Article

School Psychology International

School Psychology International
2016, Vol. 37(2) 140–154
© The Author(s) 2015
Reprints and permissions:
sagepub.co.uk/journalsPermissions.nav
DOI: 10.1177/0143034315614689
spi.sagepub.com

Bolstering resilience through teacher-student interaction: Lessons for school psychologists

Linda Liebenberg
Faculty of Graduate Studies, Dalhousie University, Canada

Linda Theron
Optentia Research Focus Area, North-West University, South Africa

Jackie Sanders
Massey University, New Zealand

Robyn Munford
Massey University, New Zealand

Angelique van Rensburg
Optentia Research Focus Area, North-West University, South Africa

Sebastian Rothmann
Optentia Research Focus Area, North-West University, South Africa

Michael Ungar
Resilience Research Centre, Dalhousie University, Canada

Abstract

Schools are often the only formal service provider for young people living in socio-economically marginalized communities, uniquely positioning school staff to support positive psychosocial outcomes of youth living in adverse contexts. Using data from 2,387 school-going young people [Canada ($N = 1,068$), New Zealand ($N = 591$), and

Corresponding author:
Linda Liebenberg, Faculty of Graduate Studies, Dalhousie University, PO Box 15000, Halifax, NS, B3K 4R2, Canada.
Email: Linda.Liebenberg@dal.ca

South Africa ($N = 728$)] living in marginalized communities and who participated in the Pathways to Resilience study, this article reviews how student experiences of school staff and school contexts moderated contextual risks and facilitated resilience processes. Findings of these analyses affirm that school staff play an important role in moderating the relationship between resilience resources and community/family risk in both global North and global South contexts. Findings hold important implications for school psychologists, including the need to champion the ways in which teachers can scaffold resilience resources for young people through the quality of the relationships they build with students.

Keywords
enabling school contexts, marginalized adolescents, resilience processes, risk moderation, teachers, teacher-student relationships

Schools are often the only formal source of service provision for young people living in socio-economically marginalized communities. In these settings, quality service provision is associated with positive outcomes (Ungar, Liebenberg, Dudding, Armstrong, & Van de Vivjer, 2013). Consequently, school staff are uniquely positioned to support positive psychosocial outcomes of youth living in adverse contexts. While familial and contextual risks can impede positive outcomes for many youth, schools offer a potential resource that can facilitate the resilience processes that scaffold healthy outcomes despite the presence of these risks (Christle, Jolivette, & Nelson, 2007; Sharkey, You, & Schnoebelen, 2008). In particular, the quality of teacher-pupil relationships has been found to predict pupil engagement and performance (Furrer & Skinner, 2003; Murray & Zvoch, 2011). Teacher efforts to positively engage with students from disadvantaged backgrounds have also been shown to increase rates of high school completion (Croninger & Lee, 2001) and further the educational achievements of these students (Frawley, McCoy, Banks, & Thornton, 2014; Furrer & Skinner, 2003; Prior & Mason, 2010). School completion, in turn, has a strong positive association with better life outcomes (Frønes, 2010; Howieson & Iannelli, 2008; Lucas, 2001). Positive school environments contribute to better student mental health (Bennett & Coggan, 1999). Factors within the control of schools themselves such as: School climate (Christle et al., 2007), teacher-student collaboration over the creation of positive student identities (Ravet, 2007), and student locus of control and involvement in school activities (Finn & Rock, 1997), have all been found to increase levels of student engagement at school regardless of contextual risks confronting students.

Similarly, it has been suggested that schools have a vital role to play in building resilience in children who are vulnerable, and resilience plays a critical role in mediating the impact of contextual risks on outcomes for at-risk students (Anderson, Christenson, Sinclair, & Lehr, 2004; Samel, Sondergeld, Fischer, & Patterson, 2011; Theron & Donald, 2013; Theron, Liebenberg, & Malindi, 2014). While schools do not always function in supportive ways (Toland & Carrigan, 2011), the combination of

educational and other developmental resources within schools nonetheless constitute a potentially positive resource that can bolster resilience and facilitate positive outcomes (Frønes, 2010; Howieson & Iannelli, 2008; Lucas, 2001). Two important factors emerge from these studies. First, children who are vulnerable do better when school professionals (particularly teachers) build strong positive relationships with them (Johnson, 2008; Noltemeyer & Bush, 2013). Second, these interactional factors are within the direct control of schools; schools can take steps to ensure that they provide a welcoming and safe environment for children who confront risks in their homes and neighbourhoods (Frawley et al., 2014; Furrer & Skinner, 2003). Schools do not, however, operate in isolation. As Goeke-Morey et al. (2013) report, community and family risks exert powerful impacts on academic achievement, ability to function at school, and children's educational expectations. It is therefore important to understand more about the types of engagement practices which professionals can use to enhance the capacity of the school system to function as a resilience resource for youth facing high levels of contextual risks (Croninger & Lee, 2001; Furrer & Skinner, 2003; Sharkey et al., 2008).

This article examines the ways in which school experiences and teacher-student relationships augment the resilience resources of youth, moderating contextual risks located in family and community. While better outcomes have been found when resilience is higher, contextual risks have been shown to undermine resilience (Sanders & Munford, 2014; Ungar et al., 2013). If school experiences and teacher-pupil interactions can boost resilience, schools become a key site to compensate for resilience resources that are missing in students' lives. Consequently, teachers and schools are theoretically critical to directly redressing the wider disadvantages facing students, potentially impacting on broader marginalization processes (Frønes, 2010; Howieson & Iannelli, 2008). Thus, the current analysis explores the ways in which school ecologies can moderate the relationship between resilience resources and contextual risks for youth from socio-economically marginalized communities. More specifically, our analysis examines the extent to which experiences of respect and empowerment in a school context scaffold protective resources for youth (Ungar et al., 2013). School experience was operationalized on two dimensions: a) the extent to which young people experienced school as empowering by being accessible and relevant; and b) the extent to which young people perceived their teachers as being respectful of student capacity for comprehension of what teachers are saying, as well as teachers being respectful of students' cultural and religious backgrounds.

Method

Sample and procedure

The analysis in this article focuses on a sample of 2,387 school going youth who participated in the Pathways to Resilience study (see Table 1). This study is a multi-country investigation of the formal and informal resources that vulnerable young

Table 1. Participant demographic information.

	Canada		New Zealand		South Africa		Total	
	M	SD	*M*	SD	*M*	SD	*M*	SD
Age	14.29	1.75	14.93	1.32	16.34	1.47	15.08	1.81
Age range	11–20		12–17		12–19		11–20	
Last grade completed	8	1.52	10	1.38	9	1.02	8	1.37
Last grade completed range	6–12		8–13		6–12		6–13	
Boys	509 (47.7%)		360 (60.9%)		340 (46.7%)		1,209 (50.6%)	
Girls	557 (52.2%)		231 (39.1%)		387 (53.2%)		1,175 (49.2%)	
Living arrangements								
Two adult parents/legal guardians	815 (76.3%)		373 (63.1%)		281 (38.6%)		1,469 (61.5%)	
Single adult parent/legal guardian	239 (22.4%)		216 (36.5%)		393 (54%)		848 (35.5%)	
Siblings					20 (2.7%)		20 (.8%)	
Supervised housing	5 (0.5%)				13 (1.8%)		18 (.8%)	
Friends	6 (0.6%)		2 (0.3%)				8 (0.3%)	
Independently	1 (0.1%)				8 (1.1%)		9 (0.4%)	
Other					6 (0.8%)		6 (0.3%)	
Information not provided	2 (0.2%)				7 (1%)		9 (0.4%)	

people draw on to achieve positive psychosocial outcomes (see www.resilienceresearch.org). Two groups of youth were sampled at each site: Young people using formal services at the time of the study, and a comparison group of youth who were not using formal services. The sample included here comprises youth from Canada (CA: $N = 1{,}068$), New Zealand (NZ: $N = 591$), and South Africa (SA: $N = 728$) who participated as part of the comparison group. Overall, 1,209 boys (50.6%; M age = 15.18, SD = 1.84, age range 11- to 20-years-old)[1] were included as well as 1,175 girls (49.2%; M age = 15.00, SD = 1.77, age range 11- to 19-years-old).[2] Ethnic and/or racial identity of young people is not included in the analysis. This detail was excluded from the larger international data set as a component of de-identifying the data. Although ethnic/racial identity is not included in the current analysis, at least half of the young people in Canada and New Zealand self-identified as visible minority youth. In South Africa, almost all self-identified as black (predominantly Sesotho-speaking).

All participants completed the Pathways to Resilience Measure (PRYM) (Resilience Research Centre, 2007), a compendium of Likert-type validated scales and sub-scales which assessed personal and contextual risks and resources (including resilience), service use and school experience, and functional outcomes.

Youth were recruited through participating schools. All schools were situated in socio-economically marginalized communities. Prior to administration, the PRYM was reviewed by Local Advisory Committees (LACs) and/or local advisors at each site to determine the appropriateness of each question and language of administration, and to ensure that items were phrased in ways that made sense to youth locally. Recommendations were integrated prior to data gathering.

Ethics approval was obtained at all participating institutions and from gatekeepers as necessary (e.g. departments of education). Potential participants were all informed that participation was voluntary, anonymous, and that all responses would be confidential. Parental/legal guardian consent was obtained. Data collection took place in classrooms, at times suggested by school management staff, and questionnaires were administered in groups. While the PRYM was administered to all participants in English, code switching (i.e. verbally switching from English to the mother tongue of participants) was used, where necessary, to provide young people with translations of terms or expressions that they did not understand in English.

Measures

Family risks were comprised of three constructs: Limited parent/caregiver affection (CA $\alpha = 0.578$; NZ $\alpha = 0.444$; SA $\alpha = 0.279$) assessed by two-items (i.e. 'How much affection do you receive from your mother figure/father figure?'); limited parent/caregiver-youth warmth (CA $\alpha = 0.540$; NZ $\alpha = 0.485$; SA $\alpha = 0.260$) assessed by two-items (i.e. 'Describe your relationship with your mother figures/father figures'), and limited parent/caregiver presence (CA $\alpha = 0.452$; NZ $\alpha = 0.548$; SA $\alpha = 0.813$) assessed by three-items (i.e. 'How many days a week is your parent/caregiver home when you wake up in the morning/come home from school/go to bed at night?').

Community risk (CA $\alpha = 0.726$; NZ $\alpha = 0.348$; SA $\alpha = 0.559$) was assessed by one construct using two-items exploring young people's sense of safety at school (i.e. 'To what extent is your school a good place to be?' and 'Teachers at my school who see students hurting each other will do something to stop them') and six-items related to community and sense of safety (e.g. 'People in my neighbourhood can be trusted' and 'How safe do you consider your neighbourhood to be?').

School experience was measured using nine service-use experience items tailored for school contexts. Six items explored a sense of empowerment (CA $\alpha = 0.871$; NZ $\alpha = 0.874$; SA $\alpha = 0.840$) relating to opportunities for personal agency at school (e.g. 'I feel like I have choices at school' and 'I have a say in school activities, and can ask for what I need') and to a sense of educational relevance (e.g. 'I receive an education that is right for me' and 'This was the education I needed'). Three items explored young people's experience of staff respect (CA $\alpha = 0.757$; NZ $\alpha = 0.809$; SA $\alpha = 0.716$) in terms of comprehension (e.g. 'Teachers and/or staff speak in a way that I understand'), and culture, ethnicity, and religion (e.g. 'Teachers and/or staff respect my religious and spiritual beliefs').

Resilience was measured using the 28-item version of the Child and Youth Resilience Measure (CYRM-28) (Liebenberg, Ungar, & Van de Vijver, 2012),

which assesses socio-ecological resources relevant to youths' resilience processes using eight constructs. These include peer support (two-items; CA $\alpha = 0.847$; NZ $\alpha = 0.784$; SA $\alpha = 0.738$), personal skills (five-items; CA $\alpha = 0.655$; NZ $\alpha = 0.672$; SA $\alpha = 0.588$), social skills (four-items; CA $\alpha = 0.708$; NZ $\alpha = 0.734$; SA $\alpha = 0.616$), psychological care-giving resources (five-items; CA $\alpha = 0.848$; NZ $\alpha = 0.786$; SA $\alpha = 0.765$), physical care-giving resources (two-items; CA $\alpha = 0.441$; NZ $\alpha = 0.314$; SA $\alpha = 0.490$), spiritual resources (three-items; CA $\alpha = 0.709$; NZ $\alpha = 0.754$; SA $\alpha = 0.400$), cultural resources (five-items; CA $\alpha = 0.702$; NZ $\alpha = 0.715$; SA $\alpha = 0.604$), and educational resources (two-items; CA $\alpha = 0.609$; NZ $\alpha = 0.702$; SA $\alpha = 0.487$).

Statistical analysis

Given the small amount of missing data (0.6%) the Estimation Maximization (EM), or maximum likelihood, imputation method was used to manage missing data (Enders, 2010). Little's MCAR test (see Little, 1988) determined that data were not missing completely at random ($p < 0.001$). Analyses of missing data patterns using cross-tabulations and variance *t*-tests indicated that the missing data mechanism was missing at random (or MAR—see Enders, 2010).

Cross-tabulations showed differences in the missing values by gender, age, and country. Males, older youth, and Canadian youth were most likely to not respond. *T*-tests identified a number of variables whose patterns of missing data were influenced by several other variables in the dataset. Since the missingness could be explained by observed information, we (i.e. the authors) adjusted for the missingness through imputation methods.

A two-step procedure was used to analyse the data. First, moderation analyses were conducted to assess the ways in which experiences of respect and empowerment at school enhanced the relationship between resilience resources and risks. These analyses were conducted per country using the Process Procedure for SPSS Release 2.13 (Hayes, 2013). To avoid multicollinearity (given the interactive nature of resilience constructs, as well those measuring school experience) analyses were run independently. The resilience resources were specified as predictors of decreased perceptions of community and family risks (i.e. limited parental/caregiver affection, limited parental/caregiver-child warmth, limited parental/caregiver presence, and elevated community risks).School experiences (i.e. extent to which youth experience school staff as respectful, and extent to which youth experience the school context as empowering) were specified as possible moderators. Second, a MANOVA was conducted to explore school experience amongst specific subpopulations of young people, per country (i.e. sex and age). Data were analysed using IBM SPSS Statistics 22. The following hypothesis was used to structure the analysis reported here:

When schools develop empowering and respectful relationships with students, young people's resilience processes are bolstered resulting in reduced reporting of community and family risk.

Results

To test the hypothesis that experiences of empowering and respectful schooling moderate the relationship between youths' perceptions of resilience resources (related to individual, relational, and contextual components) and community and family risks (i.e. limited parental/caregiver affection, warmth and presence, as well as risks in neighbourhoods), moderation analyses were conducted. During the analyses the Process Procedure for SPSS Release 2.13 centred the moderating and independent variables, and the confidence intervals (CI) were bias corrected at a 95% level of confidence with 10000 bootstraps (Hayes, 2013).

Results indicated the following significant moderations by country:

- In Canada: Experiences of respectful schooling moderate the negative relationship between peer support and limited parental/caregiver-child warmth ($\Delta R^2 = 0.01$, $\Delta F(1, 1064) = 5.70$, $p = 0.02$, $b = -0.04$, $t(1064) = -2.39$, $p = 0.02$, CI [−0.08, −0.01]).
- In New Zealand: Empowering school experiences moderate the negative relationship between educational resources and limited parental affection ($\Delta R^2 = 0.01$, $\Delta F(1, 587) = 6.03$, $p = 0.01$, $b = -0.04$, $t(587) = -2.45$, $p = 0.01$, CI [−0.07, −0.01]). In addition, experiences of respectful schooling moderate the positive relationship between peer support and limited parental/caregiver-child warmth ($\Delta R^2 = 0.01$, $\Delta F(1, 587) = 5.82$, $p = 0.02$, $b = 0.07$, $t(587) = 2.41$, $p = 0.02$, CI [0.01, 0.13]).
- In South Africa: Experiences of respectful schooling moderate the negative relationship between educational resources and community risks ($\Delta R^2 = 0.01$, $\Delta F(1, 724) = 5.83$, $p = 0.02$, $b = -0.20$, $t(587) = -2.41$, $p = 0.02$, CI [−0.36, −0.04]).

Examination of the interaction plots indicate that when young people reported higher scores of respectful and empowering schooling the negative relationship between resilience resources and risk strengthened for CA, NZ and SA. The only exception to this pattern was found for NZ—the relationship between peer support and limited caregiver-child warmth grew stronger as experiences of respectful schooling increased.

MANOVA was used to test for differences in sex and binary age (15 years and younger, and 16 years and older) on respectful and empowering experiences of schooling. Only the significant moderations identified above were investigated. Pillai's trace was used to assess multivariate tests (Tabachnick & Fidell, 2007). All but two of the multivariate main effects were significant—CA: *sex*: Pillai's Trace $= 0.018$, $F(2, 1061) = 9.64$, $p = 0.000$, $\eta^2 = 0.018$; *binary age*: Pillai's Trace $= 0.003$, $F(2, 1061) = 1.81$, $p = 0.164$, $\eta^2 = 0.003$; NZ: *sex*: Pillai's Trace $= 0.016$, $F(2, 586) = 4.82$, $p = 0.008$, $\eta^2 = 0.016$; *binary age*: Pillai's Trace $= 0.007$, $F(2, 586) = 2.05$, $p = 0.130$, $\eta^2 = 0.007$; SA: *sex*: Pillai's Trace $= 0.016$, $F(2, 722) = 5.69$, $p = 0.004$, $\eta^2 = 0.016$; *binary age*: Pillai's Trace $= 0.015$, $F(2, 722) = 5.59$,

$p = 0.004$, $\eta^2 = 0.015$. Results indicate that while significant differences were prevalent within CA, NZ, and SA, no double interactions (i.e. sex and binary age) were significant.

The univariate effect of sex was significant in CA and NZ where girls reported greater experiences of respectful schooling (CA: $M = 12.33$, $SD = 2.26$; NZ: $M = 12.26$, $SD = 2.13$; CA: $F = 14.67$, $df = 1$, $p = 0.000$; NZ: $F = 9.65$, $df = 1$, $p = 0.002$) compared to boys (CA: $M = 11.67$, $SD = 2.64$; NZ: $M = 11.66$, $SD = 2.17$). The univariate effect of age was only significant for youth in SA where younger youth reported higher experiences of respectful schooling ($M = 12.51$, $SD = 2.23$; $F = 11.160$, $df = 1$, $p = 0.001$) than older youth ($M = 11.78$, $SD = 2.39$). No significant univariate effect was found for experiences of empowering schooling.

Discussion

The current study sought to understand the ways in which school-based experiences of respect and/or empowerment moderate the protective aspects of resilience when young people from socio-economically marginalized communities are confronted by contextual risk (i.e. family and community risk). Results of the moderation analysis demonstrate the interaction of risks, school experience, and resilience resources. They also demonstrate the ways in which this interaction varies across sites.

For young people in South Africa, the greater their experiences of respectful schooling, and the higher their perceptions of educationally based resilience resources (e.g. 'Getting an education is important to me' and 'I feel I belong at my school'), the less likely they are to experience their community as dangerous. Furthermore, younger youth in South Africa are more likely to have respectful experiences than older youth. Similarly, young people in Canada, who experience their teachers as respectful, and who have strong peer support (e.g. 'I feel supported by my friends'), are less likely to report experiences of poor parental quality (i.e. low parental/caregiver warmth). In this context, girls are more likely to experience schools as respectful, than boys. In New Zealand, two moderation effects are significant. First, when young people experience better educational resources and have experiences at school that are empowering, they are less likely to report low parental affection. Interestingly however, young people who have strong peer support and experiences of respectful schooling, are more likely to report low levels of parental relationship quality (i.e. parental/caregiver warmth). And, as with young people in Canada, girls in New Zealand are more likely to experience schools as respectful. While the effect sizes in this analysis are quite small, Field (2009) and Cohen, Cohen, West, and Aiken (2003) caution that when interpreting the effect sizes of regression analyses the area of research, as well as complexity of the model or theory being investigated, should be kept in mind—the more complex the model or theory the less likely it is that the effect size will be high. Due to the complex and interactive nature of resilience, as well as the fact that we investigated individual segments of the resilience process, these findings are not unexpected.

While there are unique patterns across the three contexts there are also important similarities. Experiences of teacher respect (i.e. 'Teachers and/or staff speak in a way that I understand', 'Teachers and/or staff respect my religious and spiritual beliefs', and 'Teachers and/or staff are sensitive to my cultural and ethnic background') are of great importance to the resilience processes of young people in both global North and global South settings. In Canada and South Africa, these experiences augment young people's awareness of available supportive resources (peer support and or educational resources) when facing contextually relevant risks located in the family or community. That said, our analysis shows that in New Zealand, when young people have strong peer support and feel respected at school, they appear to be more likely to report a lack of caregiver warmth. However, when having school-based empowering (as opposed to respectful) experiences, young people are less likely to report low caregiver affection. Explaining this complex pattern is beyond the scope of this article, but we do wonder whether this might relate to young people being able to disclose a lack in their relationship with caregiving adults, given their connection to other adults and peers. The experience of respectful connectedness might throw opposite experiences into sharper relief. Such findings, and the questions they raise, emphasize the need for further studies to understand the complex dynamics of the pathways of resilience. Irrespective of these questions, the importance of the current findings is the apparent need for school psychologists to manage the facilitation of enabling, respectful school contexts in ways that do not jeopardize youths' perceptions of caregiving resilience resources, because ideally students from risk-laden contexts require as many relational resources as possible.

Prior studies have documented the resilience-supporting power of service providers (including school staff). These studies have occurred in, amongst others, Canada (e.g. Ungar et al., 2013), South Africa (e.g. Theron & Theron, 2014; Van Rensburg, Theron, Rothmann, & Kitching, 2013), Australia (e.g. Johnson, 2008), and New Zealand (e.g. Sanders & Munford, 2014). The current results are distinct in that they emanate from a multi-country analysis that illustrates how global North and South schools facilitate resilience processes in similar, and different, ways for young people in marginalized communities who are still attending school. These findings have special significance for school psychologists globally, given that these professionals are well-placed to influence teachers, school-based service providers, and school systems to respect students and to purposefully enact such respect, and to encourage youth agency (Theron et al., 2014). Irrespective of contextually based risks and the resources young people draw on to manage these risks, these findings suggest that school psychologists and other professionals may work to counteract the influence of family risk and community risk through building positive (i.e. respectful and empowering) relationships with youth facing higher levels of these risks.

In addition to highlighting the ways in which schools are important for resilience, the results suggest that, across diverse contexts, socio-demographic variables shape young people's access to school-based resilience-supporting resources in fairly stereotypical ways. In particular, the finding that girls in Canada and New

Zealand were more likely to experience respect and empowerment in a school context echoes earlier findings that being male is likely to obstruct school-related resilience resources such as quality teacher-student interaction or academic success (e.g. Murray & Zvoch, 2011; Umaña-Taylor, Wong, Gonzales, & Dumka, 2012). This finding raises important questions about what teachers in South Africa are doing that teachers in New Zealand and Canada can learn from. Simultaneously, there are concerns relating to how teachers and school systems can jeopardize resilience processes when these adults and institutions are prejudiced against girls (Cerise, Francavilla, Loiseau, & Tuccio, 2013). For example, Abukari and Laser (2013) documented that student-teacher relationships were inversely related to Ghanian girls' academic success, possibly because of deeply entrenched expectations of girls' incapacity for academic success. The results of the current study should, therefore, not be interpreted as proof that girls do not require continued teacher and school-based support. Instead, findings from this analysis demonstrate the importance of school environments that are respectful and empowering for all students. What our results also highlight in this regard, is that greater efforts need to be made to support boys, in addition to girls. Psychologists, teachers, and other school-based service providers should be encouraged toward mindfully including *all* vulnerable students in resilience-supporting interactions, regardless of sex, but with special care not to neglect boys. Put differently, school psychologists need to champion support for resilience processes in ways that 'resist the destructive and disempowering messages [and practices] regarding gender' (Jordan, 2013, p. 75).

A worrying socio-demographic influence is how differently younger and older South African adolescents report their experience of protective, school-related resources. This is particularly worrying given prior findings that older, black South African adolescents are more likely to have experienced negative life events and to report higher vulnerability compared with younger adolescents (e.g. Govender & Killian, 2001; Wild, Flisher, & Robertson, 2011). Ideally, respectful school staff and opportunities for agency should be part of students' school experience, regardless of age. Again, this calls for school psychologists (particularly those in South Africa) to advocate for, and train, teachers and other school-staff to also treat older students respectfully. Likewise, school psychologists need to encourage school systems to regularly support younger students to experience education as relevant and agentic.

The above implications for school psychologists and school systems need to be read against the backdrop of a number of limitations in our study and analysis. First, the data are self-reported and cross-sectional. They ideally need to be supplemented by future research that includes varied and longitudinal data collection strategies, including observing how school systems facilitate—and fail to facilitate—youth resilience processes (Martin, 2013; Murray & Zvoch, 2011). The data reflect students' accounts only. Gaining insight into teachers' perspectives (as in Murray & Zvoch, 2011) of the ways in which schools moderate the impact of contextual risks on youth-supporting resilience resources, and the ways in which students themselves advance and/or obstruct such processes, would deepen understanding of how schools matter for resilience. The study does also not account for

the ethnicity of participants themselves or the gender, age, or ethnicity of the teachers that youths' self-reported on—these variables could well influence teacher promotion of resilience (Martin & Marsh, 2005). The results reflect the experiences of high school students and can, therefore, not be generalized to younger children. Finally, we did not conduct invariance tests (Van de Vijver & Leung, 1997) on these measures of risk, resilience, and school experience, but rather assumed that participants interpreted the questions in the same way. In this regard, it should be noted however, that each research team went to considerable effort to train interviewers in the meaning of questions and care was taken during data collection to ensure that youth understood the meaning of all questions asked.

Conclusion

This analysis highlights the capacity of teachers and schools to make a positive difference to young people confronting family and community risks. The results imply that teachers and schools, as well as peers, can reduce young people's resilience processes (e.g. when enabling and respectful school experiences diminish young people's perception of additional relational resources, such as caring parents). Still, the quality of relationships school professionals establish with students makes a very powerful contribution to their resilience—in particular when teachers/schools facilitate respectful and agentic education experiences, resilience resources are bolstered. School psychologists in particular have a responsibility to make teachers and school systems aware of their powerful potential.

Commitment to advocating for school staff to intentionally focus on creating positive relationships within school systems in order to the facilitate resilience could, perhaps, be at odds with American school psychologists' traditional preoccupation with 'assessment, identification or diagnosis' (Wnek, Klein, & Bracken, 2008, p. 154). It fits better with an expanded understanding of school psychologists' roles comprising 'assessment, intervention, consultation, management, training, and less frequently, research' (Woods, Bond, Tyldesley, Farrell, & Humphrey, 2011, p. 370). The latter is potentially more useful to young people's positive outcomes. This is particularly so, if this role is interpreted to include school psychologists' championing of the critically important role schools can play in fostering the resilience of young people who are vulnerable, or more specifically, how all school staff can, and should, play a key role in augmenting the resilience resources available to youth confronted by adversity.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: The research reported in this article was generously

funded by CIHR, IDRC, and the Ministry of Business, Innovation and Employment, New Zealand. The aforementioned are not responsible for how the study data were interpreted.

Notes

1. Given the marginalization of participating youth, it is not uncommon for youth to start their schooling later in life, and/or to experience disruptions to their education.
2. Information on sex was missing for three youth (0.1%).

References

Abukari, Z., & Laser, J. A. (2013). Gender differences in academic outcomes among Ghanaian youth: The role of protective and risk factors. *Journal of Community Psychology*, *41*(1), 117–138. doi: 10.1002/jcop.21518.

Anderson, A. R., Christenson, S. L., Sinclair, M. F., & Lehr, C. A. (2004). Check and connect: The importance of relationships for promoting engagement with school. *Journal of School Psychology*, *42*(2), 95–113. doi: 10.1016/j.jsp.2004.01.002.

Bennett, S., & Coggan, C. (1999). *A comprehensive evaluation of the Mentally Healthy Schools Initiative*. Auckland: Injury Prevention Research Centre, University of Auckland.

Cerise, S., Francavilla, F., Loiseau, E., & Tuccio, M. (2013). *Why discriminatory social institutions affecting adolescent girls matter*. OECD Development Centre. Retrieved from https://www.researchgate.net/profile/Francesca_Francavilla2/publication/271826349_Why_discriminatory_social_institutions_affecting_adolescent_girls_matter/links/54d231590cf28370d0e1d915.pdf.

Christle, C. A., Jolivette, K., & Nelson, C. M. (2007). School characteristics related to high school dropout rates. *Remedial and Special Education*, *28*(6), 325–339. doi: 10.1177/07419325070280060201.

Cohen, C., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioural sciences* 3rd ed. Mahwah, NJ: L. Erlbaum Associates.

Croninger, R. G., & Lee, V. E. (2001). Social capital and dropping out of high school: Benefits to at-risk students of teachers' support and guidance. *Teachers College Record*, *103*(4), 548–581. doi: 10.1111/0161-4681.00127.

Enders, C. (2010). *Applied missing data analysis*. New York, NY: The Guildford Press.

Field, A. (2009). *Discovering statistics using SPSS* (3rd ed.). Thousand Oaks, CA: Sage.

Finn, J. D., & Rock, D. A. (1997). Academic success among students at risk for school failure. *Journal of Applied Psychology*, *82*(2), 221–234. doi: 10.1037//0021-9010.82.2.221.

Frawley, D., McCoy, S., Banks, J., & Thornton, M. (2014). Affective school engagement and self-concept: How are Irish boys and girls faring?. *Child Indicators Research*, *7*(4), 861–879. doi: 10.1007/s12187-014-9247-5.

Frønes, I. (2010). Status Zero youth in the welfare society. *Child Indicators Research*, *3*(3), 313–326. doi: 10.1007/s12187-009-9056-4.

Furrer, C., & Skinner, E. (2003). Sense of relatedness as a factor in children's academic engagement and performance. *Journal of Educational Psychology*, *95*(1), 148–162. doi: 10.1037/0022-0663.95.1.148.

Goeke-Morey, M. C., Taylor, L. K., Merrilees, C. E., Cummings, E. M., Cairns, E., Shirlow, P. (2013). Adolescents' educational outcomes in a social ecology of parenting, family and community risks in Northern Ireland. *School Psychology International*, *34*(3), 243–256. doi: 10.1177/0143034311435162.

Govender, K., & Killian, B. J. (2001). The psychological effects of chronic violence on children living in South African townships. *South African Journal of Psychology*, *31*(2), 1–11. Retrieved from http://reference.sabinet.co.za/sa_epublication_article/sapsyc_v31_n2_a1.

Hayes, A. (2013). Introduction to mediation, moderation and conditional process analysis: A regression-based approach. New York, NY: The Guilford Press.

Howieson, C., & Iannelli, C. (2008). The effects of low attainment on young people's outcomes at age 22–23 in Scotland. *British Educational Research Journal*, *34*(2), 479–508. doi: 10.1080/01411920701532137.

Johnson, B. (2008). Teacher-student relationships which promote resilience at school: A micro-level analysis of students' views. *British Journal of Guidance and Counselling*, *36*(4), 385–398. doi: 10.1080/03069880802364528.

Jordan, J. V. (2013). Relational resilience in girls. In S. Goldstein, & R. Brooks (Eds.), *Handbook of resilience in children* (2nd ed. pp. 73–86). New York, NY: Springer Science & Business Media.

Liebenberg, L., Ungar, M., & Van de Vijver, F. (2012). Validation of the Child and Youth Resilience Measure-28 (CYRM-28) among Canadian youth with complex needs. *Research on Social Work Practice*, *22*(2), 219–226. doi: 10.1177/1049731511428619.

Little, R. J. A. (1988). A test of missing completely at random for multivariate data with missing values. *Journal of the American Statistical Association*, *83*(404), 1198–1202. doi: 10.2307/2290157.

Lucas, S. R. (2001). Effectively maintained inequality: Education transitions, track mobility, and social background effects. *American Journal of Sociology*, *106*(6), 1642–1690. http://www.jstor.org/stable/10.1086/321300?origin=JSTOR-pdf

Martin, A. J. (2013). Academic buoyancy and academic resilience: Exploring 'everyday' and 'classic' resilience in the face of academic adversity. *School Psychology International*, *34*(5), 488–500. doi: 10.1177/0143034312472759.

Martin, A., & Marsh, H. (2005). Motivating boys and motivating girls: Does teacher gender really make a difference?. *Australian Journal of Education*, *49*(3), 320–334. doi: 10.1177/000494410504900308.

Murray, C., & Zvoch, K. (2011). Teacher-student relationships among behaviorally at-risk African American youth from low-income backgrounds: Student perceptions, teacher perceptions, and socioemotional adjustment correlates. *Journal of Emotional and Behavioral Disorders*, *19*(1), 41–54. doi: 10.1177/1063426609353607.

Noltemeyer, A. L., & Bush, K. R. (2013). Adversity and resilience: A synthesis of international research. *School Psychology International*, *34*(5), 474–487. doi: 10.1177/0143034312472758.

Prior, D., & Mason, P. (2010). A different kind of evidence? Looking for 'what works' in engaging young offenders. *Youth Justice*, *10*(3), 211–226. doi: 10.1177/1473225410381688.

Ravet, J. (2007). Making sense of disengagement in the primary classroom: A study of pupil, teacher and parent perceptions. *Research Papers in Education*, *22*(3), 333–362. doi: 10.1080/02671520701497589.

Resilience Research Centre. (2007). *Pathways to Resilience Youth Measure*. Halifax, NS: Dalhousie University.

Samel, A. N., Sondergeld, T. A., Fischer, J. M., & Patterson, N. C. (2011). The secondary school pipeline: Longitudinal indicators of resilience and resistance in urban high schools under reform. *The High School Journal*, *94*(3), 95–118. doi: 10.1353/hsj.2011.0005.

Sanders, J., & Munford, R. (2014). Youth-centred practice: Positive youth development practices and pathways to better outcomes for vulnerable youth. *Children and Youth Services Review*, *46*, 160–167. doi: 10.1016/j.childyouth.2014.08.020.

Sharkey, J. D., You, S., & Schnoebelen, K. (2008). Relations among school assets, individual resilience, and student engagement for youth grouped by level of family functioning. *Psychology in the Schools*, *45*(5), 402–418. doi: 10.1002/pits.20305.

Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics*. Boston, MA: Pearson Education.

Theron, L. C., & Donald, D. R. (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, L., Liebenberg, L., & Malindi, M. (2014). When schooling experiences are respectful of children's rights: A pathway to resilience. *School Psychology International*, *35*(3), 253–265. doi: 10.1177/0142723713503254.

Theron, L. C., & Theron, A. M. C. (2014). Education services and resilience processes: Resilient black South African students' experiences. *Child and Youth Services Review*, *47*(3), 297–306. doi: 10.1016/j.childyouth.2014.10.003.

Toland, J., & Carrigan, D. (2011). Educational psychology and resilience: New concept, new opportunities. *School Psychology International*, *32*(1), 95–106. doi: 10.1177/0143034310397284.

Umaña-Taylor, A. J., Wong, J. J., Gonzales, N. A., & Dumka, L. E. (2012). Ethnic identity and gender as moderators of the association between discrimination and academic adjustment among Mexican-origin adolescents. *Journal of Adolescence*, *35*(4), 773–786. doi: 10.1016/j.adolescence.2011.11.003.

Ungar, M., Liebenberg, L., Dudding, P., Armstrong, M., & Van de Vivjer, F. J. R. (2013). Patterns of service use, individual and contextual risk factors, and resilience among adolescents using multiple psychosocial services. *Child Abuse and Neglect*, *37*(2–3), 150–159. doi: 10.1016/j.chiabu.2012.05.007.

Van de Vijver, F. J. R., & Leung, K. (1997). *Methods and data analysis for cross-cultural research*. London: Sage.

Van Rensburg, A. C., Theron, L. C., Rothmann, S., & Kitching, A. (2013). The relationship between services and resilience: A study of Sesotho-speaking youths. *The Social Work Practitioner-Researcher*, *25*(3), 286–308.

Wild, L. G., Flisher, A. J., & Robertson, B. A. (2011). Risk and resilience in orphaned adolescents living in a community affected by AIDS. *Youth and Society*, *45*(1), 140–162. doi: 10.1177/0044118X11409256.

Wnek, A. C., Klein, G., & Bracken, B. A. (2008). Professional development issues for school psychologists—what's hot, what's not in the United States. *School Psychology International*, *29*(2), 145–160. doi: 10.1177/0143034308090057.

Woods, K., Bond, C., Tyldesley, K., Farrell, P., & Humphrey, N. (2011). The role of school psychologists in child protection and safeguarding. *School Psychology International*, *32*(4), 361–376. doi: 10.1177/0143034311406812.

Author biographies

Linda Liebenberg, PhD, is Adjunct Professor, Faculty of Graduate Studies, Dalhousie University, Canada. She is a co-investigator of the Pathways to Resilience study. She co-conceptualized this article, co-analysed the data, and directed the writing up of the manuscript.

Linda Theron, D.Ed., is a professor, Optentia Research Focus Area, Faculty of Humanities, North-West University, South Africa. She is the co-principal investigator in the Pathways to Resilience study. She co-conceptualized this article, directed the development of implications implicit in the findings, and co-wrote the first and final drafts.

Jackie Sanders, PhD, Associate Professor, Practice Research and Professional Development Hub, Massey University, New Zealand. She is co-principal investigator on the New Zealand Pathways to Resilience study, and lead the writing of the literature review and assisted with the interpretation of the findings.

Robyn Munford, PhD, is Professor, Practice Research and Professional Development Hub, Massey University, New Zealand. She is co-principal investigator on the New Zealand Pathways to Resilience study, and contributed to the literature review and assisted with the interpretation of the findings.

Angelique van Rensburg, PhD, is a post-doctoral research fellow, Optentia Research Focus Area, Faculty of Humanities, North-West University, South Africa. She co-analysed the data.

Sebastian Rothmann, PhD, is professor and Director, Optentia Research Focus Area, Faculty of Humanities, North-West University, South Africa. He reviewed and guided the analysis of the data.

Michael Ungar, PhD, is Professor, School of Social Work, and Director of the Resilience Research Centre, Dalhousie University, Canada. He is the principal investigator of the Pathways to Resilience study.