

Exploring the role of psychological aspects in the eating behaviour of female university students in a South African context

M Rieckert
22155163

Mini-dissertation submitted in partial fulfilment of the requirements
for the degree *Masters in Clinical Psychology* at the Potchefstroom
Campus of the North-West University

Supervisor: Dr W de Klerk

October 2016



CONTENT LIST

Acknowledgements	i
Summary	ii
Opsomming	iv
Preface	vi
Permission Letter from Supervisor	viii
Section 1: Introduction	1
1.1 Orientation and Literature overview.....	2
1.2 Problem statement.....	14
Section 2: Article: Exploring the role of psychological aspects in the eating behaviour of female university students in a South African context.....	25
2.1 Guidelines for authors: <i>Appetite</i>	25
2.2 Manuscript: Exploring the role of psychological aspects in the eating behaviour of female university students in a South African context.....	33
Section 3: Critical reflection	82
Complete Reference List	91
Addendum	106

ACKNOWLEDGEMENTS

I would like to start off by thanking my Heavenly Father. Without His love and grace this study would have never been possible or completed. All the glory to God.

Then I would like to thank the following people for their contributions to the study and their on-going support throughout the research process:

- **Dr Werner de Klerk**, my supervisor, firstly for your willingness to be my research supervisor. Furthermore I would like to thank you for your guidance and leadership, your on-going support, motivation and reassurance. Without your help and your valuable contributions this study would never have been possible.
- To the **participants** of this study, thank you for your willingness to participate and to contribute to this study by sharing your experiences. You made this study possible.
- My **parents** and **sister**, thank you for your motivation, encouragement and understanding during the tough times. Without you this study would never have been completed. I am so grateful for you.
- To my **grandparents**, for every prayer that helped to carry me through this process and for your never ending love.
- My fiancé **Marcel**, thank you for your unconditional love and for all the comfort and support you provided.
- To each one of my **friends** and **colleagues**, thank you for your moral support and encouragement every step of the way.

SUMMARY

Exploring the role of psychological aspects in the eating behaviour of female university students in a South African context

Keywords: eating behaviour, psychological aspects, university students, qualitative research.

In South Africa people now find themselves in what is referred to as ‘the nutrition transition’. Furthermore, a high prevalence of overweight as well as underweight and eating disorders have also been noted. Young woman have especially been found to be a vulnerable population group to develop abnormal eating behaviour. A significant amount of eating pathology is prevalent among female South African university students. Because of the severity of this problem various studies have been conducted to investigate pathological eating behaviour. However studies with a focus on general eating behaviour are still lacking.

Psychological aspects have been identified as factors that play a role in eating behaviour; however a huge gap in literature further exploring this domain still seems evident. Female university students have been indicated to be a significant risk group to develop unhealthy eating, dieting or restrictive eating behaviours, emphasising why exploring the psychological aspects involved in their general eating behaviours is of critical importance. In the South African context a dire need exists for qualitative research in this domain. By using a qualitative approach and switching this study’s focus to the general eating behaviour of female students, it will be possible to compile data with greater depth, and this will then lead to a better understanding of what psychological aspects play a role, why these aspects play a role and how they influence general eating behaviour. For the purpose of this study a criterion sampling method was used to establish the participants. All the participants were female students at the North -West University Potchefstroom Campus between the ages of 18-24 years. The final sample consisted of 13 participants and the data was collected by means of a

demographic questionnaire and semi-structured interviews. The thematic analysis process was then conducted to establish the relevant themes.

The main themes identified were, firstly, that eating has great social importance. Furthermore, it was found that others perceptions as well as self-perceptions and social media influenced eating behaviour. With regard to emotional states it was indicated that personal stressors and a low mood influence eating patterns and eating related choices. It was also evident that stressors which were related to the university context played a big role in determining eating behaviour, such as academic stress and the adjustment to a new environment.

This was one of the first qualitative studies conducted in this domain; thus, this study laid some of the groundwork for future research. This study identified the importance of taking psychological aspects into account when eating behaviours of female university students are explored. Furthermore, in order to develop efficient health enhancement or prevention programs, it is recommended that the findings of this study be taken into account. This study showed the importance of a holistic approach to human beings and emphasised the reciprocal effect physiological and psychological domains have on one another.

OPSOMMING

’n Ondersoek na die rol van psigiese aspekte in die eetgedrag van vroulike universiteitstudiante in ’n Suid-Afrikaanse konteks

Sleuteltermes: eetgedrag, psigiese aspekte, universiteitstudiante, kwalitatiewe navorsing.

In Suid-Afrika word tans beleef waarna verwys word as ‘die voedingsoorgang’. ’n Hoë voorkoms van oorgewig en vetsug, sowel as ondergewig en eetafwykings is ook reeds waargeneem. Dit is bevind dat veral jong vroue ’n kwesbare bevolkingsgroep is waaronder abnormale eetgedrag ontwikkel. ’n Beduidende hoë voorkoms van eetafwykings heers onder vroulike universiteitstudiante en as gevolg van die erns van hierdie probleem is verskeie studies onderneem om patologiese eetgewoontes na te vors. Daar is egter tans steeds ’n gebrek aan studies waarin gefokus word op algemene eetgedrag.

Psigiese aspekte is geïdentifiseer as faktore wat ’n rol speel in eetgedrag, maar dit is duidelik dat daar steeds ’n groot leemte in die literatuur ten opsigte van ondersoek op hierdie terrein bestaan. Dit is aangedui dat vroulike universiteitstudiante ’n besondere risikogroep is by wie ongesonde eet-, dieet- of beperkende eetgedrag kan ontwikkel; dit beklemtoon waarom navorsing oor die psigiese aspekte wat in hulle algemene eetgedrag betrokke is, van kardinale belang is. In die Suid-Afrikaanse konteks bestaan ’n ernstige tekort aan kwalitatiewe navorsing op hierdie terrein. Deur van ’n kwalitatiewe benadering gebruik te maak en die fokus van die navorsing te plaas op algemene eetgedrag van vroulike studente, word dit moontlik om meer beskrywende data met groter diepte saam te stel wat sal lei tot die beter begrip van watter psigiese faktore ’n rol speel, waarom hulle ’n rol speel en hoe hulle algemene eetgedrag beïnvloed.

Vir die doeleindes van hierdie studie is gebruik gemaak van ’n standaardsteekproefmetode om die deelnemers saam te stel. Al die deelnemers was vroulike studente van die Noordwes-Universiteit, Potchefstroomkampus en hulle was almal tussen 18

en 24 jaar oud. Die steekproef het bestaan uit 13 deelnemers; die data is verkry deur middel van 'n demografiese vraelys en semi-gestruktureerde onderhoude. Die tematiese analiseproses is vervolgens gedoen om die relevante temas te identifiseer.

Die hoofemas wat geïdentifiseer is-is, eerstens, dat eet groot sosiale betekenis het. Verder is vasgestel dat ander se persepsies sowel as die selfpersepsie eetgedrag beïnvloed en dat sosiale media ook 'n rol speel. Sover dit emosionele toestande betref, is aangetoon dat persoonlike spanningsfaktore en lae gemoedstoestande eetpatrone en eetverwante keuses beïnvloed. Dit het ook duidelike geword dat spanningsfaktore wat met die universiteitskonteks verband het, bv. akademiese druk en aanpassing by 'n nuwe omgewing, 'n aansienlike rol speel in die bepaling van eetgedrag.

Hierdie is een van die eerste kwalitatiewe studies wat op hierdie terrein onderneem is, en dit baan daarom die weg vir verdere navorsing. Die studie dui aan waarom dit belangrik is om psigiese faktore in ag te neem wanneer die eetgedrag van vroulike studente ondersoek word. Ten einde effektiewe gesondheids- of voorkomingsprogramme te ontwikkel, word aanbeveel dat die bevindinge van hierdie navorsing verreken geneem word. Hierdie studie toon die belangrikheid aan van 'n holistiese benadering tot mense en beklemtoon die wedersydse effek wat fisiese en psigiese terreine deurgaans op mekaar het.

PREFACE

- This mini-dissertation adheres to the article format identified by the North-West University in rule: A 4.4.2.9.
- This article will be submitted for possible publishing in *Appetite*.
- This mini-dissertation adheres to the guidelines established by the American Psychological Association (APA: 6th edition). Section 2 of this mini-dissertation was compiled according to the author guidelines specified by the journal in which it might be published.
- The page numbering is chronological, starting with Section 1 and ending with the addendum.
- A language practitioner registered at the South African Translators Institute (SATI) conducted the language editing of this mini-dissertation.
- The Afrikaans participant quotes was also translated to English by a language practitioner registered at SATI.
- Data collection for the study (the semi-structured interviews) was conducted in the language that was preferred by the participants. English and Afrikaans interview questions were concurrently established and used during the interview process.
- Consent for the submission of this mini-dissertation for examination purposes (in fulfilment of the requirements for the Master's degree in Clinical Psychology) has been provided by the research supervisor, Dr Werner de Klerk.

- This mini-dissertation was submitted to Turn-it-in which established that this mini-dissertation falls within the norms of acceptability regarding plagiarism (Similarity Index: 2%).

PERMISSION LETTER FROM SUPERVISOR

Permission is hereby granted for the submission by the first author, Monique Rieckert of the following article for examination purposes, towards the obtainment of a Master's degree in Clinical Psychology:

Exploring the role of psychological aspects in the eating behaviour of female university students in a South African context

The role of the co-author was as follow: Dr. W. de Klerk acted as supervisor and project head of this research inquiry and assisted in the peer review of this article.



Dr. W. de Klerk

Supervisor

SECTION 1: INTRODUCTION

Structure of the Research

This mini-dissertation consists of three sections. The current section, Section 1 (p. 1), will present a literature overview that aims to inform the reader on some background information and concepts that are of relevance to this study. In Section 2 (p.25) information with regard to the article will be indicated. The article will be submitted to the *Appetite Journal* for possible publication. The article will be presented and it aims to address the methodology used and the findings of the study and offers a discussion and conclusion of the study findings. The final section, Section 3 (p.82), will then include the critical reflection of the researcher on the study and it will also indicate the contributions made by the study.

Introduction

This section of the mini-dissertation offers an in-depth literature overview to ensure that the reader gains a comprehensive understanding of some concepts and information that will be relevant to this research study. The following topics are discussed shortly:

1) Definition of eating behaviour; 2) Eating behaviour in a South-African context; 3) Definition of psychological aspects; 4) The relationship between eating behaviour and psychological aspects; 5) Late adolescence- early adulthood: Life phase and eating behaviour; 6) The research sample and context of the research study: Female university students of the North-West University, Potchefstroom Campus. The current section also indicates the problem statement as well as the aim of the study.

Literature Overview

In this literature overview the terms "*eating*", "*psychological aspects/factors*", "*university students*", "*disordered eating*" and "*eating behaviour*" were further explored by using the following databases: Google Scholar, PsychINFO, Science Direct and One Search.

Definition of Eating Behaviour

Eating is defined as the act of putting food into your mouth, chewing and swallowing it (Oxford English Dictionary, 2015), thus it is the act of consuming food. According to Grimm and Steinle (2011) eating behaviour can be defined as the constant interplay between physiological and genetic, as well as social and psychological aspects that determine our food selections, certain food preferences, as well as the amount and frequency of consumption of food. Elsner (2002) further described that eating behaviour does not only include the actual action of eating but also any thoughts about eating as well as the intent to eat. This is also the definition the researcher will make use of when she refer to eating behaviour during this study.

Eating Behaviour in a South African Context

The following quote (Berlant, 2011) was cited in Bissel, Peacock, Blackburn, and Smith (2016, p. 19): “Food is one of the few spaces of controllable, reliable pleasures people have. Additionally, unlike alcohol or other drugs, food is necessary to existence, part of the care of the self”. Therefore, eating is about more than just merely putting food in our mouth (Rodríguez-Arauz, Ramírez-Esparza, & Smith-Castro, 2016). According to Beardsworth and Keil (1977, as cited in Casotti, 2005) eating behaviour is not only about the intake of crucial nutrients and vitamins, but actually by eating food we also inevitably consume a variety of experiences of pleasure, taste and meaning. Casotti (2005) stated that every meal we eat will be filled with a variety of symbolic meanings and that eating together with others has the power to create and strengthen our relationships and social bonds. Subsequently, it is evident that eating goes beyond the purpose of only satisfying our physiological hunger.

Eating behaviour has been established to be a very complex system that plays a crucial part in our daily lives (Renner, Sproesser, Stok, & Schupp, 2016). It has, however, been indicated that human’s eating behaviour is very adaptive with regard to their

environments. This is evident if one looks at the cuisines of different countries and cultures; for example, in Japan mud and soil has recently been added as a special ingredient to various dishes in upper-class restaurants (Renner et al., 2016). Thus, we can see that the context we live in will play a crucial role in establishing our eating patterns and behaviours.

If we look at the eating behaviour in our South African context it is evident that over the last few decades various changes in this regard have taken place. If we look through a political lens at some of the changes that have occurred we see that the increase of the globalisation of food production as well as in consumerism has played a big role (Bissel et al., 2016). We see larger quantities of pre-packaged meals are being bought, less time is spent producing own meals, as well as heightened levels of high energy food are being consumed (Bissel et al., 2016). Previously South Africans consumed large amounts of grains, starchy root vegetables, fruits and legumes (Popkin, 1994) and if we look at the current state of South-Africans' diets we can see a definite shift in these previous patterns of eating behaviour. The consumption of energy-dense and processed foods seems to have especially escalated. According to Zeeni, Gharibeh and Katsounari (2013) the drastic increase of saturated fat, salt as well as sugar in people's diets that are evident today, and subsequently also the decrease of grains, fruits, and vegetables (high fibre diets) can be referred to as a nutrition transition and is reported to be a global phenomenon.

This seems to be related to the drastic rise in chronic diseases that are correlated to the increase in the levels of obesity that is currently evident (Heart and Stroke Foundation of South Africa [HSF], 2015). According to the World Health Organisation (WHO, 2015), it was found globally that during 2014 about 39% of adults (18 years old and older) were overweight. Furthermore, it was also indicated that 13% of the adult population group could be classified as obese during 2014 and that the percentage of females who were obese were almost double the number of the males (WHO, 2015).

The HSF also emphasised the problems that this rise in the levels of overweight and obesity in South Africa can lead to. Some of these health problems included hypertension (high blood pressure), Type 2 Diabetes Mellitus, stroke, certain cancers and heart disease (HSF, 2015). South Africa seems to be especially at risk as our country has been indicated to have the highest level (in the Sub-Saharan African region) of obesity and overweight and it was stated that 40% of the women in our country are obese (HSF, 2015). In our unique South-African context an aspect related to weight loss that further complicates the situation we are currently dealing with, is the fact that weight loss is associated with being HIV positive. Furthermore, in some South African cultures it has been found that people associate being wealthy with being overweight (HSF, 2015). Thus, both of the previous perceptions of some South Africans will subsequently lead to our country's inhabitants rather wanting to be obese than to lose weight and risk being stereotyped negatively. The HSF (2015) also described that the Department of Health realises the current crisis the nutrition transition is causing in South Africa and that concurrently they created a goal that by 2020 they want to reduce the prevalence of overweight and obesity by 10%, also indicating the need for research to be done to help make this goal more feasible.

Thus, we can see that eating behaviour seems to impact the current weight related difficulties of many South-Africans. However, it is not only obesity that seems to be a problem. At the other end of the spectrum, the prevalence of anorexia and bulimia nervosa are also serious coexisting problems caused by the changes occurring in people's eating behaviour (Popkin, 2004). According to the National Institute of Mental Health (NIH) about one in five women can be classified to be struggling with disordered eating behaviours or with an eating disorder (NIH, 2014). Eating disorders are said to be 2.5 times more prevalent among females and it has been indicated that they mostly appear during late teen years or

during young adulthood (NIH, 2014). Stice (2002) states that body dissatisfaction and subclinical eating disorders are the two main contributors to a full blown eating disorder developing. It has been found that girls start expressing their concerns about their weight and body shape already from the age of six and that this behaviour then endures and even increases as they become older (Smolak, 2011). Literature illustrates the constantly increasing rates of eating disorders that seem to be evident (Hoek & Van Hoeken, 2003) and it is indicated that further research with regard to understanding this epidemic is also required especially in the South African context.

Thus, we see that abnormal and disordered eating patterns have been indicated to be prevalent on the over and under eating spectrums and it is currently a great problem evident in our society that needs to be handled.

Definition of Psychological Aspects

According to Covington (2000) the term ‘psychological’ can be said to include a person’s beliefs, thoughts, feelings and behaviour. Gerrig and Zimbardo (2002) stated that psychological aspects can be described as any emotional as well as cognitive processes that can affect a person’s attitude or behaviour. According to Reis and Gray (2009) understanding the underlying emotions as well as cognitions involved is the key to truly aiming to understand a person’s behaviour. This is stated to be the case because emotions and cognitions are both in constant interaction with one another and they are even said to play a role in emotional regulation, reasoning as well as decision making processes (Reis & Gray, 2009). Now the next step will be to look at a clearer description of the concepts ‘emotion’ and ‘cognition’ separately to understand precisely what the term ‘psychological aspects’ actually entails.

According to Mulligan and Scherer (2012) an emotion can be said to be a class of affective processes. An emotion is explained to be influenced by neurochemicals that are

released in the body and these neurochemicals then impact the state or feeling a person experiences at that moment (Reis & Gray, 2009). Alternatively, emotions are also defined as the affective responses of a person to certain stimuli which can be of an internal or external nature (Matthews & Deary, 1998; Scherer, Schorr, & Johnstone, 2001). In their study Mulligan and Scherer (2012) described their frustration with the current lack of an agreed upon definition for the concept 'emotion' and they have currently only found a general agreed-upon criterion that can be used to classify something to be an emotion or not. This criterion states that for something to be an emotion it has to be an affective episode that is intentional (aimed or directed at some stimuli); furthermore, it should also involve the experience of bodily changes such as expressions changing or the level of arousal being adapted; it must be triggered and guided by a minimal of one appraisal and, finally, it is also said to have to contain an intellectual or perceptual element which also contains intentionality (Mulligan & Scherer, 2012). Now we need to still describe the second part of the concept 'psychological aspects' by looking at how the 'cognitive elements' would be defined.

Neisser (1967, as cited in Brandimonte, Bruno, & Collina, 2006) described cognitive processes as processes that include various aspects and dimensions such as paying attention, solving problems, making decisions, as well as forming a perception, using reasoning skills and planning. Furthermore, this is said to enable a person to store any received internal or external input of a cognitive nature and to encode this information in such a way that it can be retrieved again when this information is needed (Brandimonte et al, 2006).

Another important aspect of cognition that should be discussed is social cognition. According to Greenwald and Banaji (1995) as well as Wyer (2014) social cognitions can be further described as being aspects such as a person's self-concept, his/her attitudes and the stereotypes he/she perceives to be true. Thus, the term 'cognition' is a broad and widely

encompassing concept also causing the definition of ‘psychological aspects’ to include these various dimensions described.

Taking into account the above mentioned definitions, when referring to the term ‘psychological aspects’ in this study it can be defined as any emotion (including any affective state/ feeling) or cognition (such as any belief or attitude of a person, self-perception, way of reasoning) experienced by a person that will concurrently lead to his/her behaviour being influenced or impacted (and in the case of this study his/her eating behaviour).

The Relationship between Eating Behaviour and Psychological Aspects

The relationship between the physiological and psychological facets of human beings has always been a fascinating aspect and various studies have shown the connection between these two aspects (Bond, James, & Lader, 1974; American Psychological Association [APA], 2005). It is doubtful whether we will ever really be able to completely separate these two factors from each other. Alberts, Thewissen, and Raes (2012) described in their study the three main types of eating behaviour that can be found and it is evident that psychological aspects seem to be a key determinant in establishing these patterns of eating. Firstly, there is *restrained eating* which involves restriction of eating behaviour and includes dieting behaviours (Alberts et al., 2012). It was stated that the psychological aspects that can drive this type of eating behaviour includes appearance related cognitions and perceptions, as well as weight related and self-evaluative cognitive processes (Spangler, 2002). Secondly, *external eating* which can be described as eating in response to stimuli other than hunger and satiety such as external triggers (Alberts et al., 2012). Some of the external cues that have been indicated to play a role in this type of eating behaviour include psychological aspects such as stress and a low self-esteem (Alberts et al., 2012). The last eating type described was *emotional eating* which is the occurrence of a person eating in response to the experience of a negative emotion or of a negative emotional state (Nevanpera et al. 2012, as cited in

Beydoun, 2014). Alberts et al. (2012) also described this to be a type of avoidance coping mechanism used so that a person does not have to endure negative emotions that are present at certain times.

Nevanpera et al. (2012, as cited in Beydoun, 2014) agreed with the findings relayed from a previous study and then also used this information and made this applicable to abnormal eating behaviour. They state that during these episodes of uncontrolled eating behaviour, external triggers, difficulties with regard to restraining thoughts surrounding food intake, as well as emotional eating (which is usually a result of a low mood) seem to all be key role players that subsequently lead to the development of abnormal eating behaviours. Macht and Simons (2000) also stated that abnormal eating behaviour seems to be influenced by various psychological aspects such as difficulties experienced with cognitive eating control as well as using food and eating behaviour for the purpose of emotional regulation.

The influence that a person's emotions and mood has on his/her eating behaviour has been indicated by various studies. According to Gibson (2006) the interconnection of the sensory, psychological as well as physiological pathways found in all human beings, explain why eating behaviour would concurrently be influenced by psychological aspects such as emotions. In this study Gibson then further explained this by using an example in which it was described how irritability and high levels of alertness can be somewhat reduced by eating and that eating food which is high in sugar and fat content can especially improve a person's mood (Gibson, 2006). Certain neurochemicals in the brain are activated that impact the psychological state of the person when certain food is consumed and concurrently the different compositions of food all seem to have a different impact on a person. This can be illustrated with the example of dopaminergic neurotransmission being activated when food with a fatty structure and a high level of sweetness is consumed and then results in an improved mood (Gibson, 2006). Concurrently this indicates the strong association evident

between the biological and the psychological components of any human being, explaining why eating is subsequently then also not only driven by the physiological calls of hunger, but that it can also be influenced by our psychological aspects.

With regard to the more cognitive psychological elements, Thompson, Roehrig, Cafri, and Heinberg (2005) stated that the 'thin' body has been idealised in the western culture and because of this, certain changes in eating behaviour have been occurring as people try to achieve this internalised ideal. According to Smolak and Thompson, (2009 as cited in Perloff, 2014) a crucial factor, impacting disordered eating behaviour as well as body dissatisfaction, is currently the fact that unrealistic ideals are created with the distorted illustrations of female beauty (seen for e.g. in the media) which is then incorporated into a persons' views and perspectives of life and themselves. These perspectives then colour the way they view others and appraise themselves. Furthermore, body appreciation was found to be a key role player in self-perception and thus also in eating behaviour. It has also been indicated that body appreciation is also influenced by the internalisation of these previously described media ideals (Swami, Airs, Chouhan, Leon, & Towell , 2009) and high levels of body dissatisfaction was indicated to be evident as a result of this (Perloff, 2014). Subsequently, it has also been noted that a poor body image is then the result of the impact of the media on a person's body appreciation. Other studies have indicated how these high levels of body dissatisfaction then impact not only our eating behaviour and our low self-perceptions, but that it can also influence our mood and lead to high levels of negative affect that seems to be a prominent result (Perloff, 2014). This emphasises the importance of the impact of social-cultural ideas on eating behaviour and on emotional states.

Furthermore, it has been noted that this poor body image developing and influencing eating behaviours, seems to be especially prevalent in women. This is said to be because they are influenced in such a manner as to make them more prone to view themselves as 'objects'

(Petrie, Greenleaf, Reel, & Carter., 2009) that are appraised according to their appearance, which emphasises the focus on weight and body shape. These psychological aspects' involvement in eating behaviour seems to be especially evident in women from more industrialised countries and this is a big contributor to disordered eating behaviour (Petri et al., 2009). Appearance driven goals have been identified as a main reason why women would make changes to eating behaviours. These adaptations of their eating behaviour and food choices are subsequently in order to try and attain a more desirable body weight (Robbeson, Kruger, & Wright, 2015) in order to be more 'acceptable' according to our society.

Late Adolescence- Early Adulthood: Life phase and Eating Behaviour

Prendergast (1994) stated that young adulthood (18-25 years old) can be said to be a critical period during which emotional development as well as level of education, living situation and marital status start to change and it can be said to be a period filled with transition. According to Arnett (2001) this phase of 'emerging adulthood' involves the process of identity formation and an increased 'self-focus'. During this phase of their lives people have to start to fulfil increased responsibilities, and start to assume adult roles which can be seen as extra stressors occurring during this period of time (Prendergast, 1994). Specifically for university students, this phase of their lives are characterised by a decrease in parental supervision as well as an increase in academic and social pressures (Prendergast, 1994). With this amount of changes being present, one can imagine that their eating behaviour would also start to change.

Larson, Neumark-Sztainer, Hannan, and Story (2007) indicated in their research that adolescents' eating behaviours tend to be healthier than children's. This includes behaviours such as a low consumption of fruits and vegetables (low fibre diets) as well as a high consumption of fast foods and sugary soft drinks. Ervin, Wang, Wright, and Kennedy-Stephenson (2004) indicated that the intake of various important nutrients seems to be

problematic when the eating behaviour of students was investigated. This includes the intake of calcium, potassium, iron and folic acid that was below the recommended amounts. What is also ironic is that alongside these deficits that are evident, the intake of an excessive amount of high calorie, sodium and sugar food was also found (Ervin et al., 2004).

Gresse, Steenkamp and Pietersen (2015) looked at the South African university student population group in their study and found that a high intake of convenience foods and especially sweet snacks (by females) occurred. Furthermore, their study also found that female university students were prone to weight gain during the course of their studies, which also correlates with a variety of international studies indicating the first year of university to be an especially critical period for weight gain (Finlayson, Cecil, Higgs, Hill, & Hetherington, 2012; Gresse et al., 2015).

Because of these previously mentioned changes that seem to occur during the period from childhood to adolescence, this explains why such a high number of the adolescents struggle with being overweight and also why adolescence has been indicated to be such an important life phase during which to provide information about healthy eating behaviour (Fuchs, Steinhilber, & Dohnke, 2015). The high levels of overweight and obesity that is currently evident seem to be impacted by this nutrition transition as previously described (Makino, Tsuboi, & Dennerstein, 2004). According to Peltzer et al 2014 (as cited in Gresse et al., 2015) it was reported that 41% of South African female students and 17% of South African male students can be classified as overweight or obese.

Currie et al. (2012, as cited in Fuchs et al., 2015) described adolescence as a period in one's life when you have an increased risk towards behaviour that are detrimental to your health such as consuming large amounts of alcohol and smoking, as well as exhibiting unhealthy eating behaviours. Adolescent girls and young women have been indicated as a vulnerable group for the development of abnormal eating behaviour, and eating disorders also

seem to commonly occur during this life phase (Pinto-Gouveia, Ferreira, & Cristiana Duarte, 2014). According to Hudson, Hiripi, Pope, and Kessler (2007) eating disorders tend to be associated with severe levels of impairment in the social and psychological domains of a person's life. It is also not surprising that this study indicated that eating disorders have a high comorbidity with other mental disorders because of the psychological and social aspects that actively play a role in determining this behaviour (Hudson et al., 2007). According to a study conducted by Robbeson et al. (2015) it was found that female university students are an important group to provide information to with regard to healthy eating behaviour as this group has a high risk of developing disordered eating behaviour.

Behaviour that is even more prevalent than eating disorders in this population group seems to be subclinical disordered eating behaviour (Favaro, Ferrara, & Santonastaso, 2003; Kirsten & Du Plessis, 2008). The previously mentioned studies (Favaro et al., 2003; Kirsten & Du Plessis, 2008) also especially indicated the importance of the relationship between food and body image during this life phase and they also illustrate a clear need for healthy eating programs to further attend to this relationship.

Zeeni et al. (2013) stated that social cultural influences (especially set societal norms and standards) as well as social communication (found in circles of friends) seem to be another key determinant of eating behaviour. A study done by Swami et al. (2009) found that female Caucasian and South African students, compared to female Hispanic- and African-Caribbean students, were more inclined to be influenced by social-cultural factors, indicating that this will be an important aspect to take into account in a South African university context. Eating behaviour has been indicated to be associated with social factors; therefore, it should be no surprise that disordered eating behaviour is strongly linked to low levels of social functioning, problems experienced in relationships, as well as difficulties occurring with regard to social adjustment (Striegel-Moore, Seeley, & Lewinsohn, 2003).

As has been previously mentioned, university-aged females have been indicated as a vulnerable group to develop disordered eating behaviour because of social-cultural influences, and also because of their current developmental concerns during this phase (Quick & Byrd-Bredbenner, 2013). Furthermore, Hoerr, Bokram, Lago, Bivins, and Keast (2002) indicated that, because of the actual university context they now find themselves to be in, factors such as needing to adapt to the unknown university environment, as well as being removed from the previously more prominent parental influences and now having these replaced by their peer group's inputs, concurrently lead to their eating habits and behaviour being impacted and changed. Thus, we see the importance of focussing on gaining a better understanding of this population group's eating behaviour and what factors influence this behaviour in order to attend to the previously described problems that are currently evident.

The Research Sample and the Context of the Research Study: Female University Students of the North-West University, Potchefstroom Campus.

The sample for this study was female university students at the North-West University, Potchefstroom Campus. According to statistics retrieved in 2015 the Potchefstroom Campus comprises predominantly of Afrikaans-speaking students, and is geographically small; as many as 21578 contact students out of the total 57033 reside on campus (North-West University, 2015). According to the official North-West University website (2015), the majority (70%) of students enrolled at the Potchefstroom Campus are female, and the vast majority (75%) of these students are in the process of obtaining their undergraduate qualifications. If we look at race (ethnicity), the total student ratio is as follows: 64% African, 29% White, 6% Coloured, and 1% Indian/Asian.

Kirsten and Du Plessis (2008) investigated the living experiences of female university students (aged 18-22 years) of the North-West University, Potchefstroom Campus with sub-clinical eating disorders. In their study they identified the severity of symptoms and the high

risk of full-blown eating disorders to develop in this population. The greater understanding and insight into these disorders, lead to the conclusion that prevention programs and health promotion programs should be utilised with regard to the eating behaviour of female university students (Kirsten & Du Plessis, 2008). Their study already laid the ground work and identified the North-West University, Potchefstroom Campus female students as a population group whose eating behaviour should be further investigated. Furthermore, a gap in current research has been indicated emphasising a need to gain a more in-depth understanding of the psychological aspects that play a role in determining the eating behaviour of students.

Problem Statement

From the preceding literature study one can see that eating related difficulties are currently a big problem in our country (WHO, 2015). In the unique South African context it has become evident that a double burden of overweight and underweight seems to be prevalent among the inhabitants (Kruger, 2014). This indicates the complexity with regard to improving the nutritional status of South Africans, and concurrently emphasis the need for research to improve our current understanding of the underlying factors involved in determining eating behaviour.

The problems that are currently especially evident in young women's eating behaviour have clearly been indicated in various studies (Delpont & Szabo, 2008; Hoerr et al., 2002) and this can be ascribed to their current developmental phase as well as various other factors. An aspect that seems to play a key role in determining eating behaviour is psychological aspects (Gitau, 2014; Perloff, 2014). Furthermore, various psychological aspects are involved during this critical life phase of young adulthood which can concurrently then also play a role in influencing their eating behaviour (Petri et al., 2009; Perloff, 2014; Tylka & Hill, 2004).

One of the psychological aspects especially evident is the challenge of the transition from secondary school to university which can further complicate and influence the eating behaviour of female university students (Crombie, Ilich, Dutton, Panton, & Abood, 2009). Furthermore, as has also been previously described in the literature overview, a stronger focus on appearance driven goals, as well as high levels of body dissatisfaction are some of the other psychological aspects that occur during this life phase. These and various other psychological aspects also explain why literature states that female university students are especially at risk to develop disordered eating behaviour (Robbeson et al, 2015).

As previously mentioned, various studies seem to have identified female university students as a vulnerable population group to develop eating disorders as well as other eating related problems (Fitzsimmons-Craft, 2011; Pinto-Gouveia et al., 2014). However, qualitative studies exploring the experiences of female students with regard to their eating behaviour and what aspects play a role in their eating behaviour are still lacking, which is currently depriving us of a more in-depth perception of psychological aspects' role in eating. Furthermore, no studies with regard to the 'general' (non-pathological) eating behaviour and with a focus on the role of psychological aspects (that are so evident and crucial to explore during this life phase) have been conducted (see Gitau, 2014; Kirsten, 2012; Kirsten & Du Plessis, 2008; Le Grange, Louw, Russel, Nel, & Silkstone, 2006; Okeyo, 2009; Senekal, Steyn, Mashego, & Nel., 2001; Szabo & Allwood, 2004; Van den Berg, Okeyo, Dannhauser, & Nel, 2012, Wassenaar, Le Grange, Winship, & Lachenicht, 2000); this leaves a crucial piece of the puzzle missing, especially with reference to the South African context.

Deliens, Clarys, De Bourdeaudhuij, and Deforche (2014) emphasised the importance of the development of health enhancing programs aimed at improving the eating behaviour of female university students. Studies also stated that educating this vulnerable group to try and

prevent disordered eating behaviours, as well as the development of eating disorders from occurring, is crucial (Kirsten & Du Plessis, 2008; Mchiza, 2014).

To develop prevention as well as health enhancement programs for female university students more knowledge is required with regard to what psychological aspects should be focussed on, as it is clear that psychological aspects play a key role in determining their eating and food related choices. Further research on the general eating behaviour (Sproesser, 2011) of female university students should first be conducted to understand what aspects they experience that influence their eating on a daily basis. This is necessary in order to better understand the underlying mechanisms involved during this challenging stage of life. Only when more in depth research in the South African context is available, will we be able to develop effective programs that are desperately needed in the society we live in today, programs that are especially aimed at the university context.

Thus, the research questions that were identified for the purpose of this study are:

What are the psychological aspects that play a role in determining the general eating behaviour of South African female university students? How do these aspects play a role in their eating behaviour? And why do these psychological aspects play a role?

Aim of the Study

The aim of this research study is to concurrently explore, interpret and describe the role of psychological aspects involved in the general eating behaviour of female students of the North-West University (NWU) Potchefstroom Campus, focusing on the what, why and how. It is foreseen that these findings will possibly be used in the future to help develop more effective programs for the promotion of healthier eating, as well as developing new scales for the measurement of eating behaviour from a psychological perspective.

References

- Alberts, H. J. E. M., Thewissen, R., & Raes, L. (2012). Dealing with problematic eating behaviour. The effects of a mindfulness-based intervention on eating behaviour, food cravings, dichotomous thinking and body image concern. *Appetite*, *58*, 847–851.
- American Psychological Association [APA]. (2005). For a healthy mind and body. Retrieved from <http://www.apa.org/helpcenter/talk.aspx>
- Arnett, J. (2001) Conceptions of the transition to adulthood: Perspectives from adolescence through midlife. *Journal of Adult Development*, *8*, 133–143.
- Beydoun, M. A. (2014). The interplay of gender, mood, and stress hormones in the association between emotional eating and dietary behavior. *The Journal of Nutrition*, 1139-1141. doi:10.3945/jn.114.196717.
- Bissel, P., Peacock, M., Blackburn, J., & Smith, C. (2016). The discordant pleasures of everyday eating: Reflections on the social gradient in obesity under neo-liberalism. *Social Science & Medicine*, *159*, 14-21.
- Bond, A. J., James, D. C., & Lader M. H. (1974). Physiological and psychological measures in anxious patients. *Psychological Medicine*, *4*(4), 364-373.
doi:10.1017/S0033291700045803
- Brandimonte, M. A., Bruno, N., & Collina, S. (2006). Cognition. In P. Pawlik & G. d'Ydewalle (Eds.), *Psychological concepts: An international historical perspective* (pp. 1-22). Hove, UK: Psychology Press.
- Casotti, L. (2005). He who eats alone will die alone? An exploratory study of the meanings of the food of celebration. *Latin American Business Review*, *6*(4), 69-84.
doi:10.1300/J140v06n04_04
- Covington, E. C. (2000). Psychogenic pain-What it means, why it does not exist, and how to diagnose it. *Pain Medicine*, *1*, 287–294.

- Crombie, A. P., Ilich, J. Z., Dutton, G. R., Panton, L. B., & Abood, D. A. (2009). The freshman weight gain phenomenon revisited. *Nutrition Review*, *67*(2), 83–94.
- Deliens, T., Clarys, P., De Bourdeaudhuij, I., & Deforche, B. (2014). Determinants of eating behaviour in university students: A qualitative study using focus group discussions. *Bio-Med-Central Public Health*, *14*, 53. doi:10.1186/1471-2458-14-53
- Delport, I., & Szabo, C. P. (2008). Eating disorders in South Africa: An inter-ethnic comparison of admission data. *South African Medical Journal*, *98*(4), 272-274.
- Elsner, R. J. F. (2002). Changes in eating behavior during the aging process. *Eating Behaviors*, *3*, 15-43.
- Ervin, R., Wang, C., Wright, J., & Kennedy-Stephenson, M. (2004). *Dietary intake of selected minerals for the United States Population: 1999–2000*. Hyattsville, MD: National Center for Health Statistics.
- Favaro, A., Ferrara, S., & Santonastaso, P. (2003). The spectrum of eating disorders in young women: A prevalence study in a general population sample. *Psychosomatic Medicine*, *65*(4), 701–708. doi:10.1097/01.PSY.0000073871.67679.D8
- Finlayson, G., Cecil, J., Higgs, S., Hill, A., & Hetherington, M. (2012). Susceptibility to weight gain. Eating behaviour traits and physical activity as predictors of weight gain during the first year of university. *Appetite*, *58*, 1091–1098.
- Fitzsimmons-Craft, E. E. (2011). Social psychological theories of disordered eating in college women: Review and integration. *Clinical Psychology Review*, *31*, 1224–1237.
- Fuchs, T., Steinhilber, A., & Dohnke, B. (2015). Apple or chocolate – Intentional and social reactive processes in eating behavior among adolescents. *Social Psychology*, *46*(5), 255–264. doi: 10.1027/1864-9335/a000241
- Gerrig, R. J., & Zimbardo, P. G. (2002). *Psychology and life*. Retrieved from <http://www.apa.org/research/action/glossary.aspx?tab=16>

- Gibson, E. L. (2006). Emotional influences on food choice: Sensory, physiological and psychological pathways. *Physiology and Behaviour*, *89*, 53–61.
- Gitau, T. M. (2014). Eating attitudes, body image satisfaction, and self-esteem of South African urban adolescents: The impact of acculturation (Unpublished doctoral dissertation). University of Witwatersrand, Johannesburg.
- Greenwald, A. G., & Banaji, M. R. (1995). Implicit social cognition: Attitudes, self-esteem and stereotypes. *Psychological Review*, *102*(1), 4-27.
- Gresse, A., Steenkamp, L., & Pietersen, J. (2015). Eating, drinking and physical activity in Faculty of Health Science students compared to other students at a South African university. *South African Journal of Clinical Nutrition*, *28*(4), 154-159.
- Grimm, E. R. & Steinle, N. I. (2011). Genetics of eating behavior: Established and emerging concepts. *Nutrition Review*, *69*(1), 52–60. doi:10.1111/j.1753-4887.2010.00361.x.
- Heart and Stroke foundation South Africa [HSF]. (2015). *National Obesity Week: South Africa's weighty problem*. Retrieved from <http://www.heartfoundation.co.za/media-releases/national-obesity-week-south-africa%E2%80%99s-weighty-problem>
- Hoek, H. W., & van Hoeken, D. (2003). Review of the prevalence and incidence of eating disorders. *International Journal of Eating Disorders*, *34*(4), 383-396.
- Hoerr, S. L., Bokram, R., Lago, B., Bivins, T., & Keast, D. R. (2002). Risk for disordered eating relates to both gender and ethnicity for college students. *Journal of the American College of Nutrition*, *21*, 307–314. doi:10.1080/07315724.2002.10719228
- Hudson, J. I., Hiripi, E., Pope, H. G., & Kessler, R. C. (2007). The prevalence and correlates of eating disorders in the National Comorbidity Survey Replication. *Biological Psychiatry*, *61*(3), 348–358. doi: 10.1016/j.biopsych.2006.03.040
- Kirsten, D. K. (2012). Positive psychology and subclinical eating disorders in South Africa: A literature review (Unpublished doctoral dissertation). North-West University,

- Kirsten, D. K., & Du Plessis, W. F. (2008). Lived experiences of subclinical eating disorder: Female students' perceptions. *Journal of Psychology in Africa, 18*(4), 561-572. Potchefstroom.
- Kruger, S. (2014). The double burden of underweight and overweight in South African adolescents: A challenge and an opportunity for nutritionists and dieticians. *South African Journal of Clinical Nutrition, 27*(1), 1-8.
- Larson, N. I., Neumark-Sztainer, D., Hannan, P. J., & Story, M. (2007). Trends in adolescent fruit and vegetable consumption, 1999–2004: Project EAT. *American Journal of Preventive Medicine, 32*, 147–150. doi: 10.1016/j.amepre.2006.10.011
- Le Grange, D., Louw, J., Russel, B., Nel, T., & Silkstone, C. (2006). Eating attitudes and behaviours in South African adolescents and young adults. *Transcultural Psychiatry, 43*(3), 401-417.
- Macht, M., & Simons, G. (2000). Emotions and eating in everyday life. *Appetite, 35*, 65–71.
- Makino, M., Tsuboi, K. & Dennerstein, L. (2004). Prevalence of eating disorders: A comparison of Western and non-Western countries. *Medscape General Medicine, 6*, 49.
- Matthews, G., & Deary, I. J. (1998). *Personality traits*. Cambridge: Cambridge University Press.
- Mchiza, Z. (2014). Eating disorders in South African schools: A public health crisis that needs immediate intervention. *South African Journal of Clinical Nutrition, 27*(4), 185-186.
- Mulligan, K., & Scherer, K. R. (2012). Toward a working definition of emotion. *Emotion Review, 4*(4), 345– 357. doi: 10.1177/1754073912445818

- National Institute of Mental Health's [NIH] guide. (2014). *Eating disorders: Facts about eating disorders and the search for solutions*. Retrieved from <https://www.nimh.nih.gov/health/publications/eating-disorders>
- North-West University (2015). *Student statistics of the North-West University*. Retrieved 2015 from http://www.nwu.ac.za/sites/www.nwu.ac.za/files/files/student-stats/GR_Student_statistics_of_the_North-West_University.pdf
- Okeyo, A. P. (2009). Eating practices, nutritional knowledge and body weight in nursing science students at the university of Fort Hare (Unpublished masters dissertation). University of Free State, Bloemfontein.
- Oxford English Dictionary. (2015). *Eat*. Retrieved from <http://www.oxforddictionaries.com/definition/english/eat>
- Perloff, R. M. (2014). Social media effects on young women's body image concerns: Theoretical perspectives and an agenda for research. *Sex Roles, 71*, 363–377. doi: 10.1007/s11199-014-0384-6
- Petrie, T. A., Greenleaf, C., Reel, J., & Carter, J. (2009). Personality and psychological factors as predictors of disordered eating among female collegiate athletes. *Eating Disorders, 17*, 302–321. doi:10.1080/10640260902991160
- Pinto-Gouveia, J., Ferreira, C., & Duarte, C. (2014). Thinness in the pursuit for social safeness: An Integrative Model of Social Rank Mentality to explain eating psychopathology. *Clinical Psychology and Psychotherapy, 21*, 154–165.
- Popkin, B. M. (1994). The nutrition transition in low-income countries: An emerging crisis. *Nutrition Reviews, 52*, 285–298.
- Popkin, B. M. (2004). The nutrition transition: An overview of world patterns of change. *Nutrition Reviews, 62*, 140–143.

- Prendergast, M. L. (1994). Substance use and abuse among college students: A review of recent literature. *Journal of American College Health, 43*, 99-113.
- Quick, V. M., & Byrd-Bredbenner, C. (2013). Disturbed eating behaviours and associated psychographic characteristics of college students. *Journal of Human Nutrition and Dietetics, 26*, 53–63. doi:10.1111/jhn.12060
- Reis, D. L., & Gray J. R. (2009). Affect and action control. In E. Morsella & P. M. Gollwitzer (Eds.), *Handbook of action control* (pp. 2-39). New York: Oxford University Press.
- Renner, B., Sproesser, G., Stok, M., & Schupp, H. (2016). Eating in the dark: A dissociation between perceived and actual food consumption. *Food Quality and Preference, 50*, 145–151.
- Robbeson, J. G., Kruger, H. S., & Wright, H. H. (2015). Disordered eating behavior, body image, and energy status of female student dancers. *International Journal of Sport Nutrition and Exercise Metabolism, 25*, 344 -352.
- Rodríguez-Arauz, G., Ramírez-Esparza, N., & Smith-Castro, V. (2016). Food attitudes and well-being: The role of culture. *Appetite, 105*, 180-188.
- Scherer, K. R., Schorr, A., & Johnstone, T. (2001). *Appraisal processes in emotion: Theory, methods, research*. New York and Oxford: Oxford University Press.
- Senekal, M., Steyn, N. P., Mashego, T. B., & Nel, J. H. (2001). Evaluation of body shape, eating disorders and weight management related parameters in black female students of rural and urban origins. *South African Journal of Psychology, 31*(1), 45-53.
- Smolak, L. (2011). Body image development in childhood. In T. Cash & L. Smolak (Eds.), *Body image: A handbook of science, practice, and prevention* (pp. 67-75). New York: Guilford.

- Spangler, D. L. (2002). Testing the cognitive model of eating disorders. The role of dysfunctional beliefs about appearance. *Behaviour Therapy*, *33*, 87-105.
- Sproesser, G. (2011). Why we eat what we eat: Psychological influences on eating behavior (Unpublished doctoral thesis). University of Konstanz Mathematisch, Naturwissenschaftliche.
- Stice, E. (2002). Risk and maintenance factors for eating pathology: A meta-analytic review. *Psychological Bulletin*, *128*, 825-848.
- Striegel-Moore, R. H., Seeley, J. R., & Lewinsohn, P. M. (2003). Psychosocial adjustment in young adulthood of women who experienced an eating disorder during adolescence. *Journal of the American Academy of Child and Adolescent Psychiatry*, *42*(5), 587–593. doi:10.1097/01.CHI.0000046838.90931.44
- Swami, V., Airs, N., Chouhan, B., Leon, M. & Towell, T. (2009). Are there ethnic differences in positive body image among female British undergraduates? *European Psychologist*, *14*, 288–296.
- Szabo, C. P., & Allwood, C. W. (2004). A cross-cultural study of eating attitudes in adolescent South African females. *World Psychiatry*, *3*(1), 41-44.
- Thompson, J.K., Roehrig, M., Cafri, G., & Heinberg, L.J. (2005). Assessment of body image disturbance. In J.E. Mitchell & C.B. Peterson (Eds.), *Assessment of eating disorders* (pp. 175–202). New York: Guilford Press.
- Tylka, T. L., & Hill, M. S. (2004). Objectification theory as it relates to disordered eating among college women. *Sex Roles*, *51*, 719–730. doi:10.1007/s11199-004-0721-2
- Van den Berg, V. L., Okeyo, A. P., Dannhauser, A., & Nel, M. (2012). Body weight, eating practices and nutritional knowledge amongst university nursing students, Eastern Cape, South Africa. *African Journal of Primary Health Care Family Medicine*, *4*(1), 1-9.

- Wassenaar, D., Le Grange, D., Winship, J., & Lachenicht, L. (2000). The prevalence of eating disorder pathology in a cross-ethnic population of female students in South Africa. *European Eating Disorders Review*, 8, 225-236.
- World Health Organization [WHO]. (2015, January). *Country statistics and global health estimates by WHO and UN partners*. Retrieved from http://who.int/gho/mortality_burden_disease/en/
- Wyer, R. S. (2014). *The automaticity of everyday life: Advances in social cognition* (Vol. 10). Psychology Press.
- Zeeni, N., Gharibeh, N. & Katsounari, I. (2013). The influence of sociocultural factors on the eating attitudes of Lebanese and Cypriot students: a cross-cultural study. *Journal of Human Nutrition and Dietetics*, 26, 45–52. doi:10.1111/jhn.12059

SECTION 2: ARTICLE

Exploring the role of psychological aspects in the eating behaviour of female university students in a South African context

2.1 Guidelines for authors: *Appetite Journal*

This article will be submitted for possible publication in *Appetite*. Therefore, first a summary of key aspects to consider regarding author guidelines will be presented, followed by the article written.

Author Guidelines

(Summary of Key Aspects to Consider)

Description

Appetite is an international research journal specializing in cultural, social, psychological, sensory and physiological influences on the selection and intake of foods and drinks. It covers normal and disordered eating and drinking and welcomes studies of both human and non-human animal behaviour toward food. *Appetite* publishes research reports, reviews and commentaries. Thematic special issues appear regularly. From time to time the journal carries abstracts from professional meetings.

Research areas covered include:

- Psychological, social, sensory and cultural influences on appetite
- Cognitive and behavioural neuroscience of appetite
- Clinical and pre-clinical studies of disordered appetite
- Nutritional influences on appetite
- Food attitudes and consumer behaviour
- Psychology and ethnography of dietary habits
- History of food cultures

Audience

Psychology, Social Research, Neuroscience, Physiology, Nutrition, Sensory Food Science

Impact Factor

2014: 2.691 © Thomson Reuters Journal Citation Reports 2015

Abstracting and Indexing

Scopus

Guide for Authors

Your Paper Your Way

We now differentiate between the requirements for new and revised submissions. You may choose to submit your manuscript as a single Word or PDF file to be used in the refereeing process. Only when your paper is at the revision stage, will you be requested to put your paper in to a 'correct format' for acceptance and provide the items required for the publication of your article. To find out more, please visit the Preparation section below.

Full Length Papers

Full length papers including empirical reports and theoretical reviews are published. Reviews may be of any length consistent with succinct presentation, subdivided as appropriate to the subject matter.

Conflict of Interest

All authors are requested to disclose any actual or potential conflict of interest including any financial, personal or other relationships with other people or organizations within three years of beginning the submitted work that could inappropriately influence, or be perceived to influence, their work. See also <https://www.elsevier.com/conflictsofinterest>. Further information and an example of a Conflict of Interest form can be found at: http://service.elsevier.com/app/answers/detail/a_id/286/supporthub/publishing.

Submission Declaration

Submission of an article implies that the work described has not been published previously (except in the form of an abstract or as part of a published lecture or academic thesis or as an electronic preprint, see <https://www.elsevier.com/sharingpolicy>), that it is not under consideration for publication elsewhere, that its publication is approved by all authors and tacitly or explicitly by the responsible authorities where the work was carried out, and that, if accepted, it will not be published elsewhere including electronically in the same form, in English or in any other language, without the written consent of the copyright-holder. Authors are requested to declare if their work has been peer-reviewed previously, and if so they are encouraged to supply along with their manuscript files their responses to previous review comments.

Author Rights

As an author you (or your employer or institution) has certain rights to reuse your work. For more information see <https://www.elsevier.com/copyright>.

Language (Usage and Editing Services)

Please write your text in good English (American or British usage is accepted, but not a mixture of these). Authors who feel their English language manuscript may require editing to eliminate possible grammatical or spelling errors and to conform to correct scientific English may wish to use the English Language Editing service available from Elsevier's WebShop (<http://webshop.elsevier.com/languageediting/>) or visit our customer support site (<http://support.elsevier.com>) for more information.

References

There are no strict requirements on reference formatting at submission. References can be in any style or format as long as the style is consistent. Where applicable, author(s) name(s), journal title/book title, chapter title/article title, year of publication, volume

number/book chapter and the pagination must be present. Use of DOI is highly encouraged. The reference style used by the journal will be applied to the accepted article by Elsevier at the proof stage. Note that missing data will be highlighted at proof stage for the author to correct.

Formatting Requirements

There are no strict formatting requirements but all manuscripts must contain the essential elements needed to convey your manuscript, for example Abstract, Keywords, Introduction, Materials and Methods, Results, Conclusions, Artwork and Tables with Captions. If your article includes any Videos and/or other Supplementary material, this should be included in your initial submission for peer review purposes. Divide the article into clearly defined sections. Please ensure your paper has consecutive line numbering, this is an essential peer review requirement.

Figures and Tables Embedded in Text

Please ensure the figures and the tables included in the single file are placed next to the relevant text in the manuscript, rather than at the bottom or the top of the file.

Revised Submissions: Article Structure

Subdivision - unnumbered sections. Divide your article into clearly defined sections. Each subsection is given a brief heading. Each heading should appear on its own separate line. Subsections should be used as much as possible when cross referencing text: refer to the subsection by heading as opposed to simply 'the text'.

Introduction. State the objectives of the work and provide an adequate background, avoiding a detailed literature survey or a summary of the results.

Material and methods. Provide sufficient detail to allow the work to be reproduced. Methods already published should be indicated by a reference: only relevant modifications should be described.

Results. Results should be clear and concise.

Discussion. This should explore the significance of the results of the work, not repeat them. A combined Results and Discussion section is often appropriate. Avoid extensive citations and discussion of published literature.

Conclusions. The main conclusions of the study may be presented in a short Conclusions section, which may stand alone or form a subsection of a Discussion or Results and Discussion section.

Appendices. Appendices are not encouraged. Critical details of Method should be described in that section of the manuscript.

Essential title page information. *Title. Concise and informative.* Titles are often used in information-retrieval systems. Avoid abbreviations and formulae where possible. *Author names and affiliations.* Please clearly indicate the given name(s) and family name(s) of each author and check that all names are accurately spelled. Present the authors' affiliation addresses (where the actual work was done) below the names. Indicate all affiliations with a lowercase superscript letter immediately after the author's name and in front of the appropriate address. Provide the full postal address of each affiliation, including the country name and, if available, the e-mail address of each author. *Corresponding author.* Clearly indicate who will handle correspondence at all stages of refereeing and publication, also post-publication. Ensure that the e-mail address is given and that contact details are kept up to date by the corresponding author. *Present/permanent address.* If an author has moved since the work described in the article was done, or was visiting at the time, a 'Present address' (or 'Permanent address') may be indicated as a footnote to that author's name. The address at which the author actually did the work must be retained as the main, affiliation address. Superscript Arabic numerals are used for such footnotes.

Abstract. A concise and factual abstract is required. The abstract should state briefly the purpose of the research, the principal results and major conclusions. An abstract is often presented separately from the article, so it must be able to stand alone. For this reason, References should be avoided, but if essential, then cite the author(s) and year(s). Also, non-standard or uncommon abbreviations should be avoided, but if essential they must be defined at their first mention in the abstract itself. As per the journal style, the abstract text should not be more than 280 words (1500 characters including spaces).

Keywords. Immediately after the abstract, provide a maximum of 6 keywords, using American spelling and avoiding general and plural terms and multiple concepts (avoid, for example, 'and', 'of'). Be sparing with abbreviations: only abbreviations firmly established in the field may be eligible. These keywords will be used for indexing purposes.

Tables. Please submit tables as editable text and not as images. Tables can be placed either next to the relevant text in the article, or on separate page(s) at the end. Number tables consecutively in accordance with their appearance in the text and place any table notes below the table body. Be sparing in the use of tables and ensure that the data presented in them do not duplicate results described elsewhere in the article. Please avoid using vertical rules.

Citation in text. Please ensure that every reference cited in the text is also present in the reference list (and vice versa). Any references cited in the abstract must be given in full. Unpublished results and personal communications are not recommended in the reference list, but may be mentioned in the text. If these references are included in the reference list they should follow the standard reference style of the journal and should include a substitution of the publication date with either 'Unpublished results' or 'Personal communication'. Citation of a reference as 'in press' implies that the item has been accepted for publication.

Web references. As a minimum, the full URL should be given and the date when the reference was last accessed. Any further information, if known (DOI, author names, dates,

reference to a source publication, etc.), should also be given. Web references can be listed separately (e.g., after the reference list) under a different heading if desired, or can be included in the reference list.

Reference formatting. There are no strict requirements on reference formatting at submission. References can be in any style or format as long as the style is consistent. Where applicable, author(s) name(s), journal title/book title, chapter title/article title, year of publication, volume number/book chapter and the pagination must be present. Use of DOI is highly encouraged. The reference style used by the journal will be applied to the accepted article by Elsevier at the proof stage. Note that missing data will be highlighted at proof stage for the author to correct. If you do wish to format the references yourself they should be arranged according to the following examples.

Reference style. Text: Citations in the text should follow the referencing style used by the American Psychological Association. You are referred to the Publication Manual of the American Psychological Association, Sixth Edition, ISBN 978-1-4338-0561-5, copies of which may be ordered from <http://books.apa.org/books.cfm?id=4200067> or APA Order Dept., P.O.B. 2710, Hyattsville, MD 20784, USA or APA, 3 Henrietta Street, London, WC3E 8LU, UK. List: references should be arranged first alphabetically and then further sorted chronologically if necessary. More than one reference from the same author(s) in the same year must be identified by the letters 'a', 'b', 'c', etc., placed after the year of publication.

Submission checklist. The following list will be useful during the final checking of an article prior to sending it to the journal for review. Please consult this Guide for Authors for further details of any item.

Ensure that the following items are present:

One author has been designated as the corresponding author with contact details:

- E-mail address

- Full postal address

All necessary files have been uploaded, and contain:

- Keywords
- All figure captions
- All tables (including title, description, footnotes)

Further considerations

- Manuscript has been 'spell-checked' and 'grammar-checked'
- All references mentioned in the Reference list are cited in the text, and vice versa
- Permission has been obtained for use of copyrighted material from other sources (including the Internet) Printed version of figures (if applicable) in colour or black-and-white
- Indicate clearly whether or not colour or black-and-white in print is required.

For any further information please visit our customer support site at

<http://support.elsevier.com>.

2.2 Article:

Exploring the role of psychological aspects in the eating behaviour of female university students in a South African context

Monique Rieckert (North-West University, Community Psychosocial Research, South Africa)

*Werner de Klerk (North-West University, Community Psychosocial Research, South Africa)

*Corresponding Author: 12998699@nwu.ac.za

Abstract

Attending university has been indicated as a period in which many changes in eating behaviour occur and female university students have been found to be a vulnerable population group to develop eating related problems and eating related pathology. However limited research is available on the possible key role-players in- and determinants of female students eating behaviours, especially in a South-African specific context. This qualitative study's aim was to explore the role psychological aspects play in the general eating behaviour of female university students in a South African context. A sample of 13 female participants between the ages of 18 and 24 willingly participated in this study. Semi-structured interviews were conducted with the participants during which they shared information about their eating behaviour and the psychological aspects that seem to play a role in their eating habits. Data were thematically analysed, and the following aspects were identified as being role players in the participants eating behaviour: eating and its social importance; the role of others' perceptions; the reciprocal role of self-perceptions, eating behaviour and social media; personal stressors and low mood; and finally university specific aspects. It was concluded that eating related research and interventions should focus more on general eating behaviour, especially of first year university students and that the important role of psychological aspects should always be taken into account.

Keywords: eating behaviour, psychological aspects, university students, qualitative research.

Orientation and Problem Statement

Eating is a critical part of every human beings existence. It is not only a necessary basic need for human development and for continuation of life, but it also forms part of many cultural, social and religious activities, and therefore plays a central role in human folk psychology (Rozin, 1996). The first published literature regarding eating behaviour in South-Africa dates back to the late 1970s (see Beumont, George, & Smart, 1976; Norris, 1979). By 1995 it was already stated that eating disorders was a growing epidemic also under black and white South-Africans, especially females (Szabo & Allwood, 2004). Disordered eating and eating disorders have concurrently been significant focus points in eating and psychology related research in an attempt to further our understanding of this epidemic (Sproesser, 2011). Most of the studies done in South Africa regarding eating behaviour have a pathology focus (see Delpont & Szabo, 2008; Edmonds, 2012; Freeman & Szabo, 2005; Goodman, 1992; Kirsten, 2012; Lee, 1993; Le Grange, Telch, & Tibbs, 1998; Morris, 2008; Revelas, 2013; Silva, 2007; Sproesser, 2011; Szabo, 2002; Szabo & Le Grange, 2001; Wassenaar, Le Grange, Winship, & Lachenicht, 2000). However, recently the question has been raised whether this was the best perspective to do eating and psychology related research from.

According to Renner, Sproesser, Strohbach, and Schupp (2012) investigating and understanding what the underlying factors of pathological eating behaviour are, might not be the best way to gain further knowledge about eating behaviour. By rather focusing research on general, every day eating behaviour can help to enable us to gather the necessary information for future developments in this field (Renner et al., 2012). By changing the angle we take while approaching this research, we optimise the chance of gaining new information from a different perspective which current research has lacked to explore (Renner et al, 2012). This emphasises the need for research without a pathology focus to explore the aspects (specifically psychological aspects) that play a role in general eating behaviour, especially in

a South African context. A variety of factors (aspects) have been identified that influence eating behaviour, such as biological factors (Schupp & Renner, 2011), social aspects and influence of peers (Keel, Forney, Brown, & Heatherton, 2013), emotions and affect (Bennett, Greene, & Schwartz-Barcott, 2013), certain concurrent activities (Bellisle, Dalix, & Slama, 2004) and hedonic 'hunger' i.e. eating for pleasure in the absence of hunger (Lowe & Butryn, 2007). Even though psychological aspects have been identified as a factor that play a role in eating behaviour, a lack of studies with the goal of further exploring this aspect still seem to remain (Bjornelv, Nordahl, & Holmen, 2011). This indicates the need for research to clarify and elaborate on the role psychological aspects play in eating.

According to Gerrig and Zimbardo (2002) psychological aspects can be defined as any emotions and cognitive processes that affect the behaviour, functions and attitude of a person. According to Reis and Gray (2009) an emotion can be described as a feeling or state that is driven by various neurochemicals. An alternative definition of an emotion is that it is a change in the state of a person caused by short-term affective responses to an appraisal of external or internal stimuli (Matthews & Deary, 1998; Scherer, Schorr, & Johnstone, 2001). According to Neisser (1967, as cited in Brandimonte, Bruno, & Collina, 2006) cognitive processes involve aspects such as decision making, perceptions, reasoning, attention, planning, problem-solving as well as executing planned actions. This enables external or internal cognitive input to be transformed and elaborated on, as well as to be stored and recovered so that information can be used again later on (Brandimonte et al, 2006). Social cognition is a crucial category of cognition and this includes aspects like attitudes, self-esteem (including self-concept) as well as certain perceived stereotypes a person has (Greenwald & Banaji, 1995; Wyer, 2014). According to Reis and Gray (2009) emotions and cognitions are both powerful control systems that constantly influence each other. Emotion-cognition interactions have been identified in the process of memory making, reasoning and

decision making and even in emotional regulation (Reis & Gray, 2009). Understanding the emotions and cognitions involved in certain situations has been identified as having significant implications for truly understanding the actions and behaviour of a person (Reis & Gray, 2009). For the purpose of this study, psychological aspects will be defined as emotions (feelings or affective states) or cognitions (self-perceptions, perceptions of a situation, reasoning, beliefs and attitudes) that influence the behaviour of a person. Due to the broad definition of psychological aspects and the explorative nature of this research, no specific psychological theory was used as the foundation of this study.

Attending university has been indicated as a critical life phase in which weight gain and changes in eating behaviour and patterns are likely to occur (Crombie, Ilich, Dutton, Pantou, & Abood, 2009). For the purpose of this study eating behaviour can be defined as the thoughts about eating, the action of eating as well as the intent to eat (Elsner, 2002).

According to studies (see Bennett et al., 2013; Cilliers, Senekal, & Kunneke, 2006) there is a high prevalence of obesity and overweight among South African university students with statistics ranging from 10.8% - 24%. Furthermore, a study done by Wassenaar et al. (2000) identified a significant amount of eating related pathology under South African female students. For the purpose of this study university students can be defined as students enrolled at a university between the ages of 18-24 years (late adolescence/early adulthood). Students have to adapt in a new, more autonomous environment and failing to do so successfully has a negative impact on healthy behaviour which consequently influence their overall well-being (Von Ah, Ebert, Ngamvitroj, Park, & Kang, 2004).

Adolescence is the developmental period in which the most body dissatisfaction and critical self-evaluation start to occur and this behaviour is especially predominant in young females (Franzoi et al., n.d.; Gupta, 2011; Moore, 1993). The phase in young adulthood characterised by identity exploration and self-focus can then concurrently start to influence

people's eating behaviour as they place significant focus on body-image and thus also on eating behaviour (Quick & Byrd-Bredbenner, 2013). In the South African study of Wassenaar et al. (2000) results indicated that female students have high levels of concern about how others perceive their bodies and weight, as well as high levels of concern about their body shape. Furthermore, university students also frequently experience a variety of psychological distress including stress, depression and anxiety that have significant influence on their emotions, performance and overall health and also on their eating behaviour (Tosevski, Milovancevic, & Gajic, 2010). Thus, there are various psychological aspects involved during the identity exploration and self-evaluation that occur in this phase of young adulthood, as well as in the adaption to the stressors university life poses. This indicate that the female student community is a significant risk group for developing dieting behaviour and unhealthy and restrictive changes in eating habits, emphasising why exploring the psychological aspects, that play a role in determining the eating behaviour of this group, is so important.

According to Mchiza (2014) educating young woman to try and 'normalise' their eating behaviour and eating habits are of crucial importance to be able to cope with the increased occurrence of problematic eating behaviour. Identifying and discussing the aspects that play a role in the general eating behaviour of female university students and by focusing on the psychological aspects involved in their daily eating, will lead to a greater understanding of this vulnerable group's eating behaviour which, in turn, will enable the possible development of more effective and healthy eating strategies that are necessary, especially during this critical life phase (Deliens, Clarys, De Bourdeaudhuij, & Deforche, 2014).

Various studies have already been done regarding female university students in a South African context, but none on the psychological aspects involved in general eating behaviour. Some of these studies focused on aspects such as eating attitudes (Szabo &

Allwood, 2004; Le Grange, Louw, Russel, Nel, & Silkstone, 2006), weight and nutritional knowledge (Van den Berg, Okeyo, Dannhauser, & Nel, 2012), body figure preferences (Senekal, Steyn, Mashego, & Nel, 2001), eating disorders and current levels of body dissatisfaction (Gitau, 2014) and dietary intake (Okeyo, 2009). The lack of research on the psychological aspects involved in the general eating behaviour of female university students is obvious. Furthermore, very little qualitative studies have been done regarding eating behaviour (see Allon, 2014; Bennet et al., 2013; Close, 2013; Dovey, 2010), especially of students, and the focus groups that have been studied have mostly been in the United States (see Deliens et al., 2014), once again indicating this topic as an area that needs to be further explored in South Africa. According to Macht and Simons (2000) a pattern of emotional experiences playing a role in eating behaviour were identified in their quantitative research, but even more patterns might have emerged if participants could have actually described and elaborated on the emotions they experienced in more detail. This again emphasises the need for qualitative studies to be done on this topic. The current quantitative data available provides only a good general analysis of eating (Brooks, Prince, Stahl, Campbell, & Treasure, 2011; Griffin & Phoenix, 1994), leaving a gap qualitative data to be filled with richer and in-depth information.

By rather switching our focus to general, everyday patterns of eating (Sproesser, 2011), as this study intended to do, we will be able to identify possible psychological aspects that influence eating behaviour and its underlying mechanisms. By doing this in a qualitative study, we will be able to expose richer, more detailed data of our participants experiences (Creswell, 2013) and this will lead us not only to better understand what psychological aspects play a role in general eating behaviour, but also why these aspects seem to be significant. By asking “Why we eat what we eat when we eat it” this study will be able to

focus on the psychological aspects of general eating in greater depth (Renner et al., 2012) in a South-African context, which is a very unique one.

Goals of the Study

This qualitative study's aim was to explore, interpret and describe the role psychological aspects play in the general eating behaviours of female university students in a South African context. Therefore the following research questions guided this study:

What psychological aspects play a role in the general eating behaviour of female university students in a South African context? Why do these aspects play a role in their eating behaviour? And how do these aspects play a role in their eating behaviour?

Method of Investigation

Research Method

A qualitative research approach was used for this study. According to Denzin and Lincoln (2011, as cited in Creswell, 2013) qualitative research can be defined as a naturalistic and interpretive type of approach that attempts to make sense of phenomena by exploring the various meanings people attach to them. A qualitative method of data collection enabled the researcher to probe for beliefs, assumptions and views of participants in order to unpack their different perspectives and to gain a greater understanding of what influences their behaviour (Choy, 2014). This method also best suited the aim of this research inquiry.

Research Design

For the purpose of this study an interpretive descriptive research design (also referred to as qualitative descriptive study), was applied (see Thorne, Kirkham, & O'Flynn-Magee, 2004; Sandelowski, 2000, 2010). Interpretive descriptive design is founded in the subjective, clinical experiences/perceptions of the research participants and in their existing knowledge on the topic for the purpose of generating an interpretive description that is capable of informing clinical understanding (Thorne et al., 2004). It focuses on discovering who, where

and what of experiences and aims to gain greater clarity of the nature and basic form of an event (Sandelowski, 2000, 2010). This design, therefore, also enabled the researcher to gain a greater understanding of the what, how and why regarding the role psychological aspects play in the eating behaviour of the participants. By using this design the researcher could articulate meanings and explanations of clinical phenomena and gain a better understanding of them by identifying existing patterns and characteristics (Thorne et al., 2004).

Participants and Research Context

A study conducted by Kirsten and Du Plessis (2008) indicated that subclinical eating disorders are prevalent among the female students of the North-West University (NWU), Potchefstroom Campus and that they were also a high risk group for the development of full eating disorders. As previously described in the problem statement, female students are a vulnerable population group and limited information (especially with regard to ‘general’ eating behaviour and psychological aspects involved) is currently available that could help to develop more effective health promotion programs to ensure their well-being. Therefore, female university students on the Potchefstroom Campus of the NWU were selected as the population group for the purpose of this qualitative research.

Since certain requirements had to be met in order to meet the aim of this study, a criterion sampling method was used (Maree & Pietersen, 2016). All the participants in the study were females between the ages of 18-24 years, enrolled as students at the NWU on the Potchefstroom Campus. Students were informed about the study by means of pamphlets which were distributed on campus on various notification boards. The final research sample consisted of 13 participants who all voluntarily participated. From the sample used, 12 participants were white and Afrikaans-speaking and one was mixed race and English-speaking; their current fields of study varied (see table 1)

Table 1

Demographic Information of Participants

Participant number	Age	Ethnicity	Study field and year	Home Language	Living in hostel setting
1	21	White	B.Com Marketing and Tourism Management (4th year)	Afrikaans	No
2	20	White	B.Com Law (2nd year)	Afrikaans	Yes
3	20	White	B.Pharmacology (2nd year)	Afrikaans	Yes
4	20	White	B.Pharmacology (2nd year)	Afrikaans	Yes
5	20	White	B.Pharmacology (2nd year)	Afrikaans	Yes
6	19	White	B.Pharmacology (2nd year)	Afrikaans	Yes
7	22	White	B.Pharmacology (4th year)	Afrikaans	No
8	20	White	B.Com Marketing and Tourism Management (3rd year)	Afrikaans	No
9	20	White	B.Education (3rd year)	Afrikaans	Yes
10	20	White	B.Education (3rd year)	Afrikaans	Yes
11	23	White	BSc. Mathematics (6th year)	Afrikaans	No
12	20	Mixed	B.Com Financial Accounting (2nd year)	Tswana	No
13	19	White	B.Com Accounting (2nd year)	Afrikaans	Yes

Data Collection

As previously mentioned, the interpretive descriptive research design used in this study focused on discovering who, what, why and where of certain phenomena (Sandelowski, 2000, 2010) and aimed at articulating participants' meanings in order to gain a better understanding (Thorne et al., 2004). To try and meet this aim, the following data collection methods were used: Firstly, demographic questionnaires were used to gather the basic information of the participants. These included questions to establish participants' age, ethnicity, year of study, study field, home language and whether they were living in a hostel setting on campus (see table 1). Secondly, semi-structured interviews (Nieuwenhuis, 2016) were conducted which required participants to answer a few predetermined questions. Probing was also utilised in order to identify and clarify new lines of emerging conversation aiming at better understanding what was said, and it also enabled the researcher to ask for more information when it was needed (Nieuwenhuis, 2016).

Finally, field notes were also used. According to Laidlaw (2014, p. 32), “in qualitative research the researcher is considered a tool that is integral to the research process”.

According to Thorne (2008) the researcher’s thought processes are often influenced by his/her ideas, inquiries and discussions throughout the research process. It is crucial to recognize the possible “ways in which the researcher has been influenced and biased throughout the development and carrying out of the research” (Laidlaw, 2014, p. 33).

Therefore, the researcher made field notes throughout the research process (data collection and analysis) to identify possible bias within the study so that it could be countered.

Data Analysis

The data was transcribed verbatim into written form and then a thematic analysis was conducted. According to Clarke and Braun (2013) thematic analysis can be defined as a method for identifying and then analysing patterns and themes that exist within the collected data. Thematic analysis, therefore, assisted the researcher to not only organize the data, but also to make further interpretations regarding certain aspects of the research. Coding then also enabled the researcher to establish and identify patterns and themes that existed (Clarke & Braun, 2013). Throughout the analysis of the data the focus was on identifying the psychological aspects and information relevant to the aim of the study.

The procedure/phases followed entailed the following: The researcher familiarised herself with the data and then initial codes were generated. Then the researcher searched for themes (identifying potential themes from the codes) and then started reviewing the themes. The themes were then defined and named and the final step was producing the report by writing up the fully worked out themes (Clarke & Braun, 2013).

Trustworthiness

To establish trustworthiness, four criteria were taken into account, namely credibility, transferability, dependability and confirmability (Lincoln & Guba, 1999). Credibility is

described as an alternative to internal validity and it determines if the data collection was conducted in a way that the relevant topic has been described accurately (Krefting, 1991). Credibility was ensured through accurate transcribing and reporting of the data and by active engagement with the data (coding and re-coding of all the data, and making use of a co-coder [registered Research Psychologist with the Health Professions Council of South Africa]). The transferability, also referred to as the applicability, is the ability of the research to be transferred from a certain case into another (Krefting, 1991). The researcher gave a detailed and accurate account of the procedure (methodology) followed, allowing for future research to be conducted in a similar manner.

According to Guba (1981, as cited by Krefting, 1991), dependability can be defined as the consistency of findings. Consistency was ensured by following the interview schedule with each participant, as well as by the step-by-step process of thematic analysis as suggested by Clarke and Braun (2013). Finally, confirmability determines the objectivity in the conducted research process (Schurink, Fouché, & De Vos, 2011). This involved actively trying to keep the researchers role and the effect of the research in mind, as well as making sure the collected data supported all interpretations and conclusions that were made. Field notes were also used to limit possible bias. The researcher made use of an audit strategy (record keeping) as well.

Ethical Considerations

Ethical approval for this study was obtained from the Health Research Ethics Committee (HREC) of the NWU, Potchefstroom Campus (NWU-00338-15-S1). In this study ethical considerations were very important to take into account at all times to protect the participants as well as the researcher. Because of the potentially sensitive nature of the content of this study and because students are seen as a vulnerable participant group, the principles of ethical research were incorporated to protect the rights of the research

participants at all times to ensure that no harm was bestowed on them. Concurrently the researcher adhered to all the ethical guidelines as set out by the Health Professions Council of South Africa (HPCSA: Health Professions Act 56 of 1974) and by the NWU throughout the entirety of this study.

Permission was obtained from the relevant role-players (Dean of Student Affairs and HREC) on campus and the research study was initiated. The relevant information was given to potential participants beforehand and an opportunity was given to clarify any uncertainties they had. The participants were given the necessary information regarding confidentiality (identities would be protected), the requirements of the study, the research procedures that will be followed and the possible risks and benefits of the study. They were also informed that they could withdraw from the study at any time (prior data analysis) and reminded that their participation was entirely voluntary. Written consent (administered by an independent person) was obtained from all the participants (consent forms were signed) before the interview process commenced to ensure that they had the necessary information to make an informed decision regarding their participation.

The interviews were conducted in a comfortable and safe environment; respecting the rights of the participants and ensuring their well-being was of crucial importance throughout this process. Psychological services were available to all participants if this would have been necessary during or after the interviews, however, no participant required a referral to these services. Furthermore the NWU accepts the responsibility for the safe keeping of all the collected data and findings. The agreed upon participant confidentiality was ensured by omitting all their identifying information in order to protect their privacy.

Findings

Five main themes and their concurrent subthemes (see Table 2) emerged during the process of thematic analysis. Furthermore, the relevant verbatim quotations were then also

provided as further validation of the themes and to give the reader a better idea of the content of the data that was collected.

Table 2

Themes and Subthemes Identified Regarding Psychological Aspects that Play a Role in the General Eating Behaviour of Female University Students

Theme 1:	Eating and its social importance
Subthemes:	Part of their social activities Way to show love and support Celebrations
Theme 2:	The role of others' perceptions in eating behaviour
Subthemes:	Peers and friends Partners Parents
Theme 3:	The reciprocal role of self-perceptions, eating behaviour and social media
Subthemes:	Self-perceptions' role in eating behaviour Eating behaviours' role in self-perception Social media's role
Theme 4:	Personal stressors and low mood
Subthemes:	Bad day/ feeling down Personal distress
Theme 5:	University specific aspects role in eating behaviour
Subthemes:	Academic stress and studying First year adjustment and weight gain

Theme 1: Eating and its Social Importance

Eating together was indicated as an important role-player with regard to socialising, showing love and support to others and celebrating special occasions:

Part of their social activities. Eating was reported to play a crucial part in most of the participants' social activities. Eating seemed to be at the centre of most of their socialising behaviours with their friends as is illustrated by the following quote:

"... When I am a bit bored ... and I do not have something to do – I will for example say to my friend: 'Come on, let's go – let's just go there [restaurant]'. There's nothing really that you can do that does not involve eating." (P10)

It was also indicated that more unhealthy eating behaviour could be expected when the participants were eating as a social activity with friends. One participant mentioned:

“If I just sit and do nothing with friends over the weekend, I eat very unhealthily ... We are not going to buy veggies, are we, we are going to buy a packet of slap chips.”
(P3)

Apart from just being a main social activity, eating seemed to elicit a definite sense of ‘communion’. Participants described it as a key way for people to come together and it seemed to be a common and powerful uniting factor between all people. One participant shared the following:

“But it is not even that one is always hungry, or that one wants to necessarily eat – it is just there. It is always there when we get together; there is always something to eat.” (P6)

Thus, it seemed as if social activities tend to revolve around eating, especially unhealthy eating, and as if eating was something the participants enjoyed doing.

Way to show love and support. Participants reported that when they were feeling sad the support they received by eating with or receiving food from friends, made them feel better. One participant said when she needed cheering up, her friend would suggest the following:

“It is, like: ‘Let’s go to the Wimpy [South African restaurant] and then we can get out of the residence’ or ‘Let’s go to Fiori’s [restaurant in Potchefstroom, South Africa]’ ...” (P6)

The following was shared by another participant with regard to what helped her when she was feeling sad and needed support from her friends:

“Yes, I have a boyfriend who is studying far away ... then sometimes it is just like, ugh...on those days you just cry about everything. Then a friend will bring you a sweet.” (P13)

Another participant reported the following when she felt upset and needed support:

“... The fact that I will go with my friends and we have cake – to chat to them and ... just the fact that it is something nice for now and I am sort of not allowed to eat that... then it makes me feel better for some reason or other.” (P9)

These quotes illustrate the significant role food and eating (especially unhealthy food) played during times when the participants needed some support. Furthermore, it was also indicated that giving food as a gift to someone else was another way to show your love and support, as is illustrated by the following quote:

“... I really like to spoil other people ... Like, hey, it’s okay, I will buy you a milky, or whatever ... Also, if other people come to me, I like to make them something nice ... there is kind of a gift to giving food to people ... Always, if one thinks you are spoiling someone, then you think about: Okay, I will make them a dessert or something.” (P7)

It can be seen that eating together and giving food as a gift seemed to be ways in which participants showed support and love, as well as ways in which others conveyed this message to them.

Celebrations. Special occasions seemed to influence participants eating behaviour as well. Certain foods were associated with special occasions and they ate according to this. One participant described what her godmother would say the following when she came to visit her:

“‘Are we going to Pienk Huis [Bakery in Potchefstroom, South Africa]?’ Not because we want to go and eat, because that is what we did for special occasions.” (P6)

This indicates how certain traditions and special events seemed to revolve around food.

Another participant shared a similar experience with regard to celebrating birthdays:

“Unless I go home, for example, and we have something on ... like a birthday or something, then it [eating behaviour] is very different. Then I will obviously eat cake and nice things, and then I will drink much more coffee as well ...” (P9)

Certain occasions call for certain foods that aid in the celebration of the event. But a person’s state of mind and how they feel can also play a role in influencing their eating:

“Perhaps only at a party ... and then there are chips ... and then I will [eat] ... I think the fact that it is, like, casual ... I see chips as a casual snack ... You are relaxed ... and you enjoy yourself ... and then there are only chips and then I will eat them ... like people who smoke socially.” (P2)

The participants seemed to eat more unhealthy food when they celebrated as it was part of a tradition they established, or because of the way they felt during these special events. The feelings of joy that eating these unhealthy foods provided also seemed to play an important role in celebrating these special occasions.

Theme 2: The Role of Others’ Perceptions in Eating Behaviour

The study indicated that the participants were influenced by the perceptions of others and that they crafted their eating behaviour according to what they believed will get a more positive response from other people. Peers’ and friends’, boyfriends’ and parents’ perceptions all seemed to play a role.

Peers and friends. The opinions of their friends and peers were something that seemed to be important to the participants and it concurrently had an influence on their eating behaviour. One participant shared the following:

“...I have lost a lot of weight since last year and, uhm, then I realised, it is so much nicer when people say to me: ‘Hey, you look beautiful’ and ‘You are looking so good’ and everything, than it is to quickly finish off a piece of cake.” (P13)

Thus, we see that positive feedback from peers seemed to trump the short term psychological effects of eating a piece of cake would provide. However, even though receiving compliments is a powerful motivator, being accepted by peers seemed to be a key factor.

One participant shared what happens when she tried to eat healthier food than her friends:

“Sometimes I feel humiliated, because they will comment on that ... For example, before we go out I will make sure to eat something to make me feel full so that I will not be tempted to when we [when eating out]. Or, for example I will order a pizza, but I will eat only two slices ... Then they see that I also order something, then they cannot totally humiliate me about that.” (P5)

Not wanting negative feedback from others, motivated her to rather eat the unhealthy food they ate, so as to try and fit in with them. It seemed as if peers and friends judged dieting and the eating of healthy food as was mentioned by the following participant:

“The moment that you ... tell someone that you are on a diet ... then they are, like, ‘why?’ ... in a social environment ... that we all eat together, or something like that, then you are pushed and everyone is, like: ‘why are you not eating?’ ... Then it is awkward, because now you have to tell everybody ... And then, sometimes people are, like ... very judgy.” (P13)

Participants also believed that they should eat healthy food and not be overweight because of what others might think of them. This is illustrated by the following participant’s quote:

“On campus it is very, like, judgemental, in a way. So you have to eat healthy for other people so that they think you are putting in some effort.” (P8)

Participants believed that students think the following when they see overweight students:

“They are probably lazy ... to eat healthily ... Like, because people come out of the SS [Student Centre at North-West University, Potchefstroom Campus] and then they are a bit overweight and then they have something like nuggets ... Then I think ... you are overweight already and then you buy that.” (P8)

Being overweight was an aspect the participants especially believed their peers commented on and disapproved of. This is also indicated in the following participant quote:

“I sometimes also gain a bit of weight, and when someone notices that, I freak out completely, and then I go on a hunger strike ... They will never tell you: ‘Hey, you are really looking good’. They will say: ‘Ooh, you’ve gained some weight’ ... In my mind it is: I am getting fat ... It then influences my eating habits in the way of ... it is, like, breaking one down emotionally ...” (P1)

Talking about their weight and appearance goals seemed to be evident among participants and their friends. Getting feedback from friends/peers seemed to be an aspect that can psychologically impact a person’s views and behaviour. Thus, to avoid negative feedback or because of negative comments, participants adapted their eating behaviour accordingly.

Partners. Another aspect participants believed influenced their eating behaviour was their current relationship status. Participants emphasised aspects like looking good enough to meet someone, as well as when you have a boyfriend the importance of an acceptable appearance in order to maintain the relationship. This pressure to look good influenced choices surrounding eating behaviour as this participant’s quote illustrates:

“If you are in a relationship and you are in that person’s presence the whole time and you have to look beautiful the whole time ... It is definitely a kind of pressure.” (P 8)

When asked if being in a relationship affected her eating behaviours another participant stated:

“I think it can, because one wants to look good for the other one, and you want the other person to be proud of you, like, that you can say: ‘wow, that is my boyfriend’ you will want him to say that about you. So I think it definitely has an influence.”

(P13)

A similar experience was also shared by the participants who were currently single:

“Where I do not have a boyfriend at the moment, I feel I have to exercise and... like make myself beautiful so that I can get someone ...” (P9)

Being in a relationship made the participants experience additional pressure to look ‘good’ at all times, where as being single, on the other hand pressured participants into feeling as if they had to look good in order to meet someone. Subsequently, having a partner or looking for a partner caused enough anxiety to play a role in the eating behaviour. Beliefs surrounding what ‘guys’ wanted in a girlfriend were also evident and this can be illustrated by the following quote:

“Any guy wants a girl with kind of a beautiful body or whatever” (P10)

What was interesting was participants’ tendency to eat unhealthy foods when they were with their partners despite the pressure to ‘look good’. They were more likely to eat the same type of food as their partners were eating and one participant explained why:

“Because I do not want to be that one who always says: ‘Oh no, I cannot eat that now; let me eat my salad’ ... I think it can be very irritating for a person if you are always with them and they enjoy eating nice food ... and then the whole time you are, like: ‘no thank you; no thank you’.” (P10)

When asked if relationships influenced her eating behaviour the one participant replied:

“I think so ... my girl friends who are in relationships and... when I was in a relationship, like, your boyfriend spoils you a lot ... and you don’t want to tell him, no, you don’t want to eat that ... then you ... eat a bit worse.” (P 9)

It seemed as if the perceptions of their partners as well as their beliefs surrounding the importance of appearance played a role in the food choices the participants made.

Parents. Another aspect that emerged was that participants' eating behaviour was influenced by what they believed their parents' perceptions would be. One participant said the following with regards to how people would treat her if she gained weight:

“Like, I know my mother and father will be very hard on me ... So, that is why I do not want to become fat also, sort of, because I do not want people to change towards me.” (P8)

There seemed to be a belief that parents would develop a negative perception of them if they gained weight. It seemed to be important to some parents that their daughters should not gain weight at university as the following quote illustrates:

“It always was something like ‘you shouldn’t gain weight’, and I know that my mother was like that. My mother started gaining her weight at university and she regularly reminds me – she doesn’t want me to follow in her footsteps.” (P5)

Thus, parent's previous life experiences influenced what they taught their children and this seemed to be true for eating behaviour as well. It seemed as if parents' opinion of appearance and concurrently of eating behaviour were important feedback that the participants incorporated into their own beliefs.

Theme 3: The Reciprocal Role of Self-perceptions, Eating Behaviour and Social Media

The way participants viewed themselves with regard to their weight and appearance seemed to correlate with their eating behaviour and this impact seemed to be even further exacerbated by social media.

Self-perceptions' role in eating behaviour. The participants' self-perceptions and their feelings with regard to their weight seemed to be a key role player in influencing their eating behaviour as was explained by the following participant:

“I don't like gaining weight. So it also had a great influence in this [eating behaviour]. It is uncomfortable and you don't feel like yourself any more, your personality changes ... I became very withdrawn ... for example I would not go to Draak [restaurant on North-West University, Potchefstroom Campus] with my friends ... I'm not comfortable to sit with people, thinking: 'Okay, how do my arms look now'... It was all about, what they think of me, like: do I look bad in these clothes or whatever.” (P9)

It seemed as if weight gain was an especially crucial factor that participants wanted to avoid because of the negative feelings they then experienced about themselves. What was interesting was that the participants own perception and feelings towards themselves after weight gain had a bigger influence on eating behaviour compared to the perceptions of others:

“If I look at the amount of weight that I gained ... it's not as if it was so terrible – like twenty kilograms or something, but it was very psychological for me ... People did not really talk about that, it was only in my head that I thought people talked about that ...” (P9)

Self-perception also played a role in eating behaviour when the participants compared their appearance to others. This is illustrated in the following quotes:

“Since one came to campus, and so on, you see beautiful girls and then you also want to be beautiful, thin like the others ... So I think this is how you see yourself...” (P8)

Another participant said:

“A friend of mine, she’s so obsessed with her body ever since secondary school... She has this sexy, round, Kim Kardashian booty; thin waist...But, she still has insecurities. She still thinks that she’s not enough... you can look at yourself in the mirror and say: ‘oh, but, you know, I’ve achieved this body’, but there will always be a better body...At the end of the day you are just never going to get the satisfaction... Even if a thousand people who are saying your body is perfect....” (P12)

Because of the constant focus on their appearance, it was indicated that participants had to deal with a whole array of automatic thoughts when they wanted to eat unhealthy food:

“In general: when you eat and you are a girl, you cannot help but think: Okay, but gee, this may not be the healthiest thing for me now; or, oh, my skin looks so bad, perhaps I should not eat chips now; or ahhh, I had some fudge yesterday, perhaps I should not buy fudge today ... that always plays a role – I don’t think there is a girl who can say that she eats without thinking about ten thousand other things as well.” (P6)

This participant shared the following when asked why these thoughts were present:

“Your self-image probably plays a role. Like ... automatically, you do not want to look bad; you do not want to be fat, because it is not beautiful according to, once again, the world. So, it is, I think, your self-image that causes you rather not to eat chips.” (P6)

One participant described why her self-perceptions tended to influence her eating behaviour:

“I do not like my breaking out. For me that is really bad...It just does not look good to me ... and then it feels a bit like, I do not look after myself ... And that is not nice, because ... it makes me feel very self-conscious.” (P1)

It was evident that the participants felt more self-conscious and insecure when they gained weight or had pimples which forced them to deal with feelings of inferiority. This,

inevitably, influenced their eating behaviour to try and avoid having to feel this way about themselves again in the future.

Eating behaviour's role in self-perception. It seemed as if eating certain foods also tended to influence the participants views of and feelings towards themselves. Eating healthy food and restricting unhealthy food were found to be experienced as achievements by the participants as seen in the following quotations:

"If one like ... eats healthily ... when you have finished eating, you feel like: Yes, Okay, this was good." (P1)

Another participant also stated:

"When I eat healthily then I just feel better as well ... In the evenings when I sit to do my assignment, then I think ... what I have eaten and then it just feels to me: today I have achieved something, because I did not eat a chocolate or I did not eat something that, uhm, I should not have eaten, something that is bad for me." (P9)

Thus, when participants would eat unhealthier food they would experience disappointment in themselves. One participant described feeling the following way during these instances:

"I am definitely angry with myself ... I feel disappointed, because ... I am working hard at this ... When I overindulge then it feels to me: 'yuk, why did I do that now? Like, I did not need that now.' It makes me feel bad, emotionally and physically ... Yes, so, I think ... I am more angry with myself, just myself. But it is also ... to me as a person ... a kind of failure if one is like that ... because it starts with an eating habit and then later it affects many more things than what you could imagine." (P7)

Although it was evident that food, especially unhealthier food choices and 'treats', enhances feelings of happiness when consumed, it seemed as if this might only be a temporary effect. This was then replaced with negative thoughts and emotions that negatively

impacted on self-concept. One participant explained this cycle of emotions when she ate a treat:

Uhm, yes, [I feel good], like the first or second biscuit, but then later, then I just think: oh, why did I now ... this is ... actually such a vicious circle ... you peak and then you feel good, and then suddenly, it is like pff ... or then you have eaten just that little bit too much ... and you do not feel well.” (P7)

Eating unhealthy food seemed to have a negative impact on participants’ self-concept, while healthy food choices lead to positive feelings about the self being reinforced. This explains the reciprocal effect found between eating and self-perceptions.

Social media’s role. The views, information and the images the media, especially social media, portrayed had a strong influence on self-perceptions and subsequently on eating behaviour. It seemed as if a definite image of what “beautiful women” look like had been established, which one participant also highlighted by saying the following:

“Well, because society has this very definite image of what a girl should look like.” (P6)

Images the participants were bombarded with on social media influenced how they viewed themselves and how they believed they should look to receive any approval from society:

“I’d see this perfect body on Instagram, I’d be like: ‘oh my word, I want that. Like, can I have those thighs? ...Those abs?’ So... that week, I am going to be eating salads...” (P12)

Furthermore the media also tended to influence participants in such a way that they started to link being skinny with being confident. This message was then incorporated and it seemed to also influence eating behaviour. One participant shared the following experience:

“When I see adverts – on the TV of this thin girl who ... is fit and beautiful ... then she only eats ... apples. Then I want to eat apples as well ... Not as a result of how they

look ... just, you can see that they are confident ... then I think ... 'I also want to be that confident' ..." (P2)

Another aspect evident in the media was the focus on promoting healthy eating behaviour. This can be seen as a positive way to create awareness and the participants in this study seemed to be well informed with regard to possible dietary health related problems. However, the flipside was that promoting this information by including kilojoule counts of food and emphasising low carbohydrate and low fat intake caused participants to feel pressured to maintain this standard; it also caused them to be more guilt prone when they were unable to maintain this "ideal" lifestyle that the media promoted. One participant said:

"I think it is ... not necessarily what they say models should look like ... they look like matchsticks anyway, but like ... especially on Pinterest ... then they tell you how many [kilojoules] this contains ... then, if one, likes, converts how they convert this from how much sugar or whatever it contains, then you think, like: 'woah'." (P1)

The information the media focused on impacted on the participant's self-perceptions by promoting healthy food and the ideal body figure to such an extent that it seemed to influence the views they incorporated into their own beliefs and their eating behaviour.

Theme 4: Personal Stressors and a Low Mood

Participants' emotional state (for e.g. sadness) was caused by various difficulties and seemed to influence their eating behaviour.

Bad day/ feeling down. Participants frequently spoke about feeling 'down' and having a bad day. This occurred because of a challenging week, receiving bad test results or if things didn't work out as planned. It seemed as if engaging in certain eating behaviour helped to cheer participants up and to comfort them as the following quote illustrates:

“Let’s say I wrote a bad test ... or I had a bad day or something, then ... you sort of get the thoughts in your mind, of: ‘oh, why not buy myself an ice-cream then everything will be better’.” (P7)

It was evident that unhealthy, indulgent food, especially sweet food (treats) was usually the food of choice when participants felt they needed some cheering up. Participants were less able to regulate eating behaviour during these times: they just wanted instant gratification.

This was also indicated by the following quote of a participant:

“Well, when I feel down ... then I will want to eat more, and nicer things – then I will not make an effort to eat the correct stuff; then I will just eat something that ... I like ... I think it is just to ... help you feel better again. That you feel, but this can make you feel better – things are not so bad. To give you courage” (P11).

Eating something nice seemed to provide relief from the negative emotions the participants experienced. One participant explained why feeling down would influence her eating:

“Well, I think if you feel like that and it consumes your mind so much, then the first thing you think about ... like, you will grab literally anything in front of you. And eating is such a basic thing ... So, I think it is ... very quick thing to grab at ... I do not necessarily think it is just about eating, besides that food tastes nice, and that you want to eat ... It is more of a mental thing, of: ‘Okay, I am feeling bad and this is what consumes my mind, so let’s grab anything that I can, just to help me feel better’ ...” (P7)

A low mood, sadness and being ‘down’ lead participants to eat something they enjoyed in order to try and enhance their happiness and to try and get their minds focussed on something other than what was upsetting to them.

Personal distress. Another emotional aspect that seemed to influence participants' eating behaviour can be best described as personal distress. This is a more intense sadness caused by a more severe stressor occurring, such as fights with partners or losses. One participant described the following experience:

“I think if one is emotional ... then you put it [eating] aside, like totally aside, like ... if you and your boyfriend fought, or something, then the last thing that I want to do is eat. You want to, like lie in a little bundle on your bed ... So, I think it is then, perhaps because you are so emotional ... If one cries a lot, then you become nauseous, and I think then you do not want to eat.” (P1)

This participant seemed to think that the difficulties she experienced were so overwhelming that thinking about basic needs such as eating was over powered by something that was a bigger priority at that stage. Furthermore, a physical element of not eating because of nausea was also identified. Another participant shared the following in this regard:

“I have a boyfriend in Stellenbosch, so I know when we fight, then ... I do not want to eat. Then I become, a bit like, I do not want to – I do not have any appetite at all any longer.” (P5)

It was indicated that personal distress lead her to completely lose her appetite. It was the physical feeling in her body caused by the emotions she experienced that influenced the eating behaviour. Another participant described the following regarding this physical factor:

“Usually when I am sad I get a pain in my stomach ... it feels as if my stomach is being eaten up from the inside, I experience a kind of a stress lump, and I think that causes that I do not want to eat, because it ... it's uncomfortable. Because your stomach aches, and then when you do not feel well, you don't want to eat.” (P4)

Emotional pain manifested in a physical manner which made the participants feel as if they had no appetite. One participant explained this experience in the following way:

“I think it is like ... as if the pain that I feel emotionally wants to go over to a physical pain, in a way ... I think it is ... my way of compromising with the hurt that I feel ... So I think that it is just a way for me to, uhm, shift my focus and in a way shift my pain for a moment.” (P5)

These emotions the participants experienced impact on their eating behaviour by physically taking away their appetite. This might have been a way to deal with their emotional pain.

Theme 5: University Specific Aspects’ Role in Eating Behaviour

Attending university is a critical life phase when participants move to a new environment and have to learn to take care of themselves, while also experiencing increased academic stress and a higher work load. Thus, it is not surprising that it was found that these aspects seemed to play a role in the eating behaviour of the participants.

Academic stress and studying. Participants indicated that they tended to exhibit more snacking behaviours during exam times and when they studied. The changes this caused in their eating behaviour are illustrated in the following quote:

“Most of the time you... sit down and study – you just slide with your chair to grab a packet of chips and you slide back to your desk... You don’t even... walk there... I think that’s why I gained weight, if whatever... I’m studying is giving me trouble. Because whenever I stress, I want something [food] in my mouth.” (P12)

Other than the frequency of eating that escalated (frequent snacking) it also seemed as if ‘something nice’ to eat, like a treat, improved their emotional state during these stressful times:

“Sometimes before I study, then I think: ‘Oh, I ... am going to be busy studying the whole evening, then I just feel a bit better if I have something nice [food] with me.’”
Well, I think I ... feel: ‘Okay, I deserve this packet of biscuits now.’ Like, if it will make me happy if I just ... can eat something nice that I like now.” (P7)

By switching your attention to eating, your thoughts are not focussed on the problem at hand anymore which explains why this might influence eating behaviour. One participant stated:

“Before a test ... if I have to sit down and I have to concentrate and I realise I do not have much time or so, then I will realise every time: Oh, no, I’d rather go and look for something to eat. It is kind of a way to ... get my mind away from my work. It is a distraction.” (P5)

Another participant described the following with regard to snacking when she studied:

“If you sit and study, or you just take a break ... then you just feel: gee, I am stressed; I cannot do this; I do not know what is going on here – let me just eat. It is something that you ... can do to just ... feel more in control ... I only know it makes me feel better.” (P6)

Stress and anxiety seemed to be the accompanying emotions with regard to studying.

Academic stress constantly dwelled in the participants’ minds as is illustrated by the following:

“I think, when I start to stress, then it is just my body’s way of looking for something else to do ... Then I cannot go and sit and ... try to watch series, because it is there the whole time ... But, uhm, it feels ... if I eat something ... then it will go away, so it sounds strange, but when I eat something, then it feels ... I have something else to do ... my thoughts are with what I have to eat or nibble on, and then it is not only about the current problem.” (P5)

In this way eating served as an escape from academic stress and work and it seemed to have a neutralising effect on some of the negative aspects experienced during study times. Thus, increased hours of studying and academic stress experienced in the university context increased the snacking and eating behaviour of participants.

First year adjustment and weight gain. A recurrent theme that was evident was that many of the participants experienced weight gain in their first year. On the Potchefstroom Campus this is referred to as ‘first year syndrome’ and it seemed to be a frequent occurrence. One participant shared her experience of this:

“In the time of my first year to the end of my second year, I gained nearly ten kilos ... it was very bad. And one does not even realise it! Then one day you see: oh, shit, I am over sixty [60 kg] now.” (P10)

Another participant shared:

“In your first year, then you eat terrible food, like Two Minute Noodles and things like that, and then I got first-year syndrome.” (P9)

Unhealthy food choices seemed to be evident in the participants eating behaviours during their first years. Eating seemed to be used to lift the participants’ mood during this difficult transition. One participant shared the following:

“Yes [I ate more], perhaps like, things that I love a lot. Like ice-cream, I love ice-cream ... in that first semester at university, I ate a huge amount of Magnums ... Perhaps it is connected to making me feel better.” (P4)

Participants also experienced more freedom to make their own food choices at university:

“...Now, you’re away from home... You can eat whenever you want...You can eat whatever, at any time. You can...decide to go to ‘Chicken Lickin’ at ten o’ clock and then eat.” (P12)

Furthermore, university being a new place for participants also played a role in participants eating behaviour as can be seen in the following quote:

“And it is a new place – you try all the new places, all the new snacks.” (P13)

Going to university was difficult for participants as it was the first time they were ‘on their own’ and had to take care of themselves. One participant shared her experience of this by saying:

“I know the adjustment ... to be away from home, it was really very bad for me ... To be alone ... It was the biggest, well [transition]. There is no-one around and ... it was difficult to realise that I have to cope alone now.” (P11)

Going to University included various aspects that impacted on participants eating behaviour, such as difficulties with regard to the transition, curiosity to explore and freedom.

Discussion

For the purpose of this study the focus was to further explore the what, why and how of psychological aspects’ role in the eating behaviour of female university students. The research questions this study aimed to answer was: *What psychological aspects play a role in the general eating behaviour of female university students in a South African context? Why do these aspects play a role in their eating behaviour? And how do these aspects play a role in their eating behaviour?*

A study conducted by Wiggins, Potter, and Wildsmith (2001) defined eating as a social practice that is intertwined with our social interactions and not just an individual activity to fulfil the physiological need of hunger. This verified the findings of this study as participants’ indicated that eating played an important role in their social activities, in facilitating interpersonal contact and in maintaining their relationships.

Daniels, Glorieux, Minnen and Van Tienoven (2012) indicated that sharing meals is an important aspect of cohesion and cohabitation. It was also found that cooking a meal for someone was perceived to be a 'gift' that you can give to them (Kjaernes, 2001 as cited in Daniels et al, 2012). Food is, therefore, also a way to show care to others (Daniels et al., 2012). This concurs with the findings of this study which found that eating related social activities, preparing meals for others and giving food as a gift were used to show love and support.

According to Casotti (2005) food and eating play a crucial part in establishing social bonds and it also make an irreplaceable contribution to people's celebrations and special occasions (Casotti, 2005). A strong relationship between food and celebrations was also indicated by the participants of this study and food seemed to form part of traditions they have established which coincides with findings from the previous studies mentioned.

According to Howland, Hunger, and Mann (2012) people view their friends as trustworthy sources of feedback and information, thus the information they provide makes a significant impact on the self and it establishes social norms. These norms indicate the presence of 'togetherness' and it heightens the levels of affiliation between people (Haslam, Oakes, Reynolds, & Turner, 1999). Thus, conforming to these norms with regard to eating behaviour, people are evaluated positively by friends (Cruwys, Leverington, & Sheldon, 2016). This is especially evident in interactions between female university students where friend and peer relationships are a very important part of feeling accepted (Lindner, Hughes, & Fahy, 2008). This study indicated that feedback and perceptions of others, as well as group norms related to eating behaviour played a significant role in eating behaviour. This was verified by other studies that indicated that when friends 'defy' these set norms they were evaluated in a negative manner by their peers (Cruwys et al., 2016).

A strong belief surrounding what ‘society’ deemed to be acceptable and desirable was found in this study. ‘Fat-talk’ (when people speak in a negative manner about their- and other people’s bodies) concurrently influences perceptions and body-ideals and impacts eating behaviour (see Cruwys et al., 2016). This social aspect was also indicated in this study.

Tylka and Subich (2004) stated that other than peer influences parents of young adults also emphasise the thin ideal and concurrently young woman experiences constant pressure to be thin from their parents. Davison and McCabe (2005) indicated that a woman’s perception of her body is not only determined by her own understanding of it, but also by the views of others. This study verified this as it was found that peers’, partners’ and parents’ perceptions of eating behaviour and appearance played a role in participants eating behaviour.

Another prominent finding of this study was the big impact appearance focussed behaviour seemed to have on participants’ self-perceptions and eating behaviours. A study done by Fitzsimmons-Craft (2011) verified our finding as they found that body shape and weight are of crucial importance to female university students. Lindner et al. (2008) further described this behaviour by stating that female students are surrounded by other females who are within the same age group as they are. This leads to social-comparisons of appearance (Fitzsimmons-Craft, 2011) which was also indicated by the findings of this study. Research indicates that social comparisons are usually made in an ‘upward’ direction (compares themselves with someone who is ‘better’ than them) and this leads to high levels of body dissatisfaction occurring (Fitzsimmons-Craft et al., 2014). Participants then want to improve their current level of body dissatisfaction by adapting their eating behaviour accordingly. This might explain the negative emotions like anger, guilt and disappointment the participants reported when they encountered weight gain or when they gave in to temptation and indulged in unhealthy food (Adams & Leary, 2007; Wardle & Beales, 1986) as this would lead to being dissatisfied with their bodies. Furnham, Badmin, and Sneade (2002)

indicated that a correlation exists between body dissatisfaction and low self-esteem. This study also identified self-esteem as a prominent role-player in eating behaviour.

The participants of this study seemed to be influenced by the media and the idea of ‘thinness equalling confidence and happiness’ that was constantly portrayed. The research of Makino, Tsuboi, and Dennerstein (2004) indicated similar findings and it was stated that the media emphasises the ‘thinness ideal’ which is especially promoted under young women. Media exposure leads to the thin body ideal being internalised and because of this also to the development of body dissatisfaction (Perloff, 2014) which then influences eating behaviour, as is also seen in the findings of this study.

Furthermore Keltner and Gross (1999) stated that the emotions we experience help us to successfully adapt to our environment by influencing our reactions. The participants of this study reported that when they felt down, these emotions would influence their eating behaviour by heightening their intake of the foods they enjoy (especially sweets and treats) which Keltner and Gross (1999) would classify as an adaptive response.

Research indicates that sadness seems to activate a ‘hedonic eating goal’ (Tice, Bratslavsky, & Baumeister, 2001) which explains why it enhances indulgent eating. This is explained as an emotion (sadness/ low mood) activating a signal that an intervention is needed to regulate a person’s current emotional state (to change the feeling). This is then called a hedonic eating goal that becomes the priority, and long term consequences, such as damage to health and weight gain, are no longer a concern (Tice et al., 2001), which also coincides with the findings of this current study.

However participants also described that when they experience more intense sadness and personal distress, they lost their appetite and they ate less. Studies conducted by Salerno, Laran, and Janiszewski (2014) verified this as they found that sadness will not always increase indulgent food intake, but that at times it also seems to lead to a decrease in general

food consumption. They stated that in some instances of more severe sadness, the emotion leads to the activation of an adaptive response to prevent further 'loss' from occurring (Salerno et al, 2014). It was explained that when people are in a state of personal distress they develop sensitivity to harmful long-term consequences (for e.g. those of indulgent consumption), which they then want to prevent which results in a decrease in eating behaviour (Salerno et al, 2014). Stapleton and Whitehead (2014) described the biological mechanisms at work during these emotional states of personal distress. Gastric mobility is inhibited which results in the liver releasing sugar. Because of this, the physical feeling of satiety is then simulated and the feeling of hunger is then decreased (Schachter, Goldman, & Gordon, 1968, as cited in Stapleton & Whitehead, 2014). This physical sensation occurring in response to personal distress also verifies the findings of this study.

Another aspect that seemed to influence the participants eating behaviour was academic related stress such as studying and exams. Konttinen, Männistö, Sarlio-Lähteenkorva, Silventoinen, and Haukkala (2010) verified the findings of this study and indicated that anxiety and fear can induce emotional eating because people seem to have difficulty differentiating between the feeling of hunger and these negative states of arousal. They also state that eating reduces stress and anxiety and that this can become a type of learnt behaviour that starts to occur 'automatically' when a similar condition arises (Konttinen et al., 2010). Adam and Epel (2007) described that when stressors occur, it results in higher cortisol secretion. This leads to heightened levels of insulin which then leads to the brain's 'reward centre' being inhibited and the person starts experiencing the drive to relieve this negative state (Adam & Epel, 2007). Food intake serves as a 'reward' and it relieves the negative emotional state (Adam & Epel, 2007).

Other than the high academic demands of university, a sense of 'freedom', living alone (Vadeboncoeur, Townsend, & Foster, 2015) and a high number of eating related social

activities (Finlayson, Cecil, Higgs, Hill, & Hetherington, 2012) have been indicated to be psychological aspects that influence university students' eating behaviour, also verifying the findings of this study. The participants of this study indicated that they experienced first year weight gain and this was verified by other literature (for e.g. Finlayson et al, 2012; Vadeboncoeur et al, 2015). In the United States this phenomenon is referred to as 'Freshman 15', a play on words used to define the gain of approximately 15 pounds (6.8kg) during the first year at universities due to the transition (Brown, 2008). Vadeboncoeur et al (2015) indicated that about two thirds of university students experience first year weight gain. The transition from secondary school to the university context seems to be a critical period during which eating behaviours are influenced by various psychological factors as have been described above.

Limitations and Recommendations

One of the limitations of this study is the limited variation of the demographic group used as the participants of this study. The participants come from the same university context and therefore one is not able to generalise with certainty these findings to all female South African university students. Furthermore the fact that 12 of the 13 participants were white is another limitation of this study as the sample used was not representative of all the ethnic groups found on the campus.

With regard to further research that should be done, it is recommended that researchers focus less on the pathological and more on the 'general' and every day eating behaviour of people in a South African context in order to give more depth to the current research in our country's very unique context. Furthermore, it is recommended that eating related health enhancing program development should be further researched, and that the psychological aspects, identified in this study, should be taken into account when these programs are developed for female university students in a South African context. More

research should especially be done with regard to this population group to identify other possible areas that should be focused on to aid in the development of possible prevention programs to try and minimise and stop disordered eating behaviours from developing. A special area of focus in research should be on first year university students as they are transitioning to a new context and have been indicated as a group that is especially vulnerable to weight gain and to changes occurring in their eating behaviour.

Eating behaviour is of key importance for the health of female university students and we need more research, especially qualitative studies, to be conducted so that interventions can be developed to be able to provide these students with the “food for thought” they are in dire need of.

Conclusion

The aim of this research study was to further explore, interpret and ultimately to describe the role psychological aspects play in determining the general eating behaviour of the female university students of the North-West University (NWU) Potchefstroom Campus. In this study it was found that psychological aspects do play a key role when it comes to being a determinant of and a role-player involved in female students’ eating behaviours.

These psychological aspects that were specifically indicated in the findings of this study and verified by other literature, stretched over various domains that included psycho-social aspects (such as social activity and celebrations, food as a symbol of support and care and transitioning to university), emotions (such as sadness, personal distress, anxiety and stress (caused by academic pressure) as well as cognitions and perceptions (such as self-perceptions and the participants’ perceptions of others). The variety of psychological aspects involved in the eating behaviour and in eating related activities of female student, emphasise the importance of taking not only the physiological aspects into account when eating is further explored and discussed, but also focussing on the psychological domain as it seems

evident that in most cases eating and food has a psychological motive or consequence from which it cannot completely be separated.

Female university students have been identified as a population group on which researchers should focus, not only because of their high risk to develop eating related difficulties, but also because it is in this life phase during which they start to determine the behavioural pattern, including eating behaviour, that they will follow throughout their adult life. Education, health-promotion, as well as disordered eating prevention programs should be aimed at the female university population group with a special focus being on the first year university students.

References

- Adam, T. C. & Epel, E. S. (2007). Stress, eating and the reward system. *Physiology & Behavior*, *91*, 449–458. doi:10.1016/j.physbeh.2007.04.011
- Adams, C. E., & Leary, A. R. (2007). Promoting self-compassionate attitudes toward eating among restrictive and guilty eaters. *Journal of Social and Clinical Psychology*, *26*(10), 1120–1144.
- Allon, V. (2014). *The role and trainability of executive function in the context of healthy eating*. Retrieved from ses.library.usyd.edu.au
- Bellisle, F., Dalix, A. M., & Slama, G. (2004). Non-food-related environmental stimuli induce increased meal intake in healthy women. Comparison of television viewing versus listening to a recorded story in laboratory settings. *Appetite*, *43*, 175–180.
- Bennett, J., Greene, G., & Schwartz-Barcott, D. (2013). Perceptions of emotional eating behavior. A qualitative study of college students. *Appetite*, *60*, 187–192.
- Beumont, P. J., George, G. C. W., & Smart, D. E. (1976). “Dieters” and “vomitters” and “purgers” in anorexia nervosa. *Psychology Medicine*, *6*, 617-32.
- Brandimonte, M. A., Bruno, N., & Collina, S. (2006). Cognition. In P. Pawlik & G. d’Ydewalle (Eds.), *Psychological concepts: An international historical perspective* (pp. 1-22). Hove, UK: Psychology Press.
- Brooks, S., Prince, A., Stahl, D., Campbell, I. C., & Treasure, J. (2011). A systematic review and meta-analysis of cognitive bias to food stimuli in people with disordered eating behaviour. *Clinical Psychology Review*, *31*(1), 37-51.
- Brown, C. (2008). The information trail of the ‘Freshman 15’—a systematic review of a health myth within the research and popular literature. *Health Information and Libraries Journal*, *25*, 1-12.

- Bjornelv, S., Nordahl, H. M., & Holmen, T. L. (2011). Psychological factors and weight problems in adolescents. The role of eating problems, emotional problems, and personality traits: the Young-HUNT study. *Social Psychiatry and Psychiatric Epidemiology*, *46*, 353–362. doi: 10.1007/s00127-010-0197-z
- Casotti, L. (2005). He who eats alone will die alone? An exploratory study of the meanings of the food of celebration. *Latin American Business Review*, *6*(4), 69-84.
doi:10.1300/J140v06n04_04
- Choy, L. T. (2014). The strengths and weaknesses of research methodology: Comparison and complimentary between qualitative and quantitative approaches. *Journal of Humanities and Social Science*, *19*(4), 99-104.
- Cilliers J., Senekal M., & Kunneke E. (2006). The association between the body mass index of first-year female university students and their weight-related perceptions and practices, psychological health, physical activity and other physical health indicators. *Public Health Nutrition*, *9*, 234–243.
- Clarke, V. & Braun, V. (2013). Teaching thematic analysis: Overcoming challenges and developing strategies for effective learning. *The Psychologist*, *26*(2), 120-123.
- Close, J. (2013). Women’s experience of comfort eating: An interpretative phenomenological analysis (Unpublished doctoral dissertation). University of Leicester.
- Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches* (3rd ed.). Los Angeles, CA: SAGE Publications.
- Crombie, A. P., Ilich, J. Z., Dutton, G. R., Panton, L. B., & Abood, D. A. (2009). The freshman weight gain phenomenon revisited. *Nutrition Review*, *67*(2), 83–94.
- Cruwys, T., Leverington, C. T., & Sheldon, A. M. (2016). An experimental investigation of the consequences and social functions of fat talk in friendship groups. *International Journal of Eating Disorders*, *49*, 84–91. doi: 10.1002/eat.22446

- Daniels, S., Glorieux, I., Minnen, J., & van Tienoven, T. P. (2012). More than preparing a meal? Concerning the meanings of home cooking. *Appetite*, *58*, 1050–1056.
doi:10.1016/j.appet.2012.02.040
- Davison, T. E., & McCabe, M. P. (2005). Relationships between men's and women's body image and their psychological, social, and sexual functioning. *Sex Roles*, *52*, 463–475. doi:10.1007/s11199-005-3712-z.
- Deliens, T., Clarys, P., De Bourdeaudhuij, I., & Deforche, B. (2014). Determinants of eating behaviour in university students: A qualitative study using focus group discussions. *Bio-Med-Central Public Health*, *14*, 53. doi:10.1186/1471-2458-14-53
- Delport, I., & Szabo, C. P. (2008). Eating disorders in South Africa: An inter-ethnic comparison of admission data. *South African Medical Journal*, *98*(4), 272-274.
- Dovey, T. (2010). *Eating behaviour*. McGrawHill International.
- Edmonds, R. G. (2012). A new generation of eating disorders-not only for girls: Patients as partners brought to you by The South African Depression and Anxiety Group. *African Journal of Psychiatry*, *15*(3), 208-210.
- Elsner, R. J. F. (2002). Changes in eating behavior during the aging process. *Eating Behaviors*, *3*, 15-43.
- Finlayson, G., Cecil, J., Higgs, S., Hill, A., & Hetherington, M. (2012). Susceptibility to weight gain. Eating behaviour traits and physical activity as predictors of weight gain during the first year of university. *Appetite*, *58*, 1091–1098.
- Fitzsimmons-Craft, E. E. (2011). Social psychological theories of disordered eating in college women: Review and integration. *Clinical Psychology Review*, *31*, 1224–1237.
- Fitzsimmons-Craft, E. E., Bardone-Cone, A. M., Bulik, C. M., Wonderlich, S. A., Crosby, R., D., & Engel, S. G. (2014). Examining an elaborated sociocultural model of disordered

- eating among college women: The roles of social comparison and body surveillance. *Body Image*, 11, 488–500.
- Franzoi, S. L., Vasquez, K., Sparapani, E., Frost, K., Martin, J., & Aebly, M. (n.d.). *Exploring body comparison tendencies: Women are self-critical whereas men are self-hopeful*. Retrieved 2 June 2015 from [epublications.marquette.edu/cgi/viewcontent.cgi?article=1083&context](http://publications.marquette.edu/cgi/viewcontent.cgi?article=1083&context).
- Freeman, A. C., & Szabo, C. P. (2005). Eating disorders in South African males: A review of clinical presentation of hospitalized patients. *South African Journal of Psychiatry*, 35(4), 601.
- Furnham, A., Badmin, N., & Sneade, I. (2002). Body image dissatisfaction: Gender differences in eating attitudes, self-esteem, and reasons for exercise. *The Journal of Psychology*, 36(6), 581-596.
- Gerrig, R. J., & Zimbardo, P. G. (2002). *Psychology and life*. Retrieved from <http://www.apa.org/research/action/glossary.aspx?tab=16>
- Gitau, T. M. (2014). Eating attitudes, body image satisfaction, and self-esteem of South African urban adolescents: The impact of acculturation (Unpublished doctoral dissertation). University of Witwatersrand, Johannesburg.
- Goodman, L. (1992). From starving to stuffing: Profile on anorexics and bulimics anon. *Agenda*, 8(15), 28-32.
- Greenwald, A. G., & Banaji, M. R. (1995). Implicit social cognition: Attitudes, self-esteem and stereotypes. *Psychological Review*, 102(1), 4-27.
- Griffin, C., & Phoenix, A. (1994). The relationship between qualitative and quantitative research: Lessons from feminist psychology. *Journal of Community and Applied Social Psychology*, 4, 287-298.

- Gupta, C. (2011). *The relation between body image satisfaction and self-esteem to academic behaviour in adolescents and pre-adolescents*. University of Manitoba.
- Haslam, S. A., Oakes, P. J., Reynolds, K. J., & Turner, J. C. (1999). Social identity salience and the emergence of stereotype consensus. *Personality and Social Psychology Bulletin*, 25, 809–818.
- Howland, M., Hunger, J., & Mann, T. (2012). Friends don't let friends eat cookies: Effects of restrictive eating norms on consumption among friends. *Appetite*, 59(2), 505–509. doi:10.1016/j.appet.2012.06.020
- Keel, P. K., Forney, J. K., Brown, T. A., & Heatherton, T. F. (2013). Influence of college peers on disordered eating in women and men at 10-year follow-up. *Journal of Abnormal Psychology*, 122(1), 105–110. doi: 10.1037/a0030081
- Keltner, D., & Gross, J. J. (1999). Functional accounts of emotions. *Cognition and Emotion*, 13(5), 467–480.
- Kirsten, D. K., & Du Plessis, W. F. (2008). Lived experiences of subclinical eating disorder: Female students' perceptions. *Journal of Psychology in Africa*, 18(4), 561-572.
- Kirsten, D. K. (2012). Positive psychology and subclinical eating disorders in South Africa: A literature review (Unpublished doctoral dissertation). North-West University, Potchefstroom.
- Kontinen, H., Männistö, S., Sarlio-Lähteenkorva, S., Silventoinen, K., & Haukkala, A. (2010). Emotional eating, depressive symptoms and self-reported food consumption. A population-based study. *Appetite*, 54(3), 473–479. doi:10.1016/j.appet.2010.01.014
- Krefting, L. (1991). Rigor in qualitative research: The assessment of trustworthiness. *The American Journal of Occupational Therapy*, 45(3), 214-222.

- Laidlaw, N. A. (2014). International practicums and nursing students' understanding of culture: An interpretive description (Unpublished master's thesis). University of Columbia, Vancouver, Canada.
- Lee, N. (1993). Eating disorders in South Africa. *South African Medical Journal*, 83(7), 552-552.
- Le Grange, D., Louw, J., Russel, B., Nel, T., & Silkstone, C. (2006). Eating attitudes and behaviours in South African adolescents and young adults. *Transcultural Psychiatry*, 43(3), 401-417.
- Le Grange, D., Telch, C. F., & Tibbs, J. (1998). Eating attitudes and behaviors in 1.435 South African Caucasian and non-Caucasian college students. *American Journal of Psychiatry*, 155(2), 250-254.
- Lincoln, Y. S., & Guba, E. (1999). Establishing trustworthiness. In A. Bryman & R. G. Burgess (Eds.), *Qualitative research* (3rd ed., pp. 397-444). London: SAGE
- Lindner, D., Hughes, A., & Fahy, R. (2008). Eating pathology and social comparison in college females. *North American Journal of Psychology*, 10, 445-462.
- Lowe, M. R., & Butryn, M. L. (2007). Hedonic hunger: A new dimension of appetite? *Physiology & Behavior*, 91, 432-439.
- Macht, M., & Simons, G. (2000). Emotions and eating in everyday life. *Appetite*, 35, 65-71.
doi:10.1006/appe.2000.0325
- Makino, M., Tsuboi, K. & Dennerstein, L. (2004). Prevalence of eating disorders: A comparison of Western and non-Western countries. *Medscape General Medicine*, 6, 49.
- Maree, K., & Pietersen, J. (2016). Sampling. In K. Maree (Ed.), *First steps In research* (2nd ed., pp.192-202). Pretoria: Van Schaik Publishers.

- Matthews, G., & Deary, I. J. (1998). *Personality traits*. Cambridge: Cambridge University Press.
- Mchiza, Z. (2014). Eating disorders in South African schools: A public health crisis that needs immediate intervention. *South African Journal of Clinical Nutrition*, 27(4), 185-186.
- Moore, D. C. (1993). Body image and eating behavior in adolescents. *Journal of the American College of Nutrition*, 12, 505-510.
- Morris, P. E. (2008). Acculturative stress and eating disorders in black adolescent females in Kwazulu-Natal, South Africa (Unpublished doctoral dissertation). University of Witwatersrand, Johannesburg.
- Nieuwenhuis, J. (2016). Qualitative research design and data gathering techniques. In K. Maree (Ed.), *First steps in research* (2nd ed., pp.72-100). Pretoria: Van Schaik Publishers.
- Norris, D. L. (1979) Clinical diagnostic criteria for primary anorexia nervosa. *South African Medical Journal* 56, 987-993.
- Okeyo, A. P. (2009). Eating practices, nutritional knowledge and body weight in nursing science students at the university of Fort Hare (Unpublished masters dissertation). University of Free State, Bloemfontein.
- Perloff, R. M. (2014). Social media effects on young women's body image concerns: Theoretical perspectives and an agenda for research. *Sex Roles* 71, 363–377.
doi: 10.1007/s11199-014-0384-6
- Quick, V. M., & Byrd-Bredbenner, C. (2013). Disturbed eating behaviours and associated psychographic characteristics of college students. *Journal of Human Nutrition and Dietetics*, 26, 53–63. doi:10.1111/jhn.12060

- Reis, D. L., & Gray J. R. (2009). Affect and action control. In E. Morsella & P. M. Gollwitzer (Eds.), *Handbook of action control* (pp. 2-39). New York: Oxford University Press.
- Renner, B., Sproesser, G., Strohbach, S., & Schupp, H. (2012). Why we eat what we eat. The Eating Motivation Survey (TEMS). *Appetite*, 59,117–128.
- Revelas, A. (2013). Eating disorders are real treatable medical illnesses: Review article. *South African Family Practice*, 55(3), 252-255.
- Rozin, P. (1996). Towards a psychology of food and eating: From motivation to module to model to marker, morality, meaning, and metaphor. *Current Directions in Psychological Science*, 5(1), 18-24.
- Salerno, A., Laran, J., & Janiszewski, C. (2014). Hedonic eating goals and emotion: When sadness decreases the desire to indulge. *Journal of Consumer Research*, 41, 135-151. doi: 10.1086/675299
- Sandelowski, M. (2000). Focus on research methods: Whatever happened to qualitative description. *Research in Nursing and Health*, 23, 334-340.
- Sandelowski, M. (2010). What's in the name? Qualitative description revisited. *Research in Nursing and Health*, 33, 77-84.
- Scherer, K. R., Schorr, A., & Johnstone, T. (2001). *Appraisal processes in emotion: Theory, methods, research*. New York and Oxford: Oxford University Press.
- Schupp, H. T., & Renner, B. (2011). Food deprivation. A neuroscientific perspective. In V. Preedy, R. Watson, & C. R. Martin (Eds.), *International handbook of behavior, food and nutrition* (pp. 2239–2257). New York: Springer-Press.
- Schurink, W., Fouché, C. B., & De Vos, A. S. (2011). Qualitative data analysis and interpretation. In A. S. De Vos, H. Strydom, C. B. Fouche, & C. S. L. Delpport (Eds.),

Research at the Grass Roots: For the social sciences and human service professions (4th ed., pp.397-423). Pretoria: Van Schaik Publishers.

- Senekal, M., Steyn, N. P., Mashego, T. B., & Nel, J. H. (2001). Evaluation of body shape, eating disorders and weight management related parameters in black female students of rural and urban origins. *South African Journal of Psychology, 31*(1), 45-53.
- Silva, A. S. F. (2007). The relationship between personality traits and eating pathology in adolescent girls. *Archives of Women's Mental Health, 10*(6), 285-292.
- Sproesser, G. (2011). Why we eat what we eat: Psychological influences on eating behaviour (Unpublished doctoral thesis). University of Konstanz Mathematisch Naturwissenschaftliche.
- Stapleton, P. & Whitehead, M. (2014). Dysfunctional eating in an Australian community sample: The role of emotion regulation, impulsivity, and reward and punishment sensitivity. *Australian Psychologist, 49*, 358–368. doi:10.1111/ap.12070
- Szabo, C. P. (2002). A cross-cultural study of eating attitudes in adolescent South African females: Possible implications for epidemiology of eating disorders in South Africa (Unpublished doctoral dissertation). University of Witwatersrand, Johannesburg.
- Szabo, C. P., & Allwood, C. W. (2004). A cross-cultural study of eating attitudes in adolescent South African females. *World Psychiatry, 3*(1), 41-44.
- Szabo, C. P., & Le Grange, D. (2001). Eating disorders and the politics of identity: The South African experience. *Eating Disorders and Cultures in Transaction, 24*-33.
- Thorne, S., Kirkham, S. R., & O'Flynn-Magee, K. (2004). The analytic challenge in interpretive description. *International Journal of Qualitative Methods, 3*(1), 1-11.
- Tice, D. M., Bratslavsky, E., & Baumeister, R. F. (2001). Emotional distress regulation takes precedence over impulse control: If you feel bad, do it! *Journal of Personality and Social Psychology, 80*, 53–67.

- Tosevski, D. L., Milovancevic, M. P., & Gajic, S. D. (2010). Personality and psychopathology of university students. *Current Opinion in Psychiatry*, 23(1), 48–52.
- Tylka, T. L., & Subich, L. M. (2004). Examining a multidimensional model of eating disorder symptomatology among college women. *Journal of Counselling Psychology*, 51, 314–328. doi:10.1037/0022-0167.51.3.314.
- Vadeboncoeur, C., Townsend, N., & Foster, C. (2015). A meta-analysis of weight gain in first year university students: is freshman 15 a myth? *Bio-Med-Central Obesity*, 2(22), 1-9. doi: 10.1186/s40608-015-0051-7
- Van den Berg, V. L., Okeyo, A. P., Dannhauser, A., & Nel, M. (2012). Body weight, eating practices and nutritional knowledge amongst university nursing students, Eastern Cape, South Africa. *African Journal of Primary Health Care Family Medicine*, 4(1), 1-9.
- Von Ah, D., Ebert, S., Ngamvitroj, A., Park, N., & Kang, D.H. (2004). Predictors of health behaviours in college students. *Journal of Advanced Nursing*, 48(5), 463–474.
- Wardle, J., & Beales, S. (1986). Restraint, body image and food attitudes in children from 12 to 18 years. *Appetite*, 7(3), 209–217. doi:10.1016/S0195-6663(86)80026-5
- Wassenaar, D., Le Grange, D., Winship, J., & Lachenicht, L. (2000). The prevalence of eating disorder pathology in a cross-ethnic population of female students in South Africa. *European Eating Disorders Review*, 8, 225-236.
- Wiggins, S., Potter, J., & Wildsmith, A. (2001). Eating Your Words: Discursive Psychology and the Reconstruction of Eating Practices. *Journal of Health Psychology*, 6(1), 5–15.
- Wyer, R. S. (2014). *The automaticity of everyday life: Advances in social cognition* (Vol. 10). Psychology Press.

SECTION 3: CRITICAL REFLECTION

In this section a discussion of the researcher's personal reflection of the experience of the complete research process will be provided.

Critical Reflection

A personal critical reflection of the research process including the data collection, the data analysing and the research findings of this qualitative study will be discussed. This is important to do, because researchers have been indicated to play a big role in shaping the qualitative research process (Malterud, 2001). These aspects of the research process will now be further reflected on in this section.

Data Collection

“The subjects of inquiry in the social sciences can talk and think. Unlike a planet, or a chemical, or a lever, if given a chance to talk freely, people appear to know a lot about what is going on” (Bertaux ,1981, p. 39; as cited in Seidman, 2006, p.8).

As a first time researcher, the thought of conducting my own research initially terrified me. I had to not only plan a study and make the necessary arrangements, but now I also had to collect the data that I will need, which, to be honest, seemed like quite a daunting and time consuming task. The interviews were scheduled with all the participants who were willing to participate and who signed the informed consent forms and the semi-structured interview questions were set. To my surprise conducting the interviews was actually a very enlightening and enjoyable experience.

Establishing rapport with participants, making one to one contact, as well as having the privilege to explore another person's experiences and the meanings they attached to it, reminded me of a therapeutic context. As I am currently completing my MSc degree in

Clinical Psychology, viewing the interviews in this manner and changing my perspective of the interview process also enabled me to be more emerged and comfortable in the process. I also believe that I was able to utilise empathic listening and reflective skills during the interviews, which helped to aid the process by shifting the focus from merely collecting data to really wanting to gain a greater understanding of the participant's subjective experience. Sammut Scerri, Abela and Vetere (2012) compared successful interviewing to the work of therapists and counsellors and they believe that interviews can provide a reflective space within which participants can create meanings for their past experiences. This idea also seems to resonate with me.

It was however important for me to remember what my goal for meeting with the participants was to conduct research and not to do therapy. Thus, I arranged for outside psychological services to be at hand if at any time I saw that it might be necessary for a participant to receive therapy or to be debriefed so as to ensure that I kept purely to my role as researcher throughout this process. Furthermore, by establishing the semi-structured interview questions before hand (various committees reviewed and approved the set questions before they were used), I believe this helped to keep me grounded in my capacity as researcher and it also helped to limit possible research bias that could have influenced the data collection process. I tried to prevent any of my own subjective feelings or opinions from influencing the participants' experiences by using open-ended questions throughout the interview process. It was so interesting to hear the participants' stories and their enjoyment of the interview process and enthusiasm also refuelled my passion for the topic and made it easier for me as a first time researcher to conduct the interviews.

Data Analysis and Interpretation

Malterud (2001, p. 483) stated the following with regard to tasks that are important for a qualitative researcher:

The researcher must be prepared to use strategies for: questioning findings and interpretations, instead of taking them for granted; assessing their internal and external validity, instead of judging them obvious or universal, and thinking about the effect of context and bias, without believing that knowledge is untouched by the human mind.

Firstly, it was important to familiarise myself with the data and to also take into account the university context the participants find themselves in. The next step was to start with the thematic analysis process (Clarke & Braun, 2013). Familiarising myself with the data, coding the data and finally creating themes were very time consuming tasks, especially for a first time researcher. After the coding process I made use of mind maps to help simplify and visually represent the data. Choy (2014) stated that one of the weaknesses of conducting qualitative research is the labour intensive data analysis procedures that are required. I agree with the labour intensive part of this statement but I don't necessarily see this as a weakness. I found that by really immersing myself in the data and codes, I was ultimately able to identify themes that I would have missed if this process was not followed thoroughly. Editing and refining my themes also took quite some time as I wanted to phrase the themes correctly to accurately portray the understanding I gained from the data. Identifying the themes from the data made me feel as if my study has come 'alive' and this process was really gratifying.

Throughout this process it really also helped to be able to have regular contact with my research supervisor as he helped to guide me. Furthermore, having him also go through

the data and to check the themes I have identified, reassured me that I completed the thematic analysis process correctly. The security of being able to collaborate with him, to have a second opinion and his support really enabled me to feel more confident about the research process, especially the data analysis.

Haraway (1991) described the importance of taking the researchers impact into consideration to try and account for personal bias as far as possible. This article emphasised that the researcher should reflect on and be aware of possible bias. Even though we can't eliminate the researchers' effect completely, we can try to be as objective as possible by reflecting constantly on our own impact and beliefs. Firstly, I had to be aware of possible expectations I had of the findings as I did at one stage feel as if I could anticipate some of the results that I might find. Thus, it was important for me to take note of this bias and to confront it in order to prohibit this from influencing the data analysis process and findings. Furthermore, having a research supervisor who was also actively involved with and monitoring the research process, helped to limit any possible personal biases that might have led to subjectivity corrupting the accuracy of the results.

In qualitative research the different perspectives and backgrounds of researchers will influence the manner in which they analyse data and the findings of a study. This, however, is said not to be a failure of reliability, but rather an aspect that increases the in-depth understanding of certain phenomena that was researched (Malterud, 2001).

Findings

The aim of my study was to explore the what, why and how with regard to the role of psychological aspects in eating behaviour (Renner et al., 2012). After the identification of the themes, I was very curious to start to further explore other literature available on psychological aspects and eating to determine to what extent my research findings agree with or differ from

current literature. I was also especially interested to try and see if some of the reasons the participants gave for their eating behaviour (the why aspect of my study) might also be verified or further explained by other previous studies. One finding that especially fascinated me was the fact that depending on the severity of distress participants experienced, their eating behaviours were influenced differently. After I started consulting further research, I was amazed to find studies that concurred with my findings by explaining the physiological mechanisms at work (see Tice, Bratslavsky, & Baumeister, 2001; Salerno, Laran, & Janiszewski, 2014). The reciprocal influence of psychological and physiological facets of human beings have always interested me, hence I also chose to do further research on this relationship (psychological and eating {physiological}) and the interrelatedness of these aspects was evident throughout this study.

The fact that I have been a university student at North-West University, Potchefstroom Campus for nearly six years definitely motivated me to conduct my research in this context. I studied BSc Psychology and Nutrition pre-grad and having knowledge of both fields made me believe that an investigation of the influence on one another is necessary. Most of the literature available in a South African context on eating related topics have a pathological focus (see Delport & Szabo, 2008; Kirsten, 2012; Lee, 1993; Morris, 2008; Sproesser, 2011; Szabo & Le Grange, 2001) and I am of the opinion that the best ‘treatment’ for eating related problems is ‘prevention’ for which I believe we need a more non-pathological approach as this study provided. From this study’s findings I realised once again how complex human beings are; even the seemingly simple daily task of eating is influenced by various personal (such as emotions and own perceptions) and social factors (opinions of friends’, family, and boyfriends). Furthermore, the meaning of food (way to show love, social activity and as a part of traditions), as well as the various functions it fulfils

also really helped to broaden my view and knowledge on this topic and made me be more mindful of my own food choices as well.

“I think metaphorically of qualitative research as an intricate fabric composed of minute threads, many colours, different textures, and various blends of material. This fabric is not explained easily or simply” (Creswell, 2013, p. 42). This quote captures metaphorically exactly how I found my experience of doing qualitative research. I view the findings of this study as a multi-coloured and multi-textured mat that has all been woven together in such a manner that they create something unique that has never before been seen. It is my hope that the findings of this study will help to further explain some of the eating behaviour noted in this vulnerable population group. Furthermore, I hope that the knowledge gained from this study may lead to other studies being conducted to further explore some domains identified. With regard to prevention programs, I hope that some of the findings may guide possible elements that should be addressed in these programs. I realise that my study has only made a very small contribution to current South African literature on eating and psychology related aspects, but I hope that it serves as the start of a foundation for further research to be conducted in this field, because there is a dire need for this.

On a more personal level, this research process improved not only my knowledge of this field and my academic skills, but it also sparked my curiosity and reignited my passion for psychology and how it is interwoven into all aspects of our lives. This research process challenged me to attempt something I had never considered doing before and by pushing the boundaries of my comfort zone, I believe I have now, as a result, permanently expanded it.

I would like to end off with a quote I feel encompasses the power of food:

“People may very well choose to trade off years of their life, or the possibility of disease or injury, in exchange for the current pleasure, excitement, or stress relief they get from food” - Jacob Sullum

References

- Choy, L. T. (2014). The strengths and weaknesses of research methodology: comparison and complimentary between qualitative and quantitative approaches. *Journal Of Humanities And Social Science, 19*(4), 99-104.
- Clarke, V., & Braun, V. (2013). Teaching thematic analysis: Overcoming challenges and developing strategies for effective learning. *The Psychologist, 26*(2), 120-123.
- Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches* (3rd ed.). Los Angeles, CA: SAGE Publications.
- Haraway, D. (1991). Situated knowledge: The science question in feminism and the privilege of partial perspective. In D. Haraway (Ed.), *Simians, cyborgs, and women: The reinvention of nature* (pp.183–201). New York: Routledge.
- Malterud, K. (2001). Qualitative research: Standards, challenges, and guidelines. *The Lancet, 358*, 483–488.
- Renner, B., Sproesser, G., Strohbach, S., & Schupp, H. (2012). Why we eat what we eat. The Eating Motivation Survey (TEMS). *Appetite, 59*, 117–128.
- Salerno, A., Laran, J., & Janiszewski, C. (2014). Hedonic eating goals and emotion: When sadness decreases the desire to indulge. *Journal of Consumer Research, 41*, 135-151. doi: 10.1086/675299
- Sammut Scerri, C., Abela, A., & Vetere, A. (2012). Ethical dilemmas of a clinician/ researcher interviewing women who have grown up in a family where there was domestic violence. *International Journal of Qualitative Methods, 11*(2), 102–112.

Seidman, I. (2006). *Interviewing as qualitative research- A guide for researchers in education and the social sciences* (3rd ed., pp.7-14). Teachers College Press, New York.

Tice, D. M., Bratslavsky, E., & Baumeister, R. F. (2001). Emotional distress regulation takes precedence over impulse control: If you feel bad, do it! *Journal of Personality and Social Psychology*, 80, 53–67.

COMPLETE REFERENCE LIST

References

- Adam, T. C. & Epel, E. S. (2007). Stress, eating and the reward system. *Physiology & Behavior*, *91*, 449–458. doi:10.1016/j.physbeh.2007.04.011
- Adams, C. E., & Leary, A. R. (2007). Promoting self-compassionate attitudes toward eating among restrictive and guilty eaters. *Journal of Social and Clinical Psychology*, *26*(10), 1120–1144.
- Alberts, H. J. E. M., Thewissen, R., & Raes, L. (2012). Dealing with problematic eating behaviour. The effects of a mindfulness-based intervention on eating behaviour, food cravings, dichotomous thinking and body image concern. *Appetite*, *58*, 847–851.
- Allon, V. (2014). *The role and trainability of executive function in the context of healthy eating*. Retrieved from ses.library.usyd.edu.au
- American Psychological Association [APA]. (2005). For a healthy mind and body. Retrieved from <http://www.apa.org/helpcenter/talk.aspx>
- Arnett, J. (2001) Conceptions of the transition to adulthood: Perspectives from adolescence through midlife. *Journal of Adult Development*, *8*, 133–143.
- Bellisle, F., Dalix, A. M., & Slama, G. (2004). Non-food-related environmental stimuli induce increased meal intake in healthy women. Comparison of television viewing versus listening to a recorded story in laboratory settings. *Appetite*, *43*, 175–180.
- Bennett, J., Greene, G., & Schwartz-Barcott, D. (2013). Perceptions of emotional eating behavior. A qualitative study of college students. *Appetite*, *60*, 187–192.
- Beumont, P. J., George, G. C. W., & Smart, D. E. (1976) “Dieters” and “vomitters” and “purgers” in anorexia nervosa. *Psychology Medicine*, *6*, 617-32.

- Beydoun, M. A. (2014). The interplay of gender, mood, and stress hormones in the association between emotional eating and dietary behavior. *The Journal of Nutrition*, 1139-1141. doi:10.3945/jn.114.196717.
- Bissel, P., Peacock, M., Blackburn, J., & Smith, C. (2016). The discordant pleasures of everyday eating: Reflections on the social gradient in obesity under neo-liberalism. *Social Science & Medicine*, 159, 14-21.
- Bjornelv, S., Nordahl, H. M., & Holmen, T. L. (2011). Psychological factors and weight problems in adolescents. The role of eating problems, emotional problems, and personality traits: the Young-HUNT study. *Social Psychiatry and Psychiatric Epidemiology*, 46, 353–362. doi: 10.1007/s00127-010-0197-z
- Bond, A. J., James, D. C., & Lader M. H. (1974). Physiological and psychological measures in anxious patients. *Psychological Medicine*, 4(4), 364-373.
doi:10.1017/S0033291700045803
- Brandimonte, M. A., Bruno, N., & Collina, S. (2006). Cognition. In P. Pawlik & G. d'Ydewalle (Eds.), *Psychological concepts: An international historical perspective* (pp. 1-22). Hove, UK: Psychology Press.
- Brooks, S., Prince, A., Stahl, D., Campbell, I. C., & Treasure, J. (2011). A systematic review and meta-analysis of cognitive bias to food stimuli in people with disordered eating behaviour. *Clinical Psychology Review*, 31(1), 37-51.
- Brown, C. (2008). The information trail of the 'Freshman 15'—a systematic review of a health myth within the research and popular literature. *Health Information and Libraries Journal*, 25, 1-12.
- Casotti, L. (2005). He who eats alone will die alone? An exploratory study of the meanings of the food of celebration. *Latin American Business Review*, 6(4), 69-84.
doi:10.1300/J140v06n04_04

- Choy, L. T. (2014). The strengths and weaknesses of research methodology: Comparison and complimentary between qualitative and quantitative approaches. *Journal of Humanities and Social Science, 19*(4), 99-104.
- Cilliers J., Senekal M., & Kunneke E. (2006). The association between the body mass index of first-year female university students and their weight-related perceptions and practices, psychological health, physical activity and other physical health indicators. *Public Health Nutrition, 9*, 234–243.
- Clarke, V., & Braun, V. (2013). Teaching thematic analysis: Overcoming challenges and developing strategies for effective learning. *The Psychologist, 26*(2), 120-123.
- Close, J. (2013). Women’s experience of comfort eating: An interpretative phenomenological analysis (Unpublished doctoral dissertation). University of Leicester.
- Covington, E. C. (2000). Psychogenic pain-What it means, why it does not exist, and how to diagnose it. *Pain Medicine, 1*, 287–294.
- Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches* (3rd ed.). Los Angeles, CA: SAGE Publications.
- Crombie, A. P., Ilich, J. Z., Dutton, G. R., Panton, L. B., & Abood, D. A. (2009). The freshman weight gain phenomenon revisited. *Nutrition Review, 67*(2), 83–94.
- Cruwys, T., Leverington, C. T., & Sheldon, A. M. (2016). An experimental investigation of the consequences and social functions of fat talk in friendship groups. *International Journal of Eating Disorders, 49*, 84–91. doi: 10.1002/eat.22446
- Daniels, S., Glorieux, I., Minnen, J., & van Tienoven, T. P. (2012). More than preparing a meal? Concerning the meanings of home cooking. *Appetite, 58*, 1050–1056.
doi:10.1016/j.appet.2012.02.040

- Davison, T. E., & McCabe, M. P. (2005). Relationships between men's and women's body image and their psychological, social, and sexual functioning. *Sex Roles, 52*, 463–475. doi:10.1007/s11199-005-3712-z.
- Deliens, T., Clarys, P., De Bourdeaudhuij, I., & Deforche, B. (2014). Determinants of eating behaviour in university students: A qualitative study using focus group discussions. *Bio-Med-Central Public Health, 14*, 53. doi:10.1186/1471-2458-14-53
- Delport, I., & Szabo, C. P. (2008). Eating disorders in South Africa: An inter-ethnic comparison of admission data. *South African Medical Journal, 98*(4), 272-274.
- Dovey, T. (2010). *Eating behaviour*. McGrawHill International.
- Edmonds, R. G. (2012). A new generation of eating disorders-not only for girls: Patients as partners brought to you by The South African Depression and Anxiety Group. *African Journal of Psychiatry, 15*(3), 208-210.
- Elsner, R. J. F. (2002). Changes in eating behavior during the aging process. *Eating Behaviors, 3*, 15-43.
- Ervin, R., Wang, C., Wright, J., & Kennedy-Stephenson, M. (2004). *Dietary intake of selected minerals for the United States Population: 1999–2000*. Hyattsville, MD: National Center for Health Statistics.
- Favaro, A., Ferrara, S., & Santonastaso, P. (2003). The spectrum of eating disorders in young women: A prevalence study in a general population sample. *Psychosomatic Medicine, 65*(4), 701–708. doi:10.1097/01.PSY.0000073871.67679.D8
- Finlayson, G., Cecil, J., Higgs, S., Hill, A., & Hetherington, M. (2012). Susceptibility to weight gain. Eating behaviour traits and physical activity as predictors of weight gain during the first year of university. *Appetite, 58*, 1091–1098.
- Fitzsimmons-Craft, E. E. (2011). Social psychological theories of disordered eating in college women: Review and integration. *Clinical Psychology Review, 31*, 1224–1237.

- Fitzsimmons-Craft, E. E., Bardone-Cone, A. M., Bulik, C. M., Wonderlich, S. A., Crosby, R., D., & Engel, S. G. (2014). Examining an elaborated sociocultural model of disordered eating among college women: The roles of social comparison and body surveillance. *Body Image, 11*, 488–500.
- Franzoi, S. L., Vasquez, K., Sparapani, E., Frost, K., Martin, J., & Aebly, M. (n.d.). *Exploring body comparison tendencies: Women are self-critical whereas men are self-hopeful*. Retrieved 2 June 2015 from epublications.marquette.edu/cgi/viewcontent.cgi?article=1083&context.
- Freeman, A. C., & Szabo, C. P. (2005). Eating disorders in South African males: A review of clinical presentation of hospitalized patients. *South African Journal of Psychiatry, 35*(4), 601.
- Fuchs, T., Steinhilber, A., & Dohnke, B. (2015). Apple or chocolate – Intentional and social reactive processes in eating behavior among adolescents. *Social Psychology, 46*(5), 255–264. doi: 10.1027/1864-9335/a000241
- Furnham, A., Badmin, N., & Sneade, I. (2002). Body image dissatisfaction: Gender differences in eating attitudes, self-esteem, and reasons for exercise. *The Journal of Psychology, 36*(6), 581-596.
- Gerrig, R. J., & Zimbardo, P. G. (2002). *Psychology and life*. Retrieved from <http://www.apa.org/research/action/glossary.aspx?tab=16>
- Gibson, E. L. (2006). Emotional influences on food choice: Sensory, physiological and psychological pathways. *Physiology and Behaviour, 89*, 53–61.
- Gitau, T. M. (2014). Eating attitudes, body image satisfaction, and self-esteem of South African urban adolescents: The impact of acculturation (Unpublished doctoral dissertation). University of Witwatersrand, Johannesburg.

- Goodman, L. (1992). From starving to stuffing: Profile on anorexics and bulimics anon. *Agenda*, 8(15), 28-32.
- Greenwald, A. G., & Banaji, M. R. (1995). Implicit social cognition: Attitudes, self-esteem and stereotypes. *Psychological Review*, 102(1), 4-27.
- Gresse, A., Steenkamp, L., & Pietersen, J. (2015). Eating, drinking and physical activity in Faculty of Health Science students compared to other students at a South African university. *South African Journal of Clinical Nutrition*, 28(4), 154-159.
- Griffin, C., & Phoenix, A. (1994). The relationship between qualitative and quantitative research: Lessons from feminist psychology. *Journal of Community and Applied Social Psychology*, 4, 287-298.
- Grimm, E. R., & Steinle, N. I. (2011). Genetics of eating behavior: Established and emerging concepts. *Nutrition Review*, 69(1), 52–60. doi:10.1111/j.1753-4887.2010.00361.x.
- Gupta, C. (2011). *The relation between body image satisfaction and self-esteem to academic behaviour in adolescents and pre-adolescents*. University of Manitoba.
- Haraway, D. (1991). Situated knowledge: The science question in feminism and the privilege of partial perspective. In D. Haraway (Ed.), *Simians, cyborgs, and women: The reinvention of nature* (pp.183–201). New York: Routledge.
- Haslam, S. A., Oakes, P. J., Reynolds, K. J., & Turner, J. C. (1999). Social identity salience and the emergence of stereotype consensus. *Personality and Social Psychology Bulletin*, 25, 809–818.
- Heart and Stroke foundation South Africa [HSF]. (2015). *National Obesity Week: South Africa's weighty problem*. Retrieved from <http://www.heartfoundation.co.za/media-releases/national-obesity-week-south-africa%E2%80%99s-weighty-problem>

- Hoek, H. W., & Van Hoeken, D. (2003). Review of the prevalence and incidence of eating disorders. *International Journal of Eating Disorders*, 34(4), 383-396.
- Hoerr, S. L., Bokram, R., Lago, B., Bivins, T., & Keast, D. R. (2002). Risk for disordered eating relates to both gender and ethnicity for college students. *Journal of the American College of Nutrition*, 21, 307–314. doi:10.1080/07315724.2002.10719228
- Howland, M., Hunger, J., & Mann, T. (2012). Friends don't let friends eat cookies: Effects of restrictive eating norms on consumption among friends. *Appetite*, 59(2), 505–509. doi:10.1016/j.appet.2012.06.020
- Hudson, J. I., Hiripi, E., Pope, H. G., & Kessler, R. C. (2007). The prevalence and correlates of eating disorders in the National Comorbidity Survey Replication. *Biological Psychiatry*, 61(3), 348–358. doi: 10.1016/j.biopsych.2006.03.040
- Keel, P. K., Forney, J. K., Brown, T. A., & Heatherton, T. F. (2013). Influence of college peers on disordered eating in women and men at 10-year follow-up. *Journal of Abnormal Psychology*, 122(1), 105–110. doi: 10.1037/a0030081
- Keltner, D., & Gross, J. J. (1999). Functional accounts of emotions. *Cognition and Emotion*, 13(5), 467–480.
- Kirsten, D. K. (2012). Positive psychology and subclinical eating disorders in South Africa: A literature review (Unpublished doctoral dissertation). North-West University, Potchefstroom.
- Kirsten, D. K., & Du Plessis, W. F. (2008). Lived experiences of subclinical eating disorder: Female students' perceptions. *Journal of Psychology in Africa*, 18(4), 561-572.
- Konttinen, H., Männistö, S., Sarlio-Lähteenkorva, S., Silventoinen, K., & Haukkala, A. (2010). Emotional eating, depressive symptoms and self-reported food consumption. A population-based study. *Appetite*, 54(3), 473–479. doi:10.1016/j.appet.2010.01.014

- Krefting, L. (1991). Rigor in qualitative research: The assessment of trustworthiness. *The American Journal of Occupational Therapy, 45*(3), 214-222.
- Kruger, S. (2014). The double burden of underweight and overweight in South African adolescents: a challenge and an opportunity for nutritionists and dieticians. *South African Journal of Clinical Nutrition, 27*(1), 1-8.
- Laidlaw, N. A. (2014). International practicums and nursing students' understanding of culture: An interpretive description (Unpublished master's thesis). University of Columbia, Vancouver, Canada.
- Larson, N. I., Neumark-Sztainer, D., Hannan, P. J., & Story, M. (2007). Trends in adolescent fruit and vegetable consumption, 1999–2004: Project EAT. *American Journal of Preventive Medicine, 32*, 147–150. doi: 10.1016/j.amepre.2006.10.011
- Lee, N. (1993). Eating disorders in South Africa. *South African Medical Journal, 83*(7), 552-552.
- Le Grange, D., Telch, C. F., & Tibbs, J. (1998). Eating attitudes and behaviors in 1,435 South African Caucasian and non-Caucasian college students. *American Journal of Psychiatry, 155*(2), 250-254.
- Le Grange, D., Louw, J., Russel, B., Nel, T., & Silkstone, C. (2006). Eating attitudes and behaviours in South African adolescents and young adults. *Transcultural Psychiatry, 43*(3), 401-417.
- Lincoln, Y. S., & Guba, E. (1999). Establishing trustworthiness. In A. Bryman & R. G. Burgess (Eds.), *Qualitative research* (3rd ed., pp. 397-444). London: SAGE
- Lindner, D., Hughes, A., & Fahy, R. (2008). Eating pathology and social comparison in college females. *North American Journal of Psychology, 10*, 445–462.
- Lowe, M. R., & Butryn, M. L. (2007). Hedonic hunger: A new dimension of appetite? *Physiology & Behavior, 91*, 432–439.

- Macht, M., & Simons, G. (2000). Emotions and eating in everyday life. *Appetite*, 35, 65-71.
doi:10.1006/appe.2000.0325
- Makino, M., Tsuboi, K. & Dennerstein, L. (2004). Prevalence of eating disorders: A comparison of Western and non-Western countries. *Medscape General Medicine*, 6, 49.
- Malterud, K. (2001). Qualitative research: Standards, challenges, and guidelines. *The Lancet*, 358, 483–488.
- Maree, K., & Pietersen, J. (2016). Sampling. In K. Maree (Ed.), *First steps In research* (2nd ed., pp.192-202). Pretoria: Van Schaik Publishers.
- Matthews, G., & Deary, I. J. (1998). *Personality traits*. Cambridge: Cambridge University Press.
- Mchiza, Z. (2014). Eating disorders in South African schools: A public health crisis that needs immediate intervention. *South African Journal of Clinical Nutrition*, 27(4), 185-186.
- Moore, D. C. (1993). Body image and eating behavior in adolescents. *Journal of the American College of Nutrition*, 12, 505-510.
- Morris, P. E. (2008). Acculturative stress and eating disorders in black adolescent females in Kwazulu-Natal, South Africa (Unpublished doctoral dissertation). University of Witwatersrand, Johannesburg.
- Mulligan, K., & Scherer, K. R. (2012). Toward a working definition of emotion. *Emotion Review*, 4(4), 345– 357. doi: 10.1177/1754073912445818
- National Institute of Mental Health's [NIH] guide. (2014). *Eating disorders: Facts about eating disorders and the search for solutions*. Retrieved from <https://www.nimh.nih.gov/health/publications/eating-disorders>

- Nieuwenhuis, J. (2016). Qualitative research design and data gathering techniques. In K. Maree (Ed.), *First steps in research* (2nd ed., pp.72-100). Pretoria: Van Schaik Publishers.
- Norris, D. L. (1979) Clinical diagnostic criteria for primary anorexia nervosa. *South African Medical Journal* 56, 987-993.
- North-West University (2015). *Student statistics of the North-West University*. Retrieved 2015 from http://www.nwu.ac.za/sites/www.nwu.ac.za/files/files/studentstats/GR_Student_statistics_of_the_North-West_University.pdf
- Okeyo, A. P. (2009). Eating practices, nutritional knowledge and body weight in nursing science students at the university of Fort Hare (Unpublished masters dissertation). University of Free State, Bloemfontein.
- Oxford English Dictionary. (2015). *Eat*. Retrieved from <http://www.oxforddictionaries.com/definition/english/eat>
- Perloff, R. M. (2014). Social media effects on young women's body image concerns: Theoretical perspectives and an agenda for research. *Sex Roles* 71, 363–377. doi: 10.1007/s11199-014-0384-6
- Petrie, T. A., Greenleaf, C., Reel, J., & Carter, J. (2009). Personality and psychological factors as predictors of disordered eating among female collegiate athletes. *Eating Disorders*, 17, 302–321. doi:10.1080/10640260902991160
- Pinto-Gouveia, J., Ferreira, C., & Duarte, C. (2014). Thinness in the pursuit for social safeness: An Integrative Model of Social Rank Mentality to explain eating psychopathology. *Clinical Psychology and Psychotherapy*, 21, 154–165.
- Popkin, B. M. (1994). The nutrition transition in low-income countries: An emerging crisis. *Nutrition Reviews*, 52, 285–298.

- Popkin, B. M. (2004). The nutrition transition: An overview of world patterns of change. *Nutrition Reviews*, *62*, 140–143.
- Prendergast, M. L. (1994). Substance use and abuse among college students: A review of recent literature. *Journal of American College Health*, *43*, 99-113.
- Quick, V. M., & Byrd-Bredbenner, C. (2013). Disturbed eating behaviours and associated psychographic characteristics of college students. *Journal of Human Nutrition and Dietetics*, *26*, 53–63. doi:10.1111/jhn.12060
- Reis, D. L., & Gray J. R. (2009). Affect and action control. In E. Morsella & P. M. Gollwitzer (Eds.), *Handbook of action control* (pp. 2-39). New York: Oxford University Press.
- Renner, B., Sproesser, G., Strohbach, S., & Schupp, H. (2012). Why we eat what we eat. The Eating Motivation Survey (TEMS). *Appetite*, *59*, 117–128.
- Renner, B., Sproesser, G., Stok, M., & Schupp, H. (2016). Eating in the dark: A dissociation between perceived and actual food consumption. *Food Quality and Preference*, *50*, 145–151.
- Revelas, A. (2013). Eating disorders are real treatable medical illnesses: Review article. *South African Family Practice*, *55*(3), 252-255.
- Robbeson, J. G., Kruger, H. S., & Wright, H. H. (2015). Disordered eating behavior, body image, and energy status of female student dancers. *International Journal of Sport Nutrition and Exercise Metabolism*, *25*, 344 -352.
- Rodríguez-Arauz, G., Ramírez-Esparza, N., & Smith-Castro, V. (2016). Food attitudes and well-being: The role of culture. *Appetite*, *105*, 180-188.
- Rozin, P. (1996). Towards a psychology of food and eating: From motivation to module to model to marker, morality, meaning, and metaphor. *Current Directions in Psychological Science*, *5*(1), 18-24.

- Salerno, A., Laran, J., & Janiszewski, C. (2014). Hedonic eating goals and emotion: When sadness decreases the desire to indulge. *Journal of Consumer Research*, *41*, 135-151. doi: 10.1086/675299
- Sammut Scerri, C., Abela, A., & Vetere, A. (2012). Ethical dilemmas of a clinician/ researcher interviewing women who have grown up in a family where there was domestic violence. *International Journal of Qualitative Methods*, *11*(2), 102–112.
- Sandelowski, M. (2000). Focus on research methods: Whatever happened to qualitative description. *Research in Nursing and Health*, *23*, 334-340.
- Sandelowski, M. (2010). What's in the name? Qualitative description revisited. *Research in Nursing and Health*, *33*, 77-84.
- Scherer, K. R., Schorr, A., & Johnstone, T. (2001). *Appraisal processes in emotion: Theory, methods, research*. New York and Oxford: Oxford University Press.
- Schupp, H. T., & Renner, B. (2011). Food deprivation. A neuroscientific perspective. In V. Preedy, R. Watson, & C. R. Martin (Eds.), *International handbook of behavior, food and nutrition* (pp. 2239–2257). New York: Springer-Press.
- Schurink, W., Fouché, C. B., & De Vos, A. S. (2011). Qualitative data analysis and interpretation. In A. S. De Vos, H. Strydom, C. B. Fouche, & C. S. L. Delport (Eds.), *Research at the Grass Roots: For the social sciences and human service professions* (4th ed., pp.397-423). Pretoria: Van Schaik Publishers.
- Seidman, I. (2006). *Interviewing as qualitative research- A guide for researchers in education and the social sciences* (3rd ed., pp.7-14). Teachers College Press, New York.
- Senekal, M., Steyn, N. P., Mashego, T. B., & Nel, J. H. (2001). Evaluation of body shape, eating disorders and weight management related parameters in black female students of rural and urban origins. *South African Journal of Psychology*, *31*(1), 45-53.

- Silva, A. S. F. (2007). The relationship between personality traits and eating pathology in adolescent girls. *Archives of Women's Mental Health, 10*(6), 285-292.
- Smolak, L. (2011). Body image development in childhood. In T. Cash & L. Smolak (Eds.), *Body image: A handbook of science, practice, and prevention* (pp.67-75). New York: Guilford.
- Spangler, D. L. (2002). Testing the cognitive model of eating disorders. The role of dysfunctional beliefs about appearance. *Behaviour Therapy, 33*, 87-105.
- Sproesser, G. (2011). Why we eat what we eat: Psychological influences on eating behavior (Unpublished doctoral thesis). University of Konstanz Mathematisch, Naturwissenschaftliche.
- Stapleton, P., & Whitehead, M. (2014). Dysfunctional eating in an Australian community sample: The role of emotion regulation, impulsivity, and reward and punishment sensitivity. *Australian Psychologist, 49*, 358–368. doi:10.1111/ap.12070
- Stice, E. (2002). Risk and maintenance factors for eating pathology: A meta-analytic review. *Psychological Bulletin, 128*, 825-848.
- Striegel-Moore, R. H., Seeley, J. R., & Lewinsohn, P. M. (2003). Psychosocial adjustment in young adulthood of women who experienced an eating disorder during adolescence. *Journal of the American Academy of Child and Adolescent Psychiatry, 42*(5), 587–593. doi:10.1097/01.CHI.0000046838.90931.44
- Swami, V., Airs, N., Chouhan, B., Leon, M. & Towell, T. (2009). Are there ethnic differences in positive body image among female British undergraduates? *European Psychologist, 14*, 288–296.
- Szabo, C. P. (2002). A cross-cultural study of eating attitudes in adolescent South African females: Possible implications for epidemiology of eating disorders in South Africa (Unpublished doctoral dissertation). University of Witwatersrand, Johannesburg.

- Szabo, C. P., & Allwood, C. W. (2004). A cross-cultural study of eating attitudes in adolescent South African females. *World Psychiatry, 3*(1), 41-44.
- Szabo, C. P., & Le Grange, D. (2001). Eating disorders and the politics of identity: The South African experience. *Eating Disorders and Cultures in Transaction, 24-33*.
- Thompson, J.K., Roehrig, M., Cafri, G., & Heinberg, L.J. (2005). Assessment of body image disturbance. In J.E. Mitchell & C.B. Peterson (Eds.), *Assessment of eating disorders* (pp. 175–202). New York: Guilford Press.
- Thorne, S., Kirkham, S. R., & O’Flynn-Magee, K. (2004). The analytic challenge in interpretive description. *International Journal of Qualitative Methods, 3*(1), 1-11.
- Tice, D. M., Bratslavsky, E., & Baumeister, R. F. (2001). Emotional distress regulation takes precedence over impulse control: If you feel bad, do it! *Journal of Personality and Social Psychology, 80*, 53–67.
- Tosevski, D. L., Milovancevic, M. P., & Gajic, S. D. (2010). Personality and psychopathology of university students. *Current Opinion in Psychiatry, 23*(1), 48–52.
- Tylka, T. L., & Hill, M. S. (2004). Objectification theory as it relates to disordered eating among college women. *Sex Roles, 51*, 719–730. doi:10.1007/s11199-004-0721-2
- Tylka, T. L., & Subich, L. M. (2004). Examining a multidimensional model of eating disorder symptomatology among college women. *Journal of Counselling Psychology, 51*, 314–328. doi:10.1037/0022-0167.51.3.314.
- Vadeboncoeur, C., Townsend, N., & Foster, C. (2015). A meta-analysis of weight gain in first year university students: is freshman 15 a myth? *Bio-Med-Central Obesity, 2*(22), 1-9. doi: 10.1186/s40608-015-0051-7
- Van den Berg, V. L., Okeyo, A. P., Dannhauser, A., & Nel, M. (2012). Body weight, eating practices and nutritional knowledge amongst university nursing students, Eastern

- Cape, South Africa. *African Journal of Primary Health Care Family Medicine*, 4(1), 1-9.
- Von Ah, D., Ebert, S., Ngamvitroj, A., Park, N., & Kang, D.H. (2004). Predictors of health behaviours in college students. *Journal of Advanced Nursing*, 48(5), 463–474.
- Wardle, J., & Beales, S. (1986). Restraint, body image and food attitudes in children from 12 to 18 years. *Appetite*, 7(3), 209–217. doi:10.1016/S0195-6663(86)80026-5
- Wassenaar, D., Le Grange, D., Winship, J., & Lachenicht, L. (2000). The prevalence of eating disorder pathology in a cross-ethnic population of female students in South Africa. *European Eating Disorders Review*, 8, 225-236.
- Wiggins, S., Potter, J., & Wildsmith, A. (2001). Eating Your Words: Discursive Psychology and the Reconstruction of Eating Practices. *Journal of Health Psychology*, 6(1), 5–15.
- World Health Organization [WHO]. (2015, January). *Country statistics and global health estimates by WHO and UN partners*. Retrieved from http://who.int/gho/mortality_burden_disease/en/
- Wyer, R. S. (2014). *The automaticity of everyday life: Advances in social cognition* (Vol. 10). Psychology Press.
- Zeeni, N., Gharibeh, N. & Katsounari, I. (2013). The influence of sociocultural factors on the eating attitudes of Lebanese and Cypriot students: a cross-cultural study. *Journal of Human Nutrition and Dietetics*, 26, 45–52. doi:10.1111/jhn.12059

ADDENDUM

Quotes: Afrikaans translation to English

(Please take note: Quotes were translated by a trained linguist)

Theme 1: Eating and its Social Importance

Part of their social activities

“... When I am a bit bored ... and I do not have something to do – I will for example say to my friend: ‘Come on, let’s go – let’s just go there [restaurant].’ There’s nothing really that you can do that does not involve eating.” (P10)

“... As ek bietjie verveeld is... en ek het nou niks om te doen nie- dan sal ek byvoorbeeld ook nou vir my vriendin sê: “Hoor hier, kom ons gaan-- kom ons gaan net daarnatoe [eetplek].” Daar’s nou nie rêrig iets wat jy kan doen wat nie eet behels nie.” (P10)

“If I just sit and do nothing with friends over the weekend, I eat very unhealthily ... We are not going to buy veggies, are we, we are going to buy a packet of slap chips.” (P3)

“As ek die naweek saam met vriende net sit en niks doen nie, dan eet ek baie ongesond... Ons gaan mos nou nie gaan staan en gaan groente koop nie, ons gaan ’n pak slap chips koop” (P3)

“But it is not even that one is always hungry, or that one wants to necessarily eat – it is just there. It is always there when we get together, there is always something to eat.” (P6)

“Maar dis nie eers dat mens altyd honger is of noodwendig wil eet nie – dis net dáár. Dis altyd daar as mens kuier soos, daar is altyd iets om te eet.” (P6)

Way to show love and support

“It is, like: “Let’s go to the Wimpy [South African Restaurant] and then we can get out of the residence” or “Let’s go to Fiori’s [restaurant in Potchefstroom, South Africa] ...” (P 6)

“Dis soos: “Kom ons gaan Wimpy toe en dan kom ons uit die koshuis uit” of “Kom ons gaan Fiori’s [restaurant in Potchefstroom] toe ...” (P 6)

“Yes, I have a boyfriend who is studying far away ... then sometimes it is just like, ugh...on those days you just cry about everything. Then a friend will bring you a sweet.” (P 13)

“Ja, ek het ‘n kêrel wat ver swot... dan partykeer is jy net soos, ugh. En uhm, ag, dan huil jy sommer net oor alles daardie dae. Dan sal ‘n vriendin vir jou ‘n sweetie bring” (P 13)

“... The fact that I will go with my friends and we have cake – to chat to them and ... just the fact that it is something nice for now and I am sort of not allowed to eat that... then it makes me feel better for some reason or other.” (P 9)

“... Die feit dat ek byvoorbeeld saam met my vriendinne gaan en ons eet koek – om met hulle te gesels en... maar net die feit dat dit nou iets lekker is en ek mag dit soort van nie eet nie... dan maak dit my beter voel vir een of ander rede.” (P 9)

“... I really like to spoil other people ... Like, hey, it’s okay, I will buy you a milky, or whatever ... Also, if other people come to me, I like to make them something nice ... there is kind of a gift to giving food to people ... Always, if one thinks you are spoiling someone, then you think about: okay, I will make them a dessert or something.” (P 7)

“... Dis vir my baie lekker om ander mense te bederf... Soos, hey, dis oukei, kom ek koop vir jou ‘n melkie, of wat ook al... As ander mense na my toe kom, ook, ek hou daarvan om vir hulle iets lekkers te maak... daar is nogals soos ‘n gift om vir mense kos te gee... Altyd as mens dink, soos, jy bederf nou iemand, dan dink jy aan: oukei, ek maak nou vir hulle poeding of so.”(P 7)

Celebrations

“Are we going to Pienk Huis [Bakery in Potchefstroom, South Africa]?” “Not because we want to go and eat, because that is what we did for special occasions.” (P 6)

“Gaan ons Pienk Huis [Bakery in Potchefstroom] toe?” “Nie omdat ons wil gaan eet nie, omdat dit is wat ons gedoen het vir spesiale geleenthede. (P 6)

“Unless I go home, for example, and we have something on ... like a birthday or something, then it [eating behaviour] is very different. Then I will obviously eat cake and nice things, and then I will drink much more coffee as well ...” (P9)

“Tensy ek byvoorbeeld huis toe gaan en ons het iets aan... soos ‘n verjaarsdag of so iets, dan is dit [eating behaviour] baie anders. Dit sal obviously, soos, koek eet en lekker goeters en soos ek sal dan baie meer koffie drink ook....” (P9)

“Perhaps only at a party ... and then there are chips ... and then I will [eat] ... I think the fact that it is, like, casual ... I see chips as a casual snack ... You are relaxed ... and you enjoy yourself ... and then there are only chips and then I will eat them ... like people who smoke socially.” (P 2)

“Miskien net by ‘n partytjie... en daar’s chips... dan sal ek maar [eat]... Ek dink die feit dat dit soos, casual is... Ek beskou chips as ‘n casual snack... Jy is rustig... en jy geniet jouself... dan is daar nou maar net chips en dan eet ek dit nou maar... soos mense wat social smoke.” (P 2)

Theme 2: The Role of Others’ Perceptions in Eating Behaviour

Peers and friends

“...I have lost a lot of weight since last year and, uhm, then I realised, it is so much nicer when people say to me: ‘Hey, you look beautiful’ and ‘You are looking so good’ and everything, than it is to quickly finish off a piece of cake.” (P 13)

“...Ek het al baie gewig verloor van laasjaar af en, uhm – toe besef ek, dis eintlik vir my soveel lekkerder dat mense vir my sê: “Hoor hier, jy lyk mooi” en “Jy lyk so goed” en als, as wat dit is om so vinnig ‘n stuk koek op te eet.” (P 13)

“Sometimes I feel humiliated, because they will comment on that ... For example, before we go out I will make sure to eat something to make me feel full so that I will not be tempted to when we [when eating out]. Or for example I will order a pizza, but I will eat only two slices ... Then they see that I also order something, then they cannot totally humiliate me about that.” (P 5)

“Partykeer voel ek verneder, want hulle sal kommentaar lewer daarop... Voor ons byvoorbeeld uitgaan dan sal ek seker maak ek eet iets om my te laat vol voel sodat ek nie in die versoeking geplaas word as ons [uiteet]... Of ek sal ook ‘n pizza bestel, maar ek sal byvoorbeeld net twee skyfies eet... Dan sien hulle as ek ook iets bestel, dan kan hulle my nie heeltemal verneder daaroor nie.” (P 5)

“The moment that you ... tell someone that you are on a diet ... then they are, like, why? ... in a social environment ... that we all eat together, or something like that, then you are pushed and everyone is, like: why are you not eating? ... Then it is awkward, because now you have to tell everybody ... And then, sometimes people are, like ...very judgy.” (P 13)

“Die oomblik wat jy... vir iemand se jy’s op ‘n dieet... dan’s hulle soos, hoekom?... in ‘n sosiale omgewing... wat jy nou almal saam eet of so iets dan is jy nou gepush en almal is, soos: hoekom eet jy nie?... Dan is dit awkward, want dan moet jy nou vir hulle sê... En dan, partykeer is mense soos... Baie judgy.” (P 13)

“On campus it is very, like, judgemental, in a way. So you have to eat healthy for other people so that they think you are putting in some effort.” (P 8)

“Op kampus is dit baie, soos, judgmental, half. So jy moet ook gesond eet vir ander mense sodat hulle dink jy doen moeite.” (P 8)

“They are probably lazy ... to eat healthily ... Like, because people come out of the SS [Student Centre at North-West University, Potchefstroom Campus, South Africa] and then they are a bit overweight and then they have something like nuggets ... Then I think ... you are overweight already and then you buy that.” (P 8)

“Hulle is seker lui... om gesond te eet... Soos want dan kom mense uit die SS [studente dentrum, Potchefstroom] uit en dan is hulle nogals bietjie oorgewig en dan het hulle soos nuggets... Dan dink ek... julle is al klaar oorgewig en dan koop julle nog dit ook.” (P 8)

“I sometimes also gain a bit of weight, and when someone notices that, I freak out completely, and then I go on a hunger strike ... They will never tell you: ‘Hey, you are really looking good’. They will say: ‘Ooh, you’ve gained some weight’ ... In my mind it is: I am getting fat ... It then influences my eating habits in the way of ... it is, like, breaking one down emotionally ...” (P 1)

“Partymaal dan tel ek dalk bietjie gewig op, en as iemand dit half notice, dan freak ek soos heeltemal uit, en dan, gaan ek op ‘n eetstaking... Hulle sal nooit vir jou sê: “Hoor hier, joh, jy lyk dan nou goed” nie. Hulle sal soos wees van: “Oe, jy’t gewig opgetel” ... In my brein is dit van: ek is besig om vet te word... Dit beïnvloed my eetgewoontes dan op die manier van... dit, soos, breek mens half emosioneel af...” (P 1)

Partners

“If you are in a relationship and you are in that person’s presence the whole time and you have to look beautiful the whole time ... It is definitely a kind of pressure.” (P 8)

“As wat jy heeltyd in ‘n verhouding is en jy is die heeltyd in daardie mens se presence en jy moet die heeltyd mooi lyk... Dit is definitief ‘n tipe pressure.” (P8)

“I think it can, because one wants to look good for the other one, and you want the other person to be proud of you, like, that you can say: ‘wow, that is my boyfriend’ you will want him to say that about you. So I think it definitely has an influence.” (P 13)

“Ek dink dit kan want mens wil goed lyk vir die ander een, en jy wil hê die ander een moet so trots wees, soos, wat jy kan sê: ‘sjoe, daai is my ou’ wil jy tog hê hy moet dit van jou kan sê. So ek dink definitief dit het ‘n invloed.’” (P 13)

“Where I do not have a boyfriend at the moment, I feel I have to exercise ... like make myself beautiful so that I can get someone ...” (P 9)

“Waar ek nou nie ‘n kêrel het nie, voel ek moet oefen ... soos, myself mooi maak sodat ek iemand kan kry...” (P 9)

“Any guy wants a girl with kind of a beautiful body or whatever” (P10)

“Enige ou wil mos nou maar ‘n redelike mooi lyfie meisie hê of whatever” (P10)

“Because I do not want to be that one who always says: ‘Oh no, I cannot eat that now; let me eat my salad’ ... I think it can be very irritating for a person if you are always with them and they enjoy eating nice food ... and then the whole time you are, like: ‘no thank you; no thank you’.” (P 10)

“Want ek wil nou nie daardie een wees wat altyd sê: “Ag, nee, ek kan nou nie dit eet nie; laat ek nou maar my slaai eet”... ek dink dit kan baie irriterend raak vir ‘n persoon as jy die heelyd saam met hulle is en dis vir hulle so lekker om lekker te eet... en dan is jy net heelyd, soos: ‘nee, dankie; nee, dankie.’” (P10)

“I think so ... my girl friends who are in relationships and... when I was in a relationship, like, your boyfriend spoils you a lot ... and you don’t want to tell him, no, you don’t want to eat that ... then you ... eat a bit worse.” (P 9)

“Ek dink so... my vriendinne wat in verhoudings is en... toe ek in ‘n verhouding was – soos, jou kêrel bederf jou baie... en jy wil ook nou nie vir hom sê, nee, jy wil nie dit eet nie – so dan... eet jy bietjie slegter.” (P 9)

Parents

“Like, I know my mother and father will be very hard on me ... So, that is why I do not want to become fat also, sort of, because I do not want people to change towards me.” (P 8)

“Soos, ek weet my ma-hulle sal baie hard op my wees... So, dis hoekom ek ook nie, half, wil vet raak nie, want ek wil nie hê mense moet teenoor my verander nie.” (P8)

“It always was something like ‘you shouldn’t gain weight’, and I know that my mother was like that. My mother started gaining her weight at university and she regularly reminds me – she doesn’t want me to follow in her footsteps.” (P 5)

“Dit was vir my altyd nogals ‘n ding van “jy moenie gewig optel nie,” en ek weet my ma was so. My ma het op universiteit... haar gewig begin optel, so sy herinner my gereeld – sy wil nie hê ek moet selfde voetspore as sy trap nie.” (P5)

Theme 3: The Reciprocal Role of Self-perceptions, Eating Behaviour and Social-media Self-perceptions’ role in eating behaviour

“I don’t like gaining weight. So it also had a great influence in this [eating behaviour]. It is uncomfortable and you don’t feel like yourself any more, your personality changes ... I became very withdrawn ... for example I would not go to Draak [restaurant on North-West University, Potchefstroom Campus, South Africa] with my friends ... I’m not comfortable to sit with people, thinking: ‘Okay, how do my arms look now’... It was all about, what they think of me, like: do I look bad in these clothes or whatever.” (P9)

“Dit is nie lekker om gewig op te tel nie. So dit het ook ‘n baie groot invloed in dit [eating behaviour] ook gehad. Dit is ongemaklik en jy voel nie meer soos jouself nie, jou

persoonlikheid verander... ek het baie, teruggetrokke geraak... ek sou nie saam met my vriende... Draak [restaurant in Potchefstroom] toe gaan byvoorbeeld nie... Ek is nie gemaklik om by mense te sit en te dink: "oukei, hoe lyk my arms nou" nie... Dit het maar gegaan oor, wat hulle van my dink, soos: lyk ek nou sleg in hierdie klere of wat ook al." (P9)

"If I look at the amount of weight that I gained ... it's not as if it was so terrible – like twenty kilograms or something, but it was very psychological for me ... People did not really talk about that, it was only in my head that I thought people talked about that ..." (P9)

"As mens kyk na die hoeveelheid gewig wat ek opgetel het... dit was nou nie verskriklik – soos, twintig kilogram of iets nie, maar dit was vir my baie sielkundig... Mense het nie regtig gepraat daaroor nie, dit was nou maar net in my kop wat ek gedink het mense praat daaroor..." (P9)

"Since one came to campus, and so on, you see beautiful girls and then you also want to be beautiful, thin like the others ... So I think this is how you see yourself..." (P8)

"Vandat mens mos nou op kampus is, en so, jy sien mos nou maar mooi meisies en dan wil jy ook so mooi wees; maer wees soos die ander... So ek dink dis maar hoe jy jouself sien..." (P8)

English participant's quote:

"A friend of mine, she's so obsessed with her body ever since secondary school... She has this sexy, round, Kim Kardashian booty; thin waist...But, she still has insecurities. She still thinks that she's not enough... you can look at yourself in the mirror and say: 'oh, but, you know, I've achieved this body', but there will always be a better body...At the end of the day you are just never going to get the satisfaction... Even if a thousand of people who are saying your body is perfect...." (P12)

“In general: when you eat and you are a girl, you cannot help but think: Okay, but gee, this may not be the healthiest thing for me now; or, oh, my skin looks so bad, perhaps I should not eat chips now; or ahhh, I had some fudge yesterday, perhaps I should not buy fudge today ... that always plays a role – I don’t think there is a girl who can say that she eats without thinking about ten thousand other things as well.” (P6)

“Oor die algemeen: as jy eet en jy is ‘n meisie, jy kan nie help om te dink: oukei, maar jis, dis dalk nie die gesondste ding vir my nou nie; of, ag, my vel lyk so sleg, dalk moet ek nie nou chips eet nie; of aaa, ek het gister fudge geëet, dalk moet ek nou nie vandag fudge koop nie... daardie speel maar altyd ‘n rol – ek dink nie daar is ‘n meisie wat kan sê sy eet sonder om aan tienduuisend ander goed ook te dink nie.” (P6)

“Your self-image probably plays a role. Like ... automatically, you do not want to look bad; you do not want to be fat, because it is not beautiful according to, once again, the world. So, it is, I think, your self-image that causes you rather not to eat chips.” (P6)

“Jou selfbeeld speel seker maar ‘n rol. Soos... outomaties wil jy nie sleg lyk nie; jy wil nie vet wees nie, want dit is nie mooi volgens, weereens, die wêreld nie. So, dit is maar, ek dink, jou selfbeeld wat maak dat jy eerder nie sal chips eet nie.” (P6)

“I do not like my skin breaking out. For me that is really bad...It just does not look good to me ... and then it feels a bit like, I do not look after myself ... And that is not nice, because ... it makes me feel very self-conscious.” (P1)

“Ek hou nie daarvan dat my vel moet uitslaan nie. Dis vir my baie erg... Dit lyk net nie vir my mooi nie... en dit voel dan half vir my soos, ek kyk nie na myself nie... En dis nie lekker nie, want... dit laat my baie selfbewus voel.” (P1)

Eating behaviours’ role in self-perception.

“If one like ... eats healthily ... when you have finished eating, you feel like: Yes, okay, this was good.” (P1)

“As mens soos... gesond eet... as jy klaar geëet het dan voel jy soos: Hoor hier, oukei, hierdie was nou goed.” (P1)

“When I eat healthily then I just feel better as well ... In the evenings when I sit to do my assignment, then I think ... what I have eaten and then it just feels to me: today I have achieved something, because I did not eat a chocolate or I did not eat something that, uhm, I should not have eaten, something that is bad for me.” (P9)

“As ek nou gesond eet dan voel ek net ook beter... In die aande as ek nou sit en my taak doen, dan dink ek... wat ek geëet het en dan voel dit net vir my: vandag het ek, soos, iets bereik want ek het nou nie ‘n chocolate geëet nie of ek het nie nou iets geëet wat ek, uhm, nie moes eet nie wat nou sleg is vir my.” (P9)

“I am definitely angry with myself ... I feel disappointed, because ... I am working hard at this ... When I overindulge then it feels to me: “yuk, why did I do that now? Like, I did not need that now.” It makes me feel bad, emotionally and physically ... Yes, so, I think ... I am more angry with myself, just myself. But it is also ... to me as a person ... a kind of failure if one is like that ... because it starts with an eating habit and then later it affects many more things than what you could imagine.” (P7)

“Ek’s definitief kwaad vir myself... Ek voel teleurgesteld, want ... ek werk mos nou hard aan hierdie... As ek overindulge dan voel dit vir my: “jig, hoekom het ek dit nou gedoen? Soos, ek het nie dit nodig gehad nou nie”. Dit laat my sleg voel, emosioneel en fisies... Ja, so, ek dink... ek’s meer kwaad vir myself, eintlik net. Maar dis ook... vir my as persoon... ‘n tipe van failure as mens so is... Want dit begin by ‘n eetgewoonte en dan later dan beïnvloed dit baie meer goed as wat mens gedink het.” (P7)

Uhm, yes, [I feel good], like the first or second biscuit, but then later, then I just think: oh, why did I now ... this is ... actually such a vicious circle ... you peak and then you feel good,

and then suddenly, it is like pff ... or then you have eaten just that little bit too much ... and you do not feel well.” (P7)

“Uhm, ja [I feel good], soos die eerste of die tweede koekie, maar dan later, dan dink ek net: ag, hoekom het ek nou... dis--eintlik so ‘n bouse kringloop... jy peak dan voel jy lekker, en dan ewe skielik, dan is dit soos, pff... of dan het jy net daardie bietjie te veel geëet... en jy voel nie lekker nie.” (P7)

Social media’s role.

“Well, because society has this very definite image of what a girl should look like.” (P6)

“Wel, omdat die samelewing hierdie baie definitiewe beeld het oor hoe ‘n meisie moet lyk.” (P6)

English participant quote:

“I’d see this perfect body on Instagram, I’d be like: “oh my word, I want that. Like, can I have those thighs? ... Those abs?” So... that week, I am going to be eating salads...” (P12)

“When I see adverts – on the TV of this thin girl who ... is fit and beautiful ... then she only eats ... apples. Then I want to eat apples as well ... Not as a result of how they look ... just, you can see that they are confident ... then I think ... ‘I also want to be that confident’ ...” (P2)

“As ek advertensies sien--op die TV van hierdie maer meisie wat... fiks en mooi is... dan eet sy nou net... appels . Dan wil ek ook net appels eet... Nie oor die feit hoe hulle lyk nie... net, jy kan sien hulle is confident... dan dink ek...: ‘ek wil ook so confident wees’...” (P2)

“I think it is ... not necessarily what they say models should look like ... they look like matchsticks anyway, but like ... especially on Pinterest ... then they tell you how many [kilojoules] this contains ... then, if one, like, converts how they convert this from how much sugar or whatever it contains, then you think, like: ‘woah’.” (P1)

“Ek dink dit is... nie noodwendig wat hulle sê modelle moet so lyk... die goed lyk in elk geval soos stokkies, maar soos... veral op Pinterest... dan sê hulle nou vir jou, hoeveel [kilojoules] hierdie bevat... dan, as mens dit nou soos, omsit hoe hulle dit omsit van hoeveel suiker of wat ook al daarin is, dan dink jy net soos: ‘woah’.” (P1)

Theme 4: Personal Stressors and a Low Mood

Bad day/ feeling down.

“Let’s say I wrote a bad test ... or I had a bad day or something, then ... you sort of get the thoughts in your mind, of: ‘oh, why not buy myself an ice-cream then everything will be better’.” (P7)

“Sê nou maar ek het nou ‘n slegte toets gehad... of ek het nou ‘n slegte dag of so, dan... kry mens half daardie gedagtes in jou kop, van: ag, kom ek koop net vir my ‘n roomys en dan is alles beter .” (P7)

“Well, when I feel down ... then I will want to eat more, and nicer things – then I will not make an effort to eat the correct stuff; then I will just eat something that ... I like ... I think it is just to ... help you feel better again. That you feel, but this can make you feel better – things are not so bad. To give you courage.” (P11)

“Wel as ek af voel dan... sal ek nogals meer wil eet en lekkerder wil eet – dan sal ek nie probeer moeite doen om reg te eet nie; dan sal ek meer net iets eet wat... lekker is vir my... Ek dink dit is net om... jou weer beter te laat voel. Dat jy voel, maar hierdie kan jou beter laat voel – dinge is nie so erg nie. Om moed te gee.” (P11)

“Well, I think if you feel like that and it consumes your mind so much, then the first thing you think about ... like, you will grab literally anything in front of you. And eating is such a basic thing ... So, I think it is ... very quick thing to grab at ... I do not necessarily think it is just about eating, besides that food tastes nice, and that you want to eat ... It is more of a

mental thing, of: ‘Okay, I am feeling bad and this is what consumes my mind, so let’s grab anything that I can, just to help me feel better’ ...” (P7)

“Wel, ek dink as jy so voel en dit consume jou mind so dan, die eerste ding wat jy dink... soos, jy sal letterlik enigiets wat voor jou is gryp. En eet is so ‘n basic ding... So, ek dink dis... ‘n baie vinnige ding om na toe te gryp... Ek dink nie noodwendig dit gaan spesifiek oor die eet nie, behalwe nou dat kos is lekker en jy wil eet... Dit is meer ‘n mental ding, van: oukei, ek voel nou sleg en dit is nou wat my gedagtes consume, so kom ek gryp na enigiets wat ek kan om, om myself net te laat beter voel...” (P7)

Personal distress.

“I think if one is emotional ... then you put it [eating] aside, like totally aside, like ... if you and your boyfriend fought, or something, then the last thing that I want to do is eat. You want to, like lie in a little bundle on your bed ... So, I think it is then, perhaps because you are so emotional ... If one cries a lot, then you become nauseous, and I think then you do not want to eat.” (P1)

“Ek dink as mens soos, emosioneel is... dan skuif jy dit [eating] soos heeltemal uit, soos... as jy en jou kêrel nou soos, baklei het of iets, dan die laaste ding wat ek wil doen is eet. Jy wil soos, in jou bondeltjie gaan lê op jou bed... So ek dink dis dan, omdat jy dalk so emosioneel is... As mens baie huil dan raak jy naar, en ek dink dan wil jy nie eet nie.” (P1)

“I have a boyfriend in Stellenbosch, so I know when we fight, then... I do not want to eat. Then I become, a bit like, I do not want to – I do not have any appetite at all any longer.” (P5)

“Ek het ‘n kêrel in Stellenbosch, so ek weet as ons baklei, dan... wil ek nie eet nie. Dan raak ek so half soos, ek wil nie-- ek het net glad nie meer ‘n eetlus nie.” (P5)

“Usually when I am sad I get a pain in my stomach ... it feels as if my stomach is being eaten up from the inside, I experience a kind of a stress lump, and I think that causes that I do not want to eat, because it ... it’s uncomfortable. Because your stomach aches, and then when you do not feel well, you don’t want to eat.” (P4)

“Ek kry gewoonlik as ek soos hartseer is, kry ek soos pyn op my maag..... dit voel asof my maag van binne af opgeëet word, so ek kry so ‘n stres knop, en ek dink dit maak dat ek nie wil eet nie, want dit... dis ongemaklik. Want jou maag pyn, en dan as jy nie lekker voel nie dan wil jy nie eet nie” (P4)

“I think it is like ... as if the pain that I feel emotionally wants to go over to a physical pain, in a way... I think it is ... my way of compromising with the hurt that I feel ... So I think that it is just a way for me to, uhm, shift my focus and in a way shift my pain for a moment.” (P5)

“Ek dink dis soos... of die pyn wat ek voel emosioneel wil ek dan half oorsit in fisies, in ‘n mate... ek dink dis maar... my manier om te compromise met die seer wat ek het.... So ek dink dis maar net ‘n manier vir my om vir ‘n oomblik, uhm, my fokus te verskuif en half my pyn te verskuif.” (P5)

Theme 5: University Specific Aspects Role in Eating Behaviour

Academic stress and studying.

English participant quote:

“Most of the time you... sit down and study – you just slide with your chair to grab a packet of chips and you slide back to your desk... You don’t even... walk there... I think that’s why I gained weight, If whatever... I’m studying is giving me trouble. Because whenever I stress, I want something [food] in my mouth.” (P12)

“Sometimes before I study, then I think: ‘Oh, I ... am going to be busy studying the whole evening, then I just feel a bit better if I have something nice [food] with me.’” Well, I think I ... feel: ‘Okay, I deserve this packet of biscuits now.’ Like, if it will make me happy if I just ... can eat something nice that I like now.” (P7)

“Partykeer voordat ek leer, dan dink ek: ag, ek... gaan nou die hele aand besig wees om te leer, so dan voel ek net beter as ek ietsie [food] by my het wat lekker is. Wel, ek dink ek...voel: “oukei, ek verdien nou hierdie pak koekie’s”. Soos, asof dit my gelukkig maak as ek nou net... ‘n bietjie iets lekkers kan eet wat nou vir my lekker is.” (P7)

“Before a test ... if I have to sit down and I have to concentrate and I realise I do not have much time or so, then I will realise every time: Oh, no, I’d rather go and look for something to eat. It is kind of a way to ... get my mind away from my work. It is a distraction.” (P5)

“Voor ‘n toets... as ek nou moet gaan sit en ek moet konsentreer en ek besef ek het min tyd of so, dan sal ek elke keer... besef: O, nee, ek soek eerder iets om te eet. Dis half ‘n manier om... my kop weg te kry van my werk af. Dis ‘n distraction.” (P5)

“If you sit and study, or you just take a break ... then you just feel: gee, I am stressed; I cannot do this; I do not know what is going on here – let me just eat. It is something that you ... can do to just ... feel more in control ... I only know it makes me feel better.” (P6)

“As jy sit en leer, of jy vat net ‘n breek... dan voel jy net: jig, ek stres; ek kry nie hierdie goed gedoen nie; ek weet nie wat hier aangaan nie – kom ek eet net. Dis nog iets wat jy... kan doen sodat jy net... meer in beheer voel... Ek weet net dit laat my beter voel.” (P6)

“I think, when I start to stress, then it is just my body’s way of looking for something else to do ... Then I cannot go and sit and ... try to watch series, because it is there the whole time ... But, uhm, it feels ... if I eat something ... then it will go away, so it sounds strange, but when

I eat something, then it feels ... I have something else to do ... my thoughts are with what I have to eat or nibble on, and then it is not only about the current problem.” (P5)

“Ek dink, as ek begin stres, dan is dit ook maar my liggaam se manier om iets anders te soek om te doen... Ek kan dan nie gaan sit en... series probeer kyk nie, want dis die heelyd, onderliggend... Maar, uhm, dit voel... as ek iets... eet, dan gaan dit weg, so dit klink snaaks, maar as ek iets eet, dan voel dit vir my... het ek iets anders om te doen... my gedagtes gaan dan oor wat ek dan moet eet of waaraan ek moet peusel, en dit gaan nie net oor die probleem wat op die oomblik aan die gang is nie.” (P5)

First year adjustment and weight gain.

“In the time of my first year to the end of my second year, I gained nearly ten kilos ... it was very bad. And one does not even realise it! Then one day you see: oh, shit, I am over sixty [60 kg] now.” (P10)

“In die tyd van my eerste jaar tot einde my tweede jaar toe, toe het ek amper tien kilo’s opgetel... dis verskriklik erg gewees. En mens kom dit nie agter nie! Tot jy net eendag weer sien: o, shit, ek’s nou oor sestig [60kg].” (P10)

“In your first year, then you eat terrible food, like Two Minute Noodles and things like that, and then I got first-year syndrome.” (P9)

“In jou eerste jaar, dan eet jy verskriklik, soos, Two Minute Noodles en sulke goed, en toe het ek door-sindroom [first year syndrome] gekry.” (P9)

“Yes [I ate more], perhaps like, things that I love a lot. Like ice-cream, I love ice-cream ... in that first semester at university, I ate a huge amount of Magnums ... Perhaps it is connected to making me feel better.” (P4)

“Ja [I ate more], miskien soos, goed waarvoor ek baie lief is. Soos roomys, ek hou ook baie van roomys... in daardie eerste semester op universiteit, ek’t vrek baie Magnums geëet... Miskien is dit geconnect aan laat my beter voel.” (P4)

English participant quote:

“...Now, you’re away from home... You can eat whenever you want... You can eat whatever, at any time. You can...decide to go to ‘Chicken Lickin’ at ten o’ clock and then eat.” (P12)

“And it is a new place – you try all the new places, all the new snacks.” (P13)

“En dis ‘n nuwe plek – jy probeer al die nuwe plekke, al die nuwe eetgoetertjies.” (P13)

“I know the adjustment ... to be away from home, it was really very bad for me ... To be alone ... It was the biggest, well [transition]. There is no-one around and ... it was difficult to realise that I have to cope alone now.” (P11)

“Ek weet die aanpassing... om nou weg van die huis af te wees, was vir my baie erg... Om alleen te wees... Dit was die grootste [aanpassing]. Daar’s nie iemand om jou nie en... dit was moeilik om nou te beseef ek gaan nou moet alleen regkom.” (P11)

LETTER 1 FROM LANGUAGE PRACTITIONER

Marietjie Delport


[BAHons MEd]
Taalpraktisyn/Language Practitioner

✉ Oesterlaan 13, STILBAAI 6674
sel/cell: 083
7696871 e-pos:
marietjie@isales.co.za/marietjie@brbsales.com

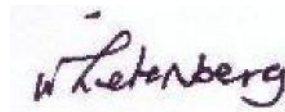
05-09-2015

I, Marietjie Delport, ID number 4702270030089, hereby confirm that I am a member of the South African Translators' Institute (SATI), membership number 1001540, and that I translated certain comments by participants in this study into English.

I also confirm that my translation was verified by Wilna Liebenberg, SATI membership number 1000014, who is a SATI accredited translator.



Marietjie Delport
Liebenberg
BAHons MEd (Stell)



Wilna

MA (Applied Linguistics – Translation) (RAU)

LETTER 2 FROM LANGUAGE PRACTITIONER

DECLARATION

I, C Vorster (ID: 710924 0034 084), Language editor and Translator, and member of the South African Translators' Institute (SATI member number 1003172), herewith declare that I did the language editing of the mini-dissertation of ms M Rieckert from the North-West University (student number 22155163).

Title of the mini-dissertation: Exploring the role of psychological aspects in the eating behaviour of female university students in a South African context

C Vorster

12/9/2016

C Vorster

Date