

**THE RELATIONSHIP BETWEEN SELF-EFFICACY, GOAL-SETTING AND
ACHIEVEMENT MOTIVATION AMONG FINAL YEAR STUDENTS AT A SELECTED
UNIVERSITY IN THE WESTERN CAPE PROVINCE**

BY

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MOTIVATION AMONG FINAL YEAR STUDENTS AT A SELECTED UNIVERSITY IN THE WESTERN
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KEYWORDS:

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Achievement Motivation

Goal-setting

Self-efficacy

Sources of Self efficacy



ABSTRACT

The relationship between self-efficacy, goal-setting and achievement motivation among students in their final year at a selected university in the Western Cape Province

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The purpose of the study was to investigate the relationship between self-efficacy, goal-setting and achievement motivation among students in their final year at a selected university in the Western Cape Province. The sample consisted of 128 final year students who were asked to complete a questionnaire. The questionnaires comprise a section on the biographical information of the participants as well as sections containing the, Academic Self-Efficacy Scale, Achievement Motivation Scale and a Goal Setting Questionnaire. Informed consent was obtained from the various participants and anonymity of participation and confidentiality were ensured.

Data was analysed using the Statistical Package for the Social Sciences (SPSS) version 23. The Statistical analyses techniques employed included Item Analysis, Pearson's Correlation test, Factor Analysis and a Multiple Regression Analysis.

The results of the study indicate there is a statistically significant relationship between self-efficacy and goal-setting (Hypothesis 1), self-efficacy and achievement motivation (Hypothesis 2), achievement motivation and goal-setting among students in their final year of study (Hypothesis 3). Furthermore the results indicated that self-efficacy and goal-setting are significant predictors of achievement motivation (Hypothesis 4).

These findings indicate that the stronger an individual's belief in their perceived self-efficacy, the more likely they are to set challenging goals for themselves which may in turn result in a stronger commitment to attaining those goals. In addition, students who are assured in their ability to achieve success in their studies are most likely to possess the need to achieve excellence. Furthermore, results suggest that students who possess the need to achieve excellence or

demonstrate higher levels of achievement motivation have the tendency to set more challenging goals than those with lower levels of achievement motivation.

November 2015



DECLARATION

I declare that the thesis entitled: 'The relationship between self-efficacy, goal-setting and achievement motivation among final year students at a selected university in the Western Cape Province' is my own work, that it has not been submitted before for any degree or examination in any other university, and that all the sources I have used or quoted have been indicated and acknowledged as complete references.

Samantha Davids

November 2015

Signed: 



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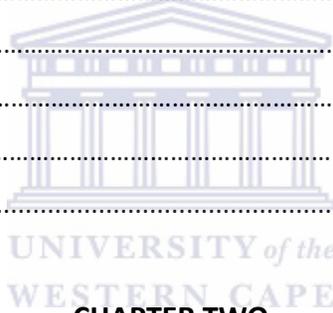
CONTENTS

Title Page	i
Abstract	ii
Declaration	iii
Acknowledgements	v

CHAPTER ONE

INTRODUCTION

1.1 Introduction	1
1.2 Statement of the problem.....	2
1.3 Objective of the study.....	5
1.4 Significance of the study.....	5
1.5 The study Context.....	6
1.6 Outline of the chapters.....	8
1.7 Conclusion.....	8



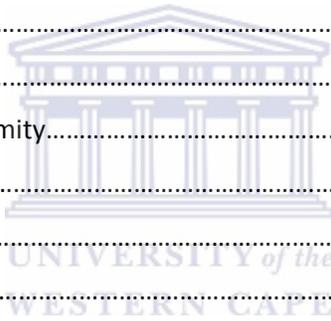
CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction	10
2.2 Motivation.....	10
2.3 Achievement Motivation/McClelland's Motivational Needs Theory	13
2.4 Goal-Setting Theory	17
2.5 Self-Efficacy Theory.....	21
2.5.1 Sources of Self-efficacy	25
2.6 Relationships among the variables used in the study.....	27
2.6.1 Self-efficacy and goal-setting.....	27
2.6.2 Self-efficacy and achievement motivation.....	27
2.6.3 Goal-setting and achievement motivation.....	28
2.7 Conclusion.....	28

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction.....	30
3.2 Research Design.....	30
3.3 Research Participants.....	30
3.4 Data collection and procedure.....	32
3.5 Measuring instruments.....	32
3.5.1 Biographical questionnaire.....	32
3.5.2 Academic Self-efficacy.....	32
3.5.3 Goal-setting.....	33
3.5.4 Achievement Motivation.....	33
3.6 Ethical Considerations.....	34
3.6.1 Voluntary Participation.....	34
3.6.2 Confidentiality, privacy & anonymity.....	34
3.6.3 Non-maleficence & beneficence.....	35
3.7 Statistical Analysis.....	35
3.7.1 Missing Values.....	35
3.7.2 Item Analysis.....	38
3.7.3 Exploratory Factor Analysis.....	38
3.7.4 Pearson Correlation Analysis.....	38
3.7.5 Multiple Regression Analysis.....	38
3.8 Conclusion.....	38



CHAPTER FOUR
REPORTING OF RESULTS

4.1 Introduction.....	40
4.2 Missing Values.....	40
4.3 Item Analysis.....	40
4.3.1 Item Analysis of Self-efficacy.....	41

4.3.2 Item Analysis of Goal-setting.....	42
4.3.3 Item Analysis of Achievement motivation.....	43
4.4 Exploratory Factor Analysis.....	43
4.4.1 Exploratory Factor Analysis of Self-efficacy.....	45
4.4.2 Exploratory Factor Analysis of Goal-setting.....	45
4.4.3 Exploratory Factor Analysis of Achievement motivation.....	47
4.5 The relationship between Self-efficacy, Goal-setting and Achievement motivation.....	49
4.5.1 Regression Analysis Output.....	49
4.6 Conclusion.....	50

CHAPTER FIVE
CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction.....	52
5.2 Relationship between self-efficacy, goal-setting and achievement motivation among students in their final year.....	52
5.3 Recommendations.....	54
5.3.1 Self-efficacy.....	55
5.3.2 Goal-setting.....	56
5.3.3 Achievement Motivation.....	57
5.4 Limitations and suggestions for future research.....	59
5.5 Conclusion.....	61

LIST OF TABLES

Table 3.1: Sample Profile of Participants	31
Table 4.1: The reliability analysis output for Self-efficacy scale	41
Table 4.2: The reliability analysis output for Goal-setting scale	42
Table 4.3: The reliability analysis output for Achievement Motivation scale	44
Table 4.4: Exploratory Factor analysis of Self-efficacy	46
Table 4.5: Exploratory Factor analysis of Goal-setting	47
Table 4.6: Exploratory Factor analysis of Achievement Motivation	48
Table 4.7: The relationship between Self-efficacy, Goal-setting and Achievement Motivation	49
Table 4.8: Regression Analysis Output	50



CHAPTER ONE

INTRODUCTION

1.1 Introduction

While time spent at university is a fond memory and a happy experience for most students, this life is not without its rough patches and problems. According to Beard and Senior (1980, p.10) an enquiry into student progress “drew attention to the large number of undergraduates who had left university by the end of the first year of their course. The majority were recorded as doing so for ‘academic reasons’ such as the unsuitability of the course or examination failure, but it is likely that in many cases this official explanation is convenient shorthand which masks a multitude of diverse experiences”. Lack of achievement motivation has often been cited as the reason behind differences in learning performance and graduate dropouts at universities (Beard & Senior, 1980; Mahembe, 2014).

Achievement motivation typically refers to the level of an individual’s motivation to engage in achievement behaviours, based on the interaction of such parameters as need for achievement, expectancy of success and the incentive value of success (Harter & Connell, 1984). Achievement motivation can also be defined as the striving to increase or to keep as high as possible, an individual’s own capabilities in all activities in which a standard of excellence is thought to apply and where the execution of such activities can, therefore either succeed or fail (Heckhausen, 1967). Achievement motivation has its roots in the motivation theory. Motivation is a state of mind that stimulates activities and human body actions (behaviour) (Afzal, Ali, Khan & Hamid, 2010). It refers to the set of processes that stimulate, direct and sustain human behaviour toward accomplishing a goal (Greenberg, 2011). Motivation has proven to be an important outcome in the work and educational contexts. To date motivation has been documented to be linked to better transfer of knowledge (Blume, Ford, Baldwin & Huang, 2010; Colquitt, LePine, & Noe, 2000; Pham, Segers, & Gijsselaers, 2010); time-on-task (Mahembe, 2014) and training and performance (Khan, 2012). A question can be posed whether the possession of achievement

motivation alone is sufficient to influence the performance of the students in their final year of study? The answer is definitely negative since there are other variables that can influence achievement motivation in tertiary institutions. One of the important characteristics of successful students is the ability to set goals.

The ability to set specific goals to work towards during the learning period determines whether a student will succeed or fail (www.usc.edu.au/media/3834/GoalSetting.pdf). Goal setting has been documented to enhance self-regulation which has an impact on achievement motivation, learning, self-efficacy (perceived ability to achieve a specific task), and personal assessment of progress (Bandura, 1997; Schunk, 1995). In addition to the role of goal setting in influencing achievement motivation, there are aspects relating to personality that also distinguishes between those who succeed and fail. The belief in one's potential to succeed (self-efficacy) is also likely to influence the students' studying behaviour that leads to successful outcomes (Pajares, 2002).

Self-efficacy is the belief in one's competence in performing particular tasks (Siegler, 2000); it is also perceived as a realistic way of dealing with complications. It is a skill to effectively handle undesired changes (Achmed, Qazi & Jabeen, 2011). Self-efficacy relates to the tasks chosen, the effort exerted and the persistence to achieve the task at hand. Furthermore, motivation to learn, skill acquisition, post training self-efficacy, transfer and performance, have also been associated with self-efficacy (Colquitt, LePine & Noe, 2000; Quinones, 1995). If a specific task has been chosen and the outcome thereof was successful, the person will exert the same amount of effort (behaviour) in order to receive the same outcome (Success).

1.2 Statement of the problem

Initially the pressures experienced at university are most likely to be social rather than academic; institutions and departments may vary in their academic requirements of students entering a programme or course, but all such students must face the personal and interpersonal problems

of settling in, finding friends and establishing a way of life in a new environment (Beard & Senior, 1980); these problems can easily be their downfall or what causes them to fail.

“One of the most important factors that lead one to their goals is the drive. This drive is known as motivation. It is a zest and determination with a kind of excitement that leads one to persevere to reach greater heights, in no matter what avenue of their life; be it personal or professional” (Singh, 2011, p. 161). Singh (2011) further postulates the achievement of one goal puts the process in motion for achieving another; thus to be motivated is a constant need. It is not without a doubt individuals may face a period of de-motivation and everything may seem dreary, but it is then when they need to determine what would motivate them back into action (Singh, 2011).

It is widely held that self-efficacy belief serves as core cause of human actions; it makes individuals believe in their own ability to execute a given task (Yusuf, 2011). Concurringly, it refers to the belief, the student holds about his or her capability “to organize and execute the courses of action required to produce given attainments” (Bandura, 1997, p.3, cited in Wood & Olivier, 2004).

According to Schwarzer (1992), self-efficacy makes a difference in how people feel, think and act. When looking at the feeling aspect, depression, anxiety and helplessness are often associated with a low sense of self-efficacy. These individuals also tend to have low self-esteem and hold pessimistic thoughts about their accomplishments and personal development.

In terms of thinking, Schwarzer (1992), further states high levels of confidence in one’s capabilities aids cognitive processes and academic performance. When planning for action, self-related cognitions are a key component of the motivation process. Furthermore, self-efficacy levels can improve or hinder motivation. Individuals with high levels of self-efficacy often opt to carry out more challenging tasks. Such individuals also tend to set themselves higher goals and commit to them. Actions are a preconceived notion and individuals will predict either optimistic or pessimistic situations according to their perceived level of self-efficacy.

After taking action, highly self-efficacious individuals invest more effort and persist longer than those with low levels of self-efficacy. In the occurrence of setbacks, highly self-efficacious

individuals recover faster to maintain the commitment to their goals. Moreover, self-efficacy also allows individuals to choose complex situations, explore their environments, or create new environments (Schwarzer, 1992).

Furthermore, motivation is generally regarded as the drive to achieve targets and the process to maintain the drive. Performances of individuals are often compared against standards or with others for assessments (Singh, 2011).

According to Latham (2003) the major finding of goal setting is individuals who are provided with specific, difficult but attainable goals perform better than those given easy, nonspecific, or no goals at all. At the same time, however, the individuals must have sufficient ability, accept the goals, and receive feedback related to performance. Locke and Latham (1990) suggest goals direct attention and action. Furthermore, challenging goals activate energy, lead to greater effort and increase persistent effort. Goals motivate people to develop strategies that will enable them to perform at the required goal levels (Lunenburg, 2011).

In addition, studies identified difficult (high) goals lead to a higher level of task performance than do easy goals or vague, abstract goals such as the encouragement to 'do one's best.' As long as a person is committed to the goal, has the necessary ability to attain it and does not have conflicting goals there is a positive, linear relationship between goal difficulty and task performance (Locke & Latham, 1990; Locke & Latham, 2002). Finally, accomplishing the goal can lead to satisfaction and further motivation, or frustration and lower motivation if the goal is not accomplished (Lunenburg, 2011).

"Motivation influences student engagement and achievement behaviour, and the activities chosen, the effort invested, the persistence in tasks, and the performances achieved, respectively" (Palóú, Munteanu, Costea & Macinga, 2011, p. 138). Despite the importance of goal setting and self-efficacy in influencing achievement motivation in tertiary institutions, a research gap exist in the literature on how these variables relate to students at a tertiary institution in the Western Cape province. Therefore the purpose of the present study is to determine how self-efficacy and goal setting affect the achievement motivation of a selected sample of final year students at a selected university in the Western Cape Province of South

Africa. The main research imitating question is therefore: Is there a relationship between self-efficacy, goal setting and achievement motivation?

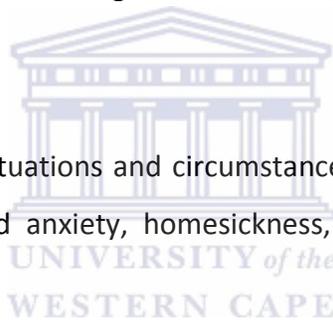
1.3 Objective of the study

The overarching objective of the study is to determine the nature of the relationships between self-efficacy, achievement motivation and goal setting at a selected university in the Western Cape. The specific objectives of the study are therefore:

1. To determine whether there is a relationship between self-efficacy and goal setting.
2. To determine the relationship between self-efficacy and achievement motivation
3. To determine the relationship between goal setting and achievement motivation
4. To determine whether goal setting and self-efficacy predict achievement motivation

1.4 Significance of the study

Students are faced with unique situations and circumstances including studying, money, jobs, health conditions, depression and anxiety, homesickness, friends/roommates, partying and relationships (Gates, 2014).



Specifically studying is most likely to be a problem in that students register for a number of modules required completing their degree. Keeping up to date and coping with the various modules may tend to be difficult and complicated, as each component may include assignments, tutorials, tutorial assignments and examinations; often the due dates of the respective course work tend to be more or less around the same time. MacLoed (2014) suggests students may feel stressed out and inundated with work due to all the academic demands. They will most likely find their courses more difficult than they expected. They may also realize they do not have good study or time-management skills and in some cases they may slowly come to the realization their major is not seen in a favourable light, but feel pressurized to remain with the chosen direction (MacLoed, 2014).

The study is also important in that it attempts to provide an explanation on why students drop out of training and skills development programmes without completion which has long been a

problem that South African educational institutions are battling to address (Alexander, 1991; Letsoalo, 2007).

1.5 The study context

The availability of money is one of the major problems students face when attending university. Tuition costs are particularly high, combining it with the price of textbooks, petrol for travelling, buying lunch and snacks (eating out), shopping trips and going out; becomes the students' worst nightmare (Gates, 2014). Some students drop out due to insufficient funds or simply because they cannot afford to keep it all together. Others are forced to juggle part-time or even full-time employment to make ends meet. It is becoming increasingly difficult for students to graduate debt-free. Furthermore Gates (2014) states finding a job is most likely the common way to combat the high price of tuition costs. Some students participate in club sports or extra mural activities. In addition, students juggle all these activities and try to cram them all into one day at the expense of time spent sleeping and resting, causing health problems (Gates, 2014).

Health problems can pose a major threat to the students' academic success. These problems can either be managed by visiting a physician or specialist, resulting in students taking time off from campus. Sometimes it is not as simple as the doctor prescribing medication and requesting bed rest. Stress is often the underlying cause of many chronic illnesses/diseases; a few days of bed rest could become weeks, possibly even months, resulting in the students' work suffering and their studies being compromised.

Students experience high level of stress at times which may be a normal part of university life, however, too much stress or a strong negative response to stress can be harmful, mentally, emotionally and physically. High levels of unmanageable stress can cause problems that affect the students' health, academic success and relationships (Mayo clinic, 2009).

At university students are faced with a unique amount of stressors. Specifically, university experiences require a significant transition where students experience many firsts, which may

include new lifestyle, friends, roommates, acquaintance to new cultures and alternate ways of thinking. When students cannot manage these firsts they are more likely to struggle to adapt to this new environment (Tartakovsky, 2008). In addition, if students feel inadequate or they are not prepared to cope with the new environment of university/campus life they could easily become susceptible to depression and anxiety (Tartakovsky, 2008).

Moreover, adjusting to university also influences identity. When students leave home for university, the familiar people such as their family and close friends are no longer there to support their identity they have created for themselves. Subsequently, this can lead to students feeling disoriented and a loss of their sense of self, which may contribute to symptoms of depression and anxiety (Tartakovsky, 2008). For students who live on campus, depression and anxiety will most likely result in feelings of being homesick or vice versa (Thurber & Walton, 2012).

An unstable personal identity and lack of confidence can lead students to make poor choices amongst factors present in the academic life (Tartakovsky, 2008). Furthermore, students may be introduced to unhealthy behaviours, some of which may be mal-adaptively adopted as coping mechanisms, such as binge drinking and drug use. The university environment also stimulates nearly every student's instinctive desire to belong, to feel socially accepted (Thurber & Walton, 2012). Therefore finding the right friends and social circles, as well as establishing good relationships are important. All these factors some way or another has an impact on the students' academic or personal life.

These are but a few of many problems students have to face and are most likely to hinder them from accomplishing both their short and long term goals, as well as their self-efficacy and the motivation to achieve their academic goals. It is then questionable as to whether students drop out and abandon their goal to complete their studies due to financial strain, personal or academic problems or whether they go forth and work harder with those problems serving as an even greater motivation to attain that achievement.

1.6 Outline of chapters

This thesis consists of five chapters.

Chapter One includes an introduction, statement of the problem, objective of the study, significance of the study, the study context, an outline of the chapters and lastly the conclusion.

Chapter Two focusses on the literature review, which commences with a broad perspective of the topic, discussing definitions. It will touch on intrinsic and extrinsic theories and then concentrate on the variables specific to the problem and presenting theories relevant to the aims of the study. Furthermore it will link the variables to formulate hypotheses.

Chapter Three outlines the strategy used to address the problem under investigation. The methodology incorporates the research participants, ethical considerations, data collection and procedure, measuring instruments and the statistical analysis.

Chapter Four is the representation of the results.

Chapter Five includes the conclusions and recommendations of the study. Reintroducing the main objectives; focussing on the relationship between self-efficacy, goal-setting and achievement motivation, discussing the results of each of the 4 hypotheses. Furthermore, it provides recommendations for each of the constructs as well as limitations and suggestions for future research.

1.7 Conclusion

Chapter one served as groundwork for the research study. The chapter includes the problem statement and objective of the study, addressing the main research question: whether there is a relationship between self-efficacy, goal-setting and achievement motivation among final year students. Furthermore it highlights the significance of the study, focussing on the difficulties students face at a tertiary level; the context of the study and lastly it outlines the chapters of the research study. Chapter Two delves deeper into the concepts, forming a body of knowledge and literature as a foundation, on which to expound the research. The following chapter will focus on

the concepts and theories of motivation more specifically concentrating on Self-Efficacy, Achievement Motivation and Goal-Setting.



CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The literature study pertaining to the research problem presented in the previous chapter is discussed in the present chapter. The discussion in the present chapter focuses on the conceptual definitions of the variables studied; what previous studies have documented on the variables relating to the research problem and the development of the argument culminates in the formulation of the hypotheses to be tested in the study. The literature review focuses on aspects of motivation, namely student motivation as well as intrinsic and extrinsic motivation. This constitutes the broad context and foundation of the study and is placed in context by discussing and focussing on the variables studied which is achievement motivation, goal-setting and self-efficacy.

2.2 Motivation

Motivation is a state of mind that stimulates activities and human body actions (Afzal et al., 2010). It is defined as the set of processes that arouse, direct and maintain human behaviour toward attaining a goal (Greenberg, 2011). Maslow suggests when a need occurs it results in the advancement of motivational tensions, which are directed towards the satisfaction of the felt need. The intensity of effort is a function of how strong the need might be for the individual (Grobler, Warnich, Carrel, Elbert & Hatfield, 2006). Motivation is further defined as a drive to fulfil a need when the tension becomes intense (Aderman, 1999; Maslow, 1954; Murray, Poole, & Jones, 2006). When individuals are motivated they feel energised or inspired to act, whereas an unmotivated one feels no drive to take action and move (Ryan & Deci, 2000).

Motivation is the result of the interaction between an individual and a situation (Robbins, Judge, Odendaal & Roodt, 2009). It is further defined as the process that accounts for an individual's intensity, direction and persistence of effort toward attaining a goal. Intensity refers to the extent to which (how hard) a person tries to satisfy the underlying or identified need. The second

component refers to the direction in which the effort is channelled so that either the individual or organisation benefits once the need is satisfied. Lastly, motivation has a persistence dimension this is a measure of the duration (how long) a person can maintain effort. Motivated individuals stay with a task long enough to achieve their goal compared to the opposite (Robbins et al., 2009).

Student motivation is the element that leads students' attitude towards the learning process. Most motivation theorists believe motivation is involved in the performance of all learned responses and learned behaviour will not occur unless it is energised (Afzal et al., 2010). Student motivation can additionally be described as student willingness, need, desire and obligation to participate and be successful in the learning process (Bomia, Beluzo, Demeester, Elander, Johnson & Sheldon, 1997). Afzal et al., (2010) further postulate student motivation is often separated into two types being intrinsic and extrinsic motivation.

Maslow (1954), postulated that motivation may be driven by either of the two or an interplay of both. Intrinsic motivation is defined as being the execution of a task or activity because of the inherent satisfaction arising from it rather than due to some separate outcome. Intrinsic motivation reflects the natural tendency of people toward learning and integration (Constanta & Madela, 2013). In contrast extrinsic motivation is when an activity is done in order to attain some separate outcome (Ryan & Deci, 2000). It can then be said that individuals who are extrinsically motivated engage in an activity, not out of interest but rather based on the fact that it is linked to a tangible result or consequence (Gagné & Deci, 2005).

Intrinsic motivation suggests students are intrinsically motivated when they are motivated from within; intrinsically motivated students keenly engage themselves in learning out of peculiarity, interest or enjoyment or in order to achieve their own academic and personal goals (Afzal et al., 2010). According to Dev (1997), a student who is intrinsically motivated will not need any type of reward or incentive to initiate or complete a task and this type of student is more likely to complete the chosen task and eagerly by the challenging nature of an activity.

Dev (1997) asserts that an extrinsically motivated student engages in learning purely for attaining a reward or for avoiding some punishment. Students who do their homework only because they fear parental sanctions for not being responsible are extrinsically motivated because they are doing the work in order to attain the separable outcome of avoiding being reprimanded (Ryan & Deci, 2000). Similarly, students who do the work because they personally believe it is valuable for their chosen career are also extrinsically motivated because they too are doing it for its instrumental value rather than finding it interesting (Ryan & Deci, 2000).

Furthermore, motivation can be classified as two major theoretical bodies, content and process theories of motivation. The main difference is content theory focuses on individual needs, while process theory focuses on behaviour. These theories provide insight into what motivates people to act a certain way in a particular setting (retrieved from <http://www.ask.com/world-view/difference-between-content-process-theories-motivation-8e31361acc6d8f71>, on 13 May 2015). Additionally, content theories focus on factors within the individual that energize, direct, sustain and stop behaviour. They look at the specific needs that motivate people (Stotz & Bolger, n.d). Content theories include Maslow's Hierarchy of Needs, McGregor's Theory X and Theory Y, Aldefer's ERG Theory, Herzberg's Two-factor Theory and McClelland's Achievement, Power and Affiliation needs (Stotz & Bolger, n.d). The process theories focus on the dynamics of motivation and how the motivation process takes place (Robel, 2013). It provides a description and analysis of how behaviour is energized, directed, sustained and stopped. The predominant process theories include reinforcement, expectancy, equity, self-efficacy and goal Setting (Stotz & Bolger, n.d; Lunenburg & Ornstein, 2011). The theories, self-efficacy, achievement motivation and goal setting were chosen as it focused on higher order needs and as a response to the problem statement.

The terms and theories of achievement motivation, goal-setting and self-efficacy will place the research study in perspective, understanding and conceptualizing the problem to be investigated.

2.3 Achievement Motivation/McClelland's Motivational Needs Theory

“Achievement motivation theory attempts to explain and predict behaviour and performance based on a person’s need for achievement, power and affiliation” (Lussier & Achua, 2007, p. 4). The achievement motivation theory is also referred to as the acquired needs theory or the learned needs theory (Moore, Grabsch & Rotter, 2010). Daft (2008) defined the acquired needs theory as “McClelland’s theory that proposes that certain types of needs (achievement, affiliation, power) are acquired during an individual’s lifetime” (p. 233).

McClelland's theory of needs was developed by David McClelland and his associates. Robbins et al. (2009), proposed the theory focuses on three needs, which can be defined as;

1. Need for achievement (nAch) which is the drive to excel, to achieve in relation to a set of standards and strive to succeed.
2. Need for power (nPow) which is the need to make others behave in a way in which they would not have behaved otherwise.
3. Need for affiliation (nAff) which is the desire for friendly and close interpersonal relationships.

Motivation can be described as relating to the dynamics of behaviour, which incorporate needs, desires and ambitions in life. Achievement motivation is anchored on accomplishing success and achieving each and every aspiration in one’s life. These goals can influence the manner in which an individual executes a task and represent a desire to show competence (Harackiewicz, Barron, Carter, Lehto, & Elliot, 1997). Moreover, the individuals’ motives for achievement can range from biological needs to satisfying creative desires or realizing success in competitive ventures (Rabideau, 2005). Achievement motives include the need for achievement and the fear of failure. These are the more predominant motives that direct behaviour towards positive and negative outcomes. Classified as “the need to perform well or the striving for success, and evidenced by persistence and effort in the face of difficulties, achievement motivation is regarded as a central human motivation” (Singh, 2011, p. 164-165).

McClelland, Atkinson, Clark and Lowell (1958, p.181) defined the need for achievement as “success in competition with some standard of excellence. That is, the goal of the individual in the story is to be successful in terms of competition with some standard of excellence. The individual may fail to achieve this goal, but the concern over competition with a standard of excellence still enables one to identify the goal sought as an achievement goal”.

McClelland et al., (1958) went on to describe competition with a standard of excellence was most notable when an individual was in direct competition with someone else but it can be evident in the concern for how well one individual performs a task, regardless of how someone else is doing. According to Lussier and Achua (2007, p.42), “the need for achievement is the unconscious concern for excellence in accomplishments through individual efforts”. Similarly, Daft (2008, p.233) stated the need for achievement is “the desire to accomplish something difficult, attain a high standard of success, master complex tasks, and surpass others”. Individuals who exhibit the need for achievement seek to accomplish realistic but challenging goals.

According to Dave and Anand (1979, cited in Singh, 2011) it is a desire to do well in relation to particular standards of excellence. Similarly, achievement motivation can be described as a social form of motivation concerning a competitive desire to meet standards of excellence (Colman, 2001, cited in Singh, 2011). Moreover, Rabideau (2005) describes it as the need for success or the accomplishment of excellence. Additionally, the author suggests that individuals will satisfy their needs through different means and are driven to succeed for varying reasons both internal and external (Rabideau, 2005). Atkinson (1964, cited in Singh, 2011. p.165) states “the theory of achievement motivation attempts to account for the determinants of the direction, magnitude and persistence of behaviour, in limited but very important domain of human activities”.

The definition of achievement motivation had originated from Atkinson (1964, cited in Singh, 2011) who defined it as “the comparison of performances with others and against certain standard activities (p.163.)”. Atkinson and Feather (1966) suggested achievement motivation is a combination of two personality variables: tendency to approach success and tendency to avoid failure. Bigge and Hunt (1980, cited in Singh, 2011) defined achievement motivation as “the drive

to work with diligence and vitality, to constantly steer toward targets, to obtain dominance in challenging and difficult tasks and create a sense of achievement as a result (p.163).” In addition, they postulate, this definition consists of three elements namely, “the stimulation of personal capabilities, constant efforts with drive and obtaining of sense of satisfaction (Bigge & Hunt, 1980 cited in Singh, 2011. p.163).” According to Helmreich and Spence (1978) achievement motivation is a “subjective, internal, and psychological drive, enabling individuals to pursue work they perceive to be valuable and eventually achieve their goals (cited in Singh, 2011, p.163)”.

Robbins et al., (2009) stated, McClelland found high achievers differentiate themselves from others by their desire to do things better. They seek personal responsibility for finding solutions to problems. Furthermore Robbins et al., (2009) proposes they want to receive rapid feedback on their performance so they can tell easily whether they are improving or not. They can set moderately challenging goals. Moreover high achievers are not gamblers; they dislike succeeding by chance rather take calculated risks. High achievers perform best when they perceive their probability of success as 50-50. They like to set goals that require stretching themselves to a certain extent albeit even a little (Robbins et al., 2009).

Achievement motivation can be viewed as the foundation for a rewarding life together with feelings of being in control of situations. Motivated individuals fosters being dynamic with self-respect as a reward. As suggested by Singh (2011), these individuals when engaged in work set ‘moderately difficult but easily achievable targets’; this in turn assist in achieving goals. They ensure success by achieving objectives through setting manageable targets. Achievement motivated people ensure the completion of solving a problem rather than revert to external locus of control. Personal achievement is central to these individuals belief in life rather than the rewards of success (Singh, 2011).

Chapman (2009) is of the opinion McClelland suggested achievement motivated individuals possessed, additional characteristics and attitudes. These individuals expressed that achievement is more important than material or financial reward. Achieving the aim or task gives greater personal satisfaction than receiving praise or recognition. Moreover Chapman (2009),

states achievement motivated individuals constantly seek improvements and ways of doing things better.

Zenzen (2002), proposed achievement motivation is typically a non-conscious process wherein the decision is made in terms of how to act or not to act. Spence (1983) and Wlodkowski (1985) state achievement can often bring benefits and failure is followed by shame. According to Monte and Lifrieri (1973) there are students who may have the wish to achieve and the ability to complete a task, but feel the completion has limited or no value and experience doing it is not worth the effort or time. Others in contrast fear they are not able to finish the required task so they do not even begin. These individuals are prepared to receive lower grades than to prove they do not have the capability to precisely complete the task.

Similarly, Veroff, McClelland, and Marquis (1971) and Grabe (1979) are of the opinion there are students who choose not to do the task and are fearful they may not be able to accomplish the task; have a fear of failure. "Rather than face the humiliation of not being able to complete the task, thus failing the task, these students choose not to do the task at all. They would rather risk a poor grade than a poor image". Additionally, Atkinson (1974) and Aschuler (1973) suggested that it is only a small number of students who fall into these categories of little accomplishment.

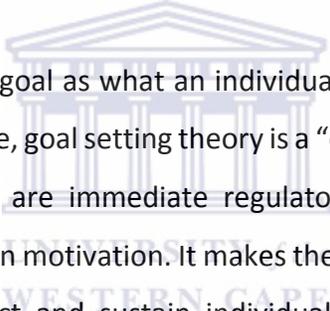
Atkinson (1974) states a number of need for achievement students have to accomplish each task regardless of the nature or how complicated. Some students tend to feel the need for success even though they consider whether it is all worth the effort or value to accomplish before attempting the task. In some instances, students decide against the task if they perceive it has no value, despite their capability to accomplish the task perfectly.

Generally, some students are likely to fall somewhere in the middle of this achievement scale between extremely high achievers and those who may not achieve at all (Aschuler, 1973). Everyone has a need to achieve and a fear of failure, but these needs vary between individuals

and from situation to situation. Each student acts on the levels of motivation differently, but some of them are predisposed to having little desire to accomplish certain tasks (Atkinson, 1999).

According to Singh (2011, p.165) planning activities to establish the level of need for achievement of students will accommodate the different endeavours even those motivated by a need to avoid failure. Students highly motivated will excel when faced with challenging assignments together with strict feedback systems and be given a second opportunity to accomplish their goals. In contrast those students keen to avoid failure could receive less demanding work, moderate grading and create environments where they are sheltered against humiliation which are game plans to reinforce success.

2.4 Goal-Setting Theory

Locke and Latham (1990) define a goal as what an individual is trying to accomplish that is the object or aim of action. Furthermore, goal setting theory is a “cognitive theory of work motivation based on the premise that goals are immediate regulators of human behaviour, and that performance goals play a vital role in motivation. It makes the assumption that human behaviour is purposeful and that goals direct and sustain individuals’ energies towards performing a particular action (Locke & Latham, 1990, cited in Chipunza & Masiza, 2004.p. 82)”. 

The key consistent finding supporting this theoretical model of goal setting is “setting specific and difficult goals leads to high levels of performance if these goals are accepted by individuals (Locke, 1968, cited in Chipunza & Masiza, 2004, p.82)”. Furthermore, according to Locke and Latham (2002) when goals are set at a difficult level individuals are often required to put more effort in to meet the required standard; effort is motivation dependent. Therefore, goals are motivation based outcomes leading to personal satisfaction.

Chipunza and Masiza (2004) proposed goals should be explicit and unclouded; something to aim toward without misinterpretation. These authors found people are more likely to succeed if their goals are specific and difficult. Brown and Latham (2000) indicate in conditions where individuals

set specific, difficult goals, performance is higher than when individuals are just asked to do their best.

Individuals with clear goals demonstrate they have a greater competence for self-regulation by ignoring unrelated actions. Enthusiasm is heightened when there is a clearly defined path to follow with the aim to exert goal directed energy. Negative behavioural patterns of apprehension, disappointment and frustration will be reduced if there is an increase in clearly defined goals. Well-organised strategies and modes of contemplation and perception will become reality to assist individuals to complete certain tasks assigned to them in either the class room or work arena (Locke & Latham, 2002; Locke, Shaw, Saari, & Latham, 1981; Smith, Locke, & Barry, 1990).

Similarly, Anderson, Griego and Stevens (2010) states that the key principle is goals must be set, in order for people to be motivated to achieve them. These cannot be easily achieved goals, but rather present some type of challenge to the individual. Easily attainable goals tend to relate more with lower performance than difficult goals; goals must be specific. Vague goals also tend to be associated with lower performance; effective goals are likely to be very specific and rather challenging to achieve. Furthermore, goals should be able to motivate someone enough to urge them to meet ambitions, in so doing helping the individual focus on the objective. All efforts will be put towards achieving that objective and ultimately reaching the goal (Anderson et al., 2010).

Locke and Latham (1990), suggested goals have two primary attributes (Chipunza & Masiza, 2004):

- Goal content refers to the features of the goals themselves, such as the difficulty and specificity of the goals.
- Goal intensity is the process by which the goal is set and accomplished. It relates to such factors as commitment, and the cognitive process involved in attaining the set goals

Goal setting is defined as the process of determining specific levels of performance for workers to attain and then striving to attain them (Greenberg, 2011). According to Locke and Latham (1990), goal-setting theory can provide some insight into the question of how people respond to assigned goals. This approach states an assigned goal influences people's self-efficacy, which is the belief they have about their ability to perform the task in question and their personal goals, of which both of these factors influence performance.

Latham (2004) postulate, the primary notion behind goal-setting theory is a goal serves as a motivator for three reasons. First, when goals are set, attention is directed towards the goal and people can then measure how well they are doing. In other words, they evaluate their current ability to perform with that required to succeed at the goal. Second, goal-setting theory also claims that assigned goals eventually get accepted as the individuals' own personal goals (Latham, 2004). This is the idea of goal commitment – the extent to which people invest themselves in meeting a goal. Finally, goal-setting theory claims task performance is influenced by the beliefs of both self-efficacy and goal commitment. According to Gellatly and Meyer (1992) people tend to exercise greater effort when they believe they will succeed than when they think their efforts will be worthless (cited in Greenberg, 2011).

Goal setting theory pre-supposes an individual is committed to the goal; an individual is determined not to lower or abandon the goal. Behaviourally this means individuals believe they can achieve the goal and have a willingness to be successful. Goal commitment is most likely to occur when goals are made public, when the individual has an internal locus of control (a person's perception of the source of his or her fate) and when the goals are self-set rather than given (Robbins et al., 2009).

According to Latham and Brown (2006), goal-setting theory states emotions are the reasons behind an individual's actions and the subsequent outcome, from working toward and/or attaining the goal. If an individual perceives their actions as being effective (i.e. goal attainment) they experience satisfaction. However, if they perceive their actions as ineffective (i.e. the goals are not attained) they will then experience dissatisfaction.

Latham and Kinne (1974) and Locke and Bryan (1967), proposed goal setting was used as an intervention in a particular study because it has a positive effect on interest by providing people with a sense of purpose. Adler and Weiss (1988) stated it is a strong variable that masks individual differences; goal setting engages people by challenging them to see how well they can perform. Latham and Brown (2006), Gould (1939) and White (1959) observed many years ago people have the “desire to accomplish” an element which they consider to be important.

To date several studies demonstrate the broad impact of goal setting (Morisano et al., 2010; Emmons & Diener, 1986; Brunstein, 1993). Emmons and Diener (1986) found goal attainment correlated with positive affect among undergraduates (and the lack of goal attainment had a negative correlation with negative affect, although somewhat less strongly). Furthermore, Emmons and Diener (1986) revealed the sheer presence of self-rated important goals correlated with positive affect as essentially attaining those goals. Moreover, Brunstein (1993) demonstrated similarly, feelings of well-being could increase if goal progress is perceived. Resultantly, levels of perceived self-efficacy may also tend to increase (Latham & Seijts, 1999). “If participating in goal setting improves self-efficacy, then individuals are not only encouraged to set further goals, but are also likely to develop higher expectations of success (Karakowsky & Mann, 2008, p.256)”.

Correspondingly Siegle (2002), suggests goals provide a criterion by which students can measure their progress and setting goals can have an impact on student self-efficacy and achievement. With the attainment of the student’s short-term goals, they experience and are introduced to a sense of self-efficacy for performing well, which is later substantiated as they observe progress toward longer-term goals. Furthermore, goals are known to be effective in two ways; in the first instance they give direction for a student’s effort; they provide a way to measure, looking at and drawing from past achievements (Siegle, 2002).

Goal setting plays a prominent role in social-cognitive learning models of academic achievement. According to such frameworks successful achievement involves positive feedback loops between self-efficacy and goal commitment (Schunk, 1990; Zimmerman, Bandura, & Martinez-Pons,

1992). As a student experiences successful goal attainment, self-efficacy increases; this in turn enhances goal commitment and mobilizes the self-regulation of cognitive and motivational resources to facilitate subsequent achievement (Pintrich, 2000).

2.5 Self-Efficacy Theory

The notion of self-efficacy lies at the heart of psychologist Albert Bandura's social cognitive theory. Bandura's theory emphasizes the role of observational learning, social experience and reciprocal determinism in the development of personality (Cherry, 2013).

Bandura's theory suggests a person's attitudes, abilities and cognitive skills cover what is known as the self-system. This system plays a key role in how they perceive situations and how individuals behave in response to different situations; self-efficacy is a vital part of this self-system (Cherry, 2013). Pajares (2009) describes it as the belief people hold about themselves and that affects their day-to-day functioning and which significantly lies at the core of social cognitive theory. It is further defined as the "judgments that individuals hold about their capabilities to learn or to perform courses of action at selected levels. In essence, self-efficacy beliefs are the self-perceptions that individuals hold about their capabilities (Pajares, 2009 p.1.)".

According to social cognitive theory, self-efficacy beliefs provide the foundation for human motivation, well-being and personal accomplishment: Except if individuals believe their actions can fabricate the outcomes they desire, they have little incentive (motivation) to proceed or to persevere in the face of difficulties (Pajares, 2009). Moreover, these self-perceptions tap into practically every aspect of people's lives; whether they think productively, self-debilitating, pessimistically or optimistically; the extent to which they motivate themselves and persevere when faced with adversities; their susceptibility to stress and depression; and the life choices they make (Pajares, 2009).

Furthermore, Bandura (1994, cited in Cherry, 2013, p.1.) self-efficacy is "the belief in one's capabilities to organise and execute the courses of action required to manage prospective situations." Thus self-efficacy is a persons' belief in their ability to succeed in a particular

situation. Bandura describes these beliefs as determinants of how people think, behave and feel. Similarly, Robbins (et al., 2009) state self-efficacy (theory) refers to individuals' belief they are capable of performing a task. The present study focuses on students and Bandura (1997, p.3, cited in Wood & Olivier, 2004, p.289.) refers to self-efficacy as the belief the student holds about their capability 'to organise and execute the courses of action required to produce given attainments'.

Siegle (2000) postulates self-efficacy is an individual's judgment concerning their ability to carry out a particular activity; student's 'I can' or 'I cannot' belief. Contrasting self-esteem, which reflects how students perceive their worth or value, self-efficacy reflects how confident students are about performing specific tasks (Siegle, 2000).

Bandura (1986) describes self-efficacy as the belief in one's competence in performing particular tasks. Individuals, who consider themselves as highly successful act, think and feel differently from those who perceive themselves as inefficacious. They produce their own future rather than simply foretell it (Bandura, 1986).

Ahmed et al., (2011), states that self-efficacy can be viewed as self-confidence, self-reliance and trust in oneself; self-efficacy is regarded as one's optimistic self-reliance. It is the self-belief one can develop; the capability to perform innovative or intricate responsibilities and to deal with variations in performance. When an individual recognises self-efficacy it enables them to set goals, attempting to achieve those goals; boosts determination and recovery from dissatisfaction. Bandura (1997 cited in Wood & Olivier, 2004 p.1) argued "self-beliefs are influenced by the interaction of three factors, namely, the behaviour of the individual, the environment, and personal factors. A positive attitude and feelings towards a subject (personal factors) will encourage the student to work hard (behaviour), which will bring forth positive feedback from the lecturer (environment), reinforcing beliefs of self-efficacy in the student".

Ahmed et al., (2011) further states it can be perceived as a positive perspective or realistic way of dealing with complications, therefore it is the skill to effectively handle undesired changes (the concept of self-Efficacy). Csikszentmihalyi (1997) proposed if individuals believe they will be

successful it encourages them to do the set task successfully, and individuals with lower self - efficacy levels generally avoid the difficult situations rather than attempt to accomplish the difficult tasks. Occasionally individuals overestimate their self-efficacy; thinking they can carry out the tasks which they are not in fact capable of and as a result they face complications (Ahmed et al., 2011).

Robbins et al., (2009) argues the higher an individual's self-efficacy the more confidence they will have with their ability to succeed in a task. In difficult situations, individuals with low self-efficacy are more likely to lessen their effort or give up altogether, while those with high self-efficacy will try harder to master the challenge.

Self-efficacy beliefs affect peoples' cognitions, motivations, affective processes and ultimately their behaviour (Bandura, 1997). When comparing individuals with low levels of self-efficacy to those with high levels are expected to keep trying when faced with difficulties, more probable to exhibit intrinsic motivation when involved and doing a task and less likely to feel dissatisfied in the face of let-down. They will to a less extent feel stressed and more regularly observe a difficult situation as demanding as opposed to complicated. Moreover, setbacks and breakdown affect individuals with low levels of self-efficacy more strongly, even in the cases of mild failure. In general in this situation they are slower to recover their sense of self-efficacy (Bandura, 1993, 1994, 1997 cited in Prat-Sala & Redford, 2010). People with the equivalence of skill pertaining to a particular task may perform differently depending on their belief in their own ability (Bandura, 1986, 1997 cited in Prat- Sala & Redford, 2010).

Pajares (2009) suggests self-efficacy beliefs also help in establishing how much effort individuals will apply to an activity, how long they will persist when confronted with obstacles and their resilience in the face of adversities. Individuals with a strong sense of personal capability tend to handle "difficult tasks as challenges to be mastered rather than as threats to be avoided. They have greater intrinsic interest and deep engrossments in activities, set them challenging goals and maintain strong commitment to them, and heighten and sustain their efforts in the face of

failure. Moreover, they more quickly recover their sense of efficacy after failures or setbacks (Pajares, 2009, p.3)".

An individual's thought processes and emotional reactions may also be influenced by self-efficacy beliefs. When dealing with difficult tasks and activities, high self-efficacy helps create feelings of serenity. On the contrary, individuals with low self-efficacy tend to believe things are tougher than they really are, "a belief that fosters anxiety, stress, depression, and a narrow vision of how best to solve a problem (Pajares, 2009, p.3)".

High self-efficacy in one area may not correspond with high self-efficacy in another area. Conversely, possessing high levels of self-efficacy does not necessarily suggest students believe they will be successful. Whereas self-efficacy indicates how strongly students believe they have the skills to do well, they may believe other factors will keep them from succeeding (Pajares, 2009).

Bandura's theory of self-efficacy provides guidelines where individuals are equal within the same circumstances will not necessarily display the same level of achievement. There is a tendency among individuals with the belief they can complete tasks successfully compared to those not holding the same conviction. The former group will tend to persevere with the task for longer if they encounter obstacles thus have positive self-efficacy expectations. The contrary is also valid for those with no belief to complete successfully have negative self-efficacy expectations with regard to the task (Bandura, 1986).

Self-efficacy influences what activities students select, how much effort they express, how persistent they are when faced with difficult situations and the difficulty of the goals they set. Students with low self-efficacy do not expect to do well and they often do not achieve at a level that is proportionate with their abilities. They do not believe they have the skills to do well so they do not try to produce acceptable results (Siegle, 2000).

2.5.1 Sources of Self-efficacy

According to Bandura (1994) individuals form their self-efficacy beliefs by interpreting information primarily from four sources: mastery experience, vicarious experience, social persuasions, and physiological reactions. For most people, the most significant source for most people is the interpreted result of the individual's own performance or mastery experience (Pajares, 2009). Basically, individual's measure the effects of their actions and their understanding thereof help create their efficacy beliefs. Performing a task successfully raises self-efficacy; whereas failing to effectively deal with a task or challenge can undermine and weaken self-efficacy; failure lowers it (Cherry, 2013).

In addition to the interpretation the results of their mastery experiences, students formulate their efficacy beliefs through the vicarious experience of observing others perform tasks. Observing the successes and failures of peers perceived as comparable in competence contributes to individuals' beliefs of their own capabilities ('if he can do it, so can I!') (Bandura, 1994; Cherry 2013; Pajares, 2009; Siegle, 2000).

Self-efficacy beliefs are also influenced by the verbal messages and social persuasions that individuals receive from others, whether these are intentional or accidental. These messages can help to exert the extra effort and persistence required to succeed, resulting in continued development of skills and personal efficacy (Bandura, 1994; Cherry 2013; Margolis & McCabe, 2006; Pajares, 2009; Siegle, 2000).

Physiological and emotional states such as anxiety and stress as well as mood provide information regarding efficacy beliefs. Generally, optimism or positive mood boost self-efficacy whereas depression, despair or a sense of despondency undermines it. As with the other sources, it is not the intensity of the physical indicator or mood state itself that is significant but the individual's interpretation thereof. Adolescents with strong self-efficacy will view the emotional state as energizing, whereas those overwhelmed by self-doubt may regard it as being debilitating (Bandura 1994; Cherry, 2013; Margolis & McCabe, 2006; Pajares, 2009).

Vialle (n.d cited in Achmed et al., 2011), suggests students with increased self-efficacy produce superior educational grades compared to students having lower self-efficacy levels. Students with self-reliance including complete confidence in their skills can handle difficult situations, take part in class displaying full attention and give fondness to acquire knowledge from their own experiences. The students in contrast with low self-efficacy levels feel reserved to partake in the class, dither to make a contribution in the classroom debate and isolated themselves in their studies.

Essentially, at university when the pressures start mounting due to when major assignments are due and tests are scheduled at simultaneous times, students start to second guess or even question their ability to complete the task at hand. They question themselves whether they will be able to finish in time, will the work be done to the best of their ability, do they have enough resources to draw from in order to produce a well written assignment, will their current study technique be efficient considering that all these tests are scheduled so close to each other and the questions of doubt are endless.

Difficult situations such as these may result in feelings of anxiety, depression and/or stress for those students who have low levels of self-efficacy. These students would probably rely on advice or encouragement from others, basically be influenced by the sources of self-efficacy. However, for those who have been in these situations before might draw from previous experience and reassure themselves they have been successful in the past and can most likely repeat the behaviour.

From the literature it can be deduced that some of the determinants of achievement motivation are self-efficacy and goal-setting. The following will focus on the relationship between self-efficacy and goal setting, self-efficacy and achievement motivation, and goal setting and achievement motivation respectively.

2.6 RELATIONSHIPS AMONG THE VARIABLES USED IN THE STUDY

2.6.1 Self-efficacy and goal setting

Previous research supports the relationship between goal setting and self-efficacy (Schunk, 1991; Schunk & Zimmerman, 1997). Jeng and Shih (2008), found that self-efficacy positively correlates with goal setting; the higher the level of self-efficacy, the higher the level of future achievement to be set. Additionally, studies on goal setting show that goals differ in specificity, difficulty level and proximity. Goals that are specific, not too difficult, and short-term usually lead to higher self-efficacy (Yailagh, Lloyd & Walsh, 2009). These results are in agreement with Bandura (1994, P.4), which states “personal goal setting is influenced by self-appraisal of capabilities. The stronger the perceived self-efficacy, the higher the goal challenges people set for themselves and the firmer their commitments to them”. Therefore it seems appropriate to suggest the existence of the following relationship:

- ❖ H1: There is a statistically significant relationship between self-efficacy and goal setting among students in their final year.

2.6.2 Self-efficacy and achievement motivation

Numerous studies on the relationship between self-efficacy and achievement motivation reported a significant relationship between the two variables for college students (Fu, 2011; Wang & Zhang, 2010; Xiao, 2003; Zhang, 2006). In addition, among university students, Elias, Noordin and Mahyuddin (2010) found a positive and significant correlation between self-efficacy and achievement motivation. This shows students who are confident in themselves in achieving success in their studies tend to have the need to achieve excellence (Elias et al., 2010). Based on the literature study, the following relationship can be suggested:

- ❖ H2: There is a statistically significant relationship between self-efficacy and achievement motivation among students in their final year.

2.6.3 Goal-setting and achievement motivation

The relationship between achievement motivation and goal setting behaviour has been studied for a number of non-learning tasks (Atkinson, 1950; Atkinson, 1958; Atkinson & Reitman, 1956; Clark, Teevan & Ricciuti, 1956; McClelland et al., 1953 cited in Mukherjee, 1965) and in a learning situation (Kausler & Trapp, 1958; Ricciuti & Schultz, 1958 cited in Mukherjee, 1965). Most of these studies show that people with strong generalised achievement motivation usually set higher goals than those with low need for achievement (Mukherjee, 1965). From the literature, it can be suggested that a relationship exists between the following:

- ❖ H3: There is a statistically significant relationship between goal setting and achievement motivation among students in their final year.

Based on the study of the literature the following secondary hypothesis will be tested in the present study:

- ❖ H4: Both self-efficacy and goal-setting are significant predictors of achievement motivation

2.7 Conclusion

The foundation was laid for the framework for the terms and theories introduced and discussed namely Self-Efficacy, Achievement Motivation and Goal- Setting. A broad overview of motivation in general was discussed together with student motivation as well as the distinction between intrinsic and extrinsic motivation. The conceptual definitions of achievement motivation, self-efficacy and goal setting were discussed in the present chapter. The nature of the relationships among the three variables used leading to the formulation of the hypotheses in the present study was also discussed. The research methodology used to test the hypotheses is provided in the next chapter (chapter three).

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

In this chapter the method used to study the hypotheses formulated in chapter two is outlined. This chapter includes five sections. Firstly, it discusses the research participants. Secondly, it discusses the data collection and procedure as well as the measuring instruments used. Thirdly, it describes the ethics governing the data collection process. Lastly, the chapter provides information about the statistical analysis as well as item analysis, exploratory factor analysis and regression analysis.

3.2 Research design

The quantitative approach will be used to respond effectively to the problem statement and achieve the stated objective. Reason being quantitative research methods can be characterised by the collection of information which can be analysed numerically (ACAPS, 2012). The results of this research method are typically presented using statistics, tables and graphs. According to ACAPS (2012) the aim is to test pre-determined hypotheses and produce generalizable results.

3.3 Research Participants

The target population of the study are final year students, students in their final year of their degree or currently doing their Honours, from a Western Cape tertiary institution. The study was conducted using a sample of 128 final year students from various departments from a Western Cape tertiary institution. There are two major types of sampling techniques, namely probability sampling and non-probability sampling. The present study used non probability sampling. The use of the non-probability sampling procedure precludes the drawing of a conclusion that the sample is representative of the target population. This type of sampling procedure tends to be less concerned about generalisability and more about obtaining preliminary information in a quick and inexpensive manner (Sekaran, 2001).

TABLE 3.1
Sample Profile

Variable	Frequency	Percentage (%)
Age		
20-24	85	66.4
25-29	22	17.2
30-34	11	8.6
35-39	6	4.7
40 & older	4	3.1
Gender		
Male	56	43.8
Female	72	56.3
Marital Status		
single	106	82.8
Married	17	13.3
Other	4	3.1
Number of Dependents		
None	103	80.5
1	11	8.6
2	10	7.8
3	3	2.3
4	1	0.8
Year of study		
3	44	34.4
4	43	33.6
5	12	9.4
6	2	1.6
7	1	0.8
other		
Course type		
Full-time	96	75
Part-time	32	25

The demographic profile of the sample indicates that, the modal group in terms of age, the majority of the participants (66.4%) were in the 20-24 age group; 56.3% were female; and not yet married (82.8%); had no dependants (80.5%); were studying full-time (75%) and were in their third year of study (34.4). Table 3.1 summarises the demographic statistics of the participants.

3.4 Data Collection and Procedure

Data collection was only possible after the application of ethical clearance. The questionnaires were distributed to the sample at the end of their respective lectures and tutorial sessions. The participants received a combined questionnaire including a covering letter, a biographical questionnaire, and the three measuring instruments. The covering letter gave the reason for the study and instructions on completing the questionnaires.

A total of 105 questionnaires were physically distributed to the participants and 105 were returned immediately after completion, also participants were invited to complete an electronic form, whereby 23 responded.

3.5 Measuring Instruments

The following instruments were used to measure the levels of self-efficacy, goal-setting and achievement motivation.



3.5.1 Biographical Questionnaire

The biographical questionnaire is a self-developed questionnaire looking at the following information: age, gender, marital status, number of dependants, year of study (duration), course type (full-time or part-time), number of modules this year, number of modules this semester, number of modules repeated, number of examinations repeated, currently working for payment, if so, the amount of hours per week.

3.5.2 Academic Self-efficacy

“Academic self-efficacy was measured using the Academic Self-Efficacy scale developed by Burger (2012). The scale was developed by adapting the Zimmerman and Kitsantas (2007) self-efficacy scale for self-regulated learning (SRL), termed the Self-Efficacy for Learning Form (SELF) and the Vick and Packard (2008) scale developed by adapting the Self-Efficacy subscale of the MSLQ (Mahembe, 2014, p.133)”. The self-efficacy questionnaire has 12 statements concerning attitudes and feelings the candidate might have about themselves and their ability to perform in

an academic situation. The participant is asked to mark the number (0- 6) with an 'X' below the statement that best describes their own opinions, which is on a 7 point Likert scale. Number 0 being: Never, number 1: Almost Never, number 2: Rarely, number 3: Sometimes, number 4: Often, number 5: Very Often, number 6: Always. The participants are asked to work quickly and give their first impressions. The scale yielded a Cronbach's alpha co-efficient of 0.91 when testing internal consistency, using 460 grade 11 learners from four different schools in the Western Cape Province of South Africa (Burger, 2012 cited in Mahembe, 2014).

3.5.3 Goal-setting

In order to measure goal setting, a measure was developed. The initial measure comprised about 12 items developed from the goal setting theory. The measure was given to a few academic members of staff at a selected university in the Western Cape Province. The questionnaire was pre-tested on a sample of final year students from a specific department at a university in the Western Cape Province of South Africa and reported a Cronbach alpha co-efficient of 0.748. The final goal setting questionnaire used consists of 8 statements requiring participants to indicate their responses using a five point Likert scale ranging from: not at all accurate, somewhat accurate, a little accurate, mostly accurate to completely accurate.

3.5.4 Achievement Motivation

The Achievement Motivation questionnaire is an adapted version where only the positively worded items of the Muthee and Thomas (2009) achievement motivation scale were used. The questionnaire consists of 15 statements and the participants were asked to indicate the accuracy of each of the statements about themselves. There were six possible responses to each statement ranging from "Never" (number 0) to "Always" (number 6). The questionnaire was also pre-tested on the sample of final year students from a specific department at a university in the Western Cape Province of South Africa and reported a Cronbach alpha co-efficient of 0.812.

3.6 Ethical Considerations

Ethics are typically associated with morality. The ethical considerations of research were adhered to. The core ethical responsibility can be summed up as being that nothing should be done during the administration of the questionnaires to harm the participant.

3.6.1 Voluntary Participation

Research is usually perceived as an intrusion into people's lives and it often requires individuals to disclose personal information about themselves, which are most likely unknown to their family and friends. The participants were made aware that participating in the study was voluntary, and the desire not to partake will be respected, as no-one should be forced to participate (Sekaran, 2001). Informed consent was pursued after the participants were made aware of the purpose and what the study entailed (Mahembe, 2014).



3.6.2 Confidentiality, privacy and anonymity

One of the primary responsibilities of the researcher is to treat the information provided by the participant as confidential and to protect their privacy (Sekaran, 2001). Anonymity is the ethical protection ensuring that the participant's name and identity is protected from disclosure and will remain unknown (Neuman, 2011). Confidentiality concerns the ethical protection of those under study by ensuring that the information obtained is kept confidential or not publicised; not releasing data in such a manner that could possibly link specific individuals to specific responses (Neuman, 2011).

3.6.3 Non-maleficence and beneficence

The principle of non-maleficence requires that the researcher "ensures that no harm befalls research participants as a direct or indirect consequence of the research" (Wassenaar, 2006, p. 67 cited in Mahembe, 2014). In the current study, no risks or discomfort (harm) were anticipated.

Benevolence refers to acts of mercy and goodness or kindness; the general concern for the welfare of others (Beauchamp, 2013). The participants will most likely benefit by gaining awareness of their attitudes, strengths and limitations with the regards to their self-efficacy, goal setting and achievement motivation.

3.7 Statistical Analysis

In order to answer the research problem and the subsequent hypotheses formulated in the current study several statistical procedures were performed. In the first stage a frequency analysis was performed to identify any possible errors that might have been made during the data entry stage as well as identifying if any missing values existed. Secondly, item analysis and exploratory factor analysis (EFA) via Statistical Package for the Social Sciences (SPSS) version 23 were performed to identify any poor items and to ensure that the instruments were unidimensional that is measuring one unique factor as constitutively defined by the authors of the instruments. This process was followed by the performing of a Pearson Correlational analyses to determine the nature of the relationships among the variables in the study. A standard multiple regression analysis was also performed to determine if goal setting and self-efficacy predict achievement motivation.

3.7.1 Missing Values

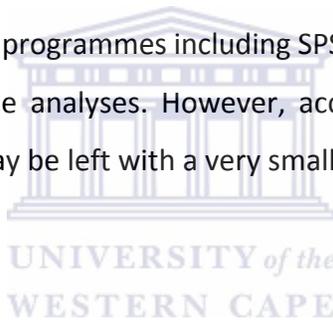
Before analysing the data for this study, the problem of missing values had to be addressed. Non-response is a common occurrence when self-reporting instruments are used (Mahembe, 2014). Addressing the problems of missing values involves selecting a method that does not have unfavourable effects on the analysis for example through sample reduction. Numerous methods of dealing with missing values exist namely: case-wise methods (listwise and pairwise deletion); single-imputation methods such as mean substitution, group substitution, regression based imputation, random hot deck imputation and imputation by matching (Mahembe, 2014) and multiple imputation (MI) and full information maximum likelihood estimation (FIML) (Jöreskog & Sörbom, 2006; Mels, 2003).

3.7.1.1 Case-wise methods

According to Kline (2011), two types of case methods exist namely listwise and pairwise deletion. Listwise and pairwise deletion is the most common techniques used to handling missing data (Peugh & Enders, 2004).

3.7.1.1.1 Listwise Deletion

The traditional way of dealing with missing data values is listwise deletion, it is used to generate a data set that only contains data cases that are complete (Mels, 2003). In other words, listwise deletion removes and excludes all data for a case that has one or more missing values, which may impact unfavourably on the sample size (Pallant, 2010). According to Enders (2010), the primary advantage of the implementation of this method is that it is convenient, as this is a standard option available in many statistical programmes including SPSS and LISREL. Secondly, it produces a common set of cases for all the analyses. However, according to Mels (2003), the major limitation is that the researcher may be left with a very small data set.



3.7.1.1.2 Pairwise deletion

Pairwise deletion tries to reduce the loss that arises in listwise deletion (retrieved from <https://www.statisticssolutions.com/missing-data-listwise-vs-pairwise/> on 7 October 2015). Furthermore, it maximises all data available by an analysis by analysis basis. “Pairwise deletion of missing data means that only cases relating to each pair of variables with missing data involved in an analysis are deleted” (Lewis-Beck, Bryman & Futing-Liao, 2004).

3.7.1.2 Single-imputation methods

“The term single imputation stems from the fact that these approaches generate a single replacement value for each missing data point. Imputation is an attractive strategy because it yields a complete data set (Enders, 2010)”. Therefore, a key advantage with any single imputation

technique is convenience. Furthermore, where other deletion approaches discard data, this technique makes use of that data.

One of the most popular of the single-imputation methods is imputation by matching; it is usually used if the assumption of multivariate normality is not met. Imputation by matching is the process whereby missing values are substituted with real values. “The substitute values replaced for a case are derived from one or more other cases that have a similar response pattern over a set of matching variables” (Jöreskog & Sörbom, 1996 cited in Mahembe, 2014, p.141.). Mean imputation is a method in which the missing value on a certain variable is replaced by the mean of the available cases, i.e. replacing the missing score of the overall sample or replacing the missing score in a specific group (males). With regression imputation, the imputed value is predicted from a regression equation while random hot-deck imputation is a technique where non-respondents are matched to resembling respondents and the missing value is imputed with the score of that similar respondent (Roth, 1994).

3.7.1.3 Multiple imputation (MI) and full information maximum likelihood estimation (FIML)

These two multiple imputation methods are used alternatively to the deletion and single imputation approach, in order to avoid sample size reduction and are available in LISREL 8.80. The benefit of the MI and FIML procedures “is that estimates of missing values are derived for all cases in the initial sample (i.e., no cases with missing values are deleted) and the data set is available for subsequent item and dimensionality analyses, and the formation of item parcels” (Mahembe, 2014, p.142.). The multiple imputation procedures “assume that values are missing at random and that the observed variables are continuous and follow a multivariate normal distribution” (Mahembe, 2014, p.142.). Mels (2010), proposes that multiple imputation can be utilised even in the occurrence where the preceding suppositions are not met. Considering that the variables in questions are measured on a five or more point scale; are not overly skewed and the missing data constitutes less than 30%.

The missing values problem in this study was addressed using the multiple imputation technique available in the PRELIS program provided in LISREL 8.80.

3.7.2 Item Analysis

Item analysis is a method which “examines student responses to individual test items (questions) in order to assess the quality of those items and of the questionnaire as a whole” (Office of Education Assessment, 2005).

3.7.3 Exploratory Factor Analysis

Exploratory Factor Analysis is used to classify multifaceted interrelationships among items and group items that are part of integrated concepts (http://en.wikipedia.org/wiki/Factor_analysis). In addition, “it is a collection of methods for explaining the correlations among variables in terms of more fundamental entities called factors” (Cudeck, 2000, p. 265).

3.7.4 Pearson Correlation Analysis

“A Pearson correlation matrix will indicate the direction, strength, and significance of the bivariate relationships of all the variables in the study” (Sekaran, 2001, p.401). The closer the value is to 0 the weaker the relationship while a value closer to 1 the stronger the relationship.

3.7.5 Multiple Regression Analysis

Standard multiple Regression Analysis is a statistical technique which allows the researcher to assess the relationship between one continuous Dependent Variable and several Independent Variables or predictors (Pallant, 2010). It is one of the most extensively used multivariate statistical techniques for testing hypotheses and predicting values for dependent variables. A square value closer to 1 indicates that the model fits the data very well. However, above 0.5 has been considered significant (<https://cran.r-project.org/doc/contrib/Faraway-PRA.pdf>). Beta is an attempt to make the regression coefficient more comparable.

3.8 Conclusion

The present chapter discussed the research participants, the data collection and procedure as well as the ethics governing the data collection process. Furthermore it described the technical and psychometric properties of the measuring instruments used. Lastly, the chapter provided information about the statistical analysis which addressed the issue of missing values and described item analysis, exploratory factor analysis and regression analysis. This chapter serves as the foundation for chapter four in which the findings will be presented graphically and statistically with appropriate discussions. Conclusions and recommendations are then made in the chapter thereafter.



CHAPTER FOUR

RESULTS

4.1 Introduction

The purpose of the present was to investigate the relationship between self-efficacy, goal setting and achievement motivation among students in their final year of study. This chapter includes three sections. The first section addresses the item analysis of the Self-efficacy, Goal-setting and Achievement motivation scales. The second section deals with the exploratory factor analysis of each of the scales and the final section utilises the Pearson correlation statistical technique to explore the relationship between the variables in order to make some decisions on the four hypotheses formulated in the study. A regression analysis test was performed to determine if self-efficacy and goal-setting are significant predictors of achievement motivation.

4.2 Missing Values

In order to ensure that all cases were included in the analyses, missing values had to be addressed. The missing values problem is one of the major drawbacks of self-reporting instruments especially when hard copies are administered. In the present study, the problem of missing values was addressed using the multiple imputation method available in the PRELIS program an option in LISREL 8.80 software. Consequently, 128 data cases were retained and used in the statistical analyses.

4.3 Item Analysis

Item analysis using the SPSS Reliability procedure (SPSS Inc, 2015) was performed on the items of the scales used to measure the variables under study. The purpose of conducting item analysis was to identify and eliminate items not contributing to an internally consistent description of the variables measured by these scales.

4.3.1 Item Analysis of Self-efficacy

A Cronbach alpha of .898 was obtained for the Self-efficacy questionnaire. The corrected item-total correlation values shown in the Item-Total Statistics table give an indication of the degree to which each item correlates with the total score. Low values (less than .30) may possibly indicate that the item is measuring something different from the scale as a whole (Pallant, 2010).

Table 4.1

The reliability analysis output for self-efficacy scale

	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items		
	.900	.911	12		

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
SE1	50.00	69.197	.674	.541	.889
SE2	49.59	72.369	.565	.435	.894
SE3	50.91	85.008	-.170	.082	.938
SE4	50.14	67.775	.711	.663	.886
SE5	50.02	68.039	.718	.644	.886
SE6	49.56	68.909	.749	.648	.885
SE7	49.98	68.023	.776	.704	.884
SE8	49.93	67.105	.779	.782	.883
SE9	49.73	66.921	.792	.805	.882
SE10	49.84	67.445	.788	.776	.883
SE11	50.00	70.567	.705	.650	.888
SE12	49.45	68.784	.708	.575	.887

As indicated in Table 4.1, all the corrected item-total correlations were larger than .30 (Pallant, 2010), except for SE3, which indicates a poor item with a loading below .30 (-.170). The item-

total statistics indicated that the reliability coefficient would increase largely if the item SE3 is to be deleted, to $\alpha = .938$. Therefore the decision was made to exclude the item in the analysis.

4.3.2 Item analysis of Goal-setting

A reliability coefficient of .837 was obtained for the goal-setting scale which can be considered satisfactory (Nunnally & Bernstein, 1994) as it is above 0.70. All the corrected item-total correlations were larger than .30 which is acceptable (Pallant, 2010). The output is shown in Table 4.2.

Table 4.2

The reliability analysis output for the goal-setting scale

	Cronbach's Alpha	Cronbach's Alpha Based on Standardize d Items	N of Items
	.837	.835	8

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
GS1	26.77	20.082	.632	.534	.809
GS2	26.94	21.035	.645	.580	.808
GS3	26.88	21.112	.603	.478	.813
GS4	26.27	20.417	.716	.561	.799
GS5	26.09	23.944	.375	.280	.839
GS6	25.92	23.049	.442	.328	.833
GS7	26.59	21.062	.536	.432	.823
GS8	27.16	20.542	.585	.395	.816

4.3.3 Item analysis of Achievement Motivation

A reliability coefficient of .856 was obtained for the Achievement motivation scale which can be considered good (Nunnally & Bernstein, 1994). All the corrected item-total correlations were larger than .30 which is acceptable (Pallant, 2010), except for item AM 5 and item AM 6, which have a corrected item-total correlation of .252 and .267 respectively. The item-total statistics indicate that the reliability coefficient would increase slightly if the item AM5 is to be deleted, to $\alpha = .853$. However the reliability coefficient would remain unchanged if item AM6 is to be deleted. Therefore the decision was made to delete the items. The output is shown in Table 4.3.

4.4 EXPLORATORY FACTOR ANALYSIS

In this section, the exploratory factor analysis results of the various instruments used in the study are presented. According to Pallant (2010, p.183), this section will make use of “two statistical measures which are generated by SPSS to help assess the factorability of the data: Bartlett’s test of sphericity (Bartlett 1954), and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy (Kaiser 1970, 1974). Bartlett’s test of sphericity should be significant ($p < .05$) for the factor analysis to be considered appropriate. A Kaiser-Meyer-Olkin measure of sampling adequacy (KMO index) value closest to 1, indicating that patterns of correlations are relatively compact and therefore factor analysis should present distinct and reliable factors (Field, 2005). The KMO index ranges from 0 to 1, with .6 suggested as the minimum value for a good factor analysis (Tabachnick & Fidell, 2007)”. However, Kaiser (as cited in Field, 2005) recommends accepting values greater than 0.5 as acceptable, values between 0.5 and 0.7 as mediocre, and values between 0.7 and 0.8 as good while values between 0.8 and 0.9 are great and values above 0.9 are superb.

Table 4.3*The reliability analysis output for the achievement motivation scale*

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.856	.860	15

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
AM1	46.83	122.474	.482	.429	.849
AM2	45.95	123.651	.527	.376	.845
AM3	45.05	126.367	.536	.449	.845
AM4	44.97	127.810	.513	.447	.846
AM7	45.20	122.190	.686	.644	.837
AM8	45.16	129.178	.474	.340	.849
AM9	46.41	129.237	.311	.485	.860
AM10	46.20	123.565	.565	.481	.843
AM11	46.12	119.222	.665	.671	.836
AM12	45.09	129.361	.396	.389	.853
AM13	45.95	117.557	.664	.655	.836
AM14	45.25	124.409	.499	.377	.847
AM15	45.80	123.434	.469	.408	.849

The decision rules that were followed to determine the number of factors to be extracted, and the items to be included in each factor when conducting exploratory factor analyses were as follows:

The number of factors to be extracted should not be more than the number of eigenvalues >1.00 , according to Kaiser's (1961) criterion. An item not loading >0.30 on any factor will be excluded (Field, 2005; Pallant, 2005; Tabachnick & Fidell, 1996).

An item loading >0.30 on more than one factor would be excluded if the difference between the higher and the lower loading was 0.25 (Nunnally & Bernstein, 1994; Tabachnick & Fidell, 1996).

4.4.1 Exploratory Factor Analysis of Self-efficacy

Exploratory factor analysis shows that the self-efficacy questionnaire is factor analysable as indicated by KMO index and the Bartlett's test of sphericity values of $.915$ and 1066.887 ($df = 55$; $p=0.000$) respectively. According to Kaiser (Field, 2005), these values are therefore superb and indicate the factor analysability of the correlation matrix of the self-efficacy questionnaire.

The Self-efficacy scale was found to be uni-dimensional. Only one factor with an eigenvalue greater than 1 was obtained and this factor accounted for 62.128% of the variance. The factors loading were all above 0.50 . The results are shown in Table 4.4.

4.4.2 Exploratory Factor Analysis of Goal-setting

Exploratory factor analysis shows that the goal-setting questionnaire is factor analysable as indicated by KMO index and the Bartlett's test of sphericity values of $.765$ and 248.507 ($df = 15$; $p=0.000$) respectively. These values are satisfactory and indicate the factor analysability of the goal-setting questionnaire (Field, 2005).

Table 4.4

Factor matrix for the self-efficacy scale

	Factor
	1
SE1	.698
SE2	.573
SE4	.752
SE5	.766
SE6	.785
SE7	.824
SE8	.822
SE9	.831
SE10	.829
SE11	.753
SE12	.743

Exploratory factor analysis showed that items GS4 and GS5 were complex items and were therefore excluded. The Goal-setting scale was found to be uni-dimensional. Only one factor with an eigenvalue greater than 1 was obtained and this factor accounted for 50.765% of the variance. The factors loading were all above 0.50 with the exception of GS6, which missed the 0.50 level. The results are shown in Table 4.5.

Table 4.5

Factor matrix for the goal-setting scale

	Factor
	1
GS1	.745
GS2	.765
GS3	.689
GS6	.386
GS7	.577
GS8	.643

4.4.3 Exploratory Factor Analysis of Achievement Motivation

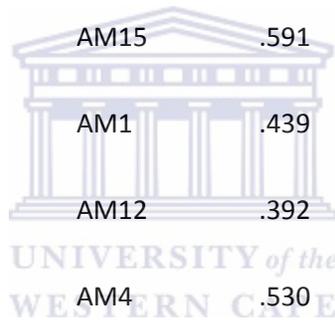
Exploratory factor analysis shows that the Achievement motivation questionnaire is factor analysable as indicated by KMO index and the Bartlett's test of sphericity values of .812 and 355.477 ($df = 28$; $p=0.000$) respectively. These values are satisfactory and indicate the factor analysability of the Achievement motivation questionnaire (Field, 2005).

Exploratory factor analysis showed that 5 items (AM2, AM3, AM8, AM9 and AM14) were complex items and were therefore excluded and 8 items remained. The Achievement motivation scale was found to be uni-dimensional. Only one factor with an eigenvalue greater than 1 was obtained and this factor accounted for 45.941% of the variance. The factors loading were all above 0.50 with the exception of AM1, AM10, AM12, which missed the 0.50 level. The final items were also examined to ensure that the scale is measuring achievement motivation. The results are shown in Table 4.6.

Table 4.6

Factor matrix for the achievement motivation scale

	Factor
	1
AM7	.803
AM10	.493
AM11	.797
AM13	.813
AM15	.591
AM1	.439
AM12	.392
AM4	.530



4.5 THE RELATIONSHIP BETWEEN SELF-EFFICACY, GOAL-SETTING AND ACHIEVEMENT MOTIVATION AMONG STUDENTS IN THEIR FINAL YEAR

The Pearson Correlation test was performed to determine the nature of the relationships among the variables under study. The relationships are in essence addressing hypotheses 1, 2 and 3. The correlations are depicted in Table 4.7. These will be discussed in chapter five.

Table 4.7

Descriptive statistics, inter-correlations of subscale scores and summarized reliability coefficients

Subscale	M	SD	SE	GS	AM
Self-efficacy	54.47	9.09	.90		
Goal-setting	30.38	5.22	.51**	.84	
AM	49.50	12.02	.46**	.49**	.86

N = 128

Coefficient alphas are presented diagonally and are indicated in bold. SE = self-efficacy; GS = goal setting; AM = achievement motivation

***p* < 0.01 significant correlations (two-tailed).

4.5.1 Regression analysis output

The secondary aim of the study was to determine if self-efficacy and goal-setting are significant predictors of achievement motivation.

Table 4.8**Regression Analysis output of Self-efficacy, Goal-setting and Achievement Motivation***Model Summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.552 ^a	.304	.293	6.883

Coefficients

Model		Unstandardized Coefficients	Standardized Coefficient	t	Sig.	Collinearity Statistics
		B	Beta			Tolerance
1	(Constant)	1.977		.516	.607	
	TSE	.255	.287	3.316	.001	.741
	TGS	.676	.347	4.000	.000	.741

Multiple Regression analysis indicates that the Model explains 30.4% of the variance in Achievement Motivation and reaches statistical significance ($r = .552$; $p < 0.01$). Both self-efficacy and goal setting are significant predictors of achievement motivation as indicated by significant levels which are below .05. Although both self-efficacy and goal setting are significant predictors of achievement motivation, Goal-setting makes the largest unique contribution (beta = .347), with Self-efficacy indicating a beta value of .287.

4.6 Conclusion

This chapter explored the psychometric properties of the instruments used to measure the constructs under study. Item analyses were conducted to determine the psychometric properties of the measures as well as identify and eliminate poor items. In addition, Exploratory Factor analyses were conducted to determine the factor analysability of the instruments and to ensure the uni-dimensionality of the scales before decisions are made. Furthermore, the Pearson

correlational analyses were conducted to determine the nature of the bivariate relationships between Self-efficacy, Goal-setting and Achievement motivation. Regression analyses were also conducted to determine if self-efficacy and goal-setting are significant predictors of achievement motivation. The following chapter will discuss those findings; drawing conclusions, revisiting the limitations and making recommendations to overcome them.



CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The main objective of the study was to determine whether there is a relationship between self-efficacy, goal-setting and achievement motivation among students in their final year at a selected university in the Western Cape Province. The previous chapters focused on the introduction of the research problem, the literature on the relationship between achievement motivation, goal-setting and self-efficacy. The main objective and research hypotheses presented in Chapter three were tested using Pearson correlation test, item analysis, exploratory factor analysis as well as multiple regression analysis. The results were presented in Chapter four and are now the subject of discussion in the present chapter. The main objectives of the present study was to firstly answer the question, whether there is a relationship between self-efficacy, goal-setting and achievement motivation among student in their final year and secondly, whether self-efficacy and goal-setting were significant predictors of achievement motivation.

5.2 The relationship between self-efficacy, goal-setting and achievement motivation among students in their final year

The Pearson correlation test was used to test whether there is a relationship between self-efficacy and goal-setting (Hypothesis 1), self-efficacy and achievement motivation (Hypothesis 2) and achievement motivation and goal-setting (Hypothesis 3).

Hypothesis 1 (H1): There is a statistically significant relationship between self-efficacy and goal setting among students in their final year.

Hypothesis 1: There is a relationship between self-efficacy and goal-setting

The results from the sample of students indicate there is a statistically significant relationship between self-efficacy and goal setting among students in their final year ($r = 0.51$ $p < 0.01$). Previous research supports the relationship between goal setting and self-efficacy (Schunk, 1991; Schunk & Zimmerman, 1997). Jeng and Shih (2008), found that self-efficacy positively correlates with goal setting; the higher the level of self-efficacy, the higher the level of future achievement to be set. Additionally, studies on goal setting show that goals differ in specificity, difficulty level and proximity. Goals that are specific, not too difficult, and short-term usually lead to higher self-efficacy (Yailagh, Lloyd & Walsh, 2009). These results are in agreement with Bandura (1994, p.4), which states “personal goal setting is influenced by self-appraisal of capabilities. The stronger the perceived self-efficacy, the higher the goal challenges people set for themselves and the firmer their commitments to them”.



Hypothesis 2 (H2): There is a statistically significant relationship between self-efficacy and achievement motivation among students in their final year

Results emanating from the current research indicate there is a statistically significant relationship between self-efficacy and achievement motivation among students in their final year ($r = .46$, $p < 0.01$) (see Table 4.7). These results are consistent with previous studies. Numerous studies on the relationship between self-efficacy and achievement motivation reported a significant relationship between the two variables for college students (Fu, 2011; Wang & Zhang, 2010; Xiao, 2003; Zhang, 2006). In addition, among university students, Elias, Noordin and Mahyuddin (2010) found a positive and significant correlation between self-efficacy and achievement motivation. This shows students who are confident in themselves in achieving success in their studies tend to have the need to achieve excellence (Elias et al., 2010).

Hypothesis 3 (H3): There is a statistically significant relationship between achievement motivation and goal setting among students in the final year

The results from the sample of students indicate there is a statistically significant relationship between achievement motivation and goal setting among students in the final year ($r = 0.49$; $p < 0.01$). The relationship between achievement motivation and goal setting behaviour has been studied for a number of non-learning tasks (Atkinson, 1950; Atkinson, 1958; Atkinson & Reitman, 1956; Clark, Teevan & Ricciuti, 1956; McClelland et al., 1953 cited in Mukherjee, 1965) and in a learning situation (Kausler & Trapp, 1958; Ricciuti & Schultz, 1958 cited in Mukherjee, 1965). Most of these studies show that people with strong generalized achievement motivation usually set higher goals than those with low need for achievement (Mukherjee, 1965). Therefore, the current study findings are consistent with the existing literature on the relationship between achievement motivation and goal setting.

Hypothesis 4 (H4): Self-efficacy and goal setting are significant predictors of achievement motivation

Regression analysis was conducted to address the secondary aim of the study which was to determine whether self-efficacy and goal-setting were significant predictors of achievement motivation. According to table 4.8 both self-efficacy and goal setting are significant predictors of achievement motivation as indicated by significant levels which are below .05. Of these two variables, Goal-setting makes the largest unique contribution ($\beta = .347$), although Self-efficacy also made a statistically significant contribution ($\beta = .287$). This makes sense given that several studies have documented the nature of these variables to be positive (Fu, 2011; Mukherjee, 1965; Wang & Zhang, 2010).

5.3 Recommendations

The problem relates to whether there is a relationship between self-efficacy, goal-setting and achievement motivation among students in their final year.

Students tend to experience difficulties in their academic studies and coping with the learning tasks. Their difficulties include studies, personal, emotional and social matters. According to Elias et al., (2010) the belief that students at tertiary level are matured enough to deal with a variety of challenges are not completely acceptable.

5.3.1 Self-efficacy

Self-efficacy beliefs have been associated with numerous academic and social benefits in students (Wood & Oliver, 2004). High levels of self-efficacy aid students in dealing with failure and managing academic anxiety (Bandura, 1997) and improve learning and examination performance (Jackson, 2002 cited in Wood & Oliver, 2004). Self-efficacy leads to higher levels of academic and social self-esteem in students, resulting in the likelihood of attempting tasks (Bailey, 1999; Cheung & Cheng, 1997).

There are four sources that influence self-efficacy by using these sources, lecturers, peers and the students themselves can improve levels of self-efficacy. Successful experiences are most likely to boost student self-efficacy while it is eroded by failures. As this is the most vigorous source of self-efficacy; students attempting new tasks can remind themselves of previous successful experiences in which the situation was relatively similar and use this as motivation and encouragement that it can be done again (Mastery experiences). Observing a peer succeed at a task can strengthen a student's belief in their own abilities (vicarious experience). Self-modelling, where students observe themselves succeed is also a powerful influence. Watching video tapes of successful performances or viewing photographs of past accomplishments can increase student confidence. Therefore the lecturers' teaching methods should also ensure that exercises that encourage self-efficacy be included as part of classroom curriculum.

Lecturers can enhance self-efficacy with credible communication and feedback to guide the student through the task or motivate them to make their best effort (Verbal persuasion). A positive mood can enhance a student's beliefs in self-efficacy, while it can be weakened by anxiety. A certain level of emotional stimulation can create an energizing feeling that can

contribute to strong performances. Lecturers can help by reducing stressful situations and lowering anxiety surrounding events like examinations or presentations (emotional state).

Tertiary institutions should take proactive steps to increase student self-efficacy. Highly self-efficacious students are more likely to use and apply the knowledge and skills they acquire at university to help them to attain their goal of obtaining a degree (Pajares, 2002). In addition, universities should provide social support for faculty and peer interaction. Social support is crucial in developing mature interpersonal relationships, establishing ideas and developing purpose. Research has shown that students who have strong social networks that support their academic and emotional development are also more likely to complete their bachelor's degree (Martinez & Klopott, 2005 cited in Vuong, Brown-Welty & Tracz, 2010).

5.3.2 Goal-setting

Students should set SMART goals, Specific, Measurable, Attainable, Realistic and Time-bound. Students should write down their goals and post them somewhere for regular review. This will serve as a reminder of what they are working towards and help to keep them motivated and on track. When goals are out of sight and lose their importance, motivation and success deteriorates as well.

When students write down their goals, they are forced to examine themselves and see their own dreams. This is important because ultimately, reflecting on why they hope to achieve their goals, rather than simply knowing what their goals are, is what motivates them to pursue their life ambitions (Rader, 2005). These goals should be stated as positive statements, avoiding vague terms and general expressions.

Students should share their goals with people who are important to them and the accomplishment of their goals. Sharing understanding and commitment with others therefore increases their chances of success.

Measures for each goal need to be determined for ease of clarity. Students are able to clearly visualize each goal and know what success will look like, considering not only the outcome but also their performance. Often individuals fall short of their outcomes for reasons out of their control; in this case, it would help to have performance standards by which they can measure their success.

When students fall short of their goals, they should remember failure to reach their goals does not matter as much, as long as they have learned something. With this they should take the time to reflect and gain from the experience improves for their next set of goals. They should also bear in mind if the goals are no longer holding their attention, students should let them go and set new ones. When students achieve a goal they should take time to enjoy the satisfaction and reflect on the implications of the achievement.

From a university perspective, it would be beneficial to invest time and resources to assess student support to ensure the goal attainment process is optimized. Administrative and lecturing (academic) staff should be trained in providing the appropriate support to students in the process of setting and achieving their academic goals, which will ultimately benefit not only goal attainment, but student satisfaction and effectiveness, as well as the University's overall effectiveness as an academic institution (Chipunza & Masiza, 2004). Students should learn to set concrete, specific and sufficiently challenging work goals for them to become committed and motivated in their academic endeavours to obtain good class degrees.

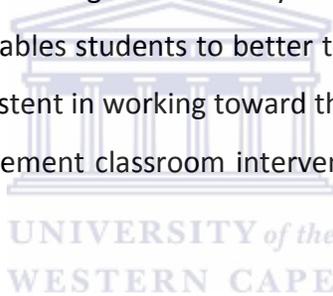
5.3.3 Achievement motivation

Achievement motivation has a great impact on academic engagement when students are motivated; they become engaged in academic work, which eventually results in good academic performance or success (Akpan & Umobong, 2013). Getting students achievement motivated to enable them to deal with academic setbacks, stress and pressures is a major challenge. Therefore it is important to increase the level of achievement motivation in students for proper academic engagement and subsequent achievement, performance or success. Parents and guardians should inspire the desire to achieve early in childhood by providing adequately for their needs,

as well as encouraging them both intrinsically and extrinsically to achieve their goals. As the student moves on to university, they should inspire this desire themselves.

Lecturers should show concern for students' low level of performance in the classroom. They should provide feedback with regards to tests and assignment results. Students may tend to shy away from academic challenges if they believe they will not be successful. This discussion may help students notice their mistakes and avoid falling into maladaptive patterns, which will assist them in thinking about how to counter it (asking a lecturer or tutor for help or finding a study partner, etc.).

Lecturers should also encourage students to increase their efforts and even more important to explore alternate problem solving strategies when they encounter academic obstacles. Being allowed to learn from mistakes enables students to better tolerate occasional failures and also encourages them to be more persistent in working toward their own intrinsic educational goals. It is pertinent that educators implement classroom interventions that foster student learning, motivation, and achievement.



Additionally, lecturers should reward students, it may not necessarily need to be tangible, however, the goal is to build a strong student perspective on intrinsic motivation as an incentive for learning, such as the pride of completing a difficult task or the satisfaction derived from a job well done. Furthermore, good interpersonal relationships between students and staff (both teachers and non-teaching) as well as among the students should be encouraged as this enhances achievement motivation.

These recommendations are not exhaustive as many other strategies and remedies can be used to improve the levels of self-efficacy, goal setting and achievement motivation among students in their final year as well as for the department and university as a whole. Also remembering this involves human behaviour and there is never a 100% solution; behaviour will always be repeated.

5.4 Limitations and suggestions for future research

This study is not without its limitations. The participants in the study were students from one university, faculty and from random departments. This sample might not be good enough to represent all students in their final year. Including specific or all faculties and more universities will most likely make the results more generalizable.

The study was conducted using students in their final year. This can be improved by studying the relationship of these variables during the course of the student's undergraduate studies; from first year through to their final year.

Additionally, the questionnaires require students to respond to formulated statements and they have no other choice; the subjects have to select from a number of answers available, it might not necessarily be their honest opinion, but rather one that most likely describes them. Furthermore, there were no interviews to support the questionnaires. Interviews will allow for further exploration and a greater depth of information regarding sources of self-efficacy, achievement motivation and goal setting.

There is also an element of social desirability, which is the “tendency of some respondents to report and answer in a way they deem to be more socially acceptable than would be their "true" answer. They do this to project a favorable image of themselves and to avoid receiving negative evaluations. The outcome of the strategy is over reporting of socially desirable behaviors or attitudes and underreporting of socially undesirable behaviors or attitudes. Social desirability is classified as one of the respondent-related sources of error (bias) (<https://srmo.sagepub.com/view/encyclopedia-of-survey-researchmethods/n537.xml>)”. Open ended questionnaires tend to be time consuming; however, they allow the subjects to elaborate on their feelings and impressions.

The use of non-probability sampling also makes it difficult to generalize the results. Moreover, the sample size was small (N= 128). The study can be strengthened by increasing the sample size

as the results may thus vary substantially. The small sample size had a limiting effect on the type of analyses that could be conducted. For instance we could not perform structural equation modelling because most of the software's require a minimum sample size of 200.

The theories discussed were not covered in a broad context but limited to certain theorists. Broadening the scope of the theories will enable more models to be explored, enhancing the understanding of the concepts more holistically and delving deeper into possibilities of other factors influencing the respective variables.

No biographical details of the students were used for inferential statistics. Including certain biographical details could strengthen the study, as more relationships as well as possible factors that may affect the relationship between the variables could be discovered. For example results may indicate that the observed variables could differ in males and females (gender); students studying full-time or part-time (course type); or the number of modules/examinations failed etc. Students tend to be motivated for and by various reasons; these biographical details/factors could justify that motivation and be evident in the results, drawing possible conclusions and correlations. Future studies should investigate the influence of biographical factors on self-efficacy, goal setting and achievement motivation.

The study is a cross-sectional study. The study can be improved by changing the research design to a longitudinal study, which will be able to detect developments or changes in these patterns during the student's progress from first year to their final year of university. This may also be useful in identifying students at risk for dropping out and may give clues regarding effective intervention strategies for students who are experiencing academic difficulties.

Lastly, future studies should attempt to develop a comprehensive model that identifies a nomological network of variables that explain additional variance in achievement motivation over and above the three variables identified in the current study.

5.5 Conclusion

This study investigated the relationship between self-efficacy, achievement motivation and goal-setting among students in their final year of study. Significant relationships were found for self-efficacy and goal-setting; self-efficacy and achievement motivation as well as achievement motivation and goal-setting and all relationships were supported. It was also found and supported that self-efficacy and goal-setting were significant predictors of achievement motivation, with goal-setting making the largest unique contribution. The limitations and suggestions for future studies have been highlighted. The results of the present study provide some important insights for students, lecturers and tertiary institutions regarding how to identify and address issues surrounding self-efficacy, goal-setting and achievement motivation among students at tertiary level.



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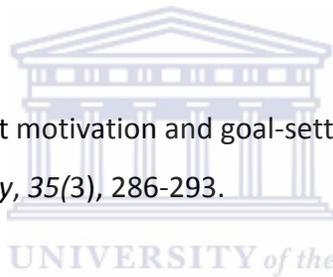
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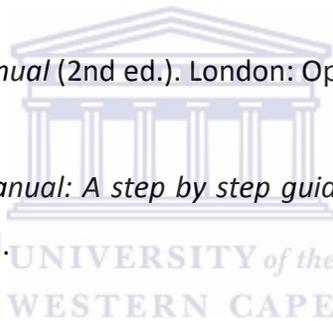
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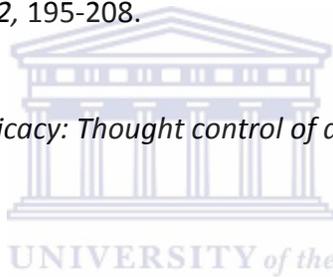
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