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How school ecologies facilitate resilience among adolescents with Intellectual Disability: Guidelines for teachers

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The global prioritisation of the inclusion of learners with disabilities, and of vulnerable young people's resilience, means that teachers worldwide require insight into how best to facilitate the resilience of adolescents made vulnerable by intellectual disability (ID). To provide such insight, we conducted a secondary data analysis of a multiple case study of resilient adolescents with ID attending special schools in Gauteng Province, South Africa. The visual and narrative data that inform this case study were generated by resilient adolescents with ID (n = 24), and their teachers (n = 18). Four school-related themes emerge from their accounts of resilience-supporting factors associated with their schools for the physically and severely intellectually disabled (SPSID). From these, we distill three uncomplicated actions mainstream school ecologies can execute in order to enable the resilience of included adolescents with ID. Their simplicity and ordinariness potentiate universally useful ways for mainstream teachers to champion the resilience of included adolescents with ID.

Keywords: adolescents; formal services; health and well-being; inclusion; intellectual disability; qualitative research; resilience; SPSID; teachers

Introduction

Adolescents with intellectual disability (ID) are a worldwide phenomenon. The overall incidence of ID, according to a meta-analysis of 52 studies, was determined as 10.37 per 1,000 of the world's population (Maulik, Mascarenhas, Mathers, Dua & Saxena, 2011). With a world population of around 7.2 billion in 2014 (Worldometers, n.d.), the number of persons with ID comes to 74,664,000, on average. The South African Department of Basic Education (DBE) (2014) reports that, in South Africa (SA), learners with primary disability – severe to mild ID (the focus of this article) – constitute 52,517. This number excludes learners with other primary disabilities such as cerebral palsy, autistic spectrum disorder, physical disability, behaviour disorder, and epilepsy, where ID may be part of the barriers to learning. These numbers urge understanding of, and attention to learners with ID.

Learners with ID are typically described as vulnerable and must overcome various challenges daily (Elegbeleye, 2013), including how they are treated by their social ecologies, e.g., being discriminated against (Kock, Molteno, Mfiki, Kidd, Ali, King & Strydom, 2012) or abused (Reiter, Bryen & Shachar, 2007). They are also challenged by risks associated with ID, e.g. poor social skills relating to poor development of language and communication (Hartley & Sikora, 2010) and psychiatric disorders, including conduct, anxiety, and emotional disorders and ADHD (Emerson & Hatton, 2007). Because of their diminished cognitive skills, they experience repeated failure and poor academic performance, possibly leading to poor self-image and self-worth (Uys, 2005). Because they need ongoing, often lifelong support (particularly when they also have physical barriers), ID can cause familial, financial, and emotional stress for those responsible for them (Nolting, 2010), heightening their vulnerability.

The international education system is convinced that the fairest way of supporting individuals with ID is to include them in mainstream education (Sapon-Shevin, 2007; United Nations Educational, Scientific and Cultural Organization (UNESCO), 1994). White Paper 6 (WP6) Special Needs Education: Building an Inclusive Education and Training System (Department of Education (DoE), 2001) and subsequent policy and guidelines (e.g., DBE, 2010) endorse inclusive education practices in South Africa. In addition to mainstream accommodation of learners with disabilities, South African inclusion practice includes special schools that cater for learners with severe disabilities, as well as full-service schools (FSS) (DBE, 2010). FSS are regular or mainstream schools (i.e., not special schools) that are designated to provide quality education to all learners, including young people with any disability. In the latter instance, FSS are tasked with, and capacitated to provide education that is differentiated according to individual need. In the long run, FSS will broaden access to differentiated quality education and also model inclusive practices for all other mainstream schools (DBE, 2010; Engelbrecht, Nel, Smit & Van Deventer, 2015; Walton, 2014). Currently, the reality is that adolescents challenged by ID are typically accommodated in special or non-regular schools, locally known as schools for the physically and severely intellectually disabled (SPSID). Like other special schools, SPSIDs are expected to serve as resource centers and help capacitate FSS to accommodate all learners, irrespective of disability (DBE, 2010; DoE, 2001; Walton, 2014).

Internationally, reports of successful implementation of inclusive tuition are divergent. According to Muskens's (2013) comparison of 10 European countries, only Scotland, Spain, and Italy had replaced all special schools with inclusive schools. Only Scotland achieved a score of 6 on a seven-point rating of effective

inclusive education (1 indicating poor, and 7 excellent). For the other European countries, effectiveness was rated between 2 and 5. Unsuccessful inclusion practices sometimes results in school attrition or disruptive behaviour, which Muskens (2013) ascribes to pressure associated with unrealistic expectations of included pupils at (high) risk. In response, the United Kingdom recently reviewed its special education needs policy to allow for the accommodation of learners with disabilities in exclusive schools (Gillie, 2012; Tomlinson, 2012).

Inclusion is similarly hamstrung in Africa. In Kenva, for instance, only 1% of all youth with disability (including ID) access higher education, and their success rate is poor (Kochung, 2011). Sulaiman (2010) ascribes the failure of inclusion in Lagos, Nigeria, to poverty, which hampers provision of necessary apparatus and services. In SA, the picture is no brighter. Following the establishment of a democracy in 1994, facilitating equal education rights for all was prioritised (Engelbrecht, 2006). With the release of WP6 (DoE, 2001), the government supported education transformation aimed at including previously marginalised groups, including learners with disabilities, in ordinary education. This process is slow, and characterised more by failures and problems (Donohue & Bornman, 2014; Geldenhuys & Wevers, 2013; Ngcobo & Muthukrishna, 2011) than successes (Gous, Eloff & Moen, 2014).

Ineffective inclusion practices, both locally and internationally potentially place adolescents with ID at (greater) risk (Geldenhuys & Wevers, 2013; Muskens, 2013). There are various reasons for this. The realisation of FSS has been slow, and thus many learners with ID remain in mainstream schools that have not been capacitated to support the unique learning needs associated with ID (Walton, 2014). As in international studies, national research shows that learners with disabilities (including ID) are often expected to adjust to the mainstream school and class environment, instead of adapting mainstream spaces to such learners' individual needs and facilitating their optimal development (Donohue & Bornman, 2014; Nel, Engelbrecht, Nel & Tlale, 2014; Ngcobo & Muthukrishna, 2011; Obiakor, Harris, Mutua, Rotatori & Algozzine, 2012). Inadequate teacher skills and knowledge to accommodate the disabled, including adolescents with ID, are partly to blame. Teachers lack the skills/willingness to adapt school and classroom environments and tailor lessons, assignments, and assessment to suit every child's abilities (Donohue & Bornman, 2014; Geldenhuys & Wevers, 2013; Kalenga, Fourie & Maphosa, 2014). Some teachers and/or fellow-learners label and bully learners with disabilities. This, and teachers' unrealistic expectations of learners with disability, prompts despondence, long absences, and/or attrition (Donohue & Bornman, 2014; Geldenhuys & Wevers, 2013; Ngcobo & Muthukrishna, 2011; Obiakor et al., 2012). Such premature school-leaving contributes to the disturbing SA statistics of 8% of seven to 15-year-olds and 33% of 16 to 18-year-olds with a disability being non-school attending (DBE, 2013).

Given the above, supporting schools and teachers to champion the resilience of included young people with ID can be taken as a pressing global agenda.

Focus of the Current Article

Ungar (2008:225) defines resilience, or the positive adjustment to risks (such as ID), as a reciprocal process between the individual and his or her social ecology. While the individual's physical and social ecology is tasked with making meaningful resources available to promote/sustain the individual's well-being, it is the individual's responsibility to steer towards, and make good use of these resources. School ecologies, in particular, are key to facilitating resilience in learners made vulnerable by risks (including ID) (Ungar, Russell & Connelly, 2014). This pertains to learners locally (see for example Theron, Liebenberg & Malindi, 2014), and internationally (see for example Sanders, Munford & Liebenberg, 2012; Ungar & Liebenberg, 2013). Nevertheless, there is negligible understanding of how school ecologies support the resilience of adolescents with ID.

International studies make passing mention of the fact that special schools afford adolescents with ID an opportunity to experience belonging and participate in extra-curricular activities (Fourie & Theron, 2012; Gilmore, Campbell, Shochet & Roberts, 2013; Hsieh & Donahue, 2010; Murray, 2003), but there are no detailed explanations of how mainstream school ecologies or teachers champion resilience among these adolescents. Likewise, there are no published studies of how SA school ecologies support resilience in adolescents with ID. Without this knowledge, teachers and school ecologies – both locally and internationally - cannot be capacitated to include adolescents with ID in ways that support their optimal development. Such capacitation is crucial, given the concern that teachers in mainstream schools (including FSS) are insufficiently skilled and/or unwilling to meaningfully accommodate learners with ID (Donohue & Bornman, 2014; Geldenhuys & Wevers, 2013; Ngcobo & Muthukrishna, 2011; Walton, 2014). The same applies to teachers internationally (Engelbrecht, 2013; Muskens, 2013).

Thus, there is a global need to answer the following question: "what do adolescents with ID's accounts reveal about how their school ecologies matter for resilience, and how might these insights support mainstream teachers (i.e., also FSS teachers) and school ecologies towards optimal support of included learners with ID?"

Method

For the purposes of this article we conducted secondary data analysis (Creswell, 2012). We reanalysed an existing saturated data set generated by resilient adolescents with ID and their teachers. As detailed below, all of these adolescents attended special schools (i.e. SPSID). Given the policy expectation that special schools share their expertise with FSS schools to optimise inclusion practices (Walton, 2014), learning how SPSID schools enable resilience among their learners is a step in this direction. Previous analyses of this data-set (Hall & Theron, 2016) did not explicitly consider the way in which school ecologies (i.e., school staff, other school-attending youth, the modus operandi of special schools) facilitated resilience in these adolescents and how such insights could support mainstream (also FSS) teachers to facilitate resilience among adolescents challenged by ID.

Research Design Informing Existing Data-Set

The data-set constituted an instrumental multiple case study (Stake, 2008) of resilient adolescents with ID. These rich case studies offered opportunity to examine and understand resilience from the perspective of various adolescents with ID, and their teachers (Yin, 2014). The guiding theoretical lens was Ungar's (2011) Social Ecology of Resilience Theory. Accordingly, we did not focus on the individual strengths of adolescents with ID, but on how their social ecology facilitated adolescents' access to meaningful resources/experiences that supported them to cope well with the challenges of ID (Ungar, 2011, 2013).

Case Informants

Each case comprised an adolescent formally diagnosed with ID, aged 12 to 19, attending a public SPSID in Gauteng (South Africa (SA)), and identified as resilient by an advisory panel (AP) or gatekeeper. Advisory Panel/gatekeeper nomination of resilient participants is a globally popular method of recruitment in resilience studies (e.g., Fourie & Theron, 2012; Liebenberg & Ungar, 2014). The adolescents (n = 24) were the primary informants and their class teachers (n = 18) were included as secondary informants (Given, 2008).

The AP facilitated the recruitment of the first 13 primary informants using the criteria listed below. It consisted of four teachers, two therapists, and three management staff, who interacted with adolescents with ID daily, and whose training and/or professional experience offered them insight into resilience. As reported elsewhere (Hall & Theron, 2016), the author and AP reached consensus about what indicated resilience in these adolescents. This included that they attended school, actively participated in school activities, could master basic life skills, exhibited good social behaviour and general emotional well-being, knew peer-acceptance, and had stable friendships (of six months and longer). Then, using these same criteria, another 11 primary informants were recruited at four other SPSID in Gauteng through gatekeepers (one teacher, one deputy principal, and two therapists). The primary informants exhibited diversity in race, age (12 to 19 years), gender, home language, schools, and risks additional to ID (see Table 1).

Additionally, 18 teachers participated as secondary informants. They had daily contact with the primary informants and were well positioned to comment on how school ecologies had facilitated the resilience processes of the primary informants. The least experienced of these teachers had taught learners with ID for three years, and the most experienced for 38 years.

SPSID Context in the Current Study

The informants came from five different SPSIDs, all in the Gauteng province. Gauteng has the largest number of special schools in South Africa, and in line with WP6, the Province has invested in strengthening the capacity of these schools to provide quality education (Walton, 2014). All of these schools are characterised by a fairly low number of learners per class (on average, 12 to 20 learners). This enables teachers to provide learners with individual attention, according to need. Academic work is tailored to the intellectual ability and pace of individual learners. At each of these schools, teachers are supported by occupational, physio- and speech therapists, as well as resident psychologists. In one school, which had a high number of learners with physical disability at the time of the study, teachers were also supported by a classroom assistant. The acquisition of life skills (hygienic habits, good manners, etc.) is prioritised to support learners with ID to be socially acceptable in their community. Learners can participate in a variety of sporting activities (e.g., soccer, softball, athletics, netball, etc.). Different SPSIDs compete against one another in sporting activities, allowing learner competition against opponents with similar barriers and, thus, opportunity for success. For instance, learners with Down Syndrome compete against others with Down Syndrome in athletics items that they are physically capable of doing, e.g. 80m sprint, shot put, and long jump (high jump and longer distances are excluded).

Table 1 Sum	mary of prima	ary info	rmants' d	emographic			
	School				Hostel		
	situated in			-	resident		
	peri-urban			Race/	(HR)/		
Self-selected	(PU) or			Home	Day scholar		
pseudonym	urban (U)	Age	Sex	Language	(DS)	Risks	Living arrangements
Chrissie	С	16	Female	Black [*]	DS	Formal ID diagnosis; Deformed feet – wheelchair bound; Delayed	Orphanage
	(U)			English		schooling.	
Christiano	D	15	Male	Coloured	DS	Formal ID diagnosis; Deformed ears; Orphan.	Grandparents
	(U)			English			
Flora	А	17	Female	Black	HR	Formal ID diagnosis; Down's syndrome; Cerebral Palsy – Hemiplegic;	Aunt and Uncle
	(PU)			Sesotho		Epilepsy; Expressive speech difficulties.	
Lady	А	15	Female	Black	HR	Formal ID diagnosis; Orphan.	Guardian
	(PU)			Sesotho			
Mako	А	18	Male	Black	HR	Formal ID diagnosis; Poverty; Maternal alcoholism.	Parents/
	(PU)			Sesotho			Grandmother
Natalie	D	17	Female	White	DS	Formal ID diagnosis; Molested, formal removal from parental care.	Orphanage
	(U)			Afrikaans			
Nicky	D	12	Female	Black	DS	Formal ID diagnosis; Limited mobility from head injuries sustained in car	Grandmother
2	(U)			SiTwana		accident.	
Nike	A	17	Male	White	DS	Formal ID diagnosis; Financial disadvantage (Mother unemployed with ID);	Orphanage
	(PU)			Afrikaans		Father absent.	1 0
Pitbull	Ē	17	Male	White	DS	Formal ID diagnosis; PTSD; ADHD; Poverty; Both parents diagnosed with	Parents
	(U)			Afrikaans		ID.	
Princess	A	18	Female	Black	HR	Formal ID diagnosis.	Parents
	(PU)			Sesotho		C	
Queen	À	18	Female	Black	HR	Formal ID diagnosis; Cerebral Palsy – Hemiplegic; High impulsivity.	Father (Mother deceased)
	(PU)			Sesotho			· · · · · · · · · · · · · · · · · · ·
Rambo	C	17	Male	White	DS	Formal ID diagnosis.	Parents
	(U)			Afrikaans			
Retabele	A	13	Female	Black	HR	Formal ID diagnosis; Visual impairment.	Parents
	(PU)			Sesotho			
Roxy	B	13	Female	White	DS	Formal ID diagnosis; Orphan; Poverty; Disrupted schooling (absent for two	Orphanage
j	(U)			Afrikaans		years).	F8-
Samantha	B	16	Female	White	DS	Formal ID diagnosis; Parental rejection.	Orphanage
	(U)			Afrikaans		· · · · · · · · · · · · · · · · · · ·	- r0-
Skim	C	18	Male	Coloured	DS	Formal ID diagnosis.	Parents
2	(U)	10		Afrikaans			
Sokkerman	A	13	Male	White	DS	Formal ID diagnosis; Auditory impairment (uses hearing aid); Paternal	Guardian
Jonnermun	(PU)	15	1,1410	Afrikaans	20	rejection; Poverty.	Cautonin
C : 1		15	M-1-		DC		Demonto
Spiderman	E	15	Male	White	DS	Formal ID diagnosis.	Parents
	(U)			Afrikaans			

Table 1 Summary of primary informants' demographics

	School				Hostel		
	situated in				resident		
	peri-urban			Race/	(HR)/		
Self-selected	(PU) or			Home	Day scholar		
pseudonym	urban (U)	Age	Sex	Language	(DS)	Risks	Living arrangements
Superhot boy	В	15	Male	Coloured	DS	Formal ID diagnosis; Poverty; Peer pressure.	Parents
	(U)			Afrikaans			
Superman	А	13	Male	Black	HR	Formal ID diagnosis.	Parents
	(PU)			Sesotho			
Terminator	А	19	Male	Black	HR	Formal ID diagnosis; Auditory impairment (uses hearing aid); Poverty.	Mother
	(PU)			Sesotho			
The Rock	А	17	Male	Black	DS	Formal ID diagnosis; Local (not school based) peer discrimination.	Parents
	(PU)			Sesotho			
Tsabalala	А	14	Male	Black	HR	Formal ID diagnosis.	Parents
	(PU)			Sesotho			
Valentino	А	17	Male	Black	HR	Formal ID diagnosis; Hydrocephalus with shunt.	Grandparents
	(PU)			Sesotho			

Note: * This is the way that South Africans still classify race.

Data Generation

We used the Draw-and-Talk method (Mitchell, Theron, Stuart, Smith & Campbell, 2011), because it is a relatively simple means of qualitative data generation that is not overly reliant on participants' verbal capacity or literacy skills. Accordingly, primary informants were asked to represent their experience of what contributed to their resilience by drawing it and then explaining the drawing's meaning in their own words. Every primary informant was approached individually and, after he/she had been given a piece of paper, grey pencil, and colouring crayons, asked: "What has helped you to do well in life? Please draw what helped you to do well at times when you felt that life was difficult".ⁱ This drawing session was immediately followed by unstructured inquiry, where they could explain their drawing (reality) in their own words (Guillemin & Drew, 2010). Teachers added to this information by completing an open-ended questionnaire about the primary informants' risks and how they coped well with these.

Data Analysis

Within-case a priori analyses were done; i.e. we proceeded deductively (Creswell, 2009). This means we scrutinised the visual and narrative data for instances where the above broad prompt elicited responses relating to schools and teachers facilitating youths' resilience processes. Then, we inductively and individually analysed these segments to understand how SPSID and teachers facilitated resilience processes. We used an open code to paraphrase what these segments explained about how SPSID and teachers facilitated resilience processes. This was followed by grouping together similar codes to form axial codes (Creswell, 2012). Following Saldaña (2009), we engaged in a consensus discussion to compare their coding (rather than computing inter-rater reliability). It was easy to reach coding consensus as the codes were similar. The axial codes of all the informants were then compared. During this cross-case analysis, axial codes were revised to accommodate similarities (Merriam, 2009), before being grouped to form themes and sub-themes to shed light on how SPSID facilitate resilience.

Ethics

Informed consent was obtained from the Gauteng Education Department, the management of the respective schools, and parents/legal caregivers of the informants. The informants assented in writing (Creswell, 2012). Out of respect for the primary

informants' vulnerability, the first author added a very simple verbal explanation to ensure that informants understood what the study was about, that their identity would be protected (they chose pseudonyms themselves), that their participation was voluntary, and that they could terminate participation at any time without penalisation (Creswell, 2012). Research was done in informants' familiar school environment to lessen tension and reduce the chances of physical or psychological harm during the research (Stake, 2010).

Trustworthiness

Credibility was increased by triangulating the multiple sources of data, consensus discussions (explained above), and checking preliminary themes with 13 of the primary informants (Flick, 2009). In addition, by detailing primary informant demographics and their SPSID context, transferability and dependability were supported (Creswell, 2014).

Findings

In answer to what the accounts of adolescents with ID revealed about how their school ecologies mattered for resilience and how these insights might support teachers and school ecologies towards optimal support of included learners with ID, four themes emerged. These themes underscore that school ecologies enabled resilience or mattered in positive ways. Informants never once suggested that their school ecologies constrained their resilience. Each theme is discussed below.

SPSID Provide Space to be Actively Engaged in

Developmentally Appropriate Sporting Activities Adolescents with ID and their teachers remarked that school-facilitated sport (namely soccer, athletics, rugby, swimming, and netball) was important and enjoyable. For Terminator, playing soccer at his SPSID, and the success this facilitated, was so important that he drew it (see Figure 1), indicating it as that which facilitated his resilience processes.

Terminator explained his success on the soccer field: "last time I play for school [...] say teacher drop and pass. [...] they throw for me, catch the ball, I throw the goal." Similarly, Natalie (she chose this pseudonym due to her admiration for the Springbok swimmer Natalie du Toit) described how her self-esteem improved when she experienced success during the inter-SPSID-schools competition: "when I swim against the other children [from SPSID] I always come first, then I feel good about myself."



Figure 1 Terminator playing soccer

SPSID Teachers Provide Differentiated Academic Activities and Learning Support

SPSID teachers reported that they engaged learners in activities that stimulated them in ways commensurate with their ability. They described the curriculum as greatly simplified and inclusive of practical subjects. Natalie's teacher described the benefits of this as: "She is in a school where she can do what she does best and enjoys – handwork and baking. She receives a lot of support from the teachers at school."

The enjoyment of schoolwork that was offered at a manageable level was evident in the adolescents' responses too. For example, Lady remarked: "We learn. I really like it." Superhot Boy's positive experience of school work led to his using schoolwork to divert his attention when he was angry: "I like work [school work], yes. If I know I am angry, I will just go and work, yes. Then I will forget for what I was angry [about] or something."

Because adolescents with ID are not very academically focused, unsurprisingly, only five specifically mentioned teachers' academic support as important to resilience. Chrissie noted her teacher's help to master schoolwork: "Because they [teacher and helper] help you nice in the classes and when you struggle in class you just ask the teacher for help." An extension of such support is the school-to-work programme that SPSID use to facilitate older learners' adjustment to formal work situations. The programme offers a protected environment in which to monitor/support learner coping in the labour market. As an older learner, Pitbull's programme participation was an important part of his happiness in life: "even at work, at the workers' programme [...] I am also happy." For Pitbull, this inner happiness was a personal factor making him "strong" in life.

SPSID Provide Space for Constructive Peer Attachments

The adolescents with ID indicated that they appreciated the safe environment of the SPSID system because, at school, they were able to make good friends with peers who experienced the same barriers to learning and daily challenges. During the conversation with Pitbull, it became clear that he had quite a few friends, all at his school: "all my friends at school. That's the one that was here [points at the drawing] [...] and there are others as well, many" (see Figure 2).

Similarly, for Sokkerman, "having pals and making friends" is what makes him happy at school.

The adolescents with ID appreciated the positive influence of their SPSID friends. Superhot Boy described this in the following manner: "yes, my buddies often keep me out of fights. They also keep me strong to say, 'you mustn't do that, you mustn't do that'. Yes, we just talk all the time so that we can't get into trouble at school." The importance of SPSID as a safe place to make friends who would be a positive influence, is increased by the understanding that seven participating adolescents had few or no such friends at home. Lady noted: "at home, only my grandmother is my friend [...] because the other - I'm a slow learner – that one she can think more than me [...] she is going to say let's go to the tavern. Let['s] go drink. Let['s] go smoke. Then you are in the big trouble, and I am not looking for that."



Figure 2 Pitbull's school friend who supported his resilience by accepting him as friend

Teachers from SPSID Offer Safe Relational Spaces where Adolescents with ID can Confide and Learn about Life

Adolescents with ID valued their teachers, primarily because these adults built trustworthy, respectful relationships with them. Teachers used these relationships to support life skills acquisition, among others, problem-solving and acceptable social behaviour, as well as to offer advice that supported self-regulation. Nicky's teacher, for instance, described the importance of safe relational spaces in which teachers could support her to cope with the severe brain damage that resulted from a car accident: "at school she learns how to be able to help herself and to be more independent."

Valentino drew his teacher (see Figure 3) and explained: "...it is my teacher who makes me feel strong. She regularly talks to us about [points at his picture] nature and things like that. She is actually a very nice person [...] we can feel comfortable [...] even if something has been bothering us, then we can talk to her. She can give us good advice – what to do and what not to do."

Roxy described her emotionally supportive attachment to her teacher: "she is training me. She is teaching me things [...] she's the most wonderful teacher. She makes me strong. She's there when I need her. When I have a problem, I can go and talk to her." Natalie also experienced her teacher as the person she could approach when she experienced problems: "let's say somebody fights with me, then she talks to me, then I feel stronger." Pitbull's teacher confirmed that the encouragement and support he got from teachers at the SPSID helped him to build his self-image. Pitbull described this acquisition of life skills through teachers beautifully in typical simple language as "she [my teacher] teaches me [how] to be alive."

Discussion

The purpose of this article has been to consider what the accounts of adolescents with ID, and those of their teachers, revealed about how their special school ecologies mattered for resilience; and how these insights might support mainstream teachers and school ecologies - both locally and internationally - towards optimal support of included learners with ID. Their accounts emphasised that SPSID and teachers mattered positively, primarily due to everyday or commonplace actions, reminiscent of Masten's (2001) well-cited contention that resilience, broadly speaking, is facilitated by unremarkable resources and interactions, or 'ordinary magic'. These included providing adolescents with a safe space where they could actively participate in developmentallycommensurate sporting activities, learn, build constructive peer attachments, connect to their teachers, and develop life-skills. These ordinary actions alleviated the limited social interaction that characterises the lives of adolescents with ID (Ali, Hassiotis, Strydom & King, 2012) and advanced self-worth and self-regulation, all of which support resilience (Gilmore et al., 2013). Implicit in all these actions is a sense of deep teacher respect for the vulnerabilities and strengths of adolescents with ID, along with meaningful responses. As in the extant international literature on resilience and ID, teachers were significant contributors to the above resilience processes (Fourie & Theron, 2012; Gilmore et al., 2013; Hsieh & Donahue, 2010; Murray, 2003). In many ways, this demands that

pre- and in-service teacher education inform teachers of their potential to champion resilience, also through ordinary, everyday actions (Theron & Theron, 2014).

The above aligns broadly with Ungar's (2011, 2012) social ecological explanation of resilience, which emphasises that adjusting well to adversity – including the challenges of chronic and severe disability – demands that social ecologies purpose-

fully support young people to beat the odds. The quality of teacher-adolescent relationships is critical to this support (Liebenberg & Ungar, 2014; Theron et al., 2014; Van Rensburg, Theron, Rothmann & Kitching, 2013). For learners with disabilities, such constructive teacher-adolescent connections have the power to galvanise entrepreneurship and encourage independence (Sefotho, 2015).



Figure 3 Valentino's teacher surrounded by things in nature that she cherished and shared with her learners

More importantly, perhaps, to support young people to beat the odds demands that social ecologies change those odds that put young people at risk (Seccombe, 2002). When schools purposefully create enabling environments for all vulnerable learners - including those with disability - the odds facing these learners begin to change (Theron, 2015). This has important implications for teachers and school ecologies that include adolescents with ID. Mainstream (i.e. also FSS) teachers and school ecologies can potentially enable included learners with ID, by using the ordinary actions that special schools engaged in to enable adolescent resilience as a starting point. As set out below, these actions are ordinary enough to be useful to teachers in South African contexts, as well as international ones. Their ordinariness signals that supporting included learners with ID and championing their resilience is not contingent on sophisticated resources, special infrastructure, extensive funding, or the inputs of specialists. All of the aforementioned have been used to explain the limited success of including learners with severe disability (such as ID) and mainstream teacher preference for these young people to be accommodated in special schools (Engelbrecht et al., 2015; Walton, 2014). Put differently, even though the actions below require some teacher effort, they are achievable in and by mainstream school ecologies. These actions are not novel – they are part and parcel of what effective schools routinely do (see, for example, Theron, 2015) as well as documented teacher strategies to promote successful inclusion (Trump & Hange, 1996). However, earnest attention to these actions by all inclusive schools will likely heighten successful inclusion of adolescents with ID.

Tailor Opportunities, Teaching, and Support to Fit Learner Need and Capacity

Moljord, Moksnes, Espnes, Hjemdal and Eriksen (2014) report that physical or sporting activity supports the resilience of adolescent girls, and that a combination of sporting/physical activity and being organised does the same for boys. For participating adolescents with ID, the resiliencepromoting value of sporting activity included that it facilitated experience of success among equals, and nurtured self-esteem. SPSID's purposeful facilitation of opportunities to interact actively and informally with equals, and to achieve, implies deep respect for learners' barriers and strengths, and need for success. The call, therefore, is for mainstream schools (including FSS) to be sensitive to the resilience-supporting potential of participation in sporting activities, particularly when these potentiate pleasure and a sense of achievement. This could be facilitated by advancing sporting opportunities with peers who have similar cognitive, physical and/or emotional developmental levels, as well as facilitating co-operative or meaningful, non-discriminatory sporting events between adolescents with ID and peers without disabilities (see, for example, McConkey, Dowling, Hassan & Menke, 2013). In many ways this speaks to the importance of looking beyond the disability, which challenges learners (Kalenga et al., 2014), while recognising – and accommodating – their universally human need to participate and feel good about themselves.

Inflexible curricula contribute to learning barriers - this is widely acknowledged (Walton, 2014). As a consequence, inclusive practices demand differentiated curricula and pedagogies, as well as teacher collaboration with curriculum specialists that are included in district-based support teams (DoE, 2000; Nel et al., 2014) and teacher up-skilling (Engelbrecht, 2006). The challenges of differentiating education are well documented (Walton, 2014). Nevertheless, differentiation is crucial so that adolescents with ID can engage in intellectually appropriate activity and develop to the best of their ability. To this end, the current study aligns with the extant literature (e.g., Nel et al., 2014; Walton, 2014) and provides evidence that this effort makes a meaningful difference to how learners with ID experience schooling and their own capabilities. In this regard, FSS-facilitated (and other) in-service teacher education provision should capacitate all teachers to competently respond to the minimum requirements for teacher education gualifications that speak to differentiating instruction and learning content according to diverse learner need (Nel, 2015).

Teachers and schools must prepare all learners to be economically active. Successfully transitioning from school to work is a crucial focus in emerging and advanced economies (Quintini & Martin, 2014). For learners with ID this demands sensitivity to the need for structured school-to-work support, particularly if the economic burdens associated with these young people are to be addressed (Heiman, 2002). In the absence of school-to-work support programmes, mainstream schools (including FSS) will struggle to champion resilience among older adolescents with ID. Some teachers might experience this as burdensome, but the resilience literature is clear that teachers often need to go the extra mile to facilitate resilience (Theron & Theron, 2014).

Ensure that Schools are Safe Spaces to Form Constructive Peer Relationships

Because societal discrimination is a reality and leads to great tension and sadness for adolescents with ID (Ali et al., 2012), the safe environment of the SPSID that facilitates constructive peer relationships is very important. These positive peer relationships contribute to self-worth and selfregulation, both of which support resilience (Gilmore et al., 2013). Teachers and management staff of mainstream schools (including FSS) are in an ideal position to sensitively handle stigma concerning adolescents with ID. It is imperative that they address prejudice, and actively encourage healthy relationships between adolescents with and without ID. How this is done (e.g. adopting a 'buddy' system) will differ across school contexts and is not as important as ensuring that adolescents with ID (like other adolescents) continue to perceive school as a place where peers can be trusted (see Trump & Hange, 1996). Additionally, teachers are well-placed to manage classroom practices that do not discriminate against adolescents with ID (see, for example, David & Kuyini, 2012; Kaur, Noman & Awang-Hashim, 2015; Robinson, 2002) and in doing so, to set the tone for constructive interactions.

Expect Teachers to be Approachable Life Coaches Teachers have the potential to limit/alleviate children's vulnerability (Ebersöhn & Ferreira, 2011; Malindi & MacHenjedze, 2012). The adolescents with ID were grateful that they could trust teachers to ease some of their vulnerability and support them in developing life skills – a resiliencepromoting resource (Theron & Theron, 2014). Teachers thus have an enormous – and achievable (see Cheminais, 2008; David & Kuyini, 2012) responsibility to provide a supportive, enabling environment in their pastoral task of supporting adolescents (also those with ID) to develop optimally as members of their socio-cultural community (DoE, 2000). This responsibility could even be heightened in the case of adolescents with ID, given how often adolescents with ID are members of dysfunctional families, or born to parents who are similarly disabled (Taggart, Taylor & McCrum-Gardner, 2010). In particular, teachers need to remember that the relational quality of these interactions is pivotal to the resilience processes of adolescents with ID (Theron et al., 2014; Van Rensburg et al., 2013).

Conclusion

A limitation of this study relates to all informants being SPSID-attending. It is plausible that adolescents with ID included in mainstream (including FSS) could have provided different insights into how school ecologies mattered for resilience. A further limitation is the phrasing of the drawing prompt and how this possibly prevented accounts of school ecologies constraining resilience; such negative cases would have provided rich insight, too. Nevertheless, it was heartening that the 24 primary informants considered their school ecologies' constructive spaces. In conclusion, inclusion is a global and local reality (DBE, 2013; UNESCO, 2009). This involves a planned increase in the number of South African adolescents with ID that will be accommodated in mainstream (DBE, 2010). The same is true internationally (UNESCO, 2009). To enhance the success of this plan, and to optimally enable included young people with ID, teachers and school ecologies would do well to pay attention to the resilience-enabling insights of adolescents with ID, including those made audible in this article.

Note

 The prompt was deliberately vague in order not to influence the responses of the primary informants and to encourage them to consider their own lived experience.

References

- Ali A, Hassiotis A, Strydom A & King M 2012. Self stigma in people with intellectual disabilities and courtesy stigma in family carers: A systemic review. *Research in Developmental Disabilities*, 33(6):2122-2140. doi: 10.1016/j.ridd.2012.06.013
- Cheminais R 2008. Every child matters: A practical guide for teaching assistants. New York, NY: Routledge.
- Creswell JW 2009. *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed). Thousand Oaks, CA: Sage Publications.
- Creswell JW 2012. Educational research: planning, conducting, and evaluating quantitative and qualitative research (4th ed). Boston, MA: Pearson.
- Creswell JW 2014. *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed). Thousand Oaks, CA: Sage Publications, Inc.
- David R & Kuyini AB 2012. Social inclusion: Teachers as facilitators in peer acceptance of students with disabilities in regular classrooms in Tamil Nadu, India. *International Journal of Special Education*, 27(2):157-168.
- Department of Basic Education, Republic of South Africa (DBE) 2010. *Guidelines for fullservice/inclusive schools 2010*. Pretoria: Department of Basic Education. Available at http://www.education.gov.za/LinkClick.aspx?fileti cket=WbxRkIOFaok%3D&tabid=617&mid=2372. Accessed 7 June 2014.
- DBE 2013. Education for all (EFA) 2013 country progress report: South Africa. Pretoria: Department of Basic Education. Available at http://www.education.gov.za/LinkClick.aspx?fileti cket=o3v%2B9o3MwWY%3D&tabid=358&mid= 1261. Accessed 5 August 2014.
- DBE 2014. *Education statistics in South Africa 2012*. Pretoria: Department of Basic Education.
- Department of Education (DoE) 2000. 82 National Education Policy Act (27/1996): Norms and standards for educators. *Government Gazette*, (Vol. 415, No. 20844), 4 February. Pretoria, South Africa: Government Printer. Available at http://www.gov.za/sites/www.gov.za/files/20844.p df. Accessed 25 August 2014.
- DoE 2001. Education White Paper 6: Special needs

education. Building an inclusive education and training system. Pretoria, South Africa: Government Printer. Available at http://www.education.gov.za/LinkClick.aspx?fileti cket=gVFccZLi/tI=. Accessed 28 April 2014.

- Donohue D & Bornman J 2014. The challenges of realising inclusive education in South Africa. *South African Journal of Education*, 34(2): Art. # 806, 14 pages. doi: 10.15700/201412071114
- Ebersöhn L & Ferreira R 2011. Coping in an HIV/AIDSdominated context: teachers promoting resilience in schools. *Health Education Research*, 26(4):596-613. doi: 10.1093/her/cyr016
- Elegbeleye A 2013. Predictors of the mental health of orphans and vulnerable children in Nigeria. *IFE PsychologIA*, 21(2):170-180. Available at http://eprints.covenantuniversity.edu.ng/id/eprint/1 648. Accessed 14 July 2014.
- Emerson E & Hatton C 2007. Mental health of children and adolescents with intellectual disabilities in Britain. *The British Journal of Psychiatry*, 191(6):493-499. doi: 10.1192/bjp.bp.107.038729
- Engelbrecht P 2006. The implementation of inclusive education in South Africa after ten years of democracy. *European Journal of Psychology of Education*, 21(3):253-264. doi: 10.1007/BF03173414
- Engelbrecht P 2013. Teacher education for inclusion, international perspectives. *European Journal of Special Needs Education*, 28(2):115-118. doi: 10.1080/08856257.2013.778110
- Engelbrecht P, Nel M, Smit S & Van Deventer M 2015. The idealism of education policies and the realities in schools: the implementation of inclusive education in South Africa. *International Journal of Inclusive Education*. Advance online publication. doi: 10.1080/13603116.2015.1095250
- Flick U 2009. An introduction to qualitative research (4th ed). London, UK: Sage.
- Fourie CL & Theron LC 2012. Resilience in the face of Fragile X syndrome. *Qualitative Health Research*, 22(10):1355-1368. doi: 10.1177/1049732312451871
- Geldenhuys JL & Wevers NEJ 2013. Ecological aspects influencing the implementation of inclusive education in mainstream primary schools in the Eastern Cape, South Africa. *South African Journal of Education*, 33(3): Art. #688, 18 pages. doi: 10.15700/201503070804
- Gillie C 2012. *The green paper on special educational needs and disability*. Available at http://researchbriefings.parliament.uk/ResearchBrie fing/Summary/SN05917#fullreport. Accessed 12 July 2014.
- Gilmore L, Campbell M, Shochet I & Roberts C 2013. Resiliency profiles of children with intellectual disability and their typically developing peers. *Psychology in the Schools*, 50(10):1032-1043. doi: 10.1002/pits.21728
- Given LM (ed.) 2008. *The SAGE encyclopedia of qualitative research methods* (Vol. 2). Thousand Oaks, CA: SAGE Publications, Inc.
- Gous JG, Eloff I & Moen MC 2014. How inclusive education is understood by principals of independent schools. *International Journal of Inclusive Education*, 18(5):535-552. doi:

10.1080/13603116.2013.802024

- Guillemin M & Drew S 2010. Questions of process in participant-generated visual methodologies. *Visual Studies*, 25(2):175-188. doi: 10.1080/1472586X.2010.502676
- Hall AM & Theron LC 2016. Resilience processes supporting adolescents with intellectual disability: A multiple case study. *Intellectual and Developmental Disabilities*, 54(1), 45-62. doi: 10.1352/1934-9556-54.1.45
- Hartley SL & Sikora DM 2010. Detecting autism spectrum disorder in children with intellectual disability: Which DSM-IV-TR criteria are most useful? *Focus on Autism and Other Developmental Disabilities*, 25(2):85-97. doi: 10.1177/1088357609356094
- Heiman T 2002. Parents of children with disabilities: Resilience, coping, and future expectations. Journal of Developmental and Physical Disabilities, 14(2):159-171. doi: 10.1023/A:1015219514621
- Hsieh WY & Donahue ML 2010. Risk and resilience frameworks in understanding special education. In PL Peterson, EL Baker & B McGaw (eds). *International Encyclopedia of Education* (3rd ed). Oxford, UK: Elsevier. doi: 10.1016/B978-0-08-044894-7.01155-6
- Kalenga RC, Fourie E & Maphosa C 2014. Replicating society's discrimination of disadvantaged and marginalized groups: Inclusive education and the power of the curriculum. *Anthropologist*, 17(2):523-532. Available at http://www.krepublishers.com/02-Journals/T-Anth/Anth-17-0-000-14-Web/Anth-17-2-000-14-Abst-PDF/T-ANTH-17-2-523-14-845-Kalenga-R-C/T-ANTH-17-2-523-14-845-Kalenga-R-C/Tx%5B24%5D.pmd.pdf. Accessed 28 August 2014.
- Kaur A, Noman M & Awang-Hashim R 2015. Exploring strategies of teaching and classroom practices in response to challenges of inclusion in a Thai school: a case study. *International Journal of Inclusive Education*. doi: 10.1080/13603116.2015.1090489
- Kochung EJ 2011. Role of higher education in promoting inclusive education: Kenyan perspective. Journal of Emerging Trends in Educational Research and Policy Studies, 2(3):144-149. Available at http://jeteraps.scholarlinkresearch.com/articles/Rol e% 200f% 20Higher% 20Education% 20in% 20Promo ting% 20Inclusive% 20Education.pdf. Accessed 16 July 2014.
- Kock E, Molteno C, Mfiki N, Kidd M, Ali A, King M & Strydom A 2012. Cross-cultural validation of a measure of felt stigma in people with intellectual disabilities. *Journal of Applied Research in Intellectual Disabilities*, 25(1):11-19. doi: 10.1111/j.1468-3148.2011.00644.x
- Liebenberg L & Ungar M 2014. A comparison of service use among youth involved with juvenile justice and mental health. *Children and Youth Services Review*, 39:117-122. doi: 10.1016/j.childyouth.2014.02.007
 - 10.1016/j.cmldyouth.2014.02.007
- Malindi MJ & MacHenjedze N 2012. The role of school engagement in strengthening resilience among male street children. *South African Journal of*

Psychology, 42(1):71-81. doi: 10.1177/008124631204200108

- Masten AS 2001. Ordinary magic: Resilience processes in development. American Psychologist, 56(3):227-238. http://dx.doi.org/10.1037/0003-066X.56.3.227
- Maulik PK, Mascarenhas MN, Mathers CD, Dua T & Saxena S 2011. Prevalence of intellectual disability: A meta-analysis of population-based studies. *Research in Developmental Disabilities*, 32(2):419-436. doi: 10.1016/j.ridd.2010.12.018
- McConkey R, Dowling S, Hassan D & Menke S 2013. Promoting social inclusion through unified sports for youth with intellectual disabilities: a five-nation study. *Journal of Intellectual Disability Research*, 57(10):923-935. doi: 10.1111/j.1365-2788.2012.01587.x
- Merriam SB 2009. *Qualitative research: A guide to design and implementation*. San Francisco, CA: Jossey-Bass.
- Mitchell C, Theron L, Stuart J, Smith A & Campbell Z 2011. Drawings as research method. In L Theron, C Mitchell, A Smith & J Stuart (eds). *Picturing research: Drawing as visual methodology*. Rotterdam, Netherlands: Sense Publishers.
- Moljord I, Moksnes UK, Espnes GA, Hjemdal O & Eriksen L 2014. Physical activity, resilience, and depressive symptoms in adolescence. *Mental Health and Physical Activity*, 7(2):79-85. doi: 10.1016/j.mhpa.2014.04.001
- Murray C 2003. Risk factors, protective factors, vulnerability, and resilience: A framework for understanding and supporting the adult transitions of youth with high-incidence disabilities. *Remedial and Special Education*, 24(10):16-26. doi: 10.1177/074193250302400102
- Muskens G 2013. Inclusion and education in European countries: methodological considerations. *Quality* & *Quantity*, 47(1):237-255. doi: 10.1007/s11135-011-9514-1
- Nel M 2015. A critical analysis of teacher education for inclusion in South Africa. Keynote presented at First South African Symposium on Teacher Education for Inclusion, Vanderbijlpark, South Africa, 1-2 October.
- Nel M, Engelbrecht P, Nel N & Tlale D 2014. South African teachers' views of collaboration within an inclusive education system. *International Journal of Inclusive Education*, 18(9):903-917. doi: 10.1080/13603116.2013.858779
- Ngcobo J & Muthukrishna N 2011. The geographies of inclusion of students with disabilities in an ordinary school. *South African Journal of Education*, 31(3):357-368. Available at http://www.sajournalofeducation.co.za/index.php/s aje/article/view/541/257. Accessed 10 May 2014.
- Nolting C 2010. Resilience in families of children with developmental disabilities. MA thesis. Stellenbosch, South Africa: Stellenbosch University. Available at http://scholar.sun.ac.za/handle/10019.1/4371. Accessed 16 November 2014.
- Obiakor FE, Harris M, Mutua K, Rotatori A & Algozzine B 2012. Making inclusion work in general education classrooms. *Education and Treatment of Children*, 35(3):477-490. doi: 10.1353/etc.2012.0020

- Quintini G & Martin S 2014. Same same but different: School-to-work transitions in emerging and advanced economies. OECD Social, Employment and Migration Working Papers, No. 154. Paris, France: OECD Publishing. doi: 10.1787/5jzbb2t1rcwc-en
- Reiter S, Bryen DN & Shachar I 2007. Adolescents with intellectual disabilities as victims of abuse. *Journal of Intellectual Disabilities*, 11(4):371-387. doi: 10.1177/1744629507084602
- Robinson S 2002. Teaching high school students with learning and emotional disabilities in inclusion science classrooms: A case study of four teachers' beliefs and practices. *Journal of Science Teacher Education*, 13(1):13-26. doi: 10.1023/A:1015177609052
- Saldaña J 2009. *The coding manual for qualitative researchers*. London, UK: SAGE Publications Ltd.
- Sanders J, Munford R & Liebenberg L 2012. Young people, their families and social supports: Understanding resilience with complexity theory. In M Ungar (ed). *The social ecology of resilience: A handbook of theory and practice*. New York, NY: Springer-Verlag. doi: 10.1007/978-1-4614-0586-3
- Sapon-Shevin M 2007. Widening the circle: The power of inclusive classrooms. Boston, MA: Beacon Press.
- Seccombe K 2002. "Beating the odds" versus "changing the odds": Poverty, resilience, and family policy. *Journal of Marriage and Family*, 64(2):384-394. doi: 10.1111/j.1741-3737.2002.00384.x
- Sefotho MM 2015. Mainstreaming disability in education beyond 2015. *South African Journal of Education*, 35(1): Art # 902, 8 pages. doi: 10.15700/201503070007
- Stake RE 2008. Qualitative case studies. In NK Denzin & YS Lincoln (eds). *Strategies of qualitative inquiry* (3rd ed). Los Angeles, CA: Sage Publications, Inc.
- Stake RE 2010. Qualitative research: Studying how things work. New York, NY: The Guilford Press.
- Sulaiman AA 2010. Problems of adolescents in inclusive secondary schools: A comparative analysis. *Ife Psychologia*, 18(2):76-86.
- Taggart L, Taylor D & McCrum-Gardner E 2010. Individual, life events, family and socio-economic factors associated with young people with intellectual disability and with and without behavioural/emotional problems. *Journal of Intellectual Disabilities*, 14(4):267–288. doi: 10.1177/1744629510390449
- 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 LC 2015. The everyday ways that school ecologies facilitate resilience: Implications for school psychologists. *School Psychology International*. Advance online publication. doi: 10.1177/0143034315615937
- Theron LC & Theron AMC 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

- Tomlinson S 2012. The irresistible rise of the SEN industry. Oxford Review of Education, 38(3):267-286. doi: org/10.1080/03054985.2012.692055
- Trump GC & Hange JE 1996. *Teacher perceptions of and strategies for inclusion: A regional summary of focus group interview findings*. Available at http://files.eric.ed.gov/fulltext/ED397574.pdf. Accessed 15 March 2016.
- United Nations Educational, Scientific and Cultural Organization (UNESCO) 1994. *The Salamanca statement and framework for action on special needs education*. Paris, France: UNESCO. Available at http://www.unesco.org/education/pdf/SALAMA_E .PDF. Accessed 13 July 2014.
- UNESCO 2009. Policy guidelines on inclusion in education. Paris, France: UNESCO. Available at http://unesdoc.unesco.org/images/0017/001778/177 849e.pdf. Accessed 19 March 2016.
- Ungar M 2008. Resilience across cultures. *British Journal of Social Work*, 38(2):218-235. doi: 10.1093/bjsw/bcl343
- Ungar M 2011. The social ecology of resilience: Addressing contextual and cultural ambiguity of a nascent construct. *American Journal of Orthopsychiatry*, 81(1):1-17. doi: 10.1111/j.1939-0025.2010.01067.x
- Ungar M (ed.) 2012. The social ecology of resilience: A handbook of theory and practice. New York, NY: Springer. doi: 10.1007/978-1-4614-0586-3
- Ungar M 2013. Resilience, trauma, context, and culture. *Trauma, Violence, & Abuse*, 14(3):255-266. doi: 10.1177/1524838013487805
- Ungar M & Liebenberg L 2013. Contextual factors related to school engagement and resilience: A study of Canadian youth with complex needs. *Journal of Child and Youth Development*, 1(1):3-26.
- Ungar M, Russell P & Connelly G 2014. School-based interventions to enhance the resilience of students. *Journal of Educational and Developmental Psychology*, 4(1):66-83. doi: 10.5539/jedp.v4n1p66
- Uys K 2005. Severe and multiple disabilities. In E Landsberg, D Krüger & N Nel (eds). Addressing barriers to learning: a South African perspective. Pretoria, South Africa: Van Schaik Publishers.
- Van Rensburg A, Theron L, 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.
- Walton E 2014. Working towards education for all in Gauteng. In F Maringe & M Prew (eds). Twenty years of education transformation in Gauteng 1994 to 2014: An independent review. Somserset West, South Africa: African Minds. Available at http://www.education.gpg.gov.za/Documents/GDE %2020%20years%20final%20print%20proof%20w ith%20cover.pdf. Accessed 23 March 2016.
- Worldometers (n.d.). World population. Available at http://worldometers.info/world-population/. Accessed 26 July 2014.
- Yin RK 2014. Case study research: Design and methods (5th ed). Thousand Oaks, CA: Sage Publications, Inc.