





Protective factors that enhance teacher resilience in a private school in Johannesburg

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Background: There is mounting empirical evidence that interacting with nature delivers measurable benefits to people which include physical health, cognitive performance, and psychological well-being.

Aim: This study aimed at understanding and exploring how the power of nature and colleagues and principal support assist teachers to adapt and cope with stressors.

Setting: The study was conducted in a private high school that uses the Cambridge Curriculum. Most of the students are from middle- and high-income households in the Roodepoort and Honeydew suburbs. Three male and eight female teachers participated in this study, with a mean age of 27 years and an age range between 24 years to 52 years. All the teachers were white, and they taught various subjects and they do not profess any particular religion.

Methods: The study adopted a generic explorative qualitative design. Data were collected using semi-structured interviews and incomplete sentences. Data were analysed using content analysis to arrive at the themes.

Results: The themes that emerged during data analysis pointed out two major protective factors that enable teachers in this school to adapt and cope resiliently - the power of nature that surrounds the school (green space) and the principal and colleagues' support in the school.

Conclusion: Natural beauty that surrounds the school that resembled a park, as well as support of the principal and colleagues contributes teacher resilience in the school.

Contribution: The findings from the study pointed out how school principal and colleagues could support teachers to cope and adapt to stressors, particularly the garden.

Keywords: nature; resilience; privately funded; independent; school; garden; protective factor.

Introduction

To be successful in one's career, one needs to adopt protective safeguards that will allow one to cope and adapt to stressful situations within the working environment. Given this assumption, this article tries to understand and explore the protective factors that enable teachers in a privately funded independent school to cope with and adapt to stressors.

'Stressors impacting South African teachers include role expansion and job overload, role conflict, low pay, long working hours, overcrowded classrooms and lack of basic resources for teaching' (Draper-Clarke & Edwards 2016:491). Teaching as a profession is considered one of the most stressful occupations worldwide. Chireshe and Mapfumo (2003) and Denhere, Ngobeli and Kutame (2010) report that teachers all over the world subjectively perceive their profession as stressful.

The effects of stress on teachers cannot be underestimated in the sense that occupational stress manifests in physiological conditions such as headaches, sleep disturbances, stomach upsets, hypertension, body rashes and illness resulting from depression (Dunham & Varma 1998). Excessive stress may lead to making poor decisions, lowered self-esteem, becoming dissatisfied with your job, being unprofessional and not caring, and the tendency to make mistakes (Champoux 2000).

Recent studies have revealed that increased stress levels negatively impact teachers' well-being (Hascher & Waber 2021; Herman et al. 2021; Katsantonis 2020; Kupers, Mouw & Fokkens-Bruinsma 2022; Ramberg et al. 2020). According to Mendoza and Dizon (2024), there exists a link

between teachers' stress and their subjective well-being, and this has garnered tremendous research focus. Teachers perceive stress as a negative emotional experience that is triggered by their perception that an external context is a threat to their well-being (Herman et al. 2021). Besides the health consequences of stress, it is also known to negatively affect the performance of workers across a variety of jobs (An et al. 2020; Nisar & Rasheed 2020). When people's stress is high, it not only affects their performance at work but also their well-being (Hirschle & Gondim 2020; Li et al. 2021). Therefore, teachers are not exempt from the negative effects of stress, and stress among teachers is linked with lower well-being (Jeon, Buettner & Grant 2018; Ramberg et al. 2020).

Research indicates that the sudden move to online learning and increased workload during the coronavirus disease 2019 (COVID-19) pandemic led to heightened stress levels and other mental health symptoms among teachers (Baker et al. 2021; Kush et al. 2022; Ozamiz-Etxebarria et al. 2021). Previous studies that linked stress and well-being at work have been well-documented over the years (see Bliese, Edwards & Sonnentag 2017), with current findings demonstrating the same results among educators or teachers (Kupers et al. 2022; Lau et al. 2022; Padmanabhanunni et al. 2023). Teachers' well-being caught the attention of scholars in recent years because it improves their life satisfaction and job commitment (Randall et al. 2021) as well as its downstream effects on teachers' teaching quality (Baker et al. 2021; Hascher & Waber 2021), which ultimately leads to improved learning outcomes for learners (Turner et al. 2021). Teachers must navigate protective factors in their environment that will enable them to resiliently cope and adapt to stressors based on teacher stress and its consequent effects on their subjective well-being and their performance.

Teacher resilience could be defined as bouncing back from adversities in the teaching profession or maintaining a balance between a sense of commitment and agency in the everyday life of a teacher (Day & Gu 2013). A study by Ingersoll and Strong (2011) suggests that resilience is shown by a positive attitude, adaptability, and a sense of efficacy in managing stressors – the key factors contributing towards this resilience are social support, self-efficacy and a positive school culture (Day 2018). It is commonly suggested that people who can overcome adversity of some kind have resilience, which is understood as:

[B]oth the capacity of individuals to navigate their way to the psychological, social, cultural and physical resources that sustain their well-being and their capacity individually and collectively to negotiate for these resources to be provided in culturally meaningful ways. (Ungar 2011:17, 2008)

Other views on resilience include the view that it is a 'process of risk management and development in the face of adversity' (Strümpfer as cited in Ebersöhn 2012:571), while others debate whether it is a static resilience or a trait or a dynamic, interactive process related to transactional-ecological matters

(Garmezy, Masten & Tellegen 1984; Masten 2012; Masten & Reed 2005; Masten et al. 2009; Rutter 2012; Ungar 2012).

Even though the debate on resilience is ongoing, it is evident that both process and outcome coexist. Resilience can be both an interactive ecological process and an outcome or trait which implies that the human system is in dynamic and active interaction with risk and protection in a particular ecology (Ungar 2013). According to the outcome view, certain personality traits or skills that have been learnt can help protect against risk (Knight 2007). On the other hand, a lack of traits (e.g., perseverance) and/or skill could become a stumbling block when trying to effectively deal with risk.

The teacher assumes a specific adaptive coping behaviour that helps them negotiate the effects of specific stressors, in other words, to cope with stressors – this points to an adaptive coping process. This whole adaptive coping process forms part of the human and ecological systems' interaction (Ebersöhn 2012; Skinner & Zimmer-Gembeck 2007). Managing adversity, therefore, is an adaptive coping behaviour. It needs the combination of the individual's personality traits and/or skills they have acquired as well as putting the available protective resources to best use:

Adaptive coping behaviour of teachers will imply that a teacher would have and know which protective resources are available to deal with risk and would negotiate ways to access and use them in a sustained way. (Ebersöhn 2012:572)

Furthermore, a study conducted by Edwards, Ngcobo and Edwards (2014) on resilience and coping experiences among Master's professional psychology students in South Africa, revealed that peer support, friends, family and spouse, time management, personal skills, study skills, exercise, sport and recreation, personal therapy, spiritual and religious activities, and rest are protective factors that enable students to cope and adapt resiliently. Finally, according to Van der Wal and George's (2018) study on social support-oriented coping and resilience for self-harm protection among adolescents, adolescents who received social support were able to cope with stressors with an associated reduction in the chances of engaging in self-harm.

Therefore, this article aims to explore and understand what protective factors enhance teacher resilience in a privately funded independent school in a suburb of Johannesburg.

Health benefits of green space and/or gardens

People in general deal with stress in different ways, and one of the ways is relaxing in a natural beautiful garden with different types of flowers. There is an increasing empirical study that demonstrates urban green space (UGC) as therapeutic since it allows city dwellers to relax and engage with nature (Frumkin et al. 2017; Hartig et al. 2014). People who enjoy green spaces have been found to enjoy positive emotional well-being (Ballew & Omoto 2018), good cognitive

functioning (Bratman et al. 2019), are well-behaved (Guéguen & Stefan 2016) and have excellent physiological responses, such as heart rate variability, pulse rate, blood pressure, skin conductance, cortical brain activity, and diurnal cortisol profiles (Haluza, Schönbauer & Cervinka 2014; Neale et al. 2020; Roe, Aspinall & Ward Thompson 2017). Furthermore, a study done in the Netherlands by Van den Berg et al. (2010) found that people who lived in an area with a high amount of green space within a 3 km radius were less affected by a stressful event than those who lived in an area with a low amount of green space. Moreover, a study done in South Africa found that those who live in green spaces are less depressed compared with those who live in less green spaces (Tomita et al. 2017) and have lower rates of mortality from all causes (Mitchell & Popham 2008).

Throughout history, mankind has had a close relationship with nature, mostly for sustenance (Keniger et al. 2013). The use of gardens in medical care has a long history. The idea of relations between human health processes and natural environments and gardens can be traced back to the medical spas and monastery gardens in the Middle Ages and as far back as Ancient Egypt and Persian Empires (Gerlach-Spriggs, Gerlach-Spriggs & Bass Warner 1998; Prest 1988). After the Second World War, human perception of nature as a means of direct consumption and exploitation shifted to a more mutualistic relationship in which people actively sought out interaction with nature for recreation and enjoyment (Fuller & Irvine 2010; Irvine et al. 2010). Interacting with nature may therefore be important, not only for survival but also for human quality of life on a personal level mentally and physically (Bailey & Kingsley, 2020).

Empirical evidence from various studies shows that seeing nature is important to people and is an effective means of relieving stress and improving well-being (Leather et al. 1998). In addition, being in nature has positive effects on physical health (Richardson & Mitchell 2010), psychological well-being (Fuller et al. 2007), cognitive ability (Han 2009), and social cohesion (Shinew, Glover & Parry 2004). Furthermore, the ability to see or experience green space also reduces domestic violence, quickens healing times, reduces stress, improves physical health, and effectuates cognitive and psychological benefits (Sullivan & Kuo 1996). Natural-based therapy and horticultural therapy have been proven to significantly enhance recovery of both cognitive abilities and levels of stress (Adevi et al. 2018). Qualitative studies (see Grahn et al. 2010; Sahlin et al. 2012) have revealed that clients health and well-being improved when therapy sessions were carried out in rehabilitation gardens. Visiting therapeutic gardens or green spaces may improve mood (Cordoza et al. 2018), regulate emotions (Lee 2017), reduce stress (Goto et al. 2018), lower body inflammation (Ng et al. 2018), and improve quality of life (Korn et al. 2018).

According to Olszewska-Guizzo et al. (2020), as a result of limited treatment availability and a growing number of people suffering from depression, testing for new self-care interventions such as visitation to therapeutic gardens may

augment traditional treatment methods. Several protective resilient factors enhance teacher resilience, but the one that speaks mostly to teacher resilience in a privately funded independent school is the power of the green space within the school ecology.

The role of school principals in promoting teacher resilience

The role of school leaders, for instance, principals in supporting teachers to adapt and cope with stressors cannot be underestimated and it has garnered much attention from researchers recently. Previous studies have shown that principal autonomy-support (PAS), which is defined as the perception of teachers that their principal motivates and empowers them (Collie, Bostwick & Martin 2020; Klassen, Perry & Frenzel 2012), is directly associated with teacher well-being (Collie & Martin 2017; Collie et al. 2020; Holliman, Revill-Keen & Waldeck 2022; Nie et al. 2015). The autonomy support that teachers receive from their principal could mitigate the increase in stress levels and consequently improve teachers' well-being (Mendoza & Dizon 2024). In the school system, one main factor that may influence how stress affects teachers' well-being is the support they receive from school leaders such as principals (Hascher & Waber 2021). Ryan and Deci (2000) were of the view that self-determination of an individual's well-being is linked to one's environment that is conducive to one's basic psychological needs – self-determination theory. In any place of work, autonomy support is regarded as an important need-support that satisfies one's basic psychological need for autonomy (Slemp et al. 2018).

The positive impact of PAS in an educational context has been widely documented (Berkovich & Hassan 2022; Chang, Leach & Anderman 2015; Collie & Martin 2017; Collie et al. 2020; Corbin et al. 2023; Holliman et al. 2022). For instance, Reeve et al. (2004) found that autonomy support for teachers increases student-level engagement, improves teachers' well-being (Collie & Martin 2017; Collie et al. 2020; Holliman et al. 2022), and enhances life satisfaction and work motivation (Ebersold, Rahm & Heise 2019; Maas et al. 2022; Nie et al. 2015). Teachers who perceive their principal as providing them with autonomy-supportive supervision are less likely to experience negative effects of stress on their well-being (Mendoza & Dizon 2024), giving them a sense of control and empowerment which ultimately makes them resilient and able to cope with stress (Collies et al. 2020). Principal autonomy support may create a positive work environment that promotes well-being by fostering positive relationships and open communication between teachers and their principals (Nie et al. 2015), reducing stress and burnout (Chang et al. 2015), and a greater sense of professional accomplishment and overall well-being even in the faces of global health crises (Kraft, Simon & Lyon 2021). These findings seem to provide some clues in terms of the inherent capabilities of principals to provide and offer support resources to educators for instance open communication lines, fair expectations, recognising effort

and organisational capacity-building initiatives (Hayes, Flowers & Williams 2021; Kraft et al. 2021; McLeod & Dulsky 2021; Weiner et al. 2021). This article aims to investigate how the power of nature and support from principal and colleagues reduces teacher stress and promotes teacher resilience.

Theoretical framework

Resilience is a complex construct that could be explored through a dynamic framework of systems using the bioecological model (Bronfenbrenner & Morris 2007). At the centre of Bronfenbrenner's theory is the belief that development and behaviour are the results of a complex network of internal and external systems. An attribute that enhances or inhibits resilience can be measured at each level of the system. The teacher being at the centre of the model is being influenced by the systems. The microsystems comprise the social roles and the interpersonal relationships with the family, colleagues at work, mentors and close friends. The mesosystems comprise two or more contextual settings, one of which does not include the target individual (Kangas-Dick & O'Shaughnessy 2020) – and teacher resilience could be well understood when it lies within the cultural and social contexts of the local communities (Johnson et al. 2014; Papatraianou et al. 2018). Resilience is regarded as a quality of both individuals and their environments, with factors at each systemic level that can either promote or inhibit resilience (Ungar 2013).

Looking at the teacher characteristics and moving outwards through bioecological systemic levels, the attributes of close others, social roles, and interpersonal factors seem to play an integral role in bolstering resilience in teachers both quantitatively and qualitatively (Ainsworth & Oldfield 2019; Doney 2013; Gu & Day 2013; Johnson et al. 2014; Le Cornu 2013; Mansfield, Beltman & Price 2014; Papatraianou & Le Cornu 2013). In addition, trusting and collegial relationships with other adults, for instance, peers, colleagues, mentors, and administrators are often pointed out as being an important source of social support that empowers teacher resilience (Buchanan et al. 2013; Gu & Li 2013). Furthermore, support received from school leaders, such as school principals also enhances resilience, particularly when principals establish collaborative relationships and encourage professional development (Papatraianou & Le Cornu 2014; Peters & Pearce 2012). The meso- and exosystemic levels play a crucial role in terms of public policy. It is critical to consider public policies and societal expectations that require teachers to be equipped with resilience strategies to overcome any adversity in the course of their work. Concerning this theoretical framework, this study believes that resilience is systemically embedded in the internal and external systems that could be sourced for by teachers in privately funded independent schools. According to Ungar (2013), it is important to recognise the significant role of the environment and recommend understanding resilience through the social-ecological model. This implies that one has to 'navigate' the socio-ecological environment to access health resources to become resilient.

Therefore, in the context of life-threatening events, resilience is the way individuals or groups of people find their way to psychological, cultural and/or physical resources in the environment to enhance their well-being. Moreover, their ability to do this must be culturally meaningful to them (Ungar 2013). Owing to the above theoretical framework, I believe that the protective factors that enable teachers to adapt and cope with stressors in a privately funded independent school are the result of social interaction within the school ecology. This theoretical framework was used to interpret the results of the study.

Research methods and design

A generic qualitative design was used. This design is appropriate for this study as the research focused on exploring and understanding how the power of nature (gardens) within the school premises and the principal and colleagues supports relieves teacher stress and thereby promotes teacher resilience. A generic qualitative design tries to 'discover and understand a phenomenon, a process, or the perspectives and world views of people involved' (Merriam 1998:78).

Participants and setting

The school selected as the site for the research was both purposeful and convenient. As the main goal of the study was to describe how teachers in a privately funded independent school adapt and cope with stressors in their school and the protective resilience factors that support them, I purposefully selected one privately funded secondary school as a site for the research. The researcher also selected this school as it was convenient as he was employed at the school and data collection would be easier. The researcher was aware of possible researcher bias created by this selection because of his teaching position at the school but attempted to address such biases in the collection and analysis as discussed later.

The researcher requested permission from the principal of the school to involve staff members of the school in the study. Informed consent was requested from all participants. The researcher decided to approach all teachers employed at the school, a total of 16 full-time employed teachers, to be part of the study. However, only 11 teachers decided to be part of the study, that is, those who returned their consent forms and completed their incomplete sentences. Teachers were, therefore, selected purposefully as full-time employed teachers at this particular school, which is a privately funded independent school. Given the aim of the study, all teachers employed were regarded as possible information-rich cases.

Data collection

In most qualitative research, Creswell (2003:17) states that researchers collect several forms of data and often spend a great deal of their time in the 'natural setting' where they gather the information needed. To understand and explore how teachers in a privately funded independent school cope and adapt to stressors and the protective resilience factors

that enable them to do this, the researcher used semi-structured interviews and incomplete sentences to collect data from the participants. Firstly, incomplete sentences were provided to all teachers who had agreed to participate in the study. These incomplete sentences were put in sealed envelopes and handed out to those teachers who had given informed consent to be included in the study.

Incomplete sentences are part of an assessment battery to determine personality structure which is based on psychodynamic theory (Holaday, Smith & Sherry 2000). For this study, incomplete sentences were not used to assess personality but rather used as a qualitative data collection technique to collect data from the participants. The gist of the incomplete sentences was to allow teachers the freedom to express their views on how they adapt and cope with stressors and what protective resilience factors enable them to daily adapt and cope with stressors through reflection on the incomplete sentences.

Secondly, an invitation was extended to all teachers who had participated and completed the incomplete sentences to be part of individual semi-structured interviews. In all, 11 teachers returned their completed incomplete sentences and consent forms. An interview is a data collection tool that is used to collect data or information from the participants in their natural settings (Myburgh & Strauss 2013). The technique was appropriate for this study because the aim was to understand and explore how teachers cope and adapt to stressors and the protective resilience factors that support them. The interviews were audio recorded and later transcribed verbatim. One of the main reasons for using the technique in this study was to allow for flexibility, which helped the researcher investigate the phenomenon in-depth (meaning it allowed the participants to express themselves as freely as possible).

Individual interviews were conducted by an independent colleague researcher studying towards a Master's qualification in educational psychology. This colleague was chosen because they had training in counselling skills and interviewing. The reasoning for this was that since the researcher was part of the staff, there might be possible bias during interviews which could compromise the trustworthiness of the study.

Data analysis

The interviews and incomplete sentences were analysed using content analysis, which is 'a research technique for making replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use' (Krippendorff 2004:18). Analytical constructs are used:

[O]r rules of inference to move from the text to the answers to the research questions. The two domains, the texts and the context are logically independent, and the researcher concludes one independent domain [*the texts*] to the other [*the context*]. (White & Marsh 2006:27)

Since this study is qualitative, inductive qualitative content analysis was used to analyse the data gathered from the field. The data were organised in the following ways: open coding, creating categories and abstraction. When using open coding, the researcher wrote notes and made headings in the text while reading. Everything that was written down was re-read several times. Thereafter, the researcher wrote as many headings as was necessary on the sides to ensure all the content was covered (Hsieh & Shannon 2005). Finally, the headings were transferred onto a coding sheet to generate categories.

After the open coding, the researcher wrote down a list of categories, grouping them under the main headings in order 'to reduce the number of categories by collapsing those that were similar or dissimilar into broader, higher categories' (Burnard 1991:462). By using inductive content analysis to create the categories, the researcher could decide, through interpretation, which themes would be placed in the same category.

The last process which was 'abstraction' involved using the categories that had been generated to articulate a general description of the research topic or research question (Polit & Beck 2004). To find names for each category, words that were representative of the content were used. Thereafter, subcategories that had similarities were grouped as categories and these categories in turn were grouped as main categories (Dey 1993). This abstraction process continued until it had been reasonably exhausted. Incomplete sentences were analysed similarly to how the interviews were analysed, after which the researcher triangulated the various data sources to arrive at the same pattern of themes that ran across the data.

Analysis was subjected to independent review through member checking and supervisor feedback. In the discussion of the analysis and findings, teachers are numbered A1–A11.

Ethical considerations

Before participants were recruited into the study, ethical approval to conduct this study was obtained from the University of Johannesburg Ethics Review Committee (ref. no. 2017-083). Permission to recruit participants from the school was first obtained from the principal and the directors of the school. Thereafter, the purpose of the study was explained to the staff during a staff meeting and those who voluntarily wanted to be part of the study were invited and their consent was obtained in the form of a letter that they signed.

Results

Two major themes emerged as protective factors within the school environment that contributed towards teacher resilience. The green space around the school and the role of the principal's and colleagues' support in managing work stress. These findings express the view of the teachers on how these protective factors contributed to their resilience in their day-to-day life of teaching at the school.

Masten (2012) holds the view that the ability of individuals to cope and adapt to stressors is inherent in the adaptive systems within their environment. Since humans interact continuously with their environment, there is a tendency to pass down useful knowledge that helps them to cope and adapt to stressors. This provides them with enough resources to negotiate their environment and access protective resources that would promote their resilience. A socio-ecological view of resilience focusses on the protective factors within one's environment that individuals must navigate and then access for their well-being. The school environment in this context means the physical environment (influence of nature), colleagues' and the principal's support (emotional support in the school), and academic support in the school, which interact within the eco-system to promote teacher resilience. The social ecology theory on resilience believes that resilience is contextually constructed and that an important role is played by school ecologies in the resilience process (Ungar 2013). These school ecologies include the role of school administrators, the collaborative support of colleagues and the general physical environment (Day & Gu 2013). In addition, Fisher (2011), who conducted a study on factors influencing stress, burnout and retention of teachers, revealed that the most popular methods of combating stress among teachers were positive peer collaboration and mentoring within the ecology of the school.

Green space in the school environment

In terms of the physical environment (green space or the garden), most of the participants indicated that the calmness of the school environment helps them to destress whenever they are at school and feel overwhelmed with work-related issues. Some of them were of the view that just walking around the school garden and sitting under the trees relieves them from the day's stress. One participant noted the following concerning the green space in the school:

'I would say, coming back to the environment, a calm environment puts me in an emotional place to be able to teach well.' (Participant A9)

Participant A9's view concurred with the study done by Ballew and Omoto (2018), where people who enjoyed, green space were found to enjoy positive emotional well-being.

The green space around the school is something Participant A3 is fond of:

'I think the school environment helps; we do have a pretty school with trees and garden etc. I think when you are out; it tends to relieve stress. I just take a breath and have a look around and we're a lot more fortunate than many schools in this country I think.' (Participant A3)

Participant A3 felt that coming out to enjoy the green space relieved her stress, and she felt fortunate to have a beautiful school surrounded by gardens or a green space that serves as a respite when teaching becomes overwhelming. This assertion by Participant A3 concurs with the study done by Van den Ber et al. (2010), in that those who lived in an area

with a large amount of green space within a 3 km radius were less affected by a stressful event than those who lived in an area with a low amount of green space. Another teacher explained:

'The fact that there is nature everywhere, I can sometimes feel I can just go outside and take a bit of nature in and feel like, okay, it will be fine. It's not just the building but the environment that helps me to relieve some of the stress.' (Participant A7)

The school being surrounded by green space is something Participant A7 is happy about. Just going to sit outside and take in some fresh air while relaxing in the gardens relieves her stress and makes her calm. She is of the view that it is not the physical buildings alone that make a school but also the natural green space. This natural green space adds some kind of natural beauty to the school which serves as a place of relaxation.

Another participant, A10, noted a 'good environment' that included neat classrooms, and a serene atmosphere coupled with green space – these help her feel joy and relax anytime she feels stressed. Therefore, a good working environment could be a source of a protective factor that bolsters employee resilience. Participant A11 viewed the natural school environment as supportive in relieving some stress:

'The natural school environment is also supportive in relieving some of the stress. Sometimes I just go and sit in the garden to relax during my free periods. It's so calming you know?' (Participant A11)

According to Participant A11, the natural school environment could be the green space around the school, and the serenity that surrounds the school. This assertion by Participant A11 is supported by the study done by Cordoza et al. (2018:511) where nurses who took work breaks and went and relaxed in the hospital garden were found to reduce work burnout and were reported feeling 'less stressed after getting some fresh air' in the garden. Therefore, the natural environment is an important resource that enhances resilience within the context of the school.

The support of the school management and colleagues

Regarding the role of the physical environment in contributing to teacher resilience in the school, it also emerged that colleagues' and the principal's support in the school play a vital role in teacher resilience:

'I would say the support structures around me such as the principal's support in terms of mentoring training ... helped me to teach well.' (Participant A9)

Participant A9 verbalised that the support he got from the school principal in terms of mentoring training plays a significant role in his teaching. The literature revealed that teachers who receive support from school leaders often cope with the stress that comes along with their jobs and that it motivates and empowers them, thereby improving their well-being (Collie & Martin 2017; Collie et al. 2020; Holliman

et al. 2022; Klassen et al. 2012; Nie et al. 2015). Participant A10 is of the view that if she can openly discuss her challenges with the principal without any restriction and the kind of support that comes from the principal assists her to go about her duty as a teacher without feeling the pressure of the workload:

'I used to work for the department where they are very prescriptive and restricting and that I battled with. If you need something you can discuss, you know, openly discuss what you need and get the support that you require. I think it's the overall environment, the supportive environment.' (Participant A10)

This assertion coincides with the work of Reeve et al. (2004) that autonomy support for teachers by their principals promotes students' engagement in the classroom and improves teachers' well-being (Collie & Martin 2017; Collie et al. 2020; Holliman et al. 2022) and enhances life satisfaction and work motivation (Ebersold et al. 2019; Maas et al. 2022; Nie et al. 2015). Therefore, teachers who perceive their principal as providing them with autonomy and supportive supervision are less likely to experience the negative effects of stress on their well-being (Mendoza & Dizon 2023), giving them a sense of control and empowerment – this ultimately makes them resilient and able to cope with stress (Collie et al. 2020).

Participants A7, A8, A9, A10 and A11 expressed the same sentiment regarding the kind of support they received from their colleagues and the principal as the reason for their resilience despite the stress that comes with the workload at the school:

'So, my colleagues always try and help me where they can. The principal I feel like she always has an open-door policy. I can always go and talk to her if I struggle with something.' (Participant A7)

'I suppose there's a bit of an open-door policy if you feel that you are stressed beyond relief, then you can go and chat to the principal or any of your colleagues.' (Participant A8)

'Debriefing with the principal and personal support I get from colleagues. You know just to have a personal conversation with a colleague is a big de-stressor.' (Participant A9)

'Again, I suppose it's supportive colleagues, good environment, and support from the principal.' (Participant A10)

'I would say the support structures around me, the academic structures with the HOD ... helped me to teach well.' (Participant A10)

'I could say the management is quite sympathetic and the principal is quite encouraging and has an open-door policy. So, if you have a problem you could go to her and discuss them.' (Participant A11)

In addition, the open-door policy adopted by the principal where teachers can express their views and where their views are taken into consideration when decisions are made makes them feel valued and appreciated. This culture in the school ensures that teachers want to come to work. Trusting and collegial relationships with other adults, for instance, peers, colleagues, mentors, and administrators are often pointed out as being an important source of social support that empowers teacher resilience (Buchanan et al. 2013; Gu & Li 2013).

Furthermore, support received from school leaders such as school principals also enhances resilience, particularly when principals establish collaborative relationships and encourage professional development (Papatrianous & Le Cornu 2014; Peters & Pearce 2012).

Taking into consideration the characteristics of the participants and moving outwards through Bronfenbrenner's bioecological systemic levels, the attributes of colleagues and the principal of the school seem to have played an integral role in promoting resilience among the teachers in the school (Ainsworth & Oldfield 2019; Doney 2013; Gu & Day 2013; Johnson et al. 2014; Le Cornu 2013; Mansfield et al. 2014; Papatrianous & Le Cornu 2014) in addition to the role of the green space.

Discussion

Teachers in the school were able to identify the resources within the school environment and use them to cope and adapt to stressors. These resources include the green space that surrounds the school where teachers go to relax during breaktime or when they are free. The school climate where there is an open-door policy, principal support of teachers as well as colleagues' support were some of the resources teachers had available to cope and adapt to stressors. This is confirmed in the study by Ungar (2008), where he asserted that access to material resources in the environment promotes resilience. The findings also confirmed the work of Beltman, Mansfield and Price (2011) that external protective factors that contribute towards teacher resilience are administrative support, mentor support and support of peers and colleagues. In addition, the way teachers support each other gives hope and inspiration that enables them to cope with difficult situations and challenges (Anderson & Olsen 2006). Furthermore, work done by Le Cornu (2013) on the ecological perspective indicates that support from colleagues, friends and family promotes resilience in teachers.

When people experience nature or walk through green spaces, it can be beneficial in terms of reducing domestic violence, quickening healing times, reducing stress, improving physical health, and bringing about cognitive and psychological benefits (see Grahm et al. 2010; Sahlin et al. 2012; Smit & Bailkey 2006). In general, greening promotes mental, physical and community health, while 'urban community greening builds natural, human, social, financial and physical capital in unique ways with important implications for building resilience before and following a disaster' (Tidball & Krasny 2007:5). Visiting therapeutic gardens or green spaces may improve mood (Cordoza et al. 2018), regulate emotions (Lee 2017), reduce stress (Goto et al. 2018), lower body inflammation (Ng et al. 2018), and improve the quality of life (Korn et al. 2018). According to Olszewska-Guizzo et al. (2020), because of limited treatment availability and a growing number of people suffering from depression, testing for new self-care interventions such as visitation to therapeutic gardens may augment traditional treatment methods. Therefore, the resilience of the participants was systemically enhanced through Bronfenbrenner's bioecological model.

Recommendations

From the findings and the conclusion of this study, further research could be conducted in other educational institutions such as private schools (state-subsidised) and government schools in urban and rural areas to explore protective factors that promote teacher resilience. In addition, owners of private schools or the management team in government schools could adopt a policy of creating green spaces (gardens) as it would go a long way in relieving teachers' and learners' stress thereby enhancing their resilience.

Limitations

Initially, all 16 staff members were interested in the study; however, only 11 returned their consent forms; thus, the entire staff were not included in the study. Even so, I still feel that having many staff participants was deemed sufficient to understand the issue under investigation from a qualitative perspective. The selection of the site may have led to researcher bias as it was convenient for the researcher because he was a full-time staff member at the time.

However, steps were taken to minimise the bias by employing an independent researcher, namely a researcher studying towards a qualification as an Educational Psychologist to conduct the interviews on the researcher's behalf. In addition, the researcher was mindful of his beliefs and expectations as a staff member which could have influenced the findings and discussion of results. To overcome these prejudices, the researcher tried to be as open-minded as possible and devoid of any prejudices. Finally, the findings from the study cannot be generalised because participants were selected from only one school as the study was qualitative and highly contextual.

Conclusion

This article aimed to describe and explore the protective factors that promote teacher resilience in a privately funded independent school. A qualitative generic design was used to elicit teachers' views on protective factors that promote their resilience. It emerged from the study that participants derived psychological well-being and stress reduction when they walked or sat in the garden. In addition, some of the participants were of the view that emotional support from the principal and their colleagues was a great resource for them in coping with stress. To conclude, the findings from the study indicate that the strong bond among teachers in the school and how they support each other in terms of difficulties ensure that each teacher views the school as a home. In addition, the support of the principal and her open-door policy towards the teachers emerged as one of the major contributing factors that made teachers feel comfortable, resulting in them giving their best. Furthermore, the physical environment of the school which resembles a park encourages teachers to come out of their classrooms to relax and enjoy the beauty of nature.

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Competing interests

The authors declare that they have no financial or personal relationships that may have inappropriately influenced them in writing this article.

Authors' contributions

This article was a product that emerged from T.B's Master of Education minor dissertation that was supervised by M.v.d.M. While T.B. received guidance from M.v.d.M. on the article writing, the actual writing of the article was done by T.B.

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Data availability

The data that support the findings of this study are available from the corresponding author, M.v.d.M., upon reasonable request. The data cannot be shared openly to protect study participant privacy.

Disclaimer

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