While conducting the study that gave rise to this article I visited schools in an informal, urban settlement community as part of a longitudinal study. The school grounds at the one school were deserted. The classrooms were empty. The only sounds were that of the wind and cars on the nearby roads. It felt like a ghost town — windswept and desolate. As I approached the administrative buildings I noticed locked security gates and closed doors. When I called out that I was there, a teacher peeped cautiously from behind a door and, seeing me, came to unlock the gate.

After spending time with this teacher, who turned out to be the deputy principal, I travelled down the road to an adjacent school, about a kilometre away, in the same community. The difference was astonishing. The school was vibrant with children standing in small hubs together, laughing and talking. Doors to classrooms were open showing visible images of ongoing learning: open books, writing on blackboards, chairs askew. The school was alive. I turned to a teacher accompanying me with a questioning face and she said to me: 'This school gives food. The children come to school' (Female teacher, School 1).

The infrastructure of both schools was limited: few classrooms, limited learning materials, and imperfect sanitation. Roads to the schools needed repair, houses were dilapidated and people in the streets were dressed in a haphazard array of clothes: poverty was obvious. Yet, the way in which the schools responded to some of these obvious challenges resulted in children being very much absent from one and very much present in the other. The deputy principal in the first school shared with me the high percentages of teenage pregnancies, criminal youth activity, school drop-out and bullying. However, teachers...
in another school explained how they partnered with social workers who conducted home visits when children stayed away from school. They spoke of links with social development officers who assisted with social grant applications for children's parents. They shared incidences of collaboration with clinic nurses to provide healthcare to children requiring treatment. They described how a network of nongovernmental organisation partnerships provides after-school programs and informs in-service teacher training. They built a picture of how connections with businesses (large and small) led to supplying the library with books, presenting the school with computers and furnishing a counselling-cum-sick room.

What makes two schools with such similar contexts so different? In this article I explain how resilience occurs as a transactional-ecological process. I centre my explanation on ways in which contexts (here schools) were reimagined and restructured by using relationships to link resources. In this way, instead of relentless risks predominantly predicting wear and tear on wellbeing, people's tenacious connectivity can plausibly predict resilience even when the risk persists. I argue that relationships and resources can be used procedurally to change the ability of an at-risk environment to enable resilience. For example, the way in which a school responds to risk can enable children living in adversity to access learning and development. My proposition is that, other than established fight or flight responses (originally characterised by Cannon in 1932), an alternative response of individuals in high-risk and resource-poor environments to shared risk may be to use flock as response.

Flock responses imply that individuals use a process of solidarity to access, mobilise and sustain resource use to counteract ongoing risk. I use the Relationship-Resourced Resilience (RRR) model to explain such collective responses to significant risk. I put forward that when individuals use RRR they are able to create a climate where the environment can buffer the effect of risk on individuals' wellbeing and development — enabling resilience. RRR is thus a framework to address Hopfall's (2011, p. 140) question: 'To what extent can people who face trauma and generally lack resources remain creative, engaged, and hopeful?'

The idea that relationships and relatedness, in addition to autonomy (Baumeister & Leary, 1995; Connell & Wellborn, 1991; Deci & Ryan, 1985; Skinner & Wellborn, 1994), are pivotal to resilience is not new. Nor is the notion that the environment is focal in resilience processes. Rutter (2000), Masten (2001) and Luther (2006) are some scholars who have focused on relationships as a key pathway to resilience. Such relatedness as primary way of coping is, of course, part of the seeking social support family (Skinner & Zimmer-Gembeck, 2011) to use available resources as adaptive process. Correspondingly, Taylor (2002) argues for the centrality of affiliation with others as a human as both psychologically and biologically reassuring in response to stress. In terms of ecological significance, Rutter (2000) established that neighbourhood factors surpass the impact of, for example, family factors to a great extent.

What the above views of relationships as an adaptive measure in coping and resilience processes have in common is that these are individual responses, spurred on by individual appraisals, individual lack of perceived control, originating from individual experiences of stress. With the RRR-model, I extend on these established views of individually appraised risk and individually initiated responses by positing the idea of collective appraisal of need and response in terms of support-seeking. I argue that, in instances where communities are vulnerable over extended times and commonly lack resources, they experience stress collectively, appraise collectively and respond collectively. The role of existential supports (Gunnestad, 2006) in resilience is embedded in an African cosmology, as is evident in Phasha's (2010) recognition of the centrality of the Ubuntu value system, Mkhize's (2006) acknowledgment of kinship and collectivism and the credit Munyaka and Mothlabi (2009) give to relatedness. In this way relationships are forged with the intention to share resources. In the RRR-model I put forward that such collective responses can be innovative and sustainable when scattered individuals link with each other (support-seeking, affiliation) and share existing resources.

Building on Ungar's (2008) idea of the significance of culture and Gunnestad's (2006) notion of existential supports (meaning, values and faith), I argue that pervasive environmental risk can also be appraised as collective stress — where groups may feel that the burden of environmental demands exceed perceived resources. This experience may then be a lack of perceived control regarding such chronic stress (exemplified by, for example, poverty and HIV & AIDS). However, the perceived control here is not in terms of individual subjective control, as described by Folkman (1984) and Taylor and Stanton (2007), to deal with obstacles. Here the lack of perceived control is collective. The environmental, chronic risk is collectively appraised as stress and the feeling of insufficient control is similarly communal. The consequent collective response is that of people flocking together to use relationships functionally. As a consequence, connected individuals, rather than alone-standing persons, engage in resilience responses to use available resources to counter shared environmental demands. The result is a changed ecology where collective perceived control exists. An unfavourable ecology of inescapable risk is changed to a favourable ecology where connectivity (flocking) means people are able to withstand and live with persistent risk (collective positive adaptation).

In the past, I have provided evidence that only diagnosing pathology in adversity research (such as HIV and AIDS) precludes kaleidoscopic knowledge creation when
also asking resilience-related research questions (Ebersohn, 2008), such as which ecologies enable flourishing, engagement, self-determination for individuals living with chronic adversity? Studies that acknowledge both deficit and wellness reflect issues of resilience. Resilience, viewed from an ecological stance (Ungar, 2008) entails both adversity-related processes and factors to handle stressors. Resilience pertains equally to, what Ungar (2008) views as, moving towards (navigating), as well as using (negotiating) available protective resources (including individuals [family constellations, teachers, nurses] and institutions and/or structures [schools, clinics, faith-based organisations, social grants]).

The Context of Data Generation: Teachers Promoting Resilience in Schools

The data I accessed for the purposes of theorising is located within the protective resource sphere of teachers and schools. I am intrigued by how resilience occurred — nested within sustained support demonstrated by teachers in an ongoing intervention study, STAR (Supportive Teachers, Assets and Resilience) (Ferreira & Ebersohn, 2011). Subsequent to STAR, teachers implemented and sustained various supportive initiatives to promote resilience in schools (Ebersohn & Ferreira, 2011). Resilience was observable in school climates where caring and supportive initiatives abounded. Indicators of robust school environments were signified by increases in: learner enrolments, disclosure of vulnerability and parental involvement. Likewise, as we reported elsewhere (Ferreira & Ebersohn, 2012), teachers’ self-reported and longitudinally observed sense of coherence (Antonovsky, 1987) increased. In this regard, teachers could experience adversity as more comprehensible, meaningful and manageable because of effective and sustained support strategies (Loots, Ebersohn, Ferreira, & Elloff, 2010).

As was expected from an asset-based (Kretzmann & McKnight, 1993) intervention, teachers identified and used existing resources to address adversity. They did not, however, seek access to, nor mobilised these mapped assets. Rather, teachers mentally mapped relationships based on required resources to address prioritised risks. Based on ‘virtual maps’ (pinpointing relationship-resource possibilities), teachers could access, mobilise and sustain the use of resources linked to the relationships. In these collective adaptive processes, teachers made use of both coordinating actions and contingencies in the environment, as well as coordinated preferences and available options (Skinner & Zimmer-Gembeck, 2011). In particular, teachers engaged in collective problem-solving, collective information-seeking (i.e., resources required, relationships that could provide these resources, strategies to mobilise and sustain resources), collective accommodation and collective negotiation strategies to move towards collective resilience. Note that the adaptive strategies were indicated as collective, rather than subjective in nature: the aim was to lessen the stranglehold of perpetual stress for the collective, not the individual.

In this regard teachers, for example, set up referrals to officials who enabled applications for social grants and to nurses for testing, treatment and counselling. All participating schools cultivated available school terrain to function as school-based vegetable gardens to supplement children’s and families’ nutrition. Initiatives thus benefited various systems: children identified as vulnerable in schools, their immediate families, as well as school community members. Initiatives were established and maintained by means of multisectoral networks. Teachers collaborated with partners in other systems to provide required resources. Examples include links with nurses to provide medical treatment, social development officials to provide access to grant applications, parents and unemployed community volunteers to work in vegetable gardens. In all but one of the case schools supportive initiatives were sustained (Bagherpour, 2010).

Theoretical Spaces: Resilience, Assets and Social Networks

Resilience implies the need to adapt because of unfavourable circumstances: to do well in life regardless of considerable adversity (Masten, 2001). By implication, the presence of risk (stressors) causes stress to adapt to the demands on an environment. Resilience requires both the presence of significant threat (Goldstein & Brooks, 2005) as well as positive adaptation ( Cicchetti, 2010). Earlier research (Anthony & Cohler, 1987) focused on resilience as trait, skills or genes, for example: this girl is resilient as she uses positive emotions to help her bounce back when teased because of illness. Recent resilience studies posit processes of adapting to threat, for example: this environment is structured in a way that it mediates the effects of adversity. Resilience is thus viewed as ecological in nature (Ungar, 2008). This ecological perspective implies that what is characteristic of risk in a poverty-saturated environment may differ from the characteristics of significant risk in a highly resourced setting. Because risk is ecological, it can also be cumulative. An example would be a family where the mother is HIV-infected (risk one). The children cannot attend school (risk two) as they care for her at home. The mother has lost her job, limiting household income (risk three). The family is stigmatised and discriminated against by neighbours because of HIV-labelling (risk four). The mother is illiterate and does not know how to apply for social grants (risk five). And so the cumulative risk scenario can be built. Here risk is also chronic: the stress to adapt is a prolonged necessity.

Asset-based approach. Using an asset-based (Kretzmann & McKnight, 1993) lens to think about the above scenario means that, together with acknowledging adversity (risk factors) in systems (Bronfenbrenner & Morris, 1998), strengths (proactive resources) are also recognised in the
same systems. In Figure 1, I depict how risk factors (squares) and protective resources (circles) are both present in contexts of adversity. Where adversity continues (is chronic), different resilience processes are probably required than in scenarios where adversity is less chronic. As individuals live together with the multiple and ongoing risks, they cannot be taken out of their at-risk environments. They have to live together with the risk. Support therefore requires similar staying power. The environment needs to buffer the effect of the risk on individuals in a correspondingly sustainable way. In RRR, the ecology’s functioning is strengthened by using Gunnestad’s (2006) notion of external supports (resilience-promoting networks), existential supports (meaning, values and faith), as well as internal supports (relationship skills).

I use RRR to explain how relationships can reconfigure a risk ecology: how individuals can engage collectively in bidirectional (Lerner, 2006; Ungar, 2011), transactional (Sameroff, 2009) processes so that an ecology can support positive adjustment. In this regard, I am informed by theories on relatedness (Carsten, 2000, 2004; Van der Geest, 2004); relationships and social support (Baumeister & Leary, 1995; Connell & Wellborn, 1991; Deci & Ryan, 1985; Skinner & Wellborn, 1994), social capital (Bourdieu, 1986), social resilience (Bloom, 1996; Evans, 2005), the prominence of environment as both protective (Rutter, 2000) and determining (Ungar, 2011), as well as transactional-ecological processes (Lerner, 2006). In Figure 2 I show how relationships can link resources through such transactional-ecological processes. The risk continues to be present and multifarious. However, the relationships and resources are superimposed onto the risk. Similar to a swimming pool net, (interconnected resource-rich) relationships provide safety and protect children, although the danger of the water remains a constant. (Later in the article I provide an example of how such a lattice was constituted in a school community, see Figure 4.)

**Adaptation.** Resilience, of course also implies positive adaptation. On the left-hand side in Figure 3, I explain how negative adaptation (maladaptation) is possible

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**TABLE 1**

<table>
<thead>
<tr>
<th>School</th>
<th>Primary</th>
<th>High</th>
<th>Urban</th>
<th>Rural</th>
<th>Province</th>
<th>Pilot</th>
<th>Replication</th>
<th>Dissemination</th>
<th>Years</th>
<th>Ongoing</th>
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<td>A</td>
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<td>√</td>
<td></td>
<td>2010</td>
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</tr>
</tbody>
</table>

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**FIGURE 1**

An ecology saturated with adversity.

**FIGURE 2**

Resources linked via relationships in an adversity context.
during adversity. With chronic adversity, maladaptive behaviour is especially predicted as a negative outcome — as evident in my narration of the first school at the beginning of this article. Some negative outcomes predicted for risk settings are feelings of hopelessness, manifested in passivity (rather than action), leading to additional feelings of distress (due to a belief in an ‘inability to be able’ to do anything). These negative outcomes can be compounded over time to result in, among others, burnout, depression, aggression and withdrawal.

The ecology of adversity can be reimagined and restructured by individuals flocking: linking through acquaintances (external supports) to build on inherent strengths in systems. In RRR external, existential and internal supports are merged in flock responses. Based on this merger positive outcomes can be predicted — as indicated on the right-hand in Figure 3. Such positive outcomes are related to positive emotions (Frederickson, 1998) and self-efficacy, including hope, agency and feelings of eustress (because of the sense of accomplishment to be able to manage an environment).

Significantly, in this regard Hopfall (2011) has argued that the highly correlated core resources of self-efficacy, self-esteem and optimism (Luszczynska, Gutierrez-Dona, & Schwarz, 2005; Xanthapoulou, Bakker, Demerouti, & Schaufeli, 2007) are also substantively correlated with social support (Brisette, Scheier, & Carver, 2002; Miyamoto et al., 2001; Rogers, McCauley, Courneya, & Verhulst, 2008; Verhaeghe, Bracke, & Bruynhoooge, 2008). I find sense of coherence theory (Antonovsky, 1987) especially helpful to explain such collective, ecologically linked positive adaptation. Sense of coherence implies that an environment is perceived as (a) comprehensible (stressors are understandable, existential and spiritual connectedness), (b) meaningful (life makes sense, linked to positive self-concept and social responsibility) and (c) manageable (feels has control over life occurrences, linked to awareness of available resources). In a collectively caring and supportive ecology individuals can be propped up to prosper. Sense of coherence from such a collectivist resilience framework could include joint appraisal of risk culminating in shared comprehensibility (the risk to the collective group is clear, the clarity makes sense in terms of the group’s life- and transcendental purposes); united meaningfulness (experiencing and dealing with the shared burden makes live worth living, which correlates positively with self-concept and social justice), as well as pooled manageability (the communal group indicate perceived control in terms of the prevailing risk, because of connections to existing resources).

Generating Theory from Case Studies
To develop RRR as generative theory (Ebersohn, forthcoming) I followed Eisenhardt (1989) and Eisenhardt and Graebner’s (2007) procedural steps to induct theory using case studies. The relevant case study data were generated (Ebersohn & Ferreira, 2011; Ferreira & Ebersohn, 2011) in Participatory Reflection and Action (PRA) mode in partnership with case schools ($N = 12$, primary $= 9$, secondary $= 3$; urban $= 9$, rural $= 3$) and teacher participants ($N = 74$, female $= 63$, male $= 11$). In Table 1 I outline the time frame and details of schools selected as cases in STAR — the cases from which I built theory on RRR.

**FIGURE 3**
Relationship-Resourced Resilience in an ecology of persistent adversity.
Initially, in STAR (Ferreira, 2006) we selected a specified population (teachers in schools where communities live with chronic, cumulative risk and low resources). For theory-building, this sampling strategy naturally constrains extraneous variation and sharpens external validity (Eisenhardt & Graebner, 2007). However, in subsequent phases we (i) replicated STAR in three additional schools and (ii) disseminated STAR in eight additional schools. In this way RRR was strengthened by the use of theoretical sampling in STAR (Glaser & Strauss, 1967). These cases are significant to define parameters for generalising RRR and to control for variation to populations not pertinent to the STAR population. School 1 formed part of the pilot phase (De Jager, 2010; Ferreira, 2006; Loots, 2005; Mnguni, 2006; McCallaghan, 2007; Odendaal, 2006). Replication occurred in Schools 2 to 4 (Loots, 2011; Olivier, 2009). Dissemination research followed from 2008 to 2010 in Schools 5 to 12 (Bagherpour, 2010; Beukes, 2010; Dempster, 2010; Joubert, 2010). Of the twelve case schools, resilience STAR-based strategies were not sustained in four of the schools (Schools 3, 9, 10, 12). We trained teachers (16) representative of the three provinces (Schools 1, 2, 3) as STAR facilitators and they subsequently selected neighbouring schools (Schools 5–12) in which they trained peers to promote resilience in these school communities.

**Livelihood setting.** All the schools are nested within systems with cumulative and chronic risk, particularly high poverty and low resources. In Loots’s (2011) study we detailed that all the case schools shared the following descriptors: high poverty levels, countless unemployed parents of school-going children and low household incomes. Consequently, families were commonly reliant on social welfare grants and services. Moreover, teachers reported parents’ literacy levels as low — a fact that hindered children’s school readiness and the possibility of them providing meaningful after-school support with homework. In many households, various ailments (mostly related to HIV and AIDS) meant that families were used to illness and were in need of healthcare. Archetypal discourses related to HIV and AIDS were apparent in all school cases. Chief among these was resistance to disclose and test due to stigma and discrimination fears. Whereas rural schools also faced resource challenges because they were too isolated to access services, urban schools habitually had to tackle multiple instances of abuse (substance, violence) and crime.

**TABLE 2**

<table>
<thead>
<tr>
<th>Data collection method</th>
<th>Purpose</th>
<th>Documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus groups with teachers</td>
<td>Baseline data of case schools in terms of risk factors and resilience promotion.</td>
<td>Audio recording, Verbatim transcriptions, Field notes</td>
</tr>
<tr>
<td>Focus groups with teachers</td>
<td>Group data of ways in which resilience was promoted in schools.</td>
<td>Audio recording, Verbatim transcriptions, Field notes</td>
</tr>
<tr>
<td>Informal conversational interviews with teachers</td>
<td>Ad hoc exploration of teachers’ individual perspectives of ways in which resilience was promoted in schools.</td>
<td>Field notes</td>
</tr>
<tr>
<td>Semistructured interviews with teachers</td>
<td>Formal exploration of teachers’ individual perspectives of ways in which resilience was promoted in schools.</td>
<td>Audio recording, Verbatim transcriptions, Field notes</td>
</tr>
<tr>
<td>Observation</td>
<td>• Observation of school settings over time to document the presence of change (or not).  • Observation during STAR intervention sessions to understand insider perspectives on risk factors, resource availability, resilience-promoting ideas.  • Observation of teacher interactions in schools and during intervention sessions to understand relationships.</td>
<td>Field notes, Visual data</td>
</tr>
<tr>
<td>Visual methods</td>
<td>• Longitudinal evidence base of school settings to establish presence/absence of change (implementation and sustainment of strategies to promote resilience).  • Document intervention artefacts (e.g. asset maps, need priorities, action plans).</td>
<td>Photographs, Video recordings</td>
</tr>
<tr>
<td>Colloquium presentations</td>
<td>Formal exploration of group experiences of implementing and sustaining strategies to promote resilience in schools.</td>
<td>Audio-visual recordings, Verbatim transcriptions, Field notes</td>
</tr>
</tbody>
</table>

**Resilience Response to Adversity**

**Theory-building.** Distinctive of theory-building, RRR-related data were generated by making use of multiple data collection methods, in particular, participatory methods. During the longitudinal intervention study we made use of focus groups, informal conversations and interviews, semistructured interviews, observation, visual data, as well as colloquium presentations to generate data. As Eisenhardt and Graebner (2007) note, the qualitative data sources both suggested theory and were useful to understand the rationale (RRR theory) that underlay relationships revealed in the longitudinal data. Because of multiple data collection methods in STAR, triangulation provides strong substantiation of RRR constructs and hypotheses. In addition, as multiple investigators generated data, divergent perspectives were fostered, reinforcing the grounding of RRR. I present an overview of qualitative and participatory methods to generate data in Table 2.

**Case study approach.** Eisenhardt (1989) warns that the definitive weakness of building theory from case studies is disproportionate complexity due to vast empirical evidence. To address this counsel, I present a discrete and minimalist overall perspective by not including overwhelming quantities of data or capturing every data feature that is relevant to my emergent thinking. Eisenhardt (1989) contends that generating a novel theory is an advantage of building theory from cases. As a result, RRR (as a theory generated from case data) is testable and embeds readily measurable constructs and propositions that may be falsified (high probability of empirical validity). Herein, Eisenhardt (1989, p. 547) clarifies that ‘this intimate interaction with actual evidence often produces theory which closely mirrors reality.’

Since RRR resulted from a bottom-up approach, data specifics define generalisations of theory with the risk that RRR is but a peculiar phenomenon, rather than being relevant on the level of generality synonymous with theorising. The implication of resilience as an ecological construct implies that building a theory from casework data of teachers in a school community context in three South African provinces may not necessarily be transferable to other individuals or settings. Folkman (2011, p. 461) however, calls on researchers not to ‘assume the contextual nature of their research necessarily limits the generalisability of their findings; instead, we should look for underlying principles in context-specific findings’. She indicates that rather than context-specificity limiting generalisability, more often than not the opposite is true. I am

<table>
<thead>
<tr>
<th>TABLE 3</th>
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<tr>
<th>Construct</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resilience</td>
<td>Resilience is the result of accessing, mobilising, networking and nurturing sustained resource use by means of systemic relationships (as resource guardians). Resilience is both a process and product (of such processes) of collective, interdependent, relationship-driven agency to counteract adversity.</td>
</tr>
<tr>
<td>Protective resources</td>
<td>Enabling capacity available in individuals’ featured strengths (teachers, parents, volunteers, businessmen), relationships (knowing an individual with access to a required resource), institutions (such as schools, clinics, nongovernmental organisations) and structures (social grants, feeding/nutrition programs, school policies).</td>
</tr>
<tr>
<td>Risk factors</td>
<td>Risk factors pertain to stressors requiring adaptation and can systematically include intrapersonal risk (illness, learning disability), interpersonal risk (ailings parent, additional household chores, abuse, inability to provide learning support), school risk (lack of trained teachers in a school, intolerance in school policy, lack of leadership), community risk (high levels of unemployment in a community, high instances of illness and death in a community) and service-level risk.</td>
</tr>
<tr>
<td>Relationships</td>
<td>Vehicle of resilience by being (i) an envoy of available resources, (ii) a mechanism to mobilise resources and (iii) a structure to sustain resource mobilisation for resilience.</td>
</tr>
<tr>
<td>Flock response</td>
<td>Collective response to access, mobilise, network and nurture sustained resource use by means of systemic relationships as resource caches.</td>
</tr>
</tbody>
</table>

**Characteristics of ecology in which RRR may be indicated as a relevant intervention to support children**

<table>
<thead>
<tr>
<th>Construct</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cumulative, chronic adversity</td>
<td>Prolonged and multiple hardships signifying risk of vulnerability and requiring mediation. Includes poverty, limited opportunity to learn, health risks (foremost of which is HIV and AIDS), unemployment, illiteracy, inability to access supportive and care services (health, social grant, education), emotional distress.</td>
</tr>
<tr>
<td>Low-resource systems</td>
<td>A low-resource system has limited availability and/or access to resources and may be characterised by physical disrepair, lack of support services (learning, health, social), as well as constituents with low household incomes and serious health, education and socioeconomic need.</td>
</tr>
<tr>
<td>Collective, consistent availability of protective resources</td>
<td>Sustained access to systemic services as necessary resources to counter prioritised risk, including the following types of services: health, social support (grant), early identification of vulnerability in schools, referral systems, employment.</td>
</tr>
<tr>
<td>Community system focus</td>
<td>Collective needs of communities surpass individual (e.g., child) needs, implying knowledge of (i) community constellations, (ii) community priority needs, (iii) community-required resources and (iv) community relationship resources.</td>
</tr>
</tbody>
</table>
Relationship Resourced Resilience Propositions

| Relationships in RRR: | • are constant suppliers of (requisite) resources in low-resource settings  
• are cumulative and sustained (chronic) counter forces to cumulative and chronic risk/adversity  
• are hands-on social capital commodities to enable agency for resilience  
• are vehicles through which available resources are used to buffer vulnerability because of adversity  
• include:  
  (i) existing (bonding) relationships bonding where the resource seeker has membership in the particular relationship-network  
  (ii) extrapolated (bonding) relationships where the resource seeker is not a member of the particular relationship-network, but is acquainted with a member in said network (vicariously permitting access to the network and resources). Extrapolated relationships are built across existing relationships as a way to access resources that may be several acquaintances removed.  
  (iii) latent relationships that may be forged depending on resources required, but are present as potential links because of existing and extrapolated relationships  
| Resilience in RRR: | • is the result of flock-responses: accessing, mobilising, networking and nurturing sustained resource use by means of systemic relationships as resource guardians  
• is established as a counterbalance to adversity in that individuals:  
  (i) steer towards existing relationships as resource hosts (bonding)  
  (ii) use relationships and relationship skills to parley access to and use of resources  
  (iii) use relationships to network with aligned relationships as extended web of resources and  
  (iv) nurture relationships to sustain resilience.  
• enables mutual leverage to counteract communal adversity  
• is associated with social buoyancy to offset challenges to livelihood and wellbeing  
| RRR requires: | • awareness of prioritised risk and required resources to use relationships as a conduit and enable resilience  
• relationship skills (being in relationships; negotiating access to resources in relationships; nurturing relationships to maintain access to resources; partnering and networking in relationships) to access, mobilise and sustain resilience in RRR  
• agency to initiate, implement and monitor decision-making of plans for resource use

Therefore also particularly intrigued to determine the extent to which RRR bears up within resource-rich environments and nonschool-related settings, and to find out if race, class, culture, nationality and gender may account for variance in RRR.

**Relationship Resourced Resilience: Concepts and Propositions**

This section presents the concepts and propositions that guide the development of this conceptual tool. In Table 3 I provide a conceptual overview of constructs in RRR. It is apparent that resilience and the promotion of resilience is at the core of thinking, implying the presence (simultaneously) of risk and protection. Ecologically, I foreground relationships as significant in negotiating one’s life within and across systems, taking cognisance of both risk factors and protective resources. To understand resilience from a RRR framework, other significant ecological variables indicate risk as cumulative chronic adversity and resources as equally collective, constantly available and system-specific. The ecology from which RRR emerged places schools and families as central protective resources and arose in high poverty (scarce resources, multi nonenabling factors) settings.

From a resilience stance, I extend relatedness assumptions that declare significance in people’s daily interactions, practices and networks. I purposely contend that relationships exist as a valued, communal commodity for resilience. As a consequence of relationships, people can act and be agents for resilience because they are able to share and exchange things they need to meet the demands of their livelihood. Accordingly, RRR is premised on notions that any individual is related/connected to others via relationships, and, as a result, similarly connected to resources: individual exist in relationships; relationships harbour resources; relationship skills can be used to access, mobilise and sustain resource use; and relationship-based resources can be used to address adversity.

**Propositions.** Based on case study insights and comparison with existing knowledge bases, I formulated propositions pertaining to RRR (Ebersöhn, forthcoming), which I present in Table 4. From Table 4 it appears that the process-oriented nature of resilience was especially evident in the data. I scrutinised relationships as a hub of dynamic interaction — where the need to address risk culminates in a meeting point of protective resources made available via relationships. From this process stance, relationships (manifesting transactional interaction) constitute a way to modify the effects of adversity. The relationship initially develops between a resource seeker and a resource provider. The relationship is then sought out and initiated by an individual seeking a good fit between a need (risk factor) and available (protective) resources. The resource provider is the beneficiary of con-
aversions to (i) explore the real availability of a required resource, (ii) negotiate access to said resources and (iii) mobilise use of the resource. In this way, relationships leverage the base of available resources to mobilise and promote resilience. The ability to maintain relationships (relationship skills) proves to be an important requirement for resilience in RRR in order to sustain access to and use of resources.

Relationship Resourced Resilience: Processes

In Table 5 I present RRR activities and competencies to use relationships to create supportive climates. These include collaboration, mapping (needs, resources and relationships), prioritisation, agency and relationship skills. In this section I explain RRR processes as analytically induced from STAR data. In each of the processes the centrality of activities and competencies is evident. The centrality of agency is also apparent. RRR processes were used to provide sustained support to children (and their families) faced with high risk. The processes can be incorporated into plans to support children. Such intervention plans can reconfigure structures in order to increase access to healthcare, education and financial support. In this way, intervention and policy may benefit from RRR insights on initiating and sustaining support in settings equally low in resources and high in need.

Awareness of Risk and Resources Co-Existing

From the onset, RRR requires that individuals facing challenges will understand that resources co-exist with risk. Absence of such appreciation potentially implies that agency could also be absent. Elsewhere we (Loots et al., 2010) indicated that agency resulted from resource awareness. From a sense of coherence framework (Antonovsky, 1987), teachers expressed that knowing resources were available in their scarce resource environments, made stressors and are understandable (comprehensibility), meant that life made sense to them (meaningfulness) and resulted in them feeling that they had control over life occurrences (manageability).

Prioritisation of Risks and Resources

Severity of risks needs to be determined. Such prioritisation can be effected in various ways. One way is to map risks faced in any environment by drawing the community and indicating on a map where risk is present (examples from STAR data include indicating places where liquor is sold, settings where crime was frequent, lack of sanitation and housing, drawing immense cemeteries). These maps also indicate risk by the absence of certain institutions. For example, in the STAR rural schools clinics were absent from the school community map (although present in the nearest town). Following risk-mapping, participating individuals can collectively decide which risks require immediate attention and list these in order of urgency. Often, such ranking activities (identifying risks in terms of highest to lowest gravity) lead to additional discussion and inclusion of other risks. Poverty, illiteracy, HIV and AIDS and related diseases were often added at this stage (i.e., such broader societal adversities was not generally mapped as a risk, but was added when prioritisation of risk occurred).

Mapping and prioritising risk is especially beneficial in a cumulative and chronic risk setting. In STAR we observed that constituents of such challenging contexts gained clarity by ‘seeing’ the risks mapped and ‘taking control’ of risks (rather than feeling passive and overwhelmed) by deciding which took precedence over others (Dempster, 2010).

Just as risks are mapped, resource mapping is also necessary. As indicated in the previous section, awareness of available resources (as part of resource-mapping activi-

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<tr>
<th>TABLE 5</th>
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</thead>
<tbody>
<tr>
<td><strong>Relationship Resourced Resilience Activities and Competencies</strong></td>
</tr>
<tr>
<td><strong>RRR activities</strong></td>
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<tr>
<td>Needs mapping</td>
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<tr>
<td>Resource mapping</td>
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<tr>
<td>Relationship mapping</td>
</tr>
<tr>
<td>Prioritisation</td>
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<tr>
<td>Competencies to implement RRR to support children</td>
</tr>
<tr>
<td>Promoting resilience</td>
</tr>
<tr>
<td>Agency</td>
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<td>Relationship skills</td>
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<tr>
<td>Collaboration</td>
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ties) lead to experiences of comprehensibility, meaningfulness and manageability. Resources that were mapped in STAR data included infrastructure (roads, shops, faith-based organisations). Information on embedded systems (such as tribal custom and governance) and individuals with expertise (capacity inventories in asset-based approach nature [Kretzmann & McKnight, 1993]) were absent from maps.

**Linking Required Resources with Prioritised Risks**

STAR participants followed risk prioritisation with ideas on how to manage the presence of the risk. During this phase, it became apparent that support plans centred on family constellations, not singling out children. Following the asset-based nature of STAR, teachers understandably focused support plans on using available resources to counteract prioritised risks. Teachers brainstormed resource-use plans in order of urgency. As stated, teachers did not turn to mapped resources in these plans. Rather, in each plan they included itemised resources that would be needed, as well as strategies detailing how resources would be used. A protective institution in the community served as coordinating base to implement the support plans. The protective institution provided set resource infrastructure (physically, with human resources, with social capital potential into the community). In STAR, it follows that schools were this coordinating platform.

**Mapping Relationships Rich with Required Resources**

In order to locate accessible resources, STAR teachers thought of relationships that could potentially contribute resources to their support plans. I opted to conceptualise these activities as (virtual) relationship mapping. Relationship mapping included existing relationships and extrapolated relationships. With regards to existing relationships, teachers made use of their own, first-hand relationships as a base to survey available resources. This process reminds of ‘bonding’ actions inherent to a social capital stance (Putnam, 1995). Social capital ‘bridging’ also occurred where resources from a collective of individuals were surveyed. In this way, access to networks is broadened and not dependent on individual membership to networks.

In Figure 4 I illustrate the honeycomb or chicken wire pattern of relationships of a specific teacher (Thembi Dyasi, who is named as she requested, as participatory partner, not to be anonymous during knowledge creation). The relationship links are created because of an imperative to access resources. Some of Thembi’s relationships are apparent in this figure. Each dot in the figure constitutes a relationship. Her existing relationships are indicated by full lines (_____), extrapolated relationships (created for the benefit of specific resource use) by broken lines (- - - - ) and latent relationships (potentially usable because of existing and extrapolated relationships) are indicated by dotted lines (. . . . ). Thembi has an existing relationship within her family, her faith-based organisation, the school and her circle of friends. By virtue of her relationship within the school, she also has access to her acquaintances of her colleagues, family members, and congregation. As a result, via her relationship with a family member she is able to connect with a small businessman, because of a church contact she is able to link up with a nurse, a teacher colleague provides access to teachers’...
knowledge in a neighbouring school and, because of this extrapolated relationship, she is linked to a person who connects her with a nongovernmental organisation to assist with extramural activities for children.

**Using Relationship Skills for Resource Use**

RRR is dependent on relationship skills, including the ability to collaborate. Individuals would need to have intact and robust relationships in order to be able to, in effect, ‘use’ the relationship. Consequently, in as much as RRR is dependent on awareness of resources and risk, co-existing, resilience would arguably stand or fall based on individuals’ interpersonal competencies. STAR participants used their interpersonal flair to approach individuals with requests for resource use. They also used their social skills to explain the need for resources and plans to use resources to manage adversity. In instances where parleying lead to resource mobilisation, the resource provider was described as a partner. As an outcome of such resource sharing partnerships, a sense of mutual satisfaction was reported (Olivier, 2009).

**Mobilising and Sustaining use of Relationship-Based Resources**

The person providing the resource in a relationship characteristically maintained ‘control’ of the resource. In this way, nurses managed the provision of medical care, treatment and advice; businessmen handled the supply of soup kitchen contributions; teachers identified and referred children in need; caregivers did home-based care visits and community members cultivated vegetable gardens. The implication is that each partner could perform in their areas of expertise.

Earlier, I indicated the coordinating role of a protective institutional base. The coordination of support actions remained with the initial resource seeker (in STAR this role was taken up by teachers). Resource seekers had a comprehensive picture of plans to provide support. They also had knowledge of the virtual strings (networks) connecting relationships and resources with one another. The resource seekers maintained relationships with resource providers to sustain resilience enablement. Frequent interaction had monitoring and evaluation value as effective resource use could be shared and barriers to use could be addressed.

In some instances ecological variables hindered maintenance of relationships and consequently had a negative impact on promoting resilience. In rural schools (Ebersohn & Ferreira, 2012) the demands of resources spread over vast distances and individuals staying in different home bases culminated in limited time to engage with resource partners. The limited personal interface implied few conversations about successes and barriers in resource use. These limitations in monitoring and evaluating resource use led to instances where support was not sustained.

**Discussion**

Relationship-Based Resources has the potential of providing service providers and academics with a conceptual tool to engage with communities in difficult circumstances. Similarly, RRR can unite the different constructs/concepts that are being used to train and work with community developers (like helping professionals, teachers and nurses) in making them more aware of their role in facilitating wellbeing. A common understanding of relationships in high-need situations has potential for policy and practice.

In summary, RRR emerged from low-resourced school-based communities in three South African provinces where children live with multiple ongoing adversities — as is the case with HIV and AIDS in Sub-Saharan Africa. Therefore, RRR does not entail eliminating risk, but rather mediating the effects of risk as a way to enable resilience. Resilience was indicated by the mobilisation of resources via relationships: school communities constructed networks around relationships to buffer adversity and promote resilience. Thus, RRR presents a social resilience mechanism that operates collectively to re-engineer the way in which a community can inclusively repave their adaptation. Resilience was evident in both stressed urban and rural school communities. As resilience strategies were maintained in two thirds of case schools, I submit that RRR explains how resilience can be initiated and sustained in similar school settings.

Transferring RRR to other similar settings requires circumspection. The RRR was evident in settings where awareness was artificially raised with an intervention explaining the presence of resources in systems and individuals. In addition, RRR would be impacted on negatively by the absence of, or limitations to relationship skills. In particular, collaboration may be restricted. Inability to collaborate implies that individuals may struggle to present their support plan to another, requisition resource use and interact over time with others to sustain such use. In addition, RRR is almost certainly impacted on negatively by the absence of social capital to bond and bridge by means of relationships. Whether RRR will be similarly evident in other protective resource domains requires further investigation. Gilligan (1997) cautions that the quality of resilience in one domain (e.g., school) does not imply that resilience will be displayed to the same degree in another domain. Evans’s (2005) study on social resilience provides some theoretical support for the probable presence of RRR at household level.

Several strategies to consolidate RRR are aimed at addressing the weakness of a potentially narrow and idiosyncratic theory (Eisenhardt, 1989). Additional theoretical sampling (Glaser & Strauss, 1967) forms part of the next phases of investigation to augment RRR as generative theory. Future theoretical sampling will aim at filling theoretical RRR categories and providing examples of polar...
Liesel Ebersöhn

types. Multiple cases within each category (e.g., additional secondary schools, additional remote schools) can greatly enhance the transferability of RRR. Choosing polar case types can also afford insight into variation. Thus, to strengthen the theoretical base of RRR, I can use characteristics of negative instances (e.g., cases where sustained resilience in terms of relationships as resource supply was not evident) as selection criteria to understand circumstances in which RRR is not indicated. Future sampling will also focus on nonintervention school settings where asset awareness was not raised. For this, I also want to sample polar types: schools known to promote resilience and schools identified as unable to cope with multiple adversities. In addition, I will expand on data collection protocols by including additional quantitative measures of core constructs (relationships/relatedness, resilience).

Like Coleman (1990), I contend with RRR that social capital has significant benefits for marginalised and what he calls ‘poor’ communities. Because the majority of studies on resilience originate in developed countries, RRR is a valuable way of understanding resilience in high-poverty, high-risk settings. In this article, I extended on Coleman’s contention by presenting supportive evidence of pathways in which teachers harness social capital for the wellbeing of individuals and groups in scarce resource settings. As indicated by others (Olsson, Bond, Burns, Vella-Brodrick, & Sawyer, 2003; Stewart, Sun, Patterson, Lemerle, & Hardie, 2004; Bryan, 2005), the current study cues further investigation of social capital (prominent in studies of public health and social epidemiology) within the realm of resilience, specifically pertaining to teachers and schools as exemplar protective resources for children. Relationship-Based Resources has the potential of providing service providers and academics with a conceptual tool to engage with communities in difficult circumstances. Similarly, RRR can unite the different constructs/concepts that are being used to train and work with community developers (like helping professionals, teachers and nurses) in making them more aware of their role in facilitating wellbeing. Relationship-Based Resources illustrates how teachers and schools use networks to buffer children in the midst of adversity and portrays how such networks enable individuals to each provide support based on their niche expertise. Because, from a RRR stance, teachers are able to provide a caring and supportive environment (without needing to be full-time nurses or social workers), they are also able to teach — a key requirement for educational retention, access and the future wellbeing of children.

Theron and Theron (2010) argued that South African studies have overlooked explanations of resilience, or accounting for indigenous processes of resilience. Relationship-Based Resources provides one such lens by explaining resilience in the face of perpetual risk as a collective endeavour — from appraisal to sustained response. As a collectivist resilience model, RRR counters redundancy discourses regarding affiliation as indicated by Taylor (2011, p. 87): ‘the biological impetus to affiliate under stress, coupled with the psychological need for contact with others under stress, may represent redundant biobehavioural protective mechanisms that ensure affiliation and corresponding safety when the environment is threatening’. Thus, RRR indicates the prevalence of affiliation, support-seeking, relatedness and interpersonal relationships in resilience processes.

Endnotes
1 Ronel Ferreira and I share wonderment regarding the way in which participation over time with teachers has contributed to scholarly knowledge creation on wellbeing in schools. At the same time, participation (as an intervention study) has benefited school communities because the majority of participating teachers made a concerted effort to promote resilience in relationship with others. Many postgraduate students (and their co-supervisors) have also been co-researchers over the 8-year time frame, including: Tilda Loots, Hermien Olivier, Bathsheba Mbongwe, Maria Mnguni, Malize McCallaghan, Viona Odendaal, Karien De Jager, Melanie Joubert, Janna Beukes, Sam Bagherpour, Georgina Dempster, Irma Eloff and Kesh Mohangi.

References


Kretzmann, J.P., & McKnight, J.L. (1993). Building communities from the inside out: A Path toward finding and mobilizing a community’s assets. Chicago: ACTA Publications.


Taylor, S.E. (2002). The tending instinct: How nurturing is essential to who we are and how we live. New York: Holt.


