

**Exploring problem focused vs. emotion focused stress management:
a qualitative study on tertiary institution students using in-depth interviews**

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**I hereby declare that the Research Report submitted for the Bachelor of Arts
Honours in Psychology degree to The Independent Institute of Education is my own
work and has not previously been submitted to another University or Higher
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ABSTRACT

The purpose of this research is to determine whether student's stress management is problem focused or emotion focused, as well as to determine if the current global pandemic has had an impact on the stress that students experience in their daily lives. Stress is seen as a prominent part in tertiary institution students' lives, however, there is a lack of research on the impact that the pandemic might have on stress experienced by students. This study is qualitative in nature and made use of semi-structured in-depth interviews as a means of data collection to allow participants to share their own subjective experiences related to stress and the pandemic. The sample comprised of five participants who form part of the tertiary institution community ranging between first year students and honours level students, and who experience high levels of stress. More so, thematic analysis was used as a method for data analysis, which identified three themes: Description of stress, Determination of stress management, and Impact of the pandemic. Findings from this research suggested that students relied more on emotion focused stress management, and that the pandemic had a great impact on their academics and physical- and emotional well-being.

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1. INTRODUCTION

1.1. Contextualisation

According to Reddy, Menon, and Thattil (2018), it is argued that stress has become a prominent part in tertiary institution student's lives due to a variety of internal and external factors that they experience. On the 30th of January 2020 the World Health Organisation (WHO) declared a global health crisis as a pandemic known as COVID-19 spread across countries around the world (Velavan & Meyer, 2020). This newfound virus has similar symptoms to a common cold and spreads like a wild fire between individuals especially within dense communities, and can progress to diseases that are much more serious (Velavan & Meyer, 2020). In order to prevent and control the spread of the virus, strict measures have been put in place which in South Africa specifically can be seen as social distancing regulations, extreme health and cleanliness protocols, and even a nationwide lockdown (Zhao, Li, Liu, Zhu, Ma, & Wang, 2020). In addition to this, Odriozola-González, Planchuelo-Gómez, Iruñia, and de Luis-García (2020) states that tertiary institution students have faced disorders such as stress and anxiety prior to the pandemic, and that it is expected that the current situation might have a notable impact on the student community. As a result, studies have indicated that students have higher levels of stress and increasing concern for their education, as well as the overall well-being of those closest to them (Odriozola-González et al., 2020).

In a study conducted by Gulzhaina, Aigerim, Ospan, and Hans (2018), results have indicated that students perceive stress as a state of mental or emotional strain associated with tension or the experience of negative emotions toward demanding circumstances, which is also seen to have an impact on their academic and personal lives. In addition to this, it can be seen that a fair amount of students do not receive treatment for such mental difficulties (Gulzhaina et al., 2018). It is therefore important that stress management techniques be considered due to the high levels of stress experienced by students in order to promote educational and social well-being (Gulzhaina et al., 2018). Therefore, stress management needs to be explored among students to determine whether the indicated techniques are problem focused or emotion focused.

1.2. Rationale

According to Odriozola-González et al (2020), the overall impact that the pandemic has on stress perceived by tertiary institution students with regard to their education and mental well-being is still unknown. Therefore, this topic has been selected to explore the impact that the pandemic has on the stress levels that students experience, and to determine whether their stress management is problem focused or emotion focused. This research will be of importance as stress management is seen as an important issue when it comes to stress and it will provide students with techniques and methods to manage and reduce the stress that they experience in their everyday lives, especially now that there is a global pandemic adding to their perceived stress. By implementing stress management techniques students will be provided with benefits such as an enhanced and positive approach to their lives, which could contribute to their academic and social performance (Gulzhaina et al., 2018).

This study is important as it could contribute to stress reduction which would then increase mental well-being, this study could then also increase the individual's life satisfaction. The research will also provide insight into relevant theories and knowledge and how to apply them in order to solve the research problem. More so, the research will also contribute to the community as a means to improve mental well-being and possibly overall health issues associated with stress. In addition to this, this research could also be relevant to certain academic fields if the outcome of the study is successful and the desired results are achieved.

1.3. Problem statement

From the foregoing background it can be seen that stress forms an intricate part of a student's daily life, and that stress levels are possibly increased with the rise of the COVID-19 pandemic. As mentioned above there is however a lack of research that indicates the overall impact that the pandemic might have on stress experienced by students (Odriozola-González et al., 2020). Therefore, research needs to be conducted in order to determine whether the pandemic has had an impact on the stress levels perceived by students, especially in the South African

context. In addition to this, research needs to be conducted to determine which stress management techniques students make use of, and whether their stress management is problem focused or emotion focused. This research is important as it will provide students with methods and techniques to manage and reduce the stress that they experience, which will have a positive impact on their overall performance and well-being (Gulzhaina et al., 2018). Thus, this study will explore the impact that the COVID-19 pandemic has on tertiary institution students, and whether their stress management is problem focused or emotion focused.

1.4. Purpose statement

The purpose of this research is to determine whether student's stress management is problem focused or emotion focused, as well as to determine if the current global pandemic has had an impact on the stress that students experience in their daily lives. This study will therefore explore the stress management techniques that students use in order to reduce stress. In addition to this, alternative stress management techniques will be introduced to ensure that students manage their stress in a positive and healthy manner.

1.5. Research question

The research question that needs to be answered in accordance with the study is: What stress management techniques have students utilised during the COVID-19 pandemic?

1.6. Objectives

The research objectives for this study are:

- To determine the impact that COVID-19 has on the stress levels that students experience.
- To identify the different stress management techniques that students utilise to manage their stress levels
- To determine whether these stress management techniques are problem focused or emotion focused.

- To explore the impact of these different stress management techniques on student's general well-being.

2. LITERATURE REVIEW

2.1. Theoretical foundation

Analytical or logical Behaviourism is the first theory that will be discussed. In order to understand the theory of Behaviourism a definition is provided from a sociological stand point by Sterwart and Zaiman (2015, p. 580) stating that Behaviourism is “a system of thought, philosophy and research practice based on the observation and measurement”. According to Graham (2019), Analytical or Logical Behaviourism theory defines an individual's mental state or condition as the product of a behavioural disposition or a cluster of other behavioural tendencies, which results in how a person reacts in certain situations. In addition to this, Omoregbe (as cited by Balogun, 2016, p. 156), “the logical behaviourist theory conceives the mind as behaviour”. This is an indication of the mind and mental state of an individual and the influence that it has on a person's overall behaviour.

Analytical or logical behaviourism can therefore be used for stress management and classical conditioning to condition an individual to associate the sensation of reduced stress with the technique used to manage the stressor. In addition to this, Balogun (2016) explains that an individual's mental state and behavioural responses can be influenced by environmental surroundings. Therefore, for the purpose of this research, the Analytical or Logical Behaviourist Theory can contribute greatly to the research being done, this is because there are many factors related to Behaviourism that can be used in accordance with the implementation of stress management techniques.

The second theory that will be discussed is that of Self-Determination. The Self-Determination Theory is defined by Deci and Ryan (2011, p. 416) as “an empirically derived theory of human motivation and personality in social contexts that differentiates motivation in terms of being autonomous and controlled”. According to Nel (2014), the Self-Determination Theory aims to highlight the factors cultivate

inherent human potentials that relate to personal growth. This theory can also be used to “explore the processes and conditions that foster the healthy development and effective functioning of individuals” (Nel, 2014, p. 133). The Self-Determination Theory can be used with the Logical Behaviourist Theory in order to study the motivational aspects of an individual when looking at their behaviour, and can aid in the personal growth of an individual with regards to their mental well-being. Subsequently, the Self-Determination Theory can be used in accordance with Logical Behaviourism to also explain the role that environmental factors might have when conducting the research for this study. In addition to the Self-Determination Theory, Nel (2014, p. 133) explains that a sub-theory known as the Cognitive Evaluation Theory is also relevant to this research as it “specifies social and environmental factors that influence motivation”.

The Self-Determination Theory states that there are certain psychological needs that are necessary for personal growth, namely: autonomy, which refers to experiences of behaviour related to choice and self-endorsement indicating that there is no pressure from external factors; competence, which refers to the experience of effective behaviour toward certain challenges; and relatedness, which refers to experiences of mutual connection between factors (Olafsen, Niemiec, Halvari, Deci, & Williams, 2017). This theory is therefore relevant to the study as it can be used in accordance with stress management and the different types of coping strategies that have been discussed.

Subsequently, after thorough research and investigation, the Analytical or Logical Behaviourist Theory, as well as the Self-Determination Theory will be used in the study being conducted as conditioning and motivation could aid in understanding the stress that students experience, and the techniques that they use to manage their stress. These theories will then also provide a sense of knowledge and understanding to the participant’s behaviour and motivation for certain events, and to why they do the things that they do, which could help determine whether the stress management techniques that students use are problem focused or emotion focused. Therefore, these theories can be used to explain and provide an

understanding to the subjective realities of each individual and related events, such as the COVID-19 pandemic.

2.2. Link between the research problem and literature

As previously mentioned by Odriozola-González et al (2020), the overall impact that the pandemic has on stress perceived by tertiary institution students with regard to their education and mental well-being is still unknown. In addition to this, Greene, Mullins, Baggett, and Cherry (2017) states that there is also a lack in research conducted on students and young adults, and how they perceive stress and self-care. Subsequently, the research problem indicates that there is a lack of research that indicates the overall impact that the pandemic might have on stress experienced by students (Odriozola-González et al., 2020). However it is indicated that studies conducted on stress have shown tremendous mental and physical health issues among individuals who experience high levels of stress (Haus, Adler, Hagl, Maragkos, & Duschek, 2016). Considering the lack of research, it is important that individuals learn more about the causes of their stress, as well as stress management techniques in order to reduce the stress that they are experiencing (Haus et al., 2016).

Stress

In order to successfully determine if the stress management techniques that students use are problem focused or emotion focused, the way in which they manage their stress needs to be explored. In addition to this, the manner in which student describe stress and stressors need to be identified, as well as their thoughts on the impact of COVID-19 on their academic- and social lives. Therefore, the first theme that is discussed in relation to this study is what stress is and what can be used to manage it. According to Felman (2020), stress is described as a feeling of being unable to cope in certain circumstances and with certain events. Felman (2020) goes on to say that it is important to follow the necessary steps to manage stress in order to prevent it from becoming a chronic condition. According to (Miliot *et al* 2016, p. 114), “chronic stress is one of the most relevant triggering factors for major depression”. For the purpose of this research, it is important to determine the stress management techniques that students might be using in order to categorise

them as problematic or emotional. More so, there are many causes that can result in the experience of stress, and these stressors can be certain life events such as problems in the individual's personal life, academic performance, as well as financial challenges (Felman, 2020).

As this study is focused on tertiary institution students, these stressors could possibly be related to their subjective experiences. For example, daily responsibilities related to their personal lives, academic performances and other possible obligations (Greene *et al* 2017). The following techniques are generally used to manage stress amongst individuals: certain life style changes such as daily exercise and maintaining a balanced diet, spending time to properly manage daily priorities, making time to focus on yourself and your mental health, and talking about their feeling as well as being mindful of their own situations (Greene *et al* 2017; Felman, 2020). In addition to this, stress and certain life events is related to the onset of major depression (Hammen, 2005). Furthermore, Hammen (2005) states that there have been many challenges associated with the assessment of stress and how it is related to depression over the past few years.

Stress management techniques

The second theme relevant to this study is to determine what can be used as techniques to manage stress. For the purpose of this research, Mindfulness-based stress reduction (MBSR) will be utilised. MBSR is defined by Chiesa and Serretti (2009, p. 593) as “a clinically standardized meditation that has shown consistent efficacy for many mental and physical disorders”. Meditation can for example be used as a healthy stress management technique to reduce stress. In addition to this, MBSR can be used as a tool to reduce stress as it is proved that too much stress can have a negative effect on both an individual's physical and mental health (Chiesa & Serretti, 2009). In the study conducted by Chiesa and Serretti (2009) as well as Thibodeaux and Rossano (2018) they concluded that MBSR was successful in reducing stress in healthy individuals as well as individuals suffering from physical- and mental illnesses, therefore it can be used for the purpose of this research as well. More so, a study conducted by Thibodeaux and Rossano (2018) indicates that there is a relationship between stress and an individual's immune

system, and that mindfulness practices like meditation can protect the immune system from stress. This study also indicates that stress management techniques decreases depression and negative affects within individuals (Thibodeaux & Rossano, 2018). It can therefore be seen that this stress management technique has a positive impact on an individual's physical- and psychological well-being.

Cognitive Behavioural Therapy (CBT) is another technique that could be used to manage stress as it “aims to challenge specific thinking patterns and implement behavioural change” (Grime, 2004, p. 354). CBT can be relevant to this study as it can be related to the Analytical or Logical Behavioural theory used for this study. Furthermore, Kassymova (2018) states that yoga and breathing exercises can be used as a method to manage stress as it provides a sense of relaxation and can relieve stress and anxiety among individuals. Alternatively, in a study conducted by Awino, Ogutu, and Musyoka (2018) the idea of social support as a stress management technique is introduced and has proved to be a positive manifestation. Furthermore, Gulzhaina et al (2018) states that Progressive Muscle Relaxation (PMR) can be used as a stress management technique as it reduces stress and anxiety, and improves the quality of life for individuals who use this method to manage their stress.

Types of coping

The third theme relevant to this study is the different types of coping related to stress management. In a study conducted by Denovan and Macaskill (2017), results have indicated that students who use effective coping techniques tend to be more optimistic and have higher levels of well-being. More so, this study suggests that students with a higher level of subjective well-being have lower levels of stress (Denovan & Macaskill, 2017). According to O'Brien and DeLongis (as cited by Cacioppo & Freberg, 2016), there are three types of coping related to stress, namely: problem-focused coping, emotion-focused coping, and relationship-focused coping. For the purpose of this research, only problem focused coping and emotion focused coping will be taken into account when looking at stress and stress management.

Problem focused coping is aimed at directly managing a stressor in order to reduce stress, this response is most effective when individuals are able to moderate their stress (Jensen, Forlini, Partridge, & Hall, 2016). An example of problem focused coping is when a tertiary institution student plans ahead and ensure that he/she has sufficient time to complete a task instead of feeling pressure for time, as a result, this student will experience lower stress levels (Jensen et al., 2016). In addition to this, problem focused coping is said to be focused on resolving certain challenges (Rodríguez-Pérez, Abreu-Sánchez, Rojas-Ocaña, & del-Pino-Casado, 2017). Furthermore, Cacioppo and Freberg (2016) state that positive problem focused coping refers to facing a challenge head on, whereas negative problem focused coping refers to escaping or avoiding stressor.

Emotional focused coping is aimed at dealing with emotions and feelings that are associated with a certain stressor, this strategy is used when individuals are unable to moderate their stress (Jensen et al., 2016). An example of emotion focused coping is when an individual seeks the emotional or social support from others when they feel disappointed about certain events (Jensen et al., 2016). Furthermore, emotion focused coping is said deal with the management of emotions toward certain challenges (Rodríguez-Pérez et al., 2017). In addition to this, Cacioppo and Freberg (2016) state that positive emotion focused coping refers to sharing your concerns or opening up to a friend about the stress that is experienced, whereas negative emotion focused coping refers to using unhealthy methods to deal with stress, such as stress eating or drinking alcohol.

As previously mentioned, it can therefore be seen that there is a lack in research related to the impact that COVID-19 might have on the stress that tertiary institution student experience (Odriozola-González et al., 2020). It can however it is clear that stress has an intricate role of student's lives and that there are many techniques that they could use in order to manage their stress. In addition to this, the way in which students deal with their stress is categorised into problem focused coping and emotion focused coping, which has both positive and negative attributes. It is therefore important to know and understand how students perceive and deal with

stress in order to determine whether their stress management techniques are problem focused or emotion focused.

2.3. Conceptualisation

The theme of the research being conducted is to determine if the stress management techniques that students use are problem focused or emotion focused. In order to understand what this means, a conceptualisation has to be done to define the key concepts that make up this research. The following key concepts will be defined in relation to the study and will provide a deeper understanding: stress, stress management, coping strategies, and classical conditioning.

Stress

According to Cacioppo and Freberg (2016), stress is described as an unpleasant state of emotion resulting from a perception of certain danger. In addition to this, stress is described as a feeling of emotional or physical tension that can come as a result of negative thoughts, anger or frustration (Berger, 2018). Therefore, stress is a reaction toward certain challenges or demands, which can either have a positive or negative impact of the individual experiencing stress and their overall health (Berger, 2018). Subsequently, the source of stress is known as a stressor and is different for each individual (Cacioppo & Freberg, 2016). Furthermore, the American Psychological Association (APA, 2019) states that stress is seen as a normal reaction toward everyday pressure, but could become unhealthy and have a negative impact on an individual's daily functioning. In relation to this study, the APA (2020) has reported higher levels of stress associated with the development and spread of COVID-19 since the beginning of the year. More specifically, results have indicated that stress related to the pandemic has been higher amongst individuals of colour (APA, 2020).

Stress management

According to Robinson, Smith, and Segal (2019), stress management refers to effective techniques used to manage stress as a way to reduce or cope with it, and

starts by identifying the source of stress within an individual's life. In addition to this, the effective management of stress aids in 'breaking the hold' that stress has on an individual's life, resulting in feelings of relaxation and happiness as well as the restoration of emotional equilibrium (Robinson et al., 2019). In order to effectively manage stress it is important to determine whether it is possible for stressors to be eliminated, instead of hoping for them to just disappear (Cacioppo & Freberg, 2016). Subsequently, Cacioppo and Freberg (2016) argue that stress is inevitable and that individuals can manage their stress in a healthy manner by maintaining a healthy and active lifestyle, for example frequent exercise.

Coping strategies

Coping can be described as different thoughts and acts that individuals use in order to manage the demands and challenges associated with stress (Chen, Peng, Xu, & O'Brien, 2018). According to Hinek (2020), coping strategies are referred to as tools or techniques used to aid in handling difficult emotions or stress circumstances in order to reduce these difficult feelings and maintain a sense of order. These strategies are useful when an individual is experiencing feelings of stress and anxiety. Furthermore, Cacioppo and Freberg (2016) state that a fair amount of coping strategies have been identified by psychologists that individuals can use in order to effectively manage and reduce the negative impacts associated with stress and overall health. It is also suggested that age differences in coping strategies could alter the results in changes associated with the extent to which individuals have to cope with as they get older (Chen et al., 2018). Therefore, the student's ages need to be taken into account when considering coping strategies and stress management techniques.

Classical conditioning

According to the Australian Institute of Professional Counsellors (2010), conditioning is seen as a process of learning where an individual is conditioned to associate certain events and components with one another. An example of this would be to associate relaxation with a certain stress management technique. In addition to this, classical conditioning is defined as a "form of associative learning in

which contingencies are established between a behaviorally important stimulus and a closely paired neutral stimulus” (Bekinschtein *et al* 2009, p. 1343). For the purpose of this research, classical conditioning is relevant as it can be used as a way to condition individuals and teach them to associate stress management with the sensation following stress reduction. Consequently, classical conditioning can be used concurrently with the previous mentioned key concepts and is therefore a relevant addition to the research being conducted.

These key concepts are important for understanding the overall research being done in relation to the topic of the study. The definitions and various insights from authors will provide knowledge on each concept and how it can be applied to this study to make it relevant. Therefore, by taking into account the descriptions and definitions of each key concept, it gives an explanation as to how they can be incorporated into the study.

3. RESEARCH DESIGN AND METHODOLOGY

3.1. Paradigm: Interpretivism

According to Maree (2020), it can be assumed that the interpretivist paradigm is outlined by the following: human life cannot be understood based on external reality, but only from within; reality is socially constructed; the meaning of things are constructed by the human mind; knowledge greatly affects how humans behave; reality is dependent on knowledge. Therefore, the interpretivist paradigm will be used for this study as it aims to provide an understanding of the subjective meanings of individuals which is seen to be essential (Goldkuhl, 2012). The reason that an interpretivist paradigm is of good use for this research is that this paradigm “allows researchers to view the world through the perceptions and experiences of the participants” (Thanh & Thanh, 2015, p. 24). Furthermore, this paradigm will provide a holistic view and a deep understanding with regard to the research being done and the participants experiences, as well as interpret the influences of stress and the stress management techniques that students use.

The interpretivist paradigm makes use of a constructivist ontology, which is described by Goldkuhl (2012) and Maree (2020) as an assumption that the social world is not set in stone, but rather a product of individual experiences and human interaction. Therefore, an individual's reality is socially constructed and not a 'given'. In addition to this, cognitive orientation is emphasised and of importance in relation to an interpretivist ontology (Goldkuhl, 2012).

According to Allen and Varga (2007), epistemology deals with what is known and how it is known, basically referring to the knowledge related to certain attributes. Goldkuhl (2012) stated that both the ontology and epistemology of the interpretivist paradigm is of importance because of the knowledge that it presents. The epistemology of this research therefore provides an understanding of what is being interpreted. For the purpose of this research it is important to have an indication to the stress management techniques that students use as a method to reduce stress in order to determine whether it is problem focused or emotion focused, which will also then indicate where changes can be made to ensure that healthy stress management techniques are incorporated into their daily lives. It is therefore important to have knowledge and understanding about the study as whole and not only individual aspects thereof (Goldkuhl, 2012). Furthermore, Badie (2017) argues that a constructivist epistemology refers to the way in which knowledge is thought of or perceived, and focuses on the way that individuals construct their own knowledge structures in order to understand the world that they live in. This once again is proof that humans construct their own reality.

By taking into account the above mentioned information, it can be argued that the interpretivist paradigm is therefore a perfect fit for this study as it makes use of individual's own experiences and subjective reality to interpret and analyse data. Thus, more relevant and accurate data will be gathered for this study, this selected paradigm is therefore an important aspect to the overall research being done.

3.2. Research approach and design

A qualitative research design will be used for this study in order to explore whether the stress management among tertiary institution students is problem focused or emotion focused, and to examine the effects that stress has on these individuals and their lives, as well as the possible additional stress that students might experience with regard to COVID-19 and the challenges that the pandemic presents. In this case, Phenomenology will be used as a research design as phenomenology aims to “reduce individual experiences with a phenomenon” (Maree, 2020, p. 85). This research will be exploratory as the aim of the study is to “inquire or find out more about a phenomenon” (Maree, 2020, p. 34). For the purpose of this study, the research will be inductive, as “inductive research is needed in order to advance knowledge and to develop theories” (Woiceshyn & Daellenbach, 2018, p. 186). This type of reasoning will be useful to the study as the research aims to gain knowledge on whether the global pandemic has an impact on tertiary institution students, and if these student’s stress management is problem focused or emotion focused. This will also then be a cross-sectional study.

3.3. Population

3.3.1. Population

According to Kenton (2020), population refers to an entire group of people that can be observed or grouped together, and that have a number of similar characteristics. In addition to this, Weeks (2020) states that population characteristics refer to the similarities between individuals or groups with regard to who they are. It is important to describe the parameters and characteristics of the population when conducting research, for example age and educational level (Majid, 2018; Ge, Mao, Lu, Cappellari, & Yan, 2019). For the purpose of this research, the key population parameters and characteristics were identified as tertiary institution students between the ages of 19 to 25, ranging between first year student and honours level students.

3.3.2. Unit of analysis

Li, Xiang, Chen, Xie, and Li (2017) introduce two different types of units of analysis. The first is known as the ‘true unit of analysis’, which is defined as “the

unit of analysis that is supposed to be used for data analysis based on the study design” (Li *et al* 2017, p. 133). This type of unit of analysis can be linked to the target population based on definition. The second is known as the ‘actual unit of analysis’, which is defined as “the unit of analysis that was used by the authors to conduct data analysis” (Li *et al.*, 2017, p. 133). This type of unit of analysis is similar to the description of the accessible population. Therefore, the unit of analysis relevant to this study will consist of individuals, more specifically tertiary institution students who experience stress and make use of stress management techniques in order to reduce stress.

3.3.3. Target and accessible population

The target population can be described as the population of interest and the population that the researcher aims to use for a study (Majid, 2018). For the purpose of this research, the target population comprises of full-time tertiary institution students. The accessible population, however, is obtained after removing participants from the target population who are not willing to participate in the research study, or who cannot be accessed during the time of the study (Asiamah, Mensah, & Oteng-Abayie, 2017). The accessible population therefore are full-time tertiary institution students who are willing to participate in the research study.

3.4. Sampling

3.4.1. Sampling method

For the purpose of this research, a non-probability, purposive sampling method was used to conduct this study as it provided the exact population and unit of analysis that was needed to conduct the research. In addition to this, the purposive sampling method is defined as “the deliberate choice of a participant due to the qualities the participant possesses” (Etikan, Musa, & Alkassim, 2016). The specific purposive sampling method relevant to this study is known as homogeneous sampling, which focuses on individuals who share similar traits or characteristics (Etikan *et al* 2016, p. 2). This sampling method allowed the researcher to recruit students who are studying at a tertiary institution, and that

are relevant to this study as they experience stress and might make use of stress management techniques as a manner to reduce stress.

More so, Taherdoost (2016) argues that purposive sampling is beneficial as it is convenient and cost effective while not being time consuming and perfect for exploring in research. Therefore, as this study aims to explore problem focused and emotion focused stress management, as well as the impact that the COVID-19 pandemic may have on students, this sampling method is relevant to the research being conducted.

3.4.2. Sample size

According to Zamboni (2018), a sample size refers to the number of individuals partaking in a research study, and should be considerate to errors that could occur in the duration of the study, as well as the standard deviation the researcher expects to find in the data. For the purpose of this research, the sample size will comprise of five participants who form part of the tertiary institution community ranging between first year students and honours level students, and who experience high levels of stress. A small sample size is seen to be beneficial as it produces more meaningful results (Deziel, 2018), and is therefore relevant to this study.

3.5. Data collection

3.5.1. Data collection method

According to Etikan *et al.* (2016), data collection is seen as a crucial part of the research process as it provides a better understanding to the theoretical framework. For the purpose of this research, semi-structured and in-depth interviews have been used as a method of data collection in this qualitative study. In addition to this, Benokraitis (2014, p. 28) argues that “in-depth interviews can provide rich detail about the respondent’s social world and vivid descriptions of personal experiences”. This method of data collection provided the study with relevant and accurate data as it consisted of the participants’ own interpretations and wasn’t fixed by the researcher. Furthermore, it is said that

the interviewer has a schedule and a set of prepared questions, even though the interviewer is allowed to deviate from these questions in order to obtain more relevant information (Adams & Cox, 2008).

In-depth interviews are beneficial as they provide the researcher with more detailed information regarding the participant's concerns and thoughts (Perry, 2018). In addition to this, in-depth interviews consist of comprehensive conversations guided by the participant's perceptions and experiences, while gaining a deep understanding of the participant's lived experiences (Cridland, Phillipson, Brennan-Horley, & Swaffer, 2016). However, in-depth interviews are seen to be extremely time consuming and costly compared to other methods (Steber, 2017).

According to Sarantakos (2013), semi-structured interviews consists of both structured and unstructured interview types suggesting that questions are not completely fixed and that there is room for participants to elaborate on the information being provided, which also indicates that the structure of interviews depend on the research topic and associated information determined by the research objectives. Therefore, nature of the questions that has been asked have been mostly open and flexible, which allowed the interviewer to engage in a discussion with the participant and be ready to change and adjust information where the study requires (Sarantakos, 2013). In addition to this, semi-structured interviews allowed for participants to be free to fully explain their thoughts and experiences, as well as gaining a more in-depth understanding to their responses (Horton, Macve, & Struyven, 2004). It was therefore clear that the use of semi-structured and in-depth interviews should have been used to collect data from participants as it provided the researcher with more accurate and relevant subjective information that which also then provided a better understanding and comprehension of the participants' experiences and thoughts.

In addition to this, permission and consent had to be obtained from participants which allowed the interviews to be recorded. By recording the interviews, the researcher was able to review the interviews for “later transcribing, analysis, and improving accuracy” (Lochrie, Curran, & O’Gorman, 2015, p. 121). According to Al-Yateem (2012), there is a lack of research related to the effects of recording during in-depth interviews. In a study conducted by Al-Yateem (2012), it is said that even though the recording of interviews are beneficial for later transcribing and analysis, it is unsettling for the individual being interviewed as it makes them feel uncomfortable. In contrast to this study, another study suggested that participants are more than willing to allow interviews to be recorded and for these recordings to be used for later interpretation of the collected data (Flint et al., 2016). Therefore, written and verbal consent has been obtained from participants before the decision was made to record the interviews.

Therefore, semi-structured and in-depth interviews were used as a data collection method to determine the impact that COVID-19 has had on the stress levels that students experience, and to determine whether these stress management techniques were problem focused or emotion focused. Furthermore, this data collection method was used to identify the different stress management techniques that students utilised to manage their stress levels, as well as to explore the impact of these different stress management techniques on student’s general well-being.

3.5.2. Data collection application

After obtaining ethical clearance, the target population was sought out by sending a notification via social media urging tertiary institution students to participate in a research study about stress management and the impact that the COVID-19 pandemic may have on stress levels. Only a few students responded and were willing to participate in the study. Thereafter, a consent form was sent to six of these participants by means of email and Whatsapp. After obtaining informed consent, the participants were briefed on the research topic, and a date and time was scheduled for interviews to be conducted.

In order to keep to the values of in-depth interviews, Zoom meetings were scheduled as a platform where the interviews would be conducted as face-to-face interviews could not take place during this time. There was however certain limitations due to connectivity issues and lack of access to network and the Zoom app that prevented two participants from partaking in the Zoom meeting, and as a result, the interviews had to be conducted via a normal phone call. Another participant was unable to participate in the study due to personal, medical reasons, which brought the sample size down to five participants.

An interview schedule was set up with an introduction to the researcher and the aim and purpose of the research study. As part of the interview schedule, the participants were notified that their participation is completely voluntary and asked if informed consent had been obtained to continue with the interviews, as well as the recording of these interviews. Thereafter, participants were given the estimated duration period of the interview, and the opportunity to ask any questions that they might have regarding the research or interview.

The semi-structured and in-depth interview questions followed and, where necessary, participants were probed to gain more information and a better understanding to their initial answers. As stated, the interviews were conducted via Zoom meetings, which allowed the researcher to observe facial expressions and body language as the participants were stating the answers to the questions being asked. However, these observations were impossible for the participants with whom interviews were conducted telephonically. The initial interview questions aimed to gain information on what the participants perceive as stress, and if the COVID-19 pandemic had an impact on their stress levels. In addition to this, participants were asked to explain how they manage their stress, and the impact that stress may have on their emotional, physical, and general well-being.

After all the questions have been answered, the participants were thanked for taking the time to participate in the interviews and research, and then asked if

they would be willing to choose a stress management technique of their choice and implement it to their daily lives. All the participants agreed to making use of their chosen techniques, and agreed to a follow-up discussion related to the stress management technique that they selected.

During the follow-up discussion, questions were asked to obtain information on the type of stress management techniques that participants selected, as well as how they went about implementing these techniques. More so, information regarding the impact of the selected technique on stress levels was sought out together with any noticeable changes that the participants may have experienced as a result of their selected stress management technique. Participants were once again thanked for their participation, which then concluded the collection of data for this study.

3.6. Data analysis

3.6.1. Data analysis method

For the purpose of this research, thematic analysis has been used as a method to analyse the collected data. According to Braun and Clarke (2006, p. 83), thematic analysis is described as “a method for identifying, analysing, and reporting patterns within data”. These patterns refer to the themes that are evident throughout the collected data. Themes are described by Vaismoradi, Jones, Turunen, and Snelgrove (2016) as a topic that categorised and organises repeated ideas throughout the data, which also then allows the researcher to answer the research question. In addition to this, Boyatzis (as cited by Braun & Clarke, 2006) argues that thematic analysis goes as far as interpreting the research topic and the aspects that are associated with the research topic, this then also provides extremely rich details related to the collected data.

Thematic analysis as a data analysis method can be used for this study as it “reports experiences, meanings and the reality of participants” (Braun & Clarke, 2006, p. 86). Subsequently, by taking into account this statement, thematic analysis can be directly linked to phenomenology as a research design as they

share the same characteristics. More so, thematic analysis allows for the identification of themes related to the overall research question (Cohen, Huziak, Gustafson, & Grubs, 2016). In addition to this, Vaismoradi *et al*, (2016, p. 100-101) explain that the key characteristics of thematic analysis are “the process of coding, examining of meaning and provision of a description of the social reality through the creation of theme”.

Furthermore, Vaismoradi *et al*, (2016) defines coding as a process used to reduce data as a way to organise data in the most qualitative approach. With this in mind, there are also different types of coding associated with thematic analysis and qualitative research. According to Vaismoradi *et al*, (2016), these types include: conceptual coding, which identifies certain key elements from data; relationship coding, which identifies certain links between these key elements; participant perspective coding, as well as setting coding, which indicates the similarities and general characteristics of participants.

More so, Braun and Clarke (as cited in Maguire & Delahunt, 2017) introduces a six-phase guide that can be used as a framework for using thematic analysis, which include the following steps. (1) Becoming familiar with the collected data; (2) generating initial codes; (3) searching for themes; (4) reviewing themes; (5) defining the themes; and (6) writing up the findings (Maguire & Delahunt, 2017).

Therefore, thematic analysis was the most suitable data analysis method for this study as it could be used to identify underlying themes and similarities between the data that has been collected, as well as the participants of the study. By identifying these themes and coding them, more accurate data has been produced, which enabled the researcher to answer the research question. In addition to this, Richards and Hemphill (2018) argues that analysis is needed to develop and implement qualitative data in order to build on the trustworthiness of the research being conducted.

3.6.2. Data analysis application

After the completion of the data collection process, the interviews were transcribed and repeatedly worked through to observe any prominent themes that might arise, and to become familiar with the collected data. In addition to this, while working through the collected data and becoming familiar with the information, notes were made to mark preliminary ideas that could be used for coding. These themes were then developed and codes were applied to organise and categorise the data. From the transcribed interviews, the following themes and codes have been found: stress, stress management, and the impact of the pandemic.

In order to identify the themes or patterns from the gathered data, the researcher repeatedly worked through the data and scanned the transcriptions for any words or phrases that were commonly or similarly used and stated by the participants. A summary of the transcribed interviews had been made to outline specific themes and patterns. Thereafter, the findings from the initial interviews were compared to distinguish any similarities or differences found within the collected data. This process and interpretation allowed the researcher to identify any patterns that stood out from the collected data, as well as themes that could be found between the similarities and differences from the collected data.

More so, the prominent themes and codes were colour coded to organise and categorise them according to the key themes and codes found within the collected data. The similarities in the description of stress were colour coded as yellow, while the determination of stress management as problem focused or emotion focused has been colour coded as blue. Lastly, the similarities found in the discussion on the impact that the COVID-19 pandemic may have on stress levels are colour coded as green. Thereafter, the themes and codes generated from the collected data were compared to identify how they relate to one another, and to visualise the similarities between them.

Furthermore, the themes were reviewed in order to find any contradictions and overlapping between the identified themes as a way to refine them and make them more meaningful. During this process, some of the themes and codes were moved around to create sub-themes, or to form part of one of the key themes. This process allowed the researcher to ensure that the collected data and themes are coherent and relevant to the entire data set. After this process has been completed, the themes were named and defined in a descriptive manner.

After the completion of the coding process and generating the necessary themes, a final report was set up, which included the results of the study, as well as a description of how the research has been carried out and analysed. The data was then summarised and compared to the research objectives to link them together and ensure that the research question has been successfully answered.

4. FINDINGS AND INTERPRETATION OF FINDINGS

Based on the foregoing data collected, findings have indicated that emotion focused stress management is more often used as a method to manage and reduce stress. More so, findings indicated that the COVID-19 pandemic has had an impact on the lives of tertiary institution students, some more than others, and that the greatest impact was related to academic challenges. This section entails further discussion on the findings in detail, as well as the themes that were identified during the data analysis process to support these mentioned statements.

The names of the participants from this study have been changed in order to protect their identity and maintain confidentiality, and therefore pseudonym names were used. The semi-structured and in-depth interviews that have been conducted with the participants have presented the following themes:

Table 4.1: The themes and sub-themes identified by the thematic analysis method

Title: Exploring problem focused vs. emotion focused stress management		
Theme 1: Similarities in the description of stress	Theme 2 : Determination of stress management techniques	Theme 3: The impact of the pandemic on perceived stress
Sub-theme 1.1 The physical reactions to stress	Sub-theme 2.1 Emotion- focused stress management	Sub-theme 3.1 The impact of the pandemic in an academic context
Sub-theme 1.2 The psychological reactions to stress		Sub-theme 3.2 The impact of the pandemic on well- being

Theme 1: Similarities in the description of stress

Stress is described as an unpleasant state of emotion, or a feeling of emotional or physical tension that impacts individual experiences (Cacioppo & Freberg, 2016; Berger, 2018). More so, stress was described by Daniel as “a physiological reaction to a lot of tension arising from circumstances around you which you may or may not be able to control”. The significance of the manner in which participants described stress has identified two subthemes from the collected data, namely: the physical reactions to stress and the psychological reactions to stress. Participants described stress by the way in which they react to it physically, or the way in which it influences them psychologically, or both.

The physical reactions to stress

The participants identified certain physical reactions that occurred as a result of stress, for example experiencing an elevated heart rate or becoming a bit sweaty. Samantha explained experiences of physical reactions such as sweating and shortness of breath, while also mentioning how stress has an effect on hormonal

changes especially for women, “our hormones I’m sure go up and down”. Luca gave reference to experiences of elevated heart rate and sweating, while Zane explained how stress drains energy. Results have therefore indicated that stress can lead to various physical reactions and changes for the individual who experiences stress.

The psychological reactions to stress

Participants have indicated that stress has had a psychological impact to their personal experiences as well. Samantha spoke about being distracted and struggling with concentration when feeling stressed, while Zane explained a sense of being weighed down and that stress drains emotions. In addition to this, Rebecca stated that stress causes feelings of pressure that makes it difficult to work and continue with daily activities. It can therefore be seen that stress has an influence on an individual’s psyche, and that it may result in certain impairments.

Theme 2: The determination of stress management techniques

According to Robinson et al (2019), stress management refers to effective techniques used to manage stress as a way to reduce or cope with it. In addition to this, O’Brien and DeLongis (as cited by Cacioppo & Freberg, 2016), stated that there are three types of coping related to stress management, namely: problem-focused coping, emotion-focused coping, and relationship-focused coping. However, for the purpose of this research only problem focused coping and emotion focused coping had been taken into account in the determination of stress management techniques. In addition to this, a sub-theme of emotion-focused stress management has been identified.

Emotion-focused stress management

Daniel made use of compartmentalisation as a means of stress management in order to “logically approach any stress that I might have”, while breaking complex situations down that cause a lot of stress. Daniel argued that this technique proves to be helpful, even though there are certain situations that are more stressful than

others, and that this technique provides a sense of calmness. Samantha sought out emotional support from family members and close friends to deal with stress and watched television in order to escape, especially when the participant realised that a close relative might have the COVID-19 virus. Samantha stated that this technique decreases stress levels, however realised that it doesn't completely reduce stress levels. Rebecca made use of physical exercise as means of managing stress and explained that going on runs in the afternoon helps to relieve stress. Rebecca spoke about feeling free when making use of this technique, and that it has had a positive impact on stress management. Luca started a little herb garden and decided to make use of meditation as a way to reduce stress, and stated that while tending to the plants there are no stress provoking thoughts. Luca indicated that this technique helped in reducing stress during those few minutes, however, the stress and anxiety returns when going back to work.

Participants have therefore indicated that the stress management techniques that they used were emotion-focused, and that these techniques were helpful only to a certain degree. Participants clearly explained that these techniques only reduced stress for a short period of time and that it cannot be seen as a long term solution.

Theme 3: The impact of the pandemic on perceived stress

Similarities on the impact that the COVID-19 pandemic may have on stress levels have been prominent during the data collection and analysis process. The impact of the pandemic can be divided into two sub-themes: the impact of the pandemic in an academic context and the impact of the pandemic on well-being.

The impact of the pandemic in an academic context

Daniel stated that at the very start, the pandemic helped in reducing stress as there was more free time to focus on university work and specific needs could be tended to. However, the work become more difficult as there were no contact sessions allowed and it become extremely difficult to contact lecturers for advice when struggling to understand and grasp academic work or assignments. Similarly, Samantha indicated a sense of happiness and decreased stress when the

pandemic just started, stating that there was more time to focus on university. Samantha explained that after a few months however, stress began to increase. More so, Rebecca stated that the pandemic had quite an impact as there were feelings of being tied down and struggles with adapting to the new online environment. Rebecca also stated that meeting the due date for assignments has been a challenge during these times. Luca used the word “massive” to explain the impact that the pandemic had on stress levels as university projects were constantly changing and failing, which increased stress. In addition to this, Luca indicated struggles with university work as there was a lack of understanding due to the fact that there were no lectures and it was difficult to contact lecturers for additional help.

Participants have therefore indicated that their perceived stress during the pandemic has had an impact on various academic aspects, and that these academic aspects can also be seen as a stressor increasing their stress levels. As this study was focused on tertiary institution students, these stressors were related to their subjective experiences. For example, daily responsibilities related to their personal lives, academic performances and other possible obligations (Greene et al., 2017), which participants have made reference to.

The impact of the pandemic on well-being

Samantha stated that the stress related to the pandemic has had an influence on both her physical and emotional well-being as it limits and hinders physical exercise, which is crucial for medical reason, and as a result and lack of exercise, her emotional well-being down spiralled. More so, Samantha stated that the stress management technique discussed earlier has had a negative impact on her well-being as it lowers physical activity. Rebecca explained how stress triggers a range of emotions that result in crying and mood swings directed to surrounding individuals. Rebecca also stated that the chosen stress management technique does not have much of an impact, but she would like to think that it has a positive effect on her general well-being. Luca mentioned in the interview enduring anxiety attacks due to experiences of stress, and that stress also results in crying and sleeplessness. In addition to this, Zane explained that the chosen stress

management technique has had a positive impact as it helps with stress reduction to a certain degree.

Participants have therefore indicated that the stress that they perceived during the pandemic, as well as the stress management techniques that they used has had an impact on their general well-being, as well as their physical- and emotional well-being. This statement is supported by Thibodeaux and Rossano (2018) who state that stress management techniques can decrease negative affects and have a positive impact on an individual's physical- and psychological well-being.

5. TRUSTWORTHINESS

According to Rose and Johnson (2020, p. 3), trustworthiness in qualitative research refers to “the systematic rigor of the research design, the credibility of the researcher, the believability of the findings, and applicability of the research methods”. In addition to this, Lincoln *et al*, (as cited by Rose & Johnson, 2020), states that in order to understand trustworthiness, the research needs to be directed and reflected in the interest of the methodologies and paradigms, as well as ontology and epistemology associated with qualitative research. Furthermore, Guba (as cited by Maree, 2020) indicates that there are four criteria that need to be considered when looking at the trustworthiness of the research being conducted.

Credibility

The first criterion is credibility, which indicates whether or not the findings of the study is realistic and congruent (Maree, 2020). Credibility establishes confidence within the truth of findings, and the way in which the participants interpreted and represented data to the researcher (Cope, 2014; Amankwaa, 2016). In order to enhance credibility, the researcher can verify the findings with the participants to ensure that the data and experiences that are being explained are truthful (Cope, 2014). Therefore, for a qualitative study to be acknowledged as credible, the description of data and experiences need to be recognised immediately by individuals who can relate to similar experiences (Cope, 2014). For the purpose of this study, the researcher ensured that the findings from the data collection and

analysis were realistic and truthful, and that it was interpreted according to the participant's subjective experiences and explanations.

Transferability

The second criterion is transferability, which is described by Denzin (as cited by Maree, 2020) as the rejection of generalisation as a goal for qualitative research, and encourages researchers to correlate between the research findings and personal experiences. More so, transferability indicates that the findings are applicable in relation to different contexts (Amankwaa, 2016). This research demonstrated transferability in a manner of similarities between the selected group of individuals who form part of the tertiary institution community, and where the findings could be applicable in different contexts and to different individuals who are typical in the sense of student characteristics.

Dependability

The third criterion is known as dependability, which is related to credibility and is demonstrated in the research design and the implementation thereof (Maree, 2020). In addition to this, Tobin and Begley (as cited by Nowell, Norris, White, & Moules, 2017) argues that in order to achieve dependability, the researcher needs to ensure that the research process is logical and clearly documented. More so, dependability indicates that the findings are consistent and that they can be repeated (Amankwaa, 2016). Therefore, the researcher documented and kept decisions and notes related to the data collection and analysis process, as well as the findings and interpretation that followed.

Confirmability

The concept of confirmability is used, which is described by Lincoln and Guba (as cited by Maree, 2020) as the extent to which the findings of the research are neutral and shaped by the participants without any biases. Furthermore, according to Guba and Lincoln (as cited by Nowell et al., 2017, p. 3) confirmability can only be established once "credibility, transferability, and dependability are all achieved".

The small sample size and data collection could be seen as a limitation to the trustworthiness of this research, however, by making use of these four criteria and

applying them to the research being conducted, the trustworthiness of this study could be enhanced and maintained.

6. CONCLUSION

6.1. Summary of findings as they relate to the research question, problem, objectives

To answer the research question: what stress management techniques have students utilised during the COVID-19 pandemic? From the above mention findings it is clear that students have made use of more emotion focused stress management techniques. This conclusion derives from the result obtained from participants during the data collection process, and it is therefore evident from the findings that the participants made use of emotion focused stress management as a method of coping as this strategy deals more with stress related feelings or emotions instead of facing the challenge head-on (Jensen et al., 2016). As stress is seen as a prominent part in tertiary institution students' lives (Reddy et al., 2018), it is important that research is conducted to explore further stressors, such as the COVID-19 pandemic. More so, Odriozola-González et al (2020) argued that there is a lack of research that indicates the overall impact that the pandemic might have on stress experienced by students. However, from the findings obtained by this research it is evident that the pandemic has in fact had an impact on the stress that students experience, specifically related to their academic work.

The first research objective was to determine the impact that COVID-19 has had on the stress levels that students experience. From the findings and evident from the third theme, results have indicated that the pandemic has had a great impact on the lives and stress levels of tertiary institution students, and more specifically in an academic context as identified by the selected group of participants. The second objective was to identify the different stress management techniques that students utilised to manage their stress levels, while the third objective was to determine whether these stress management techniques were problem focused or emotion focused. Based on the findings, participants have indicated the utilisation of a wide variety of stress management techniques ranging from physical exercise to meditation, and provided information that suggested that students mostly make use

of emotion-focused stress management techniques to manage their stress levels. The last objective was to explore the impact of these different stress management techniques on student's general well-being. Findings suggested that the different stress management techniques chosen by participants mostly had a positive impact on their general well-being.

6.2. Anticipated contribution

Anticipated contributions refer to a specific phenomenon that is of importance to the research study. According to Holton, Barry, and Chaney (2016), when coping strategies are successfully implemented it may have a positive effect on an individual's perceived stress. In a study conducted by Holton et al (2016), results have indicated that when stress management techniques are focused on increasing adaptive coping, the impact that it has is substantially higher in relation to stress management that aims to decrease maladaptive coping strategies. It can be seen that the type of coping strategy that students use have a great effect on the way in which they manage their stress. Therefore, for the purpose of this research, certain techniques and methods will be implemented in order to provide students with a healthy way to deal and cope with the stress that they might be experiencing. Research related to their stress will indicate whether the pandemic has had an impact on their stress levels, and it will furthermore be determined whether their stress management is problem focused or emotion focused. This study will be beneficial to individuals dealing with stress and who feel that they are unsure of how to cope and which techniques to use to manage their stress. Thus, different types of coping and management strategies will contribute greatly to this study.

6.3. Ethical considerations and implications

In this section, the ethical considerations that are relevant to the study will be discussed. In addition to this, the limitations associated with the study will also be outlined.

The first ethical consideration that is of importance is that before the researcher can continue with his/her research, permission is required from a review board situated at the specific institution (Maree, 2020). If permission is granted, the researcher will

be allowed to continue with the research as planned. Therefore, the second consideration indicates that the researcher would need to obtain informed consent from the participants that will form part of the study. According to Annoni (2018), there are certain considerations related to autonomy and informed consent. When constructed an informed consent form, the researcher has to include certain aspects related to the study.

Sarantakos (2013) stated that an informed consent form should include proper identification of the researcher and an introduction to the institution that granted permission for the research to be conducted. An explanation as to how participants were selected, as well as how many participants are used for the study need to be indicated (Sarantakos, 2013). The purpose and goal of the research need to be included while clarifying how the research will be beneficial and contribute to the participant (Biros, 2018). The extent to which the participant will be involved, as well as any risk factors need to be indicated (Schrems, 2014). Ensure that the participant will remain anonymous and that the gathered data will be confidential (Thackray, 2018). The participants need to be aware that they can withdraw from the research at any time (Thackray, 2018). Lastly, provide contact details for participants to contact if there are any conflicts or complaints (Sarantakos, 2013). As stress management will be explored during this research, the third consideration that needs to be taken into account throughout the research is to ensure that no harm be done to the participant. This indicates that participants should receive the best possible treatment and that their welfare should at all times be considered (Cahana & Romagnoli, 2007; Annoni, 2018). Therefore, no physical harm or mental harm will be done.

Furthermore, there are certain limitations that might pose a challenge to the study. Since the COVID-19 pandemic has resulted in a nationwide lockdown and extreme social distancing measures, it could pose as a limitation to the study as the researcher is unable to conduct face-to-face interviews in order to collect data from students. It has been previously mentioned by Benokraitis (2014) that in-depth interviews provide the researcher with rich details and vivid descriptions to what participants might be experiencing, therefore, with the limitations and restrictions the data being collected might not be as fruitful as the researcher aimed for. In addition to this, another limitation is that interviews will not be recorded, which

means that data cannot be recalled at a later stage for further interpretation and transcribing as a way to improve the accuracy of gathered information (Lochrie et al., 2015).

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8. ANNEXURES

8.1. Annexure A- Final Research Report Summary Document template

Annexure A: Concept Document Template

PROVISIONAL TITLE: Exploring problem focused vs. emotion focused stress management: a qualitative study on tertiary institution students using in-depth interviews.

Research Purpose/ Objective	Primary Research Question	Research Rationale	Seminal Authors/ Sources	Literature Review – Conceptual Framework	Paradigm	Approach	Data Collection Method(s)	Ethics	Anticipated Findings	References
To determine if stress management is problem or emotion focused. To determine if COVID-19 has an impact on student stress.	Are students' stress management techniques problem focused or emotion focused ?	This study is important as it will bring different ways to reduce stress and as a result better social and academic performance.	The work of Robinson, Smith, and Segal. Cacioppo and Freberg.	Theme 1: Stress. Theme 2: Stress management techniques. Theme 3: Types of coping.	Paradigm Interpretivism. Epistemology This research will be used to aid individuals in giving them different ways to deal with stress. Ontology Reality is seen to be socially constructed. Axiology This research can be of value as it will provide different ways to reduce stress.	Qualitative methodology.	In-depth interviews.	Request permission from ethics committee. Informed consent.	For the purpose of this study, stress management techniques and coping strategies will be implemented to successfully reduce stress.	Robinson et al. (2019). Graham (2019). Nel (2014). Etc.
							Population	Semi-structured.	Do no harm.	
								The population will consist of 6 participants who are tertiary institution students.		
Research Problem	Secondary Questions/ Hypotheses/ Objectives	Key Concepts	Key Theories			Sampling	Data Analysis Method(s)	Limitations	Anticipated Contribution	
Students have a lot of stress but it is not known if the pandemic adds to their stress levels.	To determine the impact of COVID-19 on stress. To determine if students use stress management. To determine if techniques are problem or emotion focused.	Stress. Stress management. Coping strategies. Classical conditioning.	Behaviourism and Self-determination theory.			Non-probability sampling using a purposive sampling method. This study will consist of 6 participants.	The data obtained from individuals in the study will be analysed. The analysis will be done by using Thematic analysis.	Lockdown measures and social distancing. Without face-to-face contact, data might not be as rich.	Stress management techniques and effective coping strategies.	

8.2. Annexure B- Consent Form

ANNEXURE C: EXPLANATORY INFORMATION SHEET AND CONSENT FORM FOR PARTICIPANTS

To whom it may concern,

My name is Megan Pawson and I am a student at the IIE Varsity College in Sandton. I am currently conducting research under the supervision of Evelyn Naggayi about the impact that the COVID-19 pandemic might have on the stress levels of tertiary institution students, as well as to determine whether their stress management is problem focused or emotion focused, with the aim to initially reduce stress. I hope that this research will enhance our understanding of the use of different coping strategies and stress management techniques to reduce stress in a healthy manner.

I would like to invite you to participate in my study. In order to explain to you what your participation in my study will involve, I have formulated questions that I will try to fully answer so that you can make an informed decision about whether or not to participate. If you have any additional questions that you feel are not addressed or explained in this information sheet, please do not hesitate to ask me for more information. Once you have read and understood all the information contained in this sheet and are willing to participate, please complete and sign the consent form below.

What will I be doing if I participate in your study?

I would like to invite you to participate in this research because I believe that the use of different coping strategies and stress management techniques could be an efficient method to reduce stress and increase academic and social performance. If you decide to participate in this research, I would like to determine the cause of your stress and implement stress management techniques to determine the manner in which you cope, and aid in stress reduction. By using different coping strategies and stress management techniques, you will be able to find a way to reduce the stress that you experience due to common stressors associated with being a student, as well as possible stress associated with the pandemic. In addition to this, I will conduct an interview to determine the causes of stress in your daily life and provide you with different techniques that you can use to manage your stress. Another interview will then be conducted to determine whether the stress management technique or coping strategy that you have used is problem focused or emotion focused.

You can decide whether or not to participate in this research. If you decide to participate, you can choose to withdraw at any time or to decide not to answer particular interview questions.

Are there any risks/ or discomforts involved in participating in this study?

Whether or not you decide to participate in this research, there will be no negative impact on you. There are no direct risks or benefits to you if you participate in this study. You might, however, indirectly find that it is helpful to talk about the causes of your stress and the extent to which you experience it. This will include any physical or mental health related problems as a result of your stress levels. If you find at any stage that you are not comfortable with the line of questioning, you may withdraw or refrain from participating.

Do I have to participate in the study?

- Your inclusion in this study is completely voluntary;
- If you do not wish to participate in this study, you have every right not to do so;
- Even if you agree to participate in this study, you may withdraw at any time without having to provide an explanation for your decision.

Will my identity be protected?

I promise to protect your identity. I will not use your name in any research summaries to come out of this research and I will also make sure that any other details are disguised so that nobody will be able to identify you. I would like to ask your permission to record the interviews, but only my supervisor, I and possibly a professional transcriber (who will sign a confidentiality agreement) will have access to these recordings. Nobody else, including anybody at the IIE Varsity College, will have access to your interview information. I would like to use quotes when I discuss the findings of the research but I will not use any recognisable information in these quotes that can be linked to you.

What will happen to the information that participants provide?

Once I have finished all interviews, I will write summaries to be included in my research report, which is a requirement to complete my IIE Honours in Psychology qualification. You may ask me to send you a summary of the research if you are interested in the final outcome of the study.

What happens if I have more questions about the study?

Please feel free to contact me or my supervisor should you have any questions or concerns about this research, or if there is anything you need to know before you decide whether or not to participate.

You should not agree to participate unless you are completely comfortable with the procedures followed.

My contact details are as follows:

20103423@vcconnect.co.za

The contact details of my supervisor are as follows:

Consent form for participants

I, _____, agree to participate in the research conducted by Megan Pawson about stress management techniques on tertiary institution students, with the aim to initially reduce stress.

This research has been explained to me and I understand what participation in this research will involve. I understand that:

1. I agree to be interviewed for this research.
2. My confidentiality will be ensured. My name and personal details will be kept private.
3. My participation in this research is voluntary and I have the right to withdraw from the research at any time. There will be no repercussions should I choose to withdraw from the research.
4. I may choose not to answer any of the questions that are asked during the research interview.
5. I may be quoted directly when the research is published, but my identity will be protected.

Signature

Date

Consent form for audio-recording/ video recording

I, _____, agree to allow Megan Pawson to audio record my interviews as part of the research about stress management techniques on tertiary institution students, with the aim to initially reduce stress.

This research has been explained to me and I understand what participation in this research will involve. I understand that:

1. My confidentiality will be ensured. My name and personal details will be kept private.
2. The recordings will be stored in a password protected file on the researcher's computer.
3. Only the researcher, the researcher's supervisor and possibly a transcriber (who will sign a confidentiality agreement) will have access to these recordings.

Signature

Date

8.3. Annexure C- Interview schedule

Good morning/afternoon

My name is Megan Pawson and I am currently in the process of completing my honours degree at the IIE Varsity College in Sandton. I would like to invite you to participate in a research study that I am conducting to explore the impact that the COVID-19 pandemic might have had on your stress levels, as well as to determine if your stress management is problem focused or emotion focused. I would like to ask you some questions related to stress and stress management techniques in order to draw a conclusion to the aim of the study. This information will be used to determine if there has been a change in your stress levels due to the pandemic, and to indicate if the way in which you manage your stress is problem focused or emotion focused. This interview is completely voluntary and will take about 15 minutes of your time and will be strictly confidential, with the exception of myself and my supervisor. You may ask me to send you a summary of the research should you be interested in the final outcome.

Do you agree that written consent has been obtained for the completion of this interview, as well as the recording thereof?

Do you have any questions before we start?

Questions

1. How would you describe stress?
2. In what way has the COVID-19 pandemic had an impact on your stress levels?
(What is the most stressful situation that you have faced during this period?)
3. Can you please share your experiences on how stress impacts your emotional and physical well-being?

4. How do you manage your stress levels?
5. In what ways are these techniques effective?
6. What do you think is the impact of the stress management techniques you use on your general well-being? (Positive/negative)

Thank you for taking the time to answer these questions.

Would you mind choosing your own stress management technique and making use of it for 5 days in order to reduce stress?

Would you mind to have a brief follow up discussion after these 5 days and the administration of your selected technique?

I should have all the information I need, thank you for your participation and I am looking forward to our follow up discussion.

Follow-up

1. What stress management technique did you choose following the initial interview?
(How did you go about implementing this technique?)
2. What impact did this technique have on your stress levels? (Did you experience any noticeable changes?)

Thank you once again for your participation.

8.4. Annexure D- Ethical clearance letter



August 2020

Student name: Megan Pawson

Student number: 20103423

Campus: IIE's Varsity College Sandton

Re: Approval of Honours in Psychology Proposal and Ethics Clearance

HONOURS/PGDIP ETHICAL CLEARANCE LETTER

Your research proposal and the ethical implications of your proposed research topic were reviewed by your supervisor and the campus research panel, a subcommittee of The Independent Institute of Education's Research and Postgraduate Studies Committee.

There are some aspects that you still need to address in your proposal. You will need to address these aspects in consultation with your supervisor before you may proceed (see below):

Please discuss with your supervisor/navigator/lecturer how you will address these issues listed below:

Please note: Your fieldwork may only proceed once you address the following issues:

- Please make all the changes suggested/recommended by your supervisor.

In the event of you deciding to change your research methodology in any way, kindly consult your supervisor to ensure all ethical considerations are adhered to and pose no risk to any participant or party involved. A revised ethical clearance letter will be issued.

We wish you all the best with your research!

GENERAL CONDITIONS TO BE FULFILLED IN RELATION TO RESEARCH

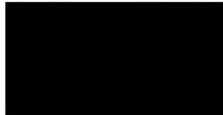
Permission is granted to proceed with the above study subject to the conditions listed below being met and may be withdrawn should any of these conditions be flouted.

Please note: The panel has not considered the merits, accuracy or ethical soundness of the research. The only merits examined are the use of The IIE as a sample.

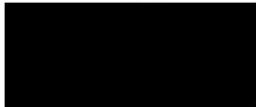
Permission is granted subject to the following conditions:

1. The researcher(s) will need to obtain informed consent in writing from all of the participants in his/ her sample if the study is not anonymous.
2. The researcher(s) may only use the data collected for research purposes and in no other way.
3. Photographs of human subjects may only be taken if relevant to the research, informed consent was obtained, and even with informed consent, the photographs may not be published on any online platforms.
4. The researcher is responsible for supplying and utilising his/her own research resources, such as stationery, photocopies, transport, faxes and telephones and should not depend on the goodwill of the institutions and/or the offices visited for supplying such resources.
5. No names or identifying information of participants may be used within the research and the research must be voluntary.
6. Please make it clear that the information will not be used punitively in any way and participants may in no way be counselled/advised based on this.

Lead Supervisor: Dr John Hunter



Campus Postgraduate Coordinator (CPC):



JENNA-LEE RAMNARAIN

8.5. Annexure E- Example of data collected

Participant 2- Samantha

My name is Megan Pawson and I am currently in the process of completing my honours degree at the IIE Varsity College in Sandton. I would like to invite you to participate in a research study that I am conducting to explore the impact that the COVID-19 pandemic might have had on your stress levels, as well as to determine if your stress management is problem focused or emotion focused. I would like to ask you some questions related to stress and stress management techniques in order to draw a conclusion to the aim of the study. This information will be used to determine if there has been a change in your stress levels due to the pandemic, and to indicate if the way in which you manage your stress is problem focused or emotion focused. This interview is completely voluntary and will take about 15 minutes of your time and will be strictly confidential, with the exception of myself and my supervisor. You may ask me to send you a summary of the research should you be interested in the final outcome.

Q: Do you agree that written consent has been obtained for the completion of this interview, as well as the recording thereof?

A: Yes.

Q: Do you have any questions before we start?

A: No.

Questions

Q 1: How would you describe stress?

A: Stress is something that manifests physically and psychologically. (Uhm) It makes changes to your body so you experience a whole bunch of things, like for example sweating, (uhm) shortness of breath. I can't really think of other symptoms (giggles). But (uhm) it also affects you psychologically, so for example (uhm) being very distracted, (uhm) not being able to concentrate on one thing or same thing really. (Uhm) Yea, I would also say it affects emotional well-being as well. I think especially for women, we're like all over the place when we're stressed. (Uhm) Our hormones I'm sure go up and down. That's pretty much how I would describe it, kind of contains all those different things.

sympt

T-1

Psych

Phys

Similar

Q 2: In what way has the COVID-19 pandemic had an impact on your stress levels?

A: I would say it's more indirect than direct. At first (uhm) I was very happy being home, so I wasn't that stressed. I was actually more relieved because I had more time with university. (Uhm) But now I feel like in the past maybe month or two it really affects me. (Uhm) So I feel fine but like I'll be very emotional for no reason type of thing. I feel like, and my hormones are very balanced, so I think the stress has really affected me emotionally.

Q 2: (What is the most stressful situation that you have faced during this period?)

A: (Uhm, giggles) It's actually been today, (giggles) ironically. (Uhm) Basically we found out we might have the virus. This morning we found out that, so (uh) that today has been very stressful. So I tried to distract myself and not do work because I'm not in a good headspace with regard to that. So yea, today has actually been the most stressful day out of all the days.

Q 3: Can you please share your experiences on how stress impacts your emotional and physical well-being?

A: So for me, (uhm) if I'm stressed I don't exercise, (uh) so it affects my physical well-being. I know it's very weird, I think other people do exercise to relieve the stress, but I just don't. And I have a muscle disorder so I need to exercise, so definitely affects me in that way. And then it kind of overflows into my emotional well-being because I don't feel good because I didn't exercise. So it's definitely a downward spiral, so if I do get too stressed it does affect my whole well-being, especially emotionally and physically.

Q 4: How do you manage your stress levels?

A: My stress levels, (uhm) I would say I manage them in two ways. So either I escape from what is stressing me, so for example watching television (uhm) because I don't have to think much about, because my stress levels pretty much derive from university, so watching television I don't have to think about anything. It kind of gives my brain a break. (Uhm) Or I actually just tackle the stress straight-on, so for example doing my varsity work (uhm) and just try and complete everything so that it's out of the way, then my stress levels decrease.

Q 5: In what ways are these techniques effective? ✓

A: (Uhm) I would say doing the work is quite effective, doing my varsity work to decrease stress levels is quite effective. But watching tv isn't a very healthy way of (uhm) decreasing the stress levels, even though sometimes it helps me, it's just a temporary fix so I do feel like I need to replace it with something. I don't know, like exercise and actually doing exercise to get my mind off of the stress and find something that's actually good for me and not just sitting like a potato (giggles).

Q 6: What do you think is the impact of the stress management techniques you use on your general well-being?

A: (Uhm) Yo, that's a difficult one. Please repeat that so that I can. (Uhm) With regard, well, howdo I say it? They don't help me in any way, so for example actually doing the work, it does help me but it doesn't help me. I don't know, like (uhm). Sorry, scratch that. I would say physical well-being, it lowers my physical well-being because, for example the whole television thing. (Uhm) If I just sit in front of the tv, I don't get exercise, (uhm) I'm less fit which means that I'm less healthy, which means that I'm less capable of handling other things, (uhm) especially if I get sick and all that stuff. Yea, that's what I would say.

Thank you for taking the time to answer these questions.

Q: Would you mind choosing your own stress management technique and making use of it for 5 days in order to reduce stress?

A: Yes, is that for the problem focused vs. emotion focused?

Q: Would you mind to have a brief follow up discussion after these 5 days and the administration of your selected technique?

A: I wouldn't mind, I would do that.

I should have all the information I need, thank you for your participation and I am looking forward to our follow up discussion.

Indirect

Follow-up

Q 1: What stress management technique did you decide to use?

A: I aimed to use (uhm) the problem, I think it's called problem focused one. (Uhm) But then I realised that in order for me to directly solve my problems using that technique, I needed the emotional support, (uhm) especially because of this whole COVID time and specifically what I'm going through you know, realising that we might have COVID. (Uhm) So yea, I used more, I actually used more of the emotion focused technique if that makes sense, (uh) in order to get to the problem focus, like in order to use the problem focused technique.

Q 1: (How did you go about implementing this technique?)

A: (Uhm) I spoke to my family about my concerns, and confided in my boyfriend because he is a, he is basically the best of my support system, apart from my family. Because he knows me so well and we also haven't been able to see each other, so I needed that from him.

common.T

Q 2: What impact did this technique have on your stress levels?

A: (Uhm) I would say it decreased my stress levels, but not completely because (uhm) I don't know. I'm a very realistic person so even though it can help me, it won't take away the stress completely because the problem is still there and it hasn't been solved 100%.

Q 2: (Did you experience any noticeable changes?)

A: (Uhm) I don't think so. I think, maybe I think the emotional support, sorry omg there is a helicopter flying over, just give me a second. The emotional support definitely helped me (uhm) more than I thought it would. I think I'm just going to stick with that.

E/F = TF