Assessing the outcomes of school-based partnership resilience intervention

Ⓘ**Ruth Mampane** and Ⓘ**Christelle Huddle**
Centre for the Study of Resilience and Department of Educational Psychology, Faculty of Education, University of Pretoria, Pretoria, South Africa
ruth.mampane@up.ac.za

This study reports on the outcomes of educational psychology school-based intervention. The aim was to determine whether the intervention served as an educational pathway to resilience. Through a concurrent mixed-methods research design interpreted through a pragmatic lens, academic school performance of students in a rural school was used as an outcome variable to gauge educational resilience in relation to educational psychology-rural school intervention. Quantitatively, academic document sampling from two student cohorts were sampled (*n* = 53). Qualitatively, knowledgeable teachers from the school (*n* = 2) were interviewed to gain more in-depth knowledge of the perceptions of academic performance and intervention. The data analysis techniques consist of descriptive statistics and *t*-tests on the sampled data, and thematic analysis of interview transcripts. As evidenced, research findings suggest that partnership intervention to increase pathways to socio-emotional competence and educational pathways to influence academic performance of students was not significant. The findings further suggest that partnership intervention certainly holds numerous benefits, yet in this case, they are not directly evidenced in the performance of students. Quantitative academic performance scores are poor indicators of school-based intervention outcomes; we recommend that future research should include qualitative student self-report.

Keywords: academic performance; educational psychology; partnership; protective resilience; resources; risk; rural school; service learning

Introduction

Students in resource-scarce environments navigate many risks and barriers on a daily basis (Marrow, Panday & Richter, 2005). Doing so inevitably bolsters their resilience. What has not been determined is whether educational psychology services in a rural school may contribute to fostering resilience in students (which for the purpose of this study is indicated by academic performance). Luthar, Cicchetti and Becker (2000:543) state that resilience is "a dynamic process encompassing positive adaptation within the context of significant adversity". In this conceptualisation of resilience, two critical phenomena are highlighted: risk and positive developmental outcomes, or positive adaptation, despite risk (Luthar et al., 2000). The pathways that individuals travel on towards positive adaptation are far from fixed (Ungar, 2004), but are rather a continuous intersection of navigating through adversity and negotiating supports (Ungar, Liebenberg, Boothroyd, Kwong, Lee, Leblanc, Duque & Makhnach, 2008). This see-saw between adaptation through adversity needs to be understood within inter- and intra-personal negotiation (Theron, 2012) and multi-cultural understanding (Ungar, 2010), together with a positively-framed transactional-ecological lens (Ebersöhn, 2013). Seen through these lenses, resilience is therefore not only understood as either capacity, process or result. Instead, it is viewed as a process and outcome phenomenon that develops along several pathways, one of which being education.

Theron and Donald (2013) emphasised that scholars and researchers recognise the crucial systemic role of educational psychologists, specifically in youths' positive adjustment or adaptation. Hines, Merdinger and Wyatt (2005) examined educational achievement as an indicator of resilience in a sample of former foster youth. Similarly, Hyman, Aubry and Klodawsky (2011) highlight research which indicates that extreme poverty has predicted poor academic achievement and high dropout rates when comparing groups of economically disadvantaged youth (Rafferty, Shinn & Weitzman, 2004). These authors observed that grade retention and underachievement are more frequently associated with resource-scarce environments.

On the other hand, recent studies are looking more closely at schools as places that can foster positive environmental contexts to buffer risks in students' lives (Brooks, 2006; Stewart, Sun, Patterson, Lemerle & Hardie, 2004). Through an asset-based view (Kretzmann & McKnight, 1993), students can be seen as capable, resourceful and adaptive. In fact, schools/teachers can be seen as a vehicle for the provision of care and support to risk-prone areas (Mohangi, 2008; Ogina, 2008). Since schools can contribute favourably to the support and development of students along their pathways to resilience, it is also pertinent to explore whether and in what way partnerships with rural schools may do the same.

School partnerships have included collaboration for numerous reasons: health purposes, financial sponsorship, teacher development, parent involvement programmes (Aid for Africa, 2017; Epstein & Dauber, 1991), service learning (Bringle & Hatcher, 2007; Ferreira & Ebersöhn, 2012), development of libraries and language support (Aid for Africa, 2017; Du Plessis, 2012), informational resources (informing students and teachers in various areas such as safety, health and other life areas) (Aid for Africa, 2017; UNICEF, 2014), and community involvement (Bauch, 2001). Schools could therefore consider partnering with faith based organisations, government sectors, businesses, hospitals/clinics, or higher education authorities.

The current study sought to explore partnerships with a rural secondary school through the Flourishing Learning Youth (FLY) partnership (Ebersöhn, 2008, 2010; Ebersöhn, Bender & Carvalho-Malekane, 2010; Ebersöhn & Maree, 2006). FLY, an Academic Service Learning (ASL) initiative established in 2006, aims to provide educational psychology students with the opportunity to include ASL into their training programme. ASL is an educational approach that combines learning objectives with service objectives in a specific field, in order to deepen the student's understanding in the realm of that field. It is therefore a form of community service, undertaken in the hope of fulfilling a community need whilst growing student knowledge and experience. A part of the FLY partnership constitutes enrolled postgraduate students in a long-term collaboration with students and teachers in a rural school (situated in the Mpumalanga-Swaziland area of South Africa). The students in the rural school that participate in the FLY partnership are Grade Nine students from the school and Master's students in Educational Psychology (enrolled at the University of Pretoria). This research study situates itself within the FLY Project by investigating how an educational psychology partnership with rural schools can generate knowledge on resilience in rural schools. The angle of this research was focused on the academic performance of students. The partnership involves numerous services, specifically career and educational psychology-related support to Grade Nine students and guidance to teachers.

Theoretical Considerations
Intervention research acknowledges the significance of the interaction between the individual and context (Winders, 2014). The interactive processes between the individual and context make ecological transactional model of human development suited to resilience and intervention research. The ecological transactional model (originating from Bronfenbrenner's ecological theory) acknowledges the complexity of the individual's context of development (Lynch & Cicchetti, 1998). In this study, the developmental context of Grade Nine participants has significant influence on the outcome of school-based resilient intervention and partnership. Literature on resilience emphasises the importance of children being surrounded by nurturing, supportive relationships (including community organisations or partnerships) to strengthen resilience (Armstrong, Birnie-Lefcovitch & Ungar 2005; Ebersöhn & Ferreira, 2011; Henderson & Milstein, 2003; Zimmerman, Stoddard, Eisman, Caldwell, Aiyer & Miller, 2013). Brooks (2006) highlights the significance of the ecological transactional model in building resilience through supportive and caring relationships. Boisture (2003) explains that connecting youths with caring adults who serve as

positive role models and communicate high expectations can assist in fostering resilience. Meaningful participation enhances youth's sense of connectedness, belonging and participation and positively impacts on their mental health and well-being (Oliver, Collin, Burns & Nicholas, 2006). Therefore, using the lens of an ecological transaction model in this research assisted in establishing the link between social connections and building resilience.

Aim of the Study
The aim of this study was to explore and evaluate the outcome of a school-based partnership resilient intervention operationalised as academic performance of students from rural secondary school. The FLY project has not previously explored and evaluated the school-based partnership as a pathway to resilience in the school. The overarching question that informed the research was: *How do school partnerships contribute to an enabling climate that indicates resilience in students, or not*? Exploratory studies are generally conducted for a phenomenon that is not clearly defined (Babbie, 2008). The study therefore focuses on the identification of patterns or ideas, rather than confirming a hypothesis (Babbie, 2008). To substantiate and contextualise findings, information from two strategic key informants (teachers) with in-depth knowledge of the school, was used to build a picture of varied partnerships involved with the rural school.

Metatheoretical Paradigm
Johnson and Onwuegbuzie (2004) describe pragmatism as the influence of the inner world of humans' experiences on their physical world. Pragmatism allows researchers to select methods or procedures that best suit the purpose of research and is not devoted to one system of philosophy (Creswell, 2009). Johnson and Onwuegbuzie (2004) argue that pragmatism offers a promising methodological and philosophical approach, by serving as a middle ground between a quantitative and qualitative approach. Triangulation of the data, namely interviews and sampled documents (academic performance schedules), were used to gain a more comprehensive idea of the concepts associated with school-based resilience intervention.

Methodology
According to Ungar (2004), a mixed method approach to the study of resilience is required for researchers to capture a tapestry of details pertaining to patterns of growth and survival. Theron and Theron (2010) urge South African researchers who aim to explore the complexities of resilience, to use mixed method approaches. Sale, Lohfeld and Brazil (2002) agree that, quantitative methods cannot access aspects such as lived experiences and social interactions or in-depth perspectives.

Therefore, a concurrent mixed method design, also called a two-phase design was used (Creswell & Plano Clark, 2007). The aim was to achieve complementary results from measured scores (quantitative document sampling) as well as in-depth perspectives (qualitative interviews) to consolidate a comprehensive picture from both research strands simultaneously (Morgan, 1998).

Participants
Qualitative strand
For the qualitative strand of the study, semi-structured interviews were conducted with two purposely-sampled (Creswell, 2005) teachers (key informants) with long-term knowledge of the school ($n = 2$). Interviews were audio-recorded and transcribed verbatim. The qualitative data allowed for organisation and making sense of students' access and performance data. Ungar (2004) states that the qualitative component of the research ensures that findings are not detached from the context of the study.

Quantitative strand
The quantitative strand of the study relied on document analysis of school records. Two cohorts of Grade Nine students were selected as the target sample. The reason for sampling Grade Nine students was because the partnership targets them. Performance schedules were purposively sampled for the students who had engaged (Cohort 2) or not engaged (Cohort 1) in the educational psychology school-based resilience intervention. The purpose of the quantitative strand was to gain a deeper understanding of the students' patterns of school access and academic performance in the school to answer the following two quantitative research questions: what is the pattern of student performance in the school; and, what is the pattern of access in the school? School records showed a population of $n = 207$ students enrolled in 2005 (Cohort 1) for Grade Nine and $n = 214$ for 2008, respectively (Cohort 2). Poor recordkeeping led to less participants being accounted for and sampled for the research. Biswal (2008) confirms that a true cohort method of assessment is commonly used in longitudinal studies to monitor the progress of students retrospectively, or during the educational cycle. To arrive at the definition of a true cohort, only students who were present and accounted for from Grade Nine consistently until Grade 11 (see Figure 1) were sampled. True cohorts samples (see Figure 1) accounted for $n = 30$ (Cohort 1) and $n = 23$ (Cohort 2) were followed retrospectively across the years in order to observe patterns in academic performance.

	Grade Nine →	Grade 10 →	Grade 11
Cohort 1 (Grade Nine group not taking part in partnership)	2005	2006	2007
	2006	2007	2008
	2007	2008	2009
Cohort 2 (Grade Nine group taking part in partnership)	2009	2010	2011
	2010	2011	-
	2011	-	-

Cohorts whose documents were sampled	**Types of documents sampled**	**Reason for sampling documents**	**Sampling criteria for documents**
Cohort 1 ($n = 30$) 2005–2007; Males = 10, Females = 20. Cohort 2 ($n = 23$) 2008–2010; Males = 9, Females = 14	Performance/progress schedules for 2005–2007; 2008–2010	• Identify learners • Identify indicators of performance for each learner	• Learner's name, surname and gender • Grade and year • Grade average for three subjects (English, siSwati and Life Orientation)
Total sample for the two cohorts: $N = 53$	Total Documents selected = six sets of performance schedules		

Figure 1 Grade 9 participants: Cohorts 1 and 2 adapted from Huddle (2014:52)

Three core school subjects were chosen to measure performance results from, namely: English First Additional Language (FAL), SiSwati (home language) and Life Orientation (LO). The three subjects were decided upon because all Grade Nine students at the school enrolled for the three fundamental subjects, which provide consistency across cohorts. Proficiency in English FAL (language of teaching and learning) and siSwati (home language) is important for acquiring core competency skills of reading, writing and speaking. Furthermore, LO curriculum is key to equipping students with life skills, knowledge, attitudes and values (Jacobs, 2011; Theron & Dalzell, 2006) including problem solving and decision making. Quantitative data was manually inputted from the school performance schedules into a spreadsheet and frequency distributions were calculated.

Data Analysis

Quantitative data were analysed statistically by means of frequency distributions in order to gain mean, mode and range scores (Terre Blanche, Durrheim & Painter, 2006). *T*-tests were deemed appropriate to compare sampled populations and to determine if there is significant difference between the means (Suciu, Lemeshow & Moeschberger, 2004). The sampled documents contained students' details (name, surname, grade and gender) and indicated their academic achievement for the year, in terms of yearly averages/performance scores for three subjects (English FAL, SiSwati and Life Orientation). According to Cohen, Manion and Morrison (2003), a researcher must categorise, order, manipulate and summarise data in order to answer research questions. An excel spreadsheet was designed under the guidance of University of Pretoria statisticians with six variables: student identification number (to ensure anonymity when reporting), name and surname, gender, marks for English FAL, SiSwati, and Life Orientation. The aim was to compare the findings from cohorts 1 and 2 and correlate with the data on partnerships from the qualitative strand. Thematic analysis was used for qualitative data (Babbie, 2008).

Ethical Considerations

Marshall and Rotimi (2001) contend that when working with participants from vulnerable community careful attention should be given to ethical standards and procedures. Ethical clearance was obtained from the University of Pretoria and participants (the school principal acted in *loco parentis* – for students' record). Voluntary participation (qualitative strand) and anonymity for participants including student documents was ensured (DiCicco-Bloom & Crabtree, 2006). The research was aligned to the principle of beneficence, as it aimed for further knowledge with regard to psychologists working in rural schools, and to assess whether such partnerships were giving value to the community. As a result, ethical principles of beneficence and autonomy were pertinent principles in the current research study (Allan, 2008; Babbie, 2005; Terre Blanche et al., 2006).

Quantitative Findings

Inconsistencies and fluctuating patterns of academic performance are observed between the two cohorts (see Figure 1). Frequency distributions (mean and mode) and *t*-tests were used to compare and determine the frequency and pattern of academic outcomes of Grade Nine students (Suciu et al., 2004). *T*-test was used to compare the means of the sample groups representing population of the study (DeCoster, 2006), and assisted in analysing differences within the two cohorts, regarding patterns of school academic performance (Wilson & MacLean, 2011). De Winter (2013) concurs that *T*-test methods can be used with sample sizes from $n \leq 5$. Methods of central tendency, which were analysed and reported on; were the mode and range (Given, 2008). The mode was used to compare the scores that were most frequent in the data set. The range or the difference between the two extreme points, (highest and lowest) on the distribution curve was also used to analyse and compare differences between both cohorts regarding academic performance (Given, 2008).

The graph depicting mean performances of all cohorts across the three years in Figure 2 shows that, there were no significant trends, indicating steady increases or declines across the three years in academic performance scores for the three measured subjects (see graphs in Figure 2). Overall, the grade averages for all subjects over the measured years were from elementary achievement, with scores ranging from 30–39% to substantial achievement scoring at 60–69 percent. See Table 1 for percentage and score equivalents. General trends for both cohorts indicate that scores were highest in the subject of siSwati (substantial achievement), recording 60–69.

Table 1 Description of score equivalents for performance scores

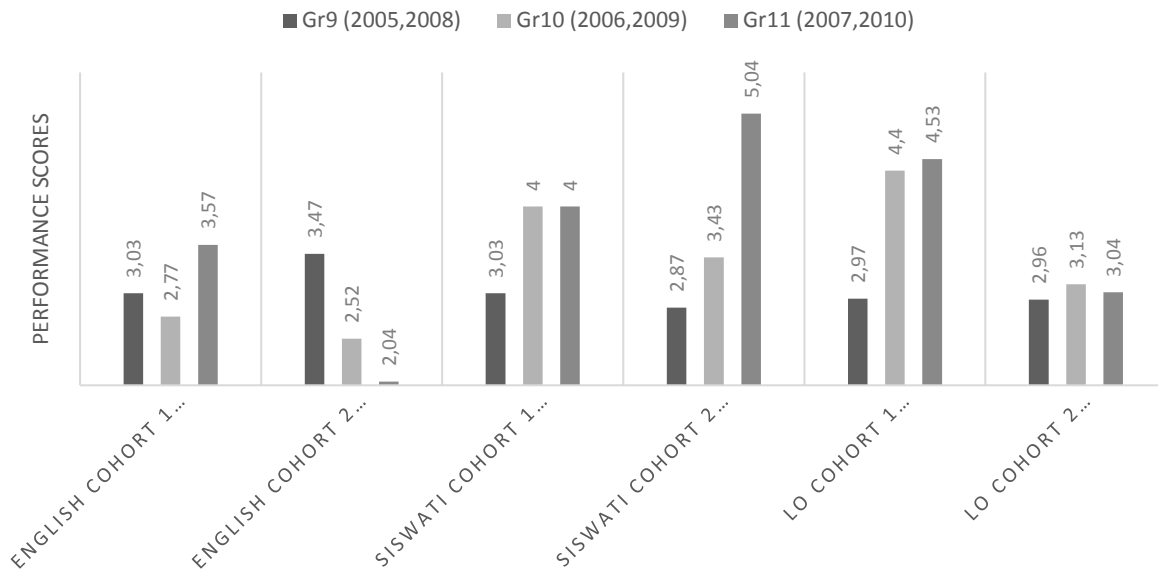| 1	2	3	4	5	6	7
0–29%	30–39%	40–49%	50–59%	60–69%	70–79%	80–100%
C	F	E	D	C	B	A
Not achieved	Elementary achieved	Moderate achieved	Adequate achieved	Substantial achievement	Meritorious achievement	Outstanding achievement

Figure 2 Mean average scores for three subjects and both cohorts over three years

Performance scores of Cohort 2 averaged from elementary achievement (30–39%), with Grade 11 English FAL to substantial achievement with Grade 11 in siSwati (60–69%), while in LO they consistently maintained a moderate achievement score (40–49%) across all grades. Table 2 also indicates fluctuations between student's own average scores over the years.

Performance scores of Cohort 1 on English FAL shows an increase in mean performance scores (over years) as seen in Grade 11 (3.57); while Cohort 2's mean performance scores show a downward decline over the three measured years.

SiSwati mean scores for Cohort 1 increased steadily from 2005 (3.03) to 2006 (4.00) and remain the same in 2007 (4.00). For Cohort 2 a similar steady increase is observed with mean scores from Grade Nine (2.87), Grade 10 (3.43) and Grade 11 (5.04). The mean scores for male students (Cohort 2) show a steady increase from Grade 9 (2.38) to Grade 10 (3.07) and 4.77 in Grade 11. A similar trend is seen with female students from Grade 9 (3.50); Grade 10 (3.90) and 5.40 in Grade 11.

With LO, the grade performance increases across the years, cohort 1 increased much better than Cohort 2. Cohort 1 moved from a mean of 2.97 in Grade Nine to 4.64 in Grade 11 while Cohort 2 was graded 2.96 in Grade Nine and 3.04 in Grade 11. The overall average LO scores for Cohort 2 indicate consistent mean scores of 40% to 49% across the years. This pattern also existed for male students' mean performance scores.

Overall, Cohort 1 and 2's English FAL scores averaged around 0–29% to 40–49 percent. The mean scores of Cohort 1 Grade 11, across the three subjects ranges from 3.57 (English FAL) to 4.00 (SiSwati) and 4.53 (LO). There is an increase of

performance from Grade 9–11. Average siSwati scores were higher (approximately 57%) when compared to those of English (approximately 47%) and LO (approximately 46%). Scores for Cohort 2 fluctuated more, with the highest mean scores for siSwati, but declining English scores over the three years, and consistent (yet low) scores for LO over the three years.

Table 2 depicts the range and mode for performance scores for both cohorts. The range allowed us to note that trends in academic performance were sometimes stark (with large differences among performance scores between students in a cohort). At other times, the range was smaller, which indicated that most students achieved similar scores in that specific year.

The mode indicates scores which were achieved most frequently. Results indicate that the range in Grade Nine was small for all subjects in Cohort 1, however Cohort 2 displayed a large range between performance scores in all subjects. Similar trends were true for males and females. When looking at the mode, it is evident that the most frequent performance mean scores were found between 30% and 59%. Scores between two and three (30–49%) were most commonly found in both cohorts for English, for both male and female students. For siSwati, overall performance scores were higher in Cohort 2 (indicating higher mode), with higher academic performance for female students in Grade 11 (70–79%). Lastly, for LO, the mode was found between performance averages of 39% and 59% in Cohort 1 across the years, and between 30% and 49% for Cohort 2 across the years. Similar patterns existed for female students, yet this was higher for male students in Cohort 1, with 60% to 69% in Grade 11 for Cohort 1.

Table 2 Range and modes for Cohort 1 and 2 for the three school subjects, adapted from Huddle (2014:103)

SUBJECT	GRADE/ YEARS IN GRADE	Cohort 1*						Cohort 2**					
		Range			Mode			Range			Mode		
		Total	Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females
English	Grade 9 (2005*, 2008**)	1	0	1	3	3	3	4	2	3	3	3	3
	Grade 10 (2006*, 2009**)	4	3	4	2	2	3	2	1	2	3	3	2
	Grade 11 (2007*, 2010**)	5	2	5	3	3	3	4	4	1	2	2	2
		3,33	1,67	3,33	2,67	2,67	3,00	3,33	2,33	2,00	2,67	2,67	2,33
SeSwati	Grade 9 (2005, 2008)	1	3	1	2	3	3	4	2	3	3	2	3
	Grade 10 (2006, 2009)	1	2	4	3	4	4	2	1	2	4	3	3
	Grade 11 (2007, 2010)	5	2	4	4	3	4	3	2	4	4	5	6
		2,33	2,33	3,00	3,00	3,33	3,67	3,00	1,67	3,00	3,67	3,33	4,00
LO	Grade 9 (2005, 2008)	1	1	0	3	3	3	3	2	4	2	2	4
	Grade 10 (2006, 2009)	4	1	1	4	4	4	2	2	2	3	3	3
	Grade 11 (2007, 2010)	4	3	5	4	5	4	4	3	2	3	2	3
		3,00	1,67	2,00	3,67	4,00	3,67	3,00	2,33	2,67	2,67	2,33	3,33

Qualitative Findings

Following thematic analysis, three main themes and six sub-themes emerged. For the purpose of this article, only themes will be focused on. The themes are: 1) partnerships with the school; 2) protective resources; and 3) processes and risks in and around the school system. The first and second themes align to resilience pathways, existing partnerships within the school, and exploration of factors essential for protecting the school against risk. The third theme is focused on exploring the risk associated with poor academic performance of students. The following keys are used with verbatim quotes: P1 (interview participant 1); P2 (interview participant 2); and P3 (member checking interview participant).

Theme 1: Partnerships with the School - Nature and Processes

Participants reported the presence of several partnerships. The focus of partnership include on sharing information and knowledge and providing resources to the school. Partners included:

Government Intersectoral collaborations: South African Police Service (SAPS, P1, 19), *Department of Health* (P1, 19); *Department of agriculture* (P1, 20); *Department of Home Affairs* (P1, 20, 71; P2, 520); *Department of Social Services* (P2, 15–16); *Parastatal (financial assistance): Transnet is pumping a lot of money into sports at school* (P2, 108–109).

Corporate organisations: "MTN has provided us with those computers, I think that there are 60 computers in there. So also provided us with the net, the internet" (P2, 2, 130). [all *sic*]

Academic and information: academics and students from higher education institutions (P1, 352–353; P2, 174–175).

Cultural and social resource: Jacob Zuma Foundation (P2, 2, 81–84).

The nature and process of partnership involve supportive relationship (academic support) seen in sharing of knowledge and expertise (subject specific) focusing on students and teachers; benefits include interactive processes and beneficial engagement with other professionals:

"*... the partnership brings other academics to the school too, like, you know, mathematics and all that*" (P2, 174–175);
"*that helps us because we get some more information to approach other aspects in the subjects*" (P2, 177–178);
"*... also the opportunity of interacting with other students who are doing engineering; they were able to speak to the learners, to tell them the nature of the subjects that they are doing*" (P2, 349–350); "*... careers - we have a high numbers of learners that have now applied*" (P3, 19–21). "*The students of Pretoria were also doing the career, you know, exhibition, rising knowledge to our leaners about careers as they are not exposed to all this before*" (P2, 183–185). [all *sic*]

Partners (in their various forms) care for development of students and teachers, where they have motivated and empowered them to acquire skills in English language:

"*Getting motivation makes you to be more focused and know where you go, and that's how they have been treated*" (P1, 611);
"*partners they have empowered us*" (P2, 163);
"*You know teachers have also learned a number of skills, especially the language ones: because we had, from the university, they brought people who know language*" (P1, 328–329). [all *sic*]

Partnerships (specially FLY - educational psychology partnership) encouraged teachers to understand children within their context of development.

"*Partners have taught us we must love the children*" (P2, 2, 158);
"*and know why and what is the root cause of the students behaving in such a way*" (P2, 2, 160);
"*if it wasn't for them* [...] *I don't care about the students, I don't care about the environment, and I don't care about the community*" (P2, 2, 584). [all *sic*]

Partnership has instilled interest in knowing the reason behind the students' behaviour, to consider the many risks that they face in relation to the outcomes at school, and even to consider the benefit of a counselling room to assist students at school with personal concerns (which could impact performance).

"*We also have other teachers who have maybe seen that the student who is struggling then maybe you adopt him ... we got this from our partners ... it started after we engaged with them*" (P1, 1, 222–226);
"*They encouraged us to have a counselling room we have that one in our school*" (P1, 188). [all *sic*]

Partnership motivated the implementation of care and support strategies. This could be explained by the trust that developed over many years of partnership, which has shown sustainability:

"*If the University of Pretoria is the most sustainable and committed partner. Although all partners assist in their various ways, this partnership is continuous ... they are always there and we know when the year starts they are going to phone us and tell us that they are coming*" (P1, 1, 60–61);
"*They are the only ones who has been there since 2005*" (P1, 2, 695). [all *sic*]

Accordingly, all partners benefit the school in their various ways. However, this could be an asset to them when the support is sustainable, or long term.

Theme 2: Protective Resources and Processes
The theme emerged as the school climate that can act as a buffer to risks and a positive step in the students' pathway to resilience. Working environment and care for employees is favourable for happiness and success (Zapf, 2002). Love for the school and a sense of passion for the work, came through as a protective process and pathway to resilience:

"*I enjoy being there, yes I enjoy being there* [in the school]" (P1, 507)
"*... every day I think the love that I have for the school it's renewed*" (P1, 533–534);
"*I just do everything out of love, for the love that I have for this school*" (P1, 567–570);
"*We've seen an improvement because what the partners have taught us we must love the children*" (P1, 1, 158);
"*It's because of the partnership that is what we have the change in the teachers*" (P1, 3, 94). [all *sic*]

Participants made several references to the supportive nature of teachers, and the school as a whole, to students. The sense of dedication and support towards students goes beyond the bare minimum; they try their best to be helpful in educating and understanding:

"*You cannot just say 'ok here are the books', just go over. You have to assist them, because looking for information in encyclopaedias. You know those learners, they don't know how, so you have to assist them, show them how to find the information*" (P1, 99–102);
"*It's our duty as an educator to assist the learners, to inspire them. So that at the end, they are going to develop a positive attitude towards learning*" (P1, 626–628);
"*Sometimes the little things that you do can change a person's life without even realising - so I think that for these learners - it's the same - the fact that you have adopted them - there may have been no hope but now they have hope*" (P3, 150–152). [all *sic*]

Theme 3: Risks in and around the School System
The theme highlights risks in the school and surrounding systems as factors that could inhibit students' learning and development; acting as potential barriers in the pathways to resilience. Risks that impact students and educators within the school and the wider interrelated community are discussed. Risks emanating from the family system include poverty, orphanhood and poor parental involvement in learning of students and access to social services (government):

"*Some of the issues, they are very tough there, is too much poverty*" (P2, 205);
"*Our learners, most of them, they are orphans*" (P2, 275). "*There is no water, so we take our containers and we go and look for water so that we can cook and they can also; and bath*" (P2, 272); "*Sometimes*

we find that our kids don't have birth certificates and IDs and all that" (P1, 72–73);
"*It becomes difficult, if the parents can't motivate a child then it means when a child gets into a school he is bringing that negative attitude*" (P2, 641–643). [all *sic*]

Poor academic performance was identified as a risk factor to students and the school. Several reasons were provided that are policy related, but also as a response to risk in the developmental system, e.g. policy on student progression. Progression refers to the advancement of a student from one grade to the next, without compliance with promotion requirements (Department of Basic Education, Republic of South Africa, 2013). The statement below shows high expectations placed on grade-specific knowledge, which is presumed to be in place:

"*You find that in a class there are learners that are capable and there are those who don't belong to this class*" (P2, 313). [all *sic*]

Student learning is interrupted by absenteeism preventing effective teaching and learning:

"*There is a problem with absenteeism*" (P3, 57);
"*there is a high rate of absence*" (P1, 153);
"*... the performance of our learners it's not stable*" (P2, 305);
"*out of 123 learners Grade 10 only 18 passed*" (P3, 44). [all *sic*]

Language of teaching and learning (English FAL) was highlighted as the main influence of poor academic performance, affecting reading, writing and speaking:

"*Our learners are struggling in the second language. The second language is the most important for them to pass their other subjects*" (P2, 332–335);
"*We had a big problem in our school - the problem of reading and writing. You can find that Grade 11 students cannot write, cannot read*" (P2, 116–118);
"*They really have difficulty to express themselves in English, even if the student is doing Grade 12 we find that when marking it is evident that the student did not understand*" (P3, 110–113);
"*So this is an indication that there is a language barrier - so it is a big problem*" (P3, 114–115). [all *sic*]

Students are exposed to multiple risks, which affect their motivation and commitment to succeed in school:

"*Sometimes you find that they are not motivated ... They don't have that interest and motivation*" (P2, 622).

Even with the many risk factors that plague the school, the support received from partners especially career guidance, knowledge and information on access to institutions of higher learning has built confidence in students and focused them to have future aspirations:

"*The youth now has changed their focus and they can see that the institutions of higher learning are not meant for certain people but they are meant for all of us as long as we have a positive attitude*" (P2, 2, 589–601);
"*Since 2008 we have seen more of them enrolling at higher institutions of learning*" (P1, 318). [all *sic*]

This theme cast some light on the findings of the quantitative strand of this research, by focusing on reasons behind poor academic performance of students. Participants clarify that language barriers creating specific concerns for literacy of students. This clarifies poor academic patterns observed in the performance of students. Furthermore, the supportive role of partnerships in creating pathways to resilience for the school community was highlighted by participants.

Discussion of Findings
The school in this study is overwhelmed by many cumulative risks, evidenced in the two data strands, making it challenging for students to perform well academically. Similar inconsistencies in performance scores were noted in other rural school research (Department of Education (DoE), Republic of South Africa, 2007). Proactive steps taken by the school (and partners) to sustain partnerships has proven to buffer the effects of risks.

The results show that, firstly, students in this rural schools find it challenging to perform well academically, due to language barriers and poor literacy skills. English as a language of teaching and learning is a barrier to effective teaching and learning for students in this study. This finding concurs with many studies conducted in South African schools, especially in rural and under-resourced schools such as the one in this study. Research on second language teaching and learning, especially in South Africa, shows that teacher knowledge and competency in English can buffer the risk associated with poor language skill and failure in students (Lafon, 2009; Uys, Van der Walt, Van den Berg & Botha, 2007; Van der Berg, Taylor, Gustafsson, Spaull & Armstrong, 2011). Teacher training and knowledge is seen to affect student performance. Learning in second language, which in the case of this study is English, requires knowledge, competency and acquisition of language skills (reading, writing and speaking). Many students, according to the DoE, Republic of South Africa (2007), have little exposure to English outside of the classroom, thereby explaining the level of English performance in the study. The previous South African Minister of Education Naledi Pandor observed that the levels of underperformance were exceptionally high in the education system (Lund, 2007). This was confirmed by a study on development indicators (The Presidency, Republic of South Africa, 2008), which showed alarming rates of poor performance in national systematic assessments, especially when making international comparisons.

This study was not able to differentiate performance of students based on gender. Patterns regarding gender differences in academic performance were also not clear-cut. However, research on National Senior Certificate statistics found

gender differences in performance of students; with males achieving slightly higher scores than females (Statistics South Africa, 2013).

Secondly, other risks found in this study pertain to rural schools context, such as lack of resources, poverty and illiteracy. This study found the following risks to impact on academic performance of learners: responsibilities at home, lack of stable family structure, backlogs in language and literacy, lack of human resources leading to impact on optimal teaching climate, and lack of resources, leading to an inability to complete school work. Other studies found similar multiple risks in rural schools, such as lack of basic needs, (Marrow et al., 2005; Vambe, 2005) poor human resources (Marrow et al., 2005), poor infrastructure (Van Deventer, 2002), education backlog/literacy (Avila & Gasperini, 2005; Pillay, 2006), and risky behaviour (DoE, Republic of South Africa, 2005; Pillay, 2006). Evidence exists that risks mentioned hinder adequate learning in the school, and impact academic performance in the following ways: erratic and poor performance, absenteeism, and lack of interest or motivation (UNICEF, 2006). Risks mentioned have a negative influence on students' academic performance and resilience. Bryan (2005) agrees that many urban minority and rural students coming from situations of poverty tend to have multiple precipitating factors and stressors that put them at risk for school failure.

Lastly, it was confirmed that partnership interventions might potentially serve as educational pathways to building resilience in teachers and students, to counteract physical constraints, and adding resources to the school (e.g. library, computers, and skilled informants). However, in the case of the rural school studied, despite partnerships, academic performance remains low. This is not difficult to understand when the wealth of risks that these students face daily is considered. Rice (2003) explained that teacher quality is a prominent factor associated with student achievement. Teachers in this study worried about student performance, together with availability of teacher training. The study shows that teachers are key to academic success of students, that they interpret and implement curriculum and assess teaching and learning received. In this study, many inconsistencies were observed in record keeping (e.g. missing records and inconsistency in recording students' identification criteria), leading to missing data.

In summary, based on the results of this study, researchers are reminded that resilience is a complex phenomenon, and that studying it in relation to an outcome variable is increasingly challenging. The challenges inherent to rural schools, both for students and researchers, demands an ecosystem and longitudinal understanding of both the students and their context, so as to best understand resilience. The results highlight that in consideration of the risks identified, any research that attempts to better understand rural school environments should be seen as valuable in itself. Furthermore, the significance of school-based resilience intervention cannot be disputed, based on the poor academic performance of students. In this study, partnerships offered the resources and support needed by students and teachers. The qualitative evidence of this study highlighted some considerations that future partners wanting to join rural schools could find valuable, especially educational psychology and academic service learning partnerships.

Limitations

Limitations to this study relate to barriers in school administration, or recordkeeping of documents in the rural school. Students' names were captured differently (varied spelling) across years, which impacted the quantitative strand of this research. As a result, it was not possible to account for a student whose name was not spelled the same across the years, as this may not have been the same student. Retrospective studies (following the same sample retrospectively) require good record-keeping, because they rely mainly on document analysis. Considering the study followed a retrospective cohort design, 368 students could not be accounted for; a substantial number, considering the sampled ($n = 53$). Again, Grade 12 performance schedules (for 2008) were not available at the school. This led to excluding Grade 12 data for both cohorts.

Conclusion

The cumulative and expansive risks that were found in the lives of the students at this rural school proved to be highly impeding on favourable adaptation in the navigation towards academic success. Notwithstanding this, by triangulating findings of the study, some possible contributing factors to the students' poor performance were found (despite stated partnership benefits). However, no obvious differences in academic performance were evident in the two cohorts. Despite partnerships as a possible protective resource in a rural school, when examining the data, it becomes evident that trying to relate patterns of performance to a partnership is a process, and require acknowledgement of other impacting variables involved in students' academic performance, such as those factors associated with academic performance (including for example, individual abilities or potential and context).

Based on the findings of this study, it is important to track academic performance in future studies using transactional ecological lens (Ferreira & Ebersöhn, 2012; Theron, 2012), with a comprehensive understanding of the risks plaguing students in rural schools. Transactional ecological lenses require the researcher to explore the reason behind the outcome of behaviour e.g. if children are

not performing at their potential or ability, one should question whether risks are outweighing resources. Context (such as child-headed households or the death of a family member) also undoubtedly have the potential to foster/hinder academic performance in the student (National Education Association (NEA), 2007).

Partnerships provided support and connectedness in the school, where teachers and students needed and were identified as protective resources to multiple risks experienced. Waters, Cross and Runions (2009) stated that a student's feeling of connectedness to school helps to mitigate health, social and academic risks. With the specific challenges seen in academic performance, the value of students' feelings of care and connectedness is more visible. Waters et al. (2009) stated that the protective aspects of the student environment (characteristic of an enabling climate) and how this is fostered, assist in satisfying needs for competence. It follows that the school climate (indicated by interactions discussed) are educational pathways to students' resilience, or favourable adaptation. This navigation and negotiation process is facilitated in a space of safety and care, and is encapsulated by relationships/partnerships relationships (Ebersöhn, 2013; Ungar et al., 2008).

Acknowledgements

Note

References
Aid for Africa 2017. *South Africa partners*. Available at http://www.aidforafrica.org/member-charities/south-africa-partners/. Accessed 10 January 2017.

Allan A 2008. *Law and ethics in psychology: An international perspective*. Cape Town, South Africa: Inter-Ed.

Armstrong MI, Birnie-Lefcovitch S & Ungar MT 2005. Pathways between social support, family well being, quality of parenting, and child resilience: What we know. *Journal of Child and Family Studies*, 14(2):269–281. doi: 10.1007/s10826-005-5054-4

Avila M & Gasperini L 2005. *The MDGs and sustainable rural development in Sub-Saharan Africa: Challenges and implications for education for rural people (ERP)*. Working document prepared for the Ministerial Seminar on education for rural people in Africa: Policy lessons, options and priorities, Ethiopia, 7–9 September. Available at http://www.fao.org/newsroom/common/ecg/10744 4/en/paper.pdf. Accessed 16 January 2017.

Babbie E 2005. *The basics of social research* (3rd ed). Belmont, CA: Thomson Wadsworth.

Babbie E 2008. *The basics of social research* (4th ed). Belmont, CA: Thomson Wadsworth.

Bauch PA 2001. School-community partnerships in rural schools: Leadership, renewal, and a sense of place. *Peabody Journal of Education*, 76(2):204–221. doi: 10.1207/S15327930pje7602_9

Biswal K 2008. *An introduction to child tracking system and true cohort analysis in basic education*. Available at http://www.educationforallinindia.com/child-tracking-and-true-cohort-study.pdf. Accessed 8 December 2016.

Boisture RA 2003. *Hardwired to connect: The new scientific case for authoritative communities*. Summary of the Commission on Children at Risk's Report. New York, NY: Institute for American Values.

Bringle RG & Hatcher JA 2007. Civic engagement and service learning: Implications for higher education in America and South Africa. *Education as Change*, 11(3):79–89. doi: 10.1080/16823200709487181

Brooks JE 2006. Strengthening resilience in children and youths: Maximizing opportunities through the schools. *Children & Schools*, 28(2):69–76. doi: 10.1093/cs/28.2.69

Bryan J 2005. Fostering educational resilience and achievement in urban schools through school-family-community partnerships. *Professional School Counseling*, 8(3):219–227.

Cohen L, Manion L & Morrison K 2003. *Research methods in education* (5th ed). London, UK: RouthledgeFalmer.

Creswell JW 2005. *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (2nd ed). Upper Saddle River, NJ: Merrill.

Creswell JW 2009. *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed). Los Angeles, CA: SAGE Publications, Inc.

Creswell JW & Plano Clark VL 2007. *Designing and conducting mixed methods research*. Thousand Oaks, CA: Sage Publications, Inc.

DeCoster J 2006. *Testing group differences using t-tests, ANOVA, and nonparametric measures*. Available at http://www.stat-help.com/notes.html. Accessed 8 December 2016.

Department of Basic Education, Republic of South Africa 2013. National policy pertaining to the programme and promotion requirements of the national curriculum statement Grades R - 12. *Government Gazette*, No. 36465. 17 May. Pretoria: Government Printing Works.

Department of Education (DoE), Republic of South Africa 2005. *Education for all – 2005 country status report: South Africa*. Pretoria: DoE. Available at http://www.dhet.gov.za/Reports%20Doc%20Librar y/Education%20For%20All%20-%202005%20Country%20Status%20Report%20S OUTH%20AFRICA.pdf. Accessed 12 January 2017.

DoE, Republic of South Africa 2007. *School realities*. Pretoria: DoE. Available at

http://www.education.gov.za/Portals/0/Statistics/School%20Realities%202007.pdf?ver=2008-07-02-110245-133. Accessed 12 January 2017.

De Winter JCF 2013. Using the student's *t*-test with extremely small sample sizes. *Practical Assessment, Research & Evaluation*, 18(10):1–12. Available at http://pareonline.net/pdf/v18n10.pdf. Accessed 10 January 2017.

DiCicco-Bloom B & Crabtree BF 2006. The qualitative research interview. *Medical Education*, 40(4):314–321. doi: 10.1111/j.1365-2929.2006.02418.x

Du Plessis C 2012. Towards a regenerative paradigm for the built environment. *Building Research & Information*, 40(1):7–22. doi: 10.1080/09613218.2012.628548

Ebersöhn L 2008. Children's resilience as assets for safe schools. *Journal of Psychology in Africa*, 18(1):11–17.

Ebersöhn L 2010. Resilience and career counseling: Describing the utility of quadrant mapping. *Journal of Psychology in Africa*, 20(3):385–393.

Ebersöhn L 2013. Building generative theory from case work: The relationship-resourced resilience model. In MP Wissing (ed). *Wellbeing research in South Africa* (Vol. 4). Netherlands: Springer. doi: 10.1007/978-94-007-6368-5

Ebersöhn L, Bender CJG & Carvalho-Malekane WM 2010. Informing educational psychology training with students' community engagement experiences. *Perspectives in Education*, 28(3):87–98. Available at https://www.researchgate.net/profile/Liesel_Ebersoehn2/publication/267844996_Informing_educational_psychology_training_with_students%27_community_engagement_experiences/links/5492d1360cf225673b3e0cb1.pdf. Accessed 10 January 2017.

Ebersöhn L & Ferreira R 2011. Coping in an HIV/AIDS-dominated context: teachers promoting resilience in schools. *Health Education Research*, 26(4):596–613. doi: 10.1093/her/cyr016

Ebersöhn L & Maree JG 2006. Demonstrating resilience in a HIV & AIDS context: An emotional intelligence perspective. *Gifted Education International*, 22(1):14–30. doi: 10.1177/026142940602200105

Epstein JL & Dauber SL 1991. School programs and teacher practices of parent involvement in inner-city elementary and middle schools. *The Elementary School Journal*, 91(3):289–305.

Ferreira R & Ebersöhn L 2012. *Partnering for resilience*. Pretoria, South Africa: Van Schaik Publishers.

Given LM (ed.) 2008. *The SAGE Encyclopaedia of qualitative research methods* (Vol. 2). London, UK: Sage Publications Ltd.

Henderson N & Milstein MM 2003. *Resiliency in schools: Making it happen for students and educators*. Thousand Oaks, CA: Corwin Press Inc.

Hines AM, Merdinger J & Wyatt P 2005. Former foster youth attending college: Resilience and the transition to young adulthood. *American Journal of Orthopsychiatry*, 75(3):381–394. doi: 10.1037/0002-9432.75.3.381

Huddle C 2014. Educational pathways to resilience in rural school partnerships. Unpublished MEd dissertation. Pretoria, South Africa: University of Pretoria. Available at http://www.repository.up.ac.za/bitstream/handle/22

63/45890/Huddle_Educational_2015.pdf?sequence=1. Accessed 28 February 2017.

Hyman S, Aubry T & Klodawsky F 2011. Resilient educational outcomes: Participation in school by youth with histories of homelessness. *Youth & Society*, 43(1):253–273. doi: 10.1177/0044118X10365354

Jacobs A 2011. Life Orientation as experienced by learners: a qualitative study in North-West Province. *South African Journal of Education*, 31(2):212–223. Available at http://www.sajournalofeducation.co.za/index.php/saje/article/view/481/243. Accessed 10 January 2017.

Johnson RB & Onwuegbuzie AJ 2004. Mixed methods research: A research paradigm whose time has come. *Educational Researcher*, 33(7):14–26. doi: 10.3102/0013189X033007014

Kretzmann JP & McKnight JL 1993. *Building communities from the inside out: A path toward finding and mobilizing a community's assets*. Chicago, IL: ACTA Publications.

Lafon M 2009. *The impact of language on educational access in South Africa*. Research Monograph No. 24. Brighton, UK: Consortium for Research on Educational Acces, Transition and Equity (CREATE). Available at https://halshs.archives-ouvertes.fr/file/index/docid/451832/filename/PTA24_2_.pdf. Accessed 10 January 2017.

Lund T 2007. 'Stop hiding behind apartheid'. *Fin24*, 29 May. Available at http://www.fin24.com/Economy/Stop-hiding-behind-apartheid-20070529. Accessed 10 December 2016.

Luthar SS, Cicchetti D & Becker B 2000. The construct of resilience: A critical evaluation and guidelines for future work. *Child Development*, 71(3):543–562. doi: 10.1111/1467-8624.00164

Lynch M & Cicchetti D 1998. An ecological-transactional analysis of children and contexts: The longitudinal interplay among child maltreatment, community violence, and children's symptomatology. *Development and Psychopathology*, 10(2):235–257.

Marrow S, Panday S & Richter L 2005. *Young people in South Africa in 2005: Where we're at and where we're going*. Johannesburg, South Africa: Umsobomvu Youth Fund Halfway House.

Marshall PA & Rotimi C 2001. Ethical challenges in community-based research. *The American Journal of the Medical Sciences*, 322(5):241–245. doi: 10.1097/00000441-200111000-00001

Mohangi K 2008. Finding roses amongst the thorns: How institutionalised children negotiate pathways to well-being while affected by HIV&AIDS. Unpublished PhD thesis. Pretoria, South Africa: University of Pretoria. Available at http://repository.up.ac.za/bitstream/handle/2263/24168/Complete.pdf?sequense=9. Accessed 12 November 2016.

Morgan DL 1998. Practical strategies for combining qualitative and quantitative methods: Applications to health research. *Qualitative Health Research*, 8(3):362–376. doi: 10.1177/104973239800800307

National Education Association (NEA) 2007. *C.A.R.E.: Strategies for closing the achievement gaps* (3rd ed). Washington, DC: NEA. Available at

https://www.nea.org/assets/docs/mf_CAREbook08 04.pdf. Accessed 14 March 2014.

Ogina T 2008. How teachers understand and respond to the emerging needs of orphaned children. In L Ebersöhn (ed). *From microscope to kaleidoscope: Reconsidering educational aspects related to children in the HIV&AIDS pandemic*. Rotterdam, The Netherlands: Sense Publishers.

Oliver KG, Collin P, Burns J & Nicholas J 2006. Building resilience in young people through meaningful participation. *Australian e-Journal for the Advancement of Mental Health*, 5(1):34–40.

Pillay J 2006. Community supervision in the training of counsellors. In H Dunbar-Krige & E Fritz (eds). *The supervision of counsellors in South Africa: Travels in new territory*. Pretoria, South Africa: Van Schaik Publishers.

Rafferty Y, Shinn M & Weitzman BC 2004. Academic achievement among formerly homeless adolescents and their continuously housed peers. *Journal of School Psychology*, 42(3):179–199. doi: 10.1016/j.jsp.2004.02.002

Rice JK 2003. *Teacher quality: Understanding the effectiveness of teacher attributes*. Washington, DC: Economic Policy Institute.

Sale JEM, Lohfeld LH & Brazil K 2002. Revisiting the quantitative-qualitative debate: Implications for mixed-methods research. *Quality & Quantity*, 36(1):43–53. doi: 10.1023/A:1014301607592

Statistics South Africa 2013. *Millennium development goals, country report 2013*. Pretoria: Statistics South Africa. Available at http://www.gov.za/sites/www.gov.za/files/MDGR_ Report_2013.pdf. Accessed 12 January 2017.

Stewart D, Sun J, Patterson C, Lemerle K & Hardie M 2004. Promoting and building resilience in primary school communities: Evidence from a comprehensive 'health promoting school' approach. *International Journal of Mental Health Promotion*, 6(3):26–33. doi: 10.1080/14623730.2004.9721936

Suciu GP, Lemeshow S & Moeschberger M 2004. Statistical tests of the equality of survival curves: Reconsidering the options. In N Balakrishnan & CR Rao (eds). *Handbook of statistics: Advances in survival analysis* (Vol. 23). Amsterdam, The Netherlands: Elsevier.

Terre Blanche M, Durrheim K & Painter D (eds.) 2006. *Research in practice: Applied methods for the social sciences* (2nd ed). Cape Town, South Africa: University of Cape Town Press (Pty) Ltd.

The Presidency, Republic of South Africa 2008. *Development indicators 2008*. Available at http://www.gov.za/sites/www.gov.za/files/dev_indi cators3.pdf. Accessed 5 November 2016.

Theron L & Dalzell C 2006. The specific Life Orientation needs of Grade 9 learners in the Vaal Triangle region. *South African Journal of Educ*ation, 26(3):397–412. Available at http://www.sajournalofeducation.co.za/index.php/s aje/article/view/93/44. Accessed 7 January 2017.

Theron LC 2012. Resilience research with South African youth: Caveats and ethical complexities. *South African Journal of Psychology*, 42(3):333–345. doi: 10.1177/008124631204200305

Theron LC & Donald DR 2013. Educational psychology and resilience in developing contexts: A rejoinder

to Toland and Carrigan (2011). *School Psychology International*, 34(1):51–66. doi: 10.1177/0143034311425579

Theron LC & Theron AMC 2010. A critical review of studies of South African youth resilience, 1990–2008. *South African Journal of Science*, 106(7/8): Art. #252, 8 pages. doi: 10.4102/sajs.v106i7/8.252

Ungar M 2004. A constructionist discourse on resilience: Multiple contexts, multiple realities among at-risk children and youth. *Youth & Soc*iety, 35(3):341–365. doi: 10.1177/0044118X03257030

Ungar M 2010. What is resilience across cultures and contexts? Advances to the theory of positive development among individuals and families under stress. *Journal of Family Psychotherapy*, 21(1):1–16. doi: 10.1080/08975351003618494

Ungar M, Liebenberg L, Boothroyd R, Kwong WM, Lee TY, Leblanc J, Duque L & Makhnach A 2008. The study of youth resilience across cultures: Lessons from a pilot study of measurement development. *Research in Human Development*, 5(3):166–180. doi: 10.1080/15427600802274019

UNICEF 2014. *UNICEF in South Africa: Unite for children*. Pretoria, South Africa: UNICEF. Available at http://www.unicef.org/southafrica/SAF_overview_ country.pdf. Accessed 16 May 2014.

United Nations Children's Fund (UNICEF) Regional Office for South Asia 2006. *State of the SAARC Child 2005*. Kathmandu, Nepal: UNICEF Regional Office for South Asia. Available at https://www.unicef.org/rosa/Final_The_State_of_S AARC_Child_2005-Feb-27-06.pdf. Accessed 15 January 2017.

Uys M, Van der Walt J, Van den Berg R & Botha S 2007. English medium of instruction: a situation analysis. *South African Journal of Education*, 27(1):69–82. Available at http://www.sajournalofeducation.co.za/index.php/s aje/article/view/51/77. Accessed 7 January 2017.

Vambe MT 2005. Opening and transforming South African education. *Open Learning: The Journal of Open, Distance and e-Learning*, 20(3):285–293.

Van der Berg S, Taylor S, Gustafsson M, Spaull N & Armstrong P 2011. *Improving education quality in South Africa*. Report for the National Planning Commission. Stellenbosch, South Africa: Department of Economics, University of Stellenbosch. Available at http://resep.sun.ac.za/wp-content/uploads/2012/10/2011-Report-for-NPC.pdf. Accessed 15 January 2017.

Van Deventer KJ 2002. Quality physical education and the partnership concept. *South African Journal for Research in Sport, Physical Education and Recreation*, 24(2):101–109. doi: 10.4314/sajrs.v24i2.25845

Waters SK, Cross DS & Runions K 2009. Social and ecological structures supporting adolescent connectedness to school: A theoretical model. *Journal of School Health*, 79(11):516–524. doi: 10.1111/j.1746-1561.2009.00443.x

Wilson S & MacLean R 2011. *Research methods and data analysis for psychology*. Berkshire, England: McGraw-Hill Higher Education.

Winders SJ 2014. From extraordinary invulnerability to ordinary magic: A literature review of resilience.

Journal of European Psychology Students, 5(1):3–9. doi: 10.5334/jeps.bk

Zapf D 2002. Emotion work and psychological well-being: A review of the literature and some conceptual considerations. *Human Resource Management Review*, 12(2):237–268. doi:

10.1016/S1053-4822(02)00048-7

Zimmerman MA, Stoddard SA, Eisman AB, Caldwell CH, Aiyer SM & Miller A 2013. Adolescent resilience: Promotive factors that inform prevention. *Child Development Perspectives*, 7(4):215–220. doi: 10.1111/cdep.12042