Schaufeli, 2006; Hakanen, Perhoniemi, & Toppinen-Tanner, 2008).

Employees, who perceive their organisation as being supportive of utilising their strengths and aiming by means of training and development interventions to improve their deficiencies, are more likely to achieve their goals and as a result contribute to organisational objectives (Linley, Nielsen, Wood, Gillett, & Biswas-Diener, 2010). Perceived organisational support for strengths use and deficit improvement can be regarded as job resources, as it vanquishes job demands and most importantly contributes to a working environment that is favourable to attaining organisational goals (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009). Therefore, perceived organisational support for strengths use is defined as the extent to which employees perceive their organisation as encouraging them to use and improve their strengths; whereas perceived organisational support for deficit improvement is described as an employee's perception of formal and informal policies, practices and procedures within the organisation, purposefully intended to develop his or her weaknesses (Van Woerkom, Mostert, Els, Rothmann, & Bakker, in process).

Proactive behaviour is described as taking self-initiated and future-oriented action intentionally to change and improve a current undesirable situation or oneself (Parker, Williams, & Turner, 2006). It is evident that employees who are constantly seeking opportunities to utilise their strengths and are actively pursuing ways to improve themselves display a form of proactive behaviour. Likewise, employees who partake in training and development programmes are vigorously taking action to improve their deficits, with the intention of bringing about desired change. Proactive behaviour towards strengths use is therefore described as the self-starting behaviour of employees, specifically directed towards utilising their strengths in the workplace; while proactive behaviour towards deficit improvement is referred to as employees' self-starting behaviour focused on improving their deficiencies in the workplace (Van Woerkom et al., in process).

The second objective was to determine the factorial validity of the adapted SUDIQ scale. Several opposing models were tested in order to verify the second hypothesis. These models included the hypothesised four-factor model; a one-factor model which comprised all four the

SUDIQ dimensions; a two-factor model, including strengths use and deficit improvement; and another two-factor model distinguishing between organisational and individual factors. As predicted, the hypothesised measurement model (Model 1) resulted in a four-factor structure, consisting of perceived organisational support towards strengths use, perceived organisational support towards deficit improvement, proactive behaviour towards strengths use and proactive behaviour towards deficit improvement. These findings are consistent with previous empirical studies that reported the SUDIQ as comprising a four-factor model (Stander & Mostert, 2013; Van Woerkom et al., in process).

With the intention of determining whether the adapted SUDIQ is reliable and also deemed appropriate to utilise in a sample of educators, Cronbach alpha and omega coefficients were utilised in order to determine the internal consistency of constructs. The results yielded reliable values for perceived organisational support for strengths use,  $\alpha = 0.97$ ; perceived support for organisational deficit improvement,  $\alpha = 0.94$ ; proactive behaviour towards strengths use,  $\alpha = 0.94$ ; and proactive behaviour towards deficit improvement,  $\alpha = 0.95$ . Corresponding with these findings, Van Woerkom et al. (in process) reported satisfactory alpha coefficients for perceived organisational support for strengths use,  $\alpha = 0.96$ ; perceived organisational support for deficit improvement,  $\alpha = 0.93$ ; proactive behaviour towards strengths use,  $\alpha = 0.94$ ; and proactive behaviour towards deficit improvement,  $\alpha = 0.94$ . These results were also substantiated by Stander and Mostert, who reported: perceived organisational support for strengths use,  $\alpha = 0.96$ ; perceived organisational support for deficit improvement,  $\alpha = 0.94$ ; proactive behaviour towards strengths use,  $\alpha = 0.93$ ; and proactive behaviour towards deficit improvement,  $\alpha = 0.94$ . It is evident that the alpha coefficients are quite highly correlated; the implication thereof is that complications regarding the segmentation analysis may occur and also that some items are redundant. Considering that the SUDIQ is only in its earliest stages, the obtained results are regarded as satisfactory.

Due to the problematic estimation of internal consistency and in some cases a gross overestimate provided by alpha coefficients (Revelle & Zinbarg, 2009; Schmitt, 1996; Sijtsma, 2009), omega coefficients were also included in the study. Reliabilities as estimated by omega coefficients were also acceptable ( $\omega_h > 0.70$ ), implying that all the scales used in this study are reliable.

The next empirical objective was to determine the relationship between the SUDIQ constructs and similar theoretical constructs (i.e. job resources, strengths use, psychological

capital, proactive behaviour and person-job fit). Educators in this sample indicated a significant correlation between all four SUDIQ dimensions and the proposed theoretical concepts. More specifically, the most significant relationships were found between perceived organisational support for strengths and perceived organisational support towards deficit improvement, proactive behaviour towards strengths use and strengths use. Perceived organisational support for deficit improvement was strongly related to proactive behaviour towards deficit improvement. Proactive behaviour towards strengths use indicated a strong correlation with strengths use, hope and proactive behaviour.

Moderate relationships were also established between perceived organisational support for strengths use and perceived organisational support for deficit improvement, autonomy, supervisor support, hope, optimism, proactive behaviour and person-job fit. Perceived organisational support for deficit improvement had a significant relationship (medium effect) with proactive behaviour towards strengths use, strengths use, proactive behaviour and person-job fit. Proactive behaviour towards strengths use had a medium correlation with proactive behaviour towards deficit improvement, self-efficacy, resilience, optimism and person-job fit. Finally, proactive behaviour towards deficit improvement correlated significantly (medium effect) with strengths use, self-efficacy, hope, optimism, proactive behaviour and person-job fit.

A significant contribution of this study is the preliminary evidence of relationships between the SUDIQ and similar theoretical constructs. These findings suggest that educators who perceive their schools as supportive when using their strengths are likely to be more autonomous, experience increased levels of supervisor support, be more hopeful and optimistic, while displaying proactive behaviour and experiencing feelings of being suitable and adequate at performing their work. Similarly, when schools provide educators with the opportunity to improve their areas of deficiencies, it is expected that teachers will be encouraged to proactively alleviate their areas of development, simultaneously closing the gap between teachers' current knowledge, skills and abilities and that required of them to perform satisfactorily.

When teachers dynamically use their strengths, it is expected to cause positive attributes such as hope, self-efficacy, resilience, optimism, proactive behaviour and person-job fit. Likewise, when educators enthusiastically aim to improve their weaknesses, they are likely to be more hopeful, optimistic, exhibit proactive behaviour and feel that their skills are aligned with their

jobs, making them feel increasingly suitable for their jobs. These findings result in teachers feeling autonomous, experiencing psychological capital (self-efficacy, hope, resilience and optimism), displaying proactive behaviour and aligning their skills and abilities with the requirements of their job (Avey, Luthans, & Jensen, 2009; Grant & Parker, 2009; Mauno, Kinnunen, & Ruokolainen, 2007; Ployhart, Schneider, & Schmitt, 2006; Tugade & Fredrickson, 2004).

To further explain these occurrences, several theoretical frameworks should be considered. Firstly, Carl Rogers (1959) anticipated that people have an inherent tendency to constantly seek growth, development and optimal functioning in order to fulfil their potential. It is believed that people actualise their human potential by thriving in terms of their strengths, expressing their talents and propensities, expanding their abilities and capacities and sufficiently managing their weaknesses. The Conservation of Resources theory (Hobfoll, 1998) further suggests that individuals are constantly striving to gain, retain, and protect their resources and in order for them to obtain new resources, they are required to invest in their existing resources (Hobfoll, 2002). People, who develop their strengths and weaknesses, are therefore not only vigilantly managing their personal resources, but also expanding and accumulating additional resources. These findings are also embedded in the self-determination theory (Deci & Ryan, 1985), which proposes that people generally aim to pursue three psychological needs, self-determination (autonomy), perceived competence, and relatedness (a sense of belonging); essential for personal growth.

A correlation matrix of discriminators with the SUDIQ was generated in order to determine the discriminant validity of the SUDIQ. It was anticipated that the SUDIQ dimensions will be unrelated to the age and education levels of participants. The results revealed that the age of participants was as expected, unrelated to perceived organisational support for deficit improvement, proactive behaviour towards strengths use and proactive behaviour towards deficit improvement. However, perceived organisational support for strengths use was found to be statistically significantly related to age. Similarly, weak statistically significant relationships were reported between the education level of participants and perceived organisational support for strengths use, perceived organisational support for deficit improvement, and proactive behaviour towards deficit improvement.

The final aim of this study was to determine whether the SUDIQ dimensions would predict significant variance when considering important work outcomes, such as vigour and

dedication (constructs of engagement), and emotional exhaustion and depersonalisation (burnout constructs) amongst educators. Engagement was predicted by three of the SUDIQ dimensions, namely perceived organisational support for strengths use, proactive behaviour towards strengths use and proactive behaviour towards deficit improvement. It was, however, evident that perceived organisational support for deficit improvement did not predict either vigour or dedication. This phenomenon can be explained by accentuating the general belief that positive outcomes can be achieved through building and improving one's weaknesses. Contrary to popular belief, these efforts may at times be in vein, as it is incongruent with one's natural abilities and talents; consequently resulting in negative and unhelpful expectations or beliefs. When training and development initiatives are enforced within an educational setting, some teachers may experience them as humiliating, as they are exposing their flaws and inadequacies which may lead to frustration, anxiety and stress; rather than feelings of vigour and dedication.

Unexpectedly, in an attempt to determine whether the SUDIQ constructs would predict any variance in the burnout levels of educators, only proactive behaviour towards strengths use was significantly related to both emotional exhaustion and depersonalisation. Wood, Linley, Maltby, Kashdan, & Hurling (2010) conducted a longitudinal study and reported that the use of strengths significantly reduced perceived levels of stress. Gallup research confirmed that the more often people utilise their strengths, the less likely they are to feel stressed, worried or angry (Gallup, 2012). Although one can differentiate between stress and burnout, these constructs share underlying fundamentals. According to Maslach, Jackson, and Leiter (1996), burnout may occur as a result of prolonged, unrelenting stress.

Finally, the sole purpose of a deficit-based approach is to ameliorate educators' poorest abilities, rather than nurture what they are able to excel in. Therefore, people often associate training and development initiatives as a counter-productive approach, emphasising their shortages and inability to perform satisfactorily and might, as a result, diminish their expectations. Empirical evidence supports the view that when such conditions are present, people may feel vulnerable and discouraged and experience negative feelings about their performance, capabilities and efficiency level (Baumeister, Campbell, Krueger, Vohs, 2003).

### **3.2 LIMITATIONS OF THE RESEARCH**

The first potential limitation of the study lies in the common criticism that it was conducted amongst a sample consisting explicitly of educators. Valuable information, specifically

applicable to the demands and challenges of educators, can be obtained. However, the findings of the present study cannot be generalised to other industries and occupations and should as a result be carefully interpreted as the sample was fairly homogeneous.

Related to the use of a homogeneous sample in this study, is the limitation of using a sample that is unequally distributed in terms of demographic variables. The sample consisted of mostly white, Afrikaans-speaking females, suggesting not only racially homogeneity, but also that the results might not be relevant when considering other demographical groups. South Africa is known for its culturally diverse population; therefore, it is crucial to represent a sample that reflects a true indication of racial, ethnic, cultural and gender diversity.

In a similar vein, participants partaking in the study were sampled based on easy accessibility; as a result the participants were from numerous schools within in the same geographical region. Considering educational institutions from other provinces may increase the reliability of the findings and also reveal different results pertaining to the engagement and burnout rates amongst educators.

Furthermore, data were gathered by means of self-report questionnaires. A number of limitations that reduce the effectiveness and usefulness of self-report questionnaires have been identified. The first concern regarding this type of approach is the probability of socially desirable answers provided by participants. Additionally, only one source (educators) was used to collect the data; therefore, only one instrument was used for measurement which could lead to a measurement error (Carlson, 2002). Furthermore, participants are assessed on subjective factors, such as self-efficacy, job satisfaction and burnout levels, which may be influenced by numerous aspects. The impact thereof is vital when interpreting and analysing the results. Moreover, common method variance could occur between predictor variables and outcome variables, due to the common method that was used to gather data (Malhotra, Kim, & Patil, 2006).

Several concerns have been raised, pertaining to the scale currently only being accessible in English. It should be considered that language may be a possible barrier, as some items may be prone for misinterpretation. South Africa is well-known for its rich diverse population, accompanied by a history of unfair, biased and discriminatory assessment instruments (Foxcroft, Paterson, Le Roux, & Herbst, 2004). In order to address these issues, translating a scale that is valid and reliable for all cultures in South African context into numerous languages is essential.

A cross sectional research design was used in this study. A common drawback of such a design is that the nature, causes and effects of the expected relationships cannot be made. Consequently, these relationships had to be interpreted by means of literature, rather than confirming these findings with evidence. Taking into account that the SUDIQ is still in its infancy, it is of paramount importance to further validate the hypothesised relationships and possible consequences.

A response rate of 48% was obtained. Therefore, a true reflection of what was intended to be measured was not established. It is plausible that teachers who are more engaged and committed toward their school, will be more interested and willing to complete the questionnaire as opposed to those who are not. This may, as a result, indicate a false representation of the overall engagement and burnout levels of the involved schools.

The last, but perhaps most noteworthy, limitation is that when several independent variables are very closely correlated to one another, multicollinearity occurs. The problem with such an occurrence is that some measuring items may be recurring and redundant. This may be the case with the four SUDIQ dimensions. Considering the fact that the SUDIQ is a newly developed scale which has only been validated in limited research settings, it is unclear whether this problem will also occur in other different research studies.

In conclusion, despite the above-mentioned limitations, findings were provided that support the proposed hypotheses. It is therefore evident that educators, who capitalise on their strengths and aim to improve their weaknesses, perceiving the schools as being involved and supportive of their development, contribute to an engaged workforce. Even though certain limitations have been identified, the findings hold valuable implications for educational institutions and future studies.

### **3.3 RECOMMENDATIONS**

#### **3.3.1 Recommendations for Educational Institutions**

Research on strengths use and deficit improvement in South African context is still in its infancy. Investigation into this phenomenon emerged only recently; therefore, the current study aimed to make a number of theoretical contributions to the previous empirical literature.

The primary purpose of this study was to provide evidence of good psychometric properties for the adapted SUDIQ, specifically adapted for educators. By confirming its validity and reliability, suggestions regarding strengths- and deficit-based interventions applicable to teachers can be made. This study also aims to provide schools and teachers with a greater understanding of the benefits associated with adopting a holistic approach, considering a strengths- and deficit-based approach. Results of this study indicated that strengths use and deficit improvement, from both an organisational and individual perspective, are related to teachers feeling more hopeful, optimistic, proactive and suited for their jobs.

An important and parallel route to increase educator engagement would be for teachers to develop the requisite attitudes and competencies to more effectively deal with problematical work situations; more precisely to effectively deploy their strengths and improve the areas of deficiencies. Grasping the importance thereof will enable schools to make informed decisions on how to groom employees to achieve their full potential.

### **3.3.2 Recommendations for Future Research**

Certain recommendations can be made for future research. Since no instrument that measures educators' perceptions of the use and improvement of their strengths and deficits from an organisational and individual perspective currently exists, the primary objective of this study was to establish the reliability and validity of an adapted SUDIQ. In order to address the issue of causality, it is suggested that a longitudinal research design be utilised to further investigate the hypothesised relationships and possible consequences. The sample in the present study was homogeneous in terms of occupation and demographical variables, such as gender, race and language. Value can be gained from approaching a more heterogeneous sample, as it may deliver different results. In order to address issues regarding possible language barriers, a scale that is valid and reliable for all cultures within a South African context should be translated into the indigenous languages. Finally, in an attempt to clarify issues regarding alpha coefficients that are too highly correlated, it is suggested that future research should further explore the items and constructs of the SUDIQ.

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