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Exploring the effects of stress on students at a technical and vocational education and training (TVET) college

LEE-ANNE NEFDT (ll.diedericks@gmail.com) Cape Peninsula University of Technology,
Department of Research and Postgraduate Studies, Faculty of Education, Cape Town, South Africa
ORCID LINK: <https://orcid.org/0009-0003-8556-5069>

HANLIE DIPPENAAR (dippenaarh@cput.ac.za) Cape Peninsula University of Technology,
Cape Town, South Africa
ORCID LINK: <https://orcid.org/0000-0001-6876-9826>

PENELOPE ENGEL-HILLS (engelhillsp@cput.ac.za) Cape Peninsula University of Technology,
Professional Education Research Institute, Cape Town, South Africa
ORCID LINK: <https://orcid.org/0000-0002-1084-769X>

ABSTRACT

Students in technical and vocational education and training (TVET) colleges experience significant amounts of stress, which can affect their academic performance and their mental and physical health. This article reports on a study using the Lazarus theory of stress to examine the patterns and contextual factors affecting the stress experiences and coping mechanisms of a student group at a TVET college in South Africa. Student interviews and journal literature revealed the key factors contributing to student stress. These include financial constraints, social challenges, daily hardships and demanding academic workloads. The study highlights the importance of targeted support strategies to deal with the negative impacts of stress in technical and vocational education. Based on the findings, a number of recommendations to reduce the impact of stress on students are made.

KEYWORDS

Technical and vocational education and training (TVET); academic performance; stress experience; coping mechanism; support framework; social challenge

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Introduction

Technical and vocational education and training (TVET) plays a crucial role in the post-school sector by providing for career-focused education and practical training in specialised skills for a variety of industries; in South Africa it has been transformed significantly since the apartheid regime ended in 1994 (Gaffoor & Van der Bijl, 2019). It is evident that these reforms have increased access to higher education and consequently the enrolment in TVET colleges has grown significantly during the past three decades. This presents new challenges to meeting the academic and social needs of the TVET student population (Buthelezi, 2018). In this changing landscape, there has been an increase in stress levels among TVET students (Buthelezi, 2018). Many of these students face financial difficulties, despite the fact that the majority of them obtain state-funded bursaries that pay for tuition and certain study-related expenses. However, according to a study conducted by Powell et al. (2024), bursary allowances are frequently insufficient to cover basic needs, including accommodation, food and toiletries. It can be especially difficult for students from low-income families to manage this funding gap. Some are consequently compelled to seek part-time jobs or to rely on family support when it is available; this might make it difficult for them to give their studies their full attention.

Many prospective TVET students qualify for a bursary from the National Student Financial Aid Scheme (NSFAS), which assists students who are struggling financially. Mafilika and Nkgabe (2024) state that, sometimes, NSFAS student allowances are not used as intended but are seen as a way to support the family. However, if bursary funding is used to support the family, the funds are insufficient to cover student fees and other expenses, such as travel costs. This is likely to contribute to students' elevated stress levels. As a result of stress, academic performance and emotional and social well-being could be negatively affected (Pariat et al. 2014).

According to a study by Herman et al. (2009), stress levels among students in South Africa have, notwithstanding the end of apartheid, risen as a result of economic instability, social challenges and academic pressures. Ruiz and Lopez (2024) point out that students are under pressure to perform well and to succeed in their studies in order to provide a way out of poverty for themselves and the rest of their family. This adds to their stress. The high stress levels experienced result in a range of emotional and physical symptoms such as headaches, fatigue, depression and anxiety (Dusselier et al., 2005). In the light of this, May (2015) believes that stress management is essential; this is because it has been discovered that individuals who employ efficient coping strategies report lower levels of anxiety than those who do not. Owusu and Essel (2017) emphasise that the first step towards preventing the destructive consequences of stress on academic success is to recognise and manage its causes and consequences. This is why many TVET colleges are exploring strategies to support students to develop additional coping mechanisms (Jonker, 2016).

Given the negative effects of stress on well-being and academic performance, it is critical to pinpoint the causes of stress and investigate the possible coping mechanisms. This article

describes a study that reviewed the way in which students dealt with stress using coping strategies. The students in the study were enrolled for a National Accredited Technical Education Diploma (NATED), NQF (National Qualifications Framework) N5, at a TVET college in Cape Town, South Africa. The college was chosen for convenience. The lower academic performance of students at the campus where the research was conducted, in comparison with other campuses of the same college, led to the site's purposeful selection for this research study. Although Business Studies students are enrolled at numerous campuses and at different NQF levels, this study concentrated on N5 students at a specific school to enable a more targeted and thorough examination of their experiences and difficulties. Focusing on N5 students is necessary because, although N4 students are the new intake, N5 students deal with a greater workload and more difficulties as a result of moving from N4 to N5. The study is useful because a deeper understanding of the students' experiences could help TVET colleges to develop a more conducive learning environment for all technical and vocational students. This could be achieved through the provision of targeted interventions and support mechanisms to reduce the negative effects of stress and to enhance students' educational experience.

To understand how stress affects students' experiences and coping strategies, this study sought to explore the following research questions:

1. What types of stress do students experience?
2. How do students perceive stress to be influencing their academic performance?
3. What coping strategies do students use?
4. How effective do students find their own coping strategies?

Stress and students

Stress is the result of both social and psychological factors. Social stress is the result of 'a relationship between individuals and their environment' (Lazarus & Folkman, 1984:19). Stress occurs when 'a relationship is deemed by the individual as taxing or exceeding their resources and endangering their well-being' (Lazarus & Folkman, 1984:19). In turn, psychological stress is the result of the coping methods available to an individual not being sufficient to enable them to cope with daily functions (Lazarus & Folkman, 1986). In this way, severe stress disrupts people's daily lives and functions and can force them to seek adjustments to their lives. However, not many people are able to do so without assistance (Bernstein et al., 2008).

Low programme completion rates, which can be linked to student stress, are one of the challenges facing TVET colleges (Lawrence, 2016). A most significant challenges that these institutions are now dealing with is the shortage of trained and experienced teachers (Lawrence, 2016). Many TVET colleges struggle to attract and retain skilled professionals who can teach the practical and theoretical components of their curriculum effectively. This shortage of qualified teaching staff often leads to suboptimal learning experiences for the

students; this is because they may not receive the hands-on training and specialised expertise needed to develop the necessary skills for the job market (Lawrence, 2016). As Gaffoor and Van der Bijl (2018) point out, students will experience stress when instructors lack both pedagogical skills and business-specific content knowledge, since this negatively affects their engagement and learning outcomes. A more recent study by Makibinyane and Khumalo (2021) shows that the persistently low throughput rates in South African TVET colleges are caused by academic difficulties, a lack of academic support and inadequate lecturer qualifications. This leads to less-satisfied students, who may drop out of college.

Studies have shown that academic stress driven by heavy workloads and performance pressures has a significant impact on students' mental health (Pierceall & Keim, 2007). Douce and Keeling (2014:1) argue that stress 'impairs learning: it decreases intellectual and emotional flexibility, weakens creativity and undermines interest in new knowledge, ideas and experiences'. Negative stress related to academic performance, according to Owusu and Essel (2017), is caused by factors such as an excessive workload; this might make a student feel that they have insufficient time to deal with all the subjects to the best of their ability. If not handled correctly, high levels of stress result in fatigue, depression and several other physical and emotional ailments. This can be exacerbated when education is combined with a 'busy life' such as working and studying when one has children (Owusu & Essel, 2017). These researchers have found that overloading students with work leads not only to academic stress, but also to mental and physical health problems, which hinder learning (Owusu & Essel, 2017). Another significant factor is financial stress, since students frequently struggle to pay for things such as food and transportation in addition to tuition (Lawrence, 2016). Personal challenges, including family responsibilities, further exacerbate stress levels (Sohail, 2013).

The academic achievement of students is heavily influenced by family factors. The main contributors to increased stress levels among students were identified in a study by Kai-Wen (2009) as social factors, a rise in poverty and the lack of resources available to many students. Students frequently balance the responsibilities of their studies, jobs and families, which leaves them with limited resources and financial support. The author pointed out that their mental and emotional health may suffer greatly as a result of the stress of juggling several obligations. This can extend to conflict in families that is often caused by a lack of understanding or support in the household or within the parent-child relationship (Kai-Wen, 2009).

Theoretical framework

Drawing on the theory proposed by Folkman and Lazarus (1980), the dynamic interplay between stress, coping mechanisms and academic success was examined. Stress can be seen as both a positive and a negative phenomenon when it is considered a challenge – which can lead to individuals adapting and responding in different ways. Our study was interested in ascertaining how individuals perceive stressors and how this affects their emotional responses.

In his work, Lazarus (1993) discussed coping mechanisms that can be employed in two ways: problem-focused coping, which involves actively modifying the external person–environment relationship; or emotion-focused coping, which involves modifying internal or personal meanings.

Problem-focused and emotion-focused coping differ in their approaches and intended outcomes, as illustrated in Table 1.

TABLE 1: Summary of coping strategies based on Lazarus (1993)

COPING STRATEGY	DESCRIPTION	EXAMPLES	OUTCOME
Problem-focused coping	Efforts are directed at behaviourally resolving distressing situations. Involves information-gathering, decision-making, conflict resolution and acquiring resources (knowledge, skills, abilities).	Situation-specific actions, task-oriented behaviours, and instrumental problem-solving.	A sense of mastery and control as an individual works towards goals.
Emotion-focused coping (positive reappraisal)	Focuses on reducing emotional distress by reinterpreting situations to make them more manageable or meaningful. Focuses on internal responses to stress rather than the external problem itself.	Positive reframing, shifting perspective and focusing on personal growth arising from the experience.	Reduces disparity between situational demands and personal capacity.

The theoretical framework of Lazarus (1966) guided the examination of stress predispositions and coping mechanisms, recognising as it does the influence of both personal and situational factors on stress management. This theory states that an individual's appraisal of events, based on the way they evaluate the significance of events, influences their emotional response and perception of stress. Lazarus and Folkman (1984) identified three types of appraisal: harm, threat and challenge; and they distinguished between primary and secondary appraisals of events. Three components of primary appraisals are evident:

1. Irrelevant, where the individual has no stake in the transaction or outcome;
2. Positive, where the individual believes the situation is positive with no potential negative consequences; and
3. Stressful, where the individual perceives only negative consequences or that the circumstances will lead to an adverse effect.

In secondary appraisals, these perceptions would be used to determine the extent of the harm caused by an event. The concept of harm or loss refers to the belief that one has suffered physical harm or emotional loss in the past. There is a threat of future harm or loss when there is an expectation of this happening again in the future. These appraisals influence the ways in which individuals perceive stress and cope with it, therefore emphasising the importance of having effective coping mechanisms in place to manage stress.

A study conducted in the university of technology sector highlights the importance of coping mechanisms and resilience in managing academic stress and improving the performance of students (Thomas et al., 2022). According to the study, resilience is associated with positive attributes such as being able to adapt to, overcome and recover from stressors. Expanding on this concept, resilience theory is also important to understanding the way in which students deal with stress in their personal and academic lives. The ability to overcome hardship, preserve well-being and even develop through trying times is known as resilience (Masten, 2001; Ungar, 2012). Resilience theory acknowledges that people can build coping mechanisms, adaptive techniques and personal qualities in response to stress rather than only seeing it as a disruptive force. Resilience is essential for students who have to juggle many responsibilities and demanding academic standards in the context of this study. These results imply that encouraging student resilience could operate as a protective factor, enabling them to persevere in the face of adversity.

To achieve academic success and personal growth, students should use coping mechanisms such as support and talking to their peers (Thomas et al., 2022). El-Ghoroury et al. (2012) determined that the most popular coping method used for managing stress was receiving support from friends, family and other students. Owusu and Essel (2017) have suggested that introducing successful coping strategies to students might help them to avoid the harmful consequences of extreme stress. Therefore, the importance of understanding perceived stress, its effects on college students and the way that students manage it is clearly valuable. However, Moir (2014) has stated that the use of coping mechanisms may not meet the needs of all students because such mechanisms have limitations and some students may require more extensive support. In addition to the lack of workshops on financial management and time management on campus, there are also support services such as counselling that may not be optimally used by students (Lawrence, 2016). As a result, developing a support system that is effective requires overcoming the shortfalls described. Therefore, this research will be beneficial to exploring the stressors as perceived by students themselves, and to assisting executive management, educators and policymakers at higher education institutions, by providing recommendations for measures to mitigate this challenge.

Methodology

An interpretivist approach was applied to the study to deepen our understanding of the subjective realities of the participants. This approach provided the researchers with an opportunity to view stress through the participants' own perceptions and experiences (Creswell, 2007). An important part of the research was to request the participating students to keep a detailed journal of their thoughts, feelings and experiences related to stress during a period of six months. The qualitative data collected during that six-month period provided valuable first-hand accounts and perspectives for the researcher from the seven students who submitted the journals that they kept. In addition to the journals, the researcher conducted in-depth individual interviews with 14 students. Insights from the

data collected were considered together with the journals of the participant students to determine the effects of stress on their sense of well-being. Instead of providing names, each interviewee was given the code name 'Participant' and a unique number. For example, 'P1' was used for Participant 1, 'Int1' for Interview dataset 1, and 'J' followed by a unique participant number was used to indicate the journal entry (e.g. 'J3'). During the interviews, the researcher engaged deeply with the participants to find out about their personal experiences and perceptions of stress, in addition to their own responses to stress. As a result of this approach, the researcher was able to make sense of the data by analysing the students' diverse perspectives, which provided a nuanced understanding of the way stress is experienced and managed by students in the TVET sector.

Research design

A qualitative research design and a narrative research tradition were applied through the use of, for instance, telephonic interviews using a narrative approach (Kvale, 2003). Narrative interviews provide a naturalistic view of the students in their natural environment in which sense is made of a phenomenon and the meaning that students attach to this phenomenon (Denzin & Lincoln, 2013). The natural environment in this research was the institution which the students attended and the phenomenon being studied was the students' stress and their current coping mechanisms.

Data collection and site selection

One TVET college in Cape Town, South Africa, was selected for this study. Business Studies N4–N6 is offered at two campuses of the college and most of the students receive bursaries from the National Student Financial Aid Scheme (NSFAS, 2018). The NATED Business Studies course includes an 18-month theoretical and an 18-month practical course. The NQF 4 Certificate takes six months to complete and another 12 months to complete NQF 5 and NQF 6 (i.e. 18 months in total). However, for students to be NQF-certified, they must complete an additional 18-month practical component (workplace learning) and hand in a portfolio of evidence. Students must demonstrate their skills through practical work, in this way preparing themselves for employment in industries that demand these skills.

The data were collected during the Covid-19 pandemic; therefore, telephonic interviews were used as an alternative to face-to-face sessions. This demonstrated the flexibility of collecting interview data from participants who, for whatever reason, might not be able to attend a face-to-face interview. There were 90 students, all of whom were invited to participate in the study; of these, 19 students aged 18 years or older volunteered to participate. Of the 19 students, only 14 agreed to participate in the in-depth interviews to enable the researcher to learn more about the difficulties they encountered in dealing with stress. Each participant was interviewed twice, once in January, at the beginning of the semester, and once at the end of the academic semester, in June. The reason for conducting two interviews at different

times was to ascertain whether the students' experiences changed at all during the course of the semester; the data indicated that minimal change had occurred.

The researchers requested the students to keep a record in their journals of any stressful events that they experienced during the period when the research was conducted (i.e. between January and June). They were requested to express their thoughts and opinions freely about their stressful circumstances, how they experienced stress and the coping strategies they used to manage it. However, only seven participants were comfortable about returning the journals that they had kept during the six-month research period.

The information gleaned from the two interviews with each participant was substantiated by their journal entries. Insights from the data collected from the interviews were considered together with the seven participants' journals to explore their experience of stress. This was done to respond to the research questions about what their key stressors were and how useful and effective their current coping mechanisms were. Many of the statements made during the interviews were repeated in these journals.

Ethical approval was obtained from the Research Ethics Committee of a higher education institution in the region and the relevant government department. The TVET college gave permission for the study to take place on two of the college campuses. Informed consent was obtained from the participating students before conducting the interviews. The research details and the purpose of the research were clearly explained to the participants and their confidentiality and privacy were respected. The data collected were used for this study only and were stored on a password-protected computer, to which only the researchers had access.

Data analysis

The data were analysed by means of thematic analysis to examine transcripts from the interviews and the written journals. This method entailed pinpointing, analysing and documenting recurring patterns (themes) in the data and providing a comprehensive and in-depth portrayal of the dataset (Howitt & Cramer, 2007). Each participant's responses to the interview questions were recorded and transcribed verbatim into a Microsoft Word document. Following that, the researcher identified codes, which were then organised into categories. Based on these categories, themes and sub-themes were identified and indicated, with corresponding direct quotations. The journal data-coding process was guided by the thematic analysis of the interview data. The journal entries clarified and sometimes elaborated on some of the matters discussed in the interviews.

Findings

This section presents the data, based on four identified themes. The first three themes are factors relating to the stressors experienced by the students and the fourth theme focuses on the effectiveness of the current support and coping mechanisms used by the participants.

The themes and sub-themes are represented graphically below:

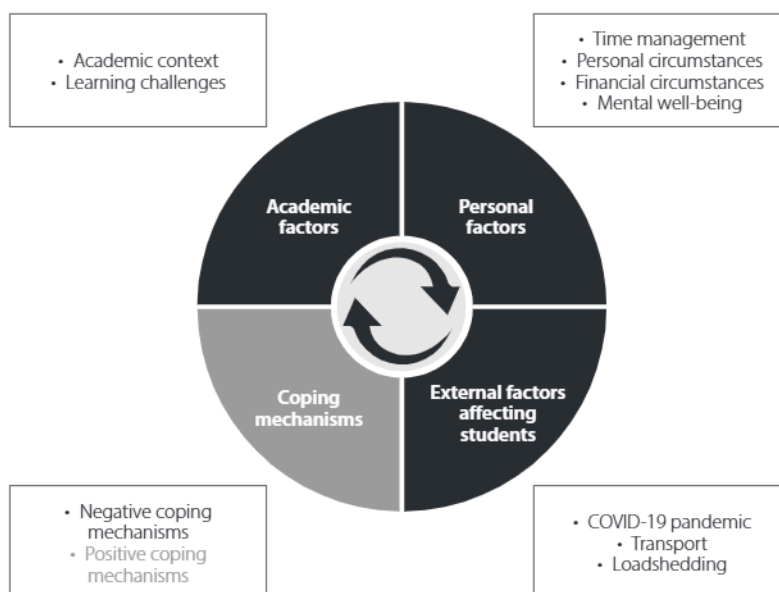


FIGURE 1: Graphical representation of the themes and sub-themes

Source: Authors' own.

Theme 1: Academic factors

The students indicated that they experienced various academic challenges daily. At times, the workload was seen as excessive. They struggled to grasp the work, especially if lecturers left and were replaced by new lecturers. This occurred when a lecturer was transferred to another department, and, more frequently, during Covid-19, owing to lecturers falling ill and temporary lecturers being employed. This was a challenge, as many students indicated that they struggled to adapt to a new lecturer's way of doing things, as seen from one of the journal entries below:

One lecturer has not come to college for three weeks, so we [are] missing out on a lot of work and this is stressful. [I] lack ... understanding [of] the work; some of [the] things [are] explained [and] I do not understand. Studying three subjects in a row with no off-time in between makes me feel stressed because of the pressure. Getting a new lecturer [has made] things more difficult. This lecturer is different to the other one so I must adjust and it disturbs my focus. [P4: J4]

When asked about further stressors that influenced their daily lives, a number of the students indicated that they could not cope with multiple academic tasks all at once. The work accumulated and then the workload could become overwhelming, especially when the

student did not have a lecturer consistently present or when the lecturer did not explain the work clearly. The students then spent time trying to figure out what was expected of them to pass or reach their desired academic goal. This is similar to the findings by Owusu and Essel (2017), who found that students who were overloaded with work experienced academic stress that led to mental and health problems, which interfered with their learning.

Interview data confirm the above statement, with participants stating:

Yes, definitely. Definitely! Because this year has been extremely tough [...] N5 has just been more difficult than N4 for some reason. [P1: Int2]

Another participant generalised the stress-related workload statement and commented:

Personally, I feel that stress to me – it actually comes down to a lot of things, a lot of things that you need to handle day by day. [P6: Int1]

P3 stated:

The work – it's too much sometimes. It is too much work, Ma'am ... it's just like they give too much work and it's a lot of pressure. [P3: Int2]

Overwhelmed by their workload, a number of the participants struggled to cope. This is supported by Kai-Wen (2009) and also by Galanakis et al. (2016) who state that increased academic workloads significantly increase stress levels. Researchers have discovered that overloading students leads not only to academic stress, but also to mental and physical health problems which hinder learning (Galanakis et al., 2016:688).

Theme 2: Personal factors

Personal stress involved socio-economic factors. These contributed to feelings of stress and thus influenced the students' academic lives. Personal obstacles could lead to stress and negatively affect students academically. Several factors were identified, including family responsibilities, child-rearing and financial responsibilities, as factors that contributed to their stress. Stress also entailed feelings of fear, anxiety and depression that hindered progress or caused students to lose focus. The students' emotions were at times so overwhelming that they were not able to manage their daily tasks. They could become withdrawn when they did not have the correct coping strategies. Fear of the unknown and not knowing what the future had in store for them also led to stress. The challenges and pressures of life could also be a barrier to success.

The participants discussed and shared information about how personal factors, such as their home environment, contributed to their feelings of stress and about how it influenced their academic life. One participant experienced a great deal of pressure associated with their academic studies and personal responsibilities:

Exploring the effects of stress on students at a TVET college – L Nefdt, H Dippenaar and P Engel-Hills

N5 has just been more difficult than N4 for some reason and it's more pressure on us because of my home situation as well. Like, maybe, when you are going through something at home, and then it's just that one thing that you think about all the time. I live with a two-year-old also now. He is not my biological brother, so it's not easy to get around to my studies because I must take care of him while my mother [is] working. [P1: Int2]

Some participants also mentioned household stress and the frustration of having to study while having to attend to other household matters:

I mentioned I'm at home and I must study from home ... [with] children [being] here. I don't like doing everything at one time and ... with Covid-19 I must study; it's hard to study [and] just stay at home. I stress out and I take it out on my sister and I take it out on the kids because I feel a lot [of] anger because of it. [P7: Int2]

It is evident from the participants' input that the previously mentioned personal issues caused both stress and interfered with their ability to study. Some individuals believed that, before they could focus on their education, they had to take care of their household duties. A number of the participants were mothers, wives, breadwinners or guardians and they struggled to cope because they lacked the support of their loved ones. Given that women reported these roles and expectations more often than males, this tends to indicate a gendered aspect to stress. Women, who frequently find themselves torn between conflicting priorities, are further burdened by the combination of caring and household duties, on the one hand, and academic work commitments, on the other. In addition to raising stress levels, this draws attention to systematic gaps in the support networks accessible to working or mature female students. Male participants, in contrast, were less likely to raise such obligations, which tends to indicate that men and women perceive and deal with stress differently.

Lawrence (2016:25) mentions the financial challenges that students experience and explains that students are reliant on bursaries. The researcher found that the participants' financial stress was a great burden, as this hindered their going to college. Older participants experienced the guilt of studying full-time and felt obliged to use the bursary money to provide for, and contribute to satisfying, their family's day-to-day needs. This was additionally stressful because it meant choosing between satisfying the family's needs and the participant's needs, and this therefore influenced their academic performance.

The participants supported the above statement:

I have bills, I have a child, I have a home that I have to take care of because none of the people that I live with are employed right now, so we're struggling financially. [P2: Int1]

Another participant also expressed this concern:

Financially, I am stressed because there is no income [coming] in, [as] everyone is locked in and some of the people are not allowed ... to go to work [yet], so that's stressing me. [P5: Int2]

These individuals experience many stressors, and the participants explained that this takes its toll on them in many ways. Some participants did not have solutions to the problems or to the challenges they were facing. This caused a build-up of stress over a long period and had a negative effect on their overall well-being, which is discussed in the next point.

Dusselier et al. (2005:15) have pointed out that stress is both physical and emotional. In the absence of relief from stress, distress can occur as a negative response that disturbs the body's internal balance, causing physical symptoms. These include headaches, an upset stomach, elevated blood pressure, chest pain, sexual dysfunction and sleeping difficulties, in addition to emotional problems such as depression, anxiety and panic attacks. Stress and anxiety therefore affect the general well-being of individuals. These problems were clearly identified by the participants, who mentioned that the stressors became so overwhelming that they led to depression and to their feeling drained and moody. This, in turn, affected their academic performance and they noticed that their grades were lower than usual. It was also suggested that academic stress is the single-most dominant stress factor affecting college students' mental health. However, stress may be more prevalent in some groups of students than others. Theme 2 describes how feelings of uncertainty could confuse or overwhelm students and consequently may affect their academic performance.

A journal entry similarly confirms the above statements:

That's what I experience. It makes you sick, you get headaches. It's a lot of stress; you can't eat, all that stuff. [P4: J4]

A number of the participants felt that these stressful emotions became so overwhelming at times that they led to depression; they made statements similar to the one below:

I feel like I'm going into depression mode because there's not much that I can do about what is happening, you see. [The number] of thoughts ... just overwhelm you, [with you] not being able to control your emotions [at] all. [P2: Int2]

Many students felt that they could not focus properly when under immense pressure. Their minds were either focused on other concerns such as negative feelings about themselves or they lacked the motivation to go on. They had no correct way of keeping their minds or feelings under control and therefore they reacted negatively and were not able to function well.

Time management was also one of their stress factors. Not having a structure or a plan for how to approach certain subjects and not knowing which subjects to focus on or prioritise led to students' experiencing many feelings of stress and anxiety. Owusu and Essel (2017:23) have suggested that having too much academic work can also increase students' stress levels because they think they will not have enough time to deal with everything properly. Because of these feelings of incompetence, tension and stress will negatively affect their academic performance.

Many of the participants found that having too many matters to attend to at once led to greater stress levels. As one participant stated:

It's a lot on my plate. [For instance,] every day I need to [have a] schedule: this is what I'm going to do this time of the day; this is what I'm going to do when I get home from college. [P6: Int1]

Another participant found it challenging to meet deadlines, stating what a challenge it was:

to [actually] get the work ... done on time. [P11: Int2]

The cause of the stress was therefore a personal time management challenge, as the participant indicated:

I'm [...] a person [who procrastinates], you know. So, I leave everything to the last minute, then [I stress]; [like having] two weeks to do stuff and [...] that [is] very, very stressful. [P12: Int2]

The participants clearly indicated that the stress and anxiety they experienced as a result of not having the correct mechanisms in place, led to frustration. Having too many responsibilities, and other factors contributing to their stress, caused the participants to feel that they did not have the energy to find solutions to their challenges. Research by Cahir and Morris (1991:414) shows that time management reduces stress levels in students.

Theme 3: External factors affecting students

At times, there were external factors that were beyond the students' control, such as transport and Covid-19. A number of factors related to Covid-19 were identified that hindered students, such as not having sufficient resources or contact time with their lecturers for extra support. Often, students cannot study effectively without receiving guidance from their lecturers. According to a study conducted by Shaik et al. (2022), students across the globe face challenges, especially during the Covid-19 pandemic. During this time, lecturers were under pressure to support students remotely, but many students had limited resources and were often able to access only inexpensive night-time data. The lack of sufficient resources

and the reduced contact time between students and lecturers significantly inhibited the academic performance of the students and increased their levels of stress.

The participants stated repeatedly how Covid-19 had affected their studies. One mentioned the following:

With Covid-19, I must study. It's hard to study [and] just stay at home; [...] it really puts a lot of [pressure] on me – I'm working [...] really hard and now this pandemic. [P7: Int1]

Another participant indicated:

With this whole virus, you're going back to college but now you don't know, are you safe? [P12: Int1]

Visser and Law-Van Wyk (2021) have pointed out the significant impact of the Covid-19 pandemic on the mental well-being of college students, with some being more stressed than others owing to economic instability, unemployment, stress, anxiety and feelings of insecurity. As a result of anxiety about the way forward after Covid-19, students reported feeling anxious about their academic future. In addition, after Covid-19, some lecturers preferred a blended approach to teaching and learning and the students, who found it challenging to adjust to the online learning context, reported a lack of guidance from lecturers.

The students mentioned that job loss and other factors such as transport problems prevented them from attending their classes and had a negative effect on their performance. Transport challenges included not knowing how to get to the college or experiencing stress when having to travel on public transport; these factors prevented the students from attending classes and they therefore missed out on receiving important information.

One participant confirmed the stress caused by having to use public transport:

[T]ravelling to college is a major stress factor because I make use of public transport. [P4: Int2]

Another participant added:

[...] I'm worrying about how I'm going to get [to college] the next day [...] or how I'm going to get home. [P9: Int2]

Apart from transport concerns, rolling blackouts during load-shedding affected the students, as they were not able to study or do their homework in the dark. Kai-Wen (2009) has indicated that the effects of social–environmental events such as load-shedding on academic performance and education in general are multifaceted.

Exploring the effects of stress on students at a TVET college – L Nefdt, H Dippenaar and P Engel-Hills

One of the participants expressed their stress about load-shedding and their studies:

[...] it's causing a lot of stress, especially from [indistinct] because [of] load shedding. [P12: Int1]

Another student's journal entry also mentioned this:

Load-shedding is a problem for me and my studies. [P4: J4]

These statements attest to the fact that a number of the students did not have control over the external factors that directly affected them, such as job losses or transport that they needed to take to them to where they were required to be. Some students relied on public transport, otherwise they would have been stranded. This directly affected their academic performance and caused them to miss classes and assessments.

Theme 4: Coping mechanisms

The coping mechanisms that students used were either negative and unhealthy or positive and healthy. Many coping mechanisms were described by the students, even if they were not necessarily positive coping mechanisms. Unhealthy coping mechanisms included resorting to alcohol or drugs to forget their troubles; other negative mechanisms included frequent crying and then isolating themselves. The healthier methods were, for example, writing in a journal or speaking to someone. A number of the students chose these positive options.

In their journal, one student mentioned another positive coping mechanism:

Jogging sessions help me relieve stress. [P3: J3]

Another participant mentioned in an interview:

I'll jog or join a couple of friends for a jog in the morning and [do a few] exercises [...] . [P5: Int1]

Some participants would find relief by exercising and others found relief in the journal-writing. Many of the journal entries indicated that this research study helped them to deal with their stress:

[The] journal helped [to relieve] my anxiety and stress. [P1: J1]

In similar vein, another journal entry stated that the present research had assisted them positively:

Diary [entries] helped me reflect and grow in these past months. [P3: J3]

Negative coping methods were employed when the participants did not have the correct support structures in place. Below are opposing views on the coping mechanisms, in which participants mentioned unhealthy lifestyle choices. This was evident largely in the participants' interviews. Some of life's pressures became overwhelming to the extent that it became difficult for some of the participants to cope and persevere with their studies.

One of the participants confirmed this by stating:

What generally makes me feel better is drinking, so I would just buy myself a bottle of wine and drink it all up. [P2: Int2]

Another participant stated:

I'm a nail-biter, Ma'am. And I tend to smoke. [P4: Int1]

Yet another participant dealt with her stress differently:

I cry a lot. Whenever I feel overwhelmed because of stress I go to my room and cry a lot. [P5: Int1]

One other participant responded as follows:

I just go to sleep; I sleep all day. [P10: Int1]

These statements indicate that the participants believed the coping mechanisms that they used helped them. But they did not realise at the time that these choices only made them feel worse and did not help them to deal with the challenges they faced.

As discussed above, Sohail (2013) has mentioned that stress can be very harmful to a person's physical and mental health. These negative coping mechanisms indicate the need to develop coping strategies to reduce stress, which is necessary to prevent the harmful effects of prolonged stress.

The word-cloud visualisation in Figure 2 effectively highlights the dominant vocabulary that emerged from the participant interviews and from the journal entries which were collected during a six-month period. They provide valuable insights into students' perspectives and experiences. Words such as 'Covid', 'lockdown', 'study', 'negative' and 'academic' were most frequently mentioned and they express what contributed to the participants' overall experiences of stress.

Exploring the effects of stress on students at a TVET college – L Nefdt, H Dippenaar and P Engel-Hills



FIGURE 2: Word-cloud of the most frequent words used during the interviews

Source: Authors' own

Discussion

Gaffoor and Van der Bijl (2018) point out that, when instructors are underqualified, such as those lacking both pedagogical skills and business-specific content knowledge, this causes students to experience stress, which negatively affects their engagement and learning outcomes. In a previous study by Makibinyane and Khumalo (2021), it was found that academic difficulties, poor academic support and unqualified lecturers resulted in a higher risk of students dropping out of college if they were not satisfied with their progress. These factors contribute to the persistently low throughput rates in South African TVET colleges.

The present study indicates that students are experiencing stress and that there is an urgent need for a multifaceted approach to handle this problem effectively. The stressors identified are apparently commonly experienced by students (Gaffoor & Van der Bijl, 2018); however, the data suggest that the pandemic made these stressors worse for students. This aligns with the study of Makibinyane and Khumalo (2021) conducted during the pandemic. It is therefore likely that the stress levels experienced by the participants in this study would have been lower in the absence of Covid-19. This means that the interpretation of the results

should take account of the pandemic that played a unique role in influencing students' experiences and contributing to their stress.

The participants in this study mentioned coping methods such as exercise or sitting alone and praying as some form of meditation as being helpful in dealing with stressful situations. Research suggests that students who practise meditation, play games and use support groups show improved coping skills and knowledge of stress (Shaikh et al., 2004). Therefore, providing students with the necessary tools and resources to manage their stress levels effectively requires targeted interventions. These interventions include stress management workshops and establishing dedicated student wellness spaces in which students are able to comfortably seek peer support or participate in mentoring programmes. Workshops on mindfulness and mental health could also be incorporated as modules into the Life Skills curriculum. Students could benefit from these interventions, as they would help them to develop a deeper understanding of stressors, including their nature and their antidotes or cures. This would enable them to recognise their internal and external support systems and to cultivate effective stress management strategies to help them with the demands of student life. By offering these diverse coping mechanisms, TVET colleges could help to mitigate the severity of stressors and build student resilience (Pierceall & Keim, 2007).

The implementation of workshops that focus on managing the causes of stress and on stress management practices – such as being taught how to be mindful, time management skills and relaxation techniques – would be extremely beneficial to students. According to Lazarus's theory (1993), social support is one of the most important coping resources. Workshops such as these should provide students with practical skills and strategies to help them to navigate the demands of academic life more effectively.

At present, the service provided at the research site is limited to a campus unit called Student Support Services. Expanding the service and encouraging students to talk to family and friends as a way to help them cope with high levels of stress could be beneficial (Pierceall & Keim, 2007).

Another finding of this study is that the participants greatly benefited from keeping a journal as a means of reducing stress. Incorporating Lazarus's theory (1993) into this recommendation underscores the effectiveness of journal-writing as a coping mechanism. Lazarus's theory emphasises the significance of cognitive appraisal in the stress response, where individuals assess the importance of a stressor (primary appraisal) and their ability to cope with it (secondary appraisal). Implementing journal-writing as a reflective process can help students to understand their stress triggers better and to develop more effective ways of coping with them.

The students also mentioned that jogging and exercising provided a sense of relief from stress. However, the data indicate a lack of recreational activities at the college such as sport,

Exploring the effects of stress on students at a TVET college – L Nefdt, H Dippenaar and P Engel-Hills

art or music that could have provided the students with much-needed stress relief and personal expression. Engaging in these activities could also help students to maintain a healthy work–life balance, enhance their overall well-being and improve their academic performance. Pierceall and Keim (2007) support this notion by affirming that recreational activities and exercise can help students to cope effectively with high levels of stress. In addition, by adopting this comprehensive approach, educational institutions are able to create a supportive environment that deals with the various aspects of student stress, enabling students to manage their stress, excel academically and enjoy a positive educational experience.

Furthermore, a study by Bester (2023) found that it is important to incorporate well-being into the strategic plans of educational institutions. Bester (2023) also indicates that TVET leaders must prioritise well-being and integrate it into the institutions' overall strategy, much like the comprehensive approach to stress management discussed earlier in this article. In addition, Bester's findings highlight the need for holistic wellness initiatives to be introduced that focus on various aspects of well-being, such as cognitive, emotional, physical and social dimensions, especially those that align with the multidimensional approach proposed in this study.

Limitations

Although this study provides insightful information about the ways students cope with stress, it is crucial to acknowledge some limitations, especially regarding the methodology of the study. Although the sample offered rich, in-depth narratives, the results of this qualitative study, which included only 14 participants from one Western Cape TVET college, cannot be generalised to the entire population of students. Future research may benefit from using quantitative techniques such as surveys to collect data from a broader and more diverse set of students across several institutions. This would improve the applicability and generalisability of the findings. In addition, there is a known risk of social desirability bias (SDB) when using interviews and reflective journals. This is because the participants may give those answers they believe are expected or which show themselves in a more positive manner. Despite this possible drawback, the data did not indicate that the participants withheld information or overstated their experiences. On the contrary, a number of the participants revealed vulnerable and intimate stories, indicating a degree of trust and transparency in their contributions. Nonetheless, the potential for SDB was taken into account throughout the data processing and steps, including preserving anonymity and posing open-ended, non-leading questions, were introduced to guarantee reducing the risk of SDB. Folkman and Lazarus's (1980) stress and coping theory served as the study's compass and offered a helpful perspective through which to view the ways in which students perceive and react to stress. However, our taking into account more extensive systemic and contextual influences on student well-being, integrating complementary theoretical approaches such as ecological models and resilience theory, could have deepened the analysis. Finally, the implications of the results are restricted by their exclusive focus on one institutional environment. To find out whether these results

would apply in different contexts or if context-specific characteristics are important, future studies should investigate comparable questions in several institutions or provinces.

Conclusion

The aims of this study were to shed light on the stress that students in a TVET setting experience and to implement effective support strategies at TVET colleges. Appropriate support strategies could reduce these stressors and promote an environment conducive to a healthier, more productive learning environment. A comprehensive understanding of the complex interactions between cognitive appraisals, coping mechanisms and stress outcomes can be gained from Lazarus's theory (1966). This theory stresses the importance of both internal and external coping mechanisms to support students in managing stress effectively and enhancing their academic performance and overall well-being. TVET colleges and the academics at them need to harness their powerful influence and work together to build a more inclusive future. Researchers should continue investigating efficient ways to manage stress and evaluate their effect on student performance. This study adds to the ongoing research on stress experienced by students at TVET colleges by revealing the specific stressors faced by a cohort of TVET students and making recommendations regarding the way in which these challenges could be managed. Future studies could possibly build upon these findings to improve interventions and support systems that promote both the academic achievement and the overall well-being of students in comparable educational environments.

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