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EXPLORING UNIVERSITY STUDENTS' MOTIVATION TO PARTICIPATE IN A LEADERSHIP DEVELOPMENT PROGRAMME

by

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ABSTRACT

EXPLORING UNIVERSITY STUDENTS' MOTIVATION TO PARTICIPATE IN A LEADERSHIP DEVELOPMENT PROGRAMME

Introduction: Student leadership is currently a critical topic at South African universities. Leadership skills are essential to the development of humanity and universities play a vital role in the development of students to become future leaders. The development and practice of leadership at university level can benefit student development and can contribute to the good of society, which is crucial at this date and time. However, very limited research has been done on what motivates students to develop their own leadership skills.

Research purpose: The objective of this study was to explore the factors that motivate students' participation in leadership development at a selected South African Higher Education Institution. In essence, the study aims to explore possible factors that contribute to students' participation in leadership development and to make recommendations for future leadership development initiatives at university level.

Motivation for the study: As far as could be determined, this was the first study on the motivational factors that influence students' interest in leadership development at university level, in particular in South Africa. This study can assist universities in exposing more students to leadership development. Essentially, it can enable universities to grow their own pipeline of leaders that can be engaged in the universities' own leadership structures and will contribute to the good of society.

Research methodology: An exploratory quantitative research design with supplementary qualitative questions was used. Convenience sampling was used and data were gathered from students of a selected South African Higher Education Institution (N = 78). Participants completed the Leadership Attitudes and Beliefs Scale (LABS), the Academic Motivation Scale (AMS) as well as biographical questions.

Main findings: The results of the study indicated that the LABS and AMS are valid and reliable instruments for use in higher educational institutions. The results of the empirical findings of this study were unexpected. No significance in terms of hierarchical and systematic thinking was found in the descriptive statistics. A strong correlation was found between EM identified and EM external regulation. The results indicated that gender differed significantly on the subscale Intrinsic motivation toward accomplishment as well as Extrinsic motivation identified and Extrinsic

motivation external regulation. The study found that previous leadership exposure might serve as motivation for students to further develop their leadership competence.

Significance of the study: No similar research could be found in South Africa or in the international context. The findings of this study do not only provide valuable insights into the theory of student leadership, but also provide insight into the practical implementation of student leadership development at universities. The study creates awareness of the critical importance of investment by universities in student leadership development.

Limitations and future research: This study emphasised the need for and relevance of future research on this topic. The convenience and homogeneous nature of the sample as well as the sample size complicated the effort to make definite conclusions about motivational factors. It is therefore recommended that a larger sample size be used in future research to ensure a representative distribution of a heterogeneous student population.

Conclusion: The development of student leadership is a critical issue for universities and society as a whole. In light of the results of this study and the current situation that universities in South Africa are faced with in so far as student leadership is concerned, further research should be conducted into this topic.

Key words: student leadership, leader, motivation, leadership development, systematic leadership thinking, hierarchical leadership thinking.

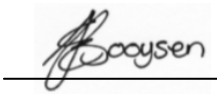
DECLARATION

I, Elsie Helena Booysen, declare that Disciplinary Enquiries in Terms of Schedule 8 of the Labour Relations Act 66 of 1995 is my own unaided work both in content and execution. All the resources I used in this study are cited and referred to in the reference list by means of a comprehensive referencing system. Apart from the normal guidance from my study leaders, I have received no assistance, except as stated in the acknowledgements. This study was submitted on Turnitin and the necessary recommendations were addressed.

I declare that the content of this thesis has never been used before for any qualification at any tertiary institution.

I, Elsie Helena Booysen, declare that the language in this thesis was edited by Desirée Homann BA (Languages)(UP), B. Hons (Journalism)(US), MA (Creative Writing)(UP).

Elsie Helena Booysen Date: 14 May 2016



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EXPLORING UNIVERSITY STUDENTS' MOTIVATION TO PARTICIPATE IN A LEADERSHIP DEVELOPMENT PROGRAMME

1 INTRODUCTION

1.1 BACKGROUND

Leadership development should ideally be integrated in every university student's learning experience (Van Velsor & Wright, 2012). Leadership skills are essential to the development of humanity and universities play a vital role in the development of students to become future leaders. The development of competent and ethical leaders is a primary responsibility of universities (Connaughton, Lawrence, & Ruben, 2003). Additional effort should be put into the development and practice of leadership at university level in order to benefit student development and for the good of humanity (Rosch & Kusel, 2010). Van Velsor and Wright (2012) argue that the development of leadership skills must start at the earliest age possible and that leadership development should be focused on a larger variety of humanity. In a study conducted the researchers prove that 97% of their respondents feel strongly that the development of leadership should start before an individual reaches the age of twenty-one.

Previous research has addressed the importance of developing leaders at university level (Rosch & Kusel, 2010; Van Velsor & Wright, 2012), and the responsibility that universities have in fulfilling a leadership development role (Connaughton *et al*., 2003), as well as the different outcomes that student leadership development has and the contribution these make (Crossan, Mazutis, Seijts & Gandz, 2013; Rosch & Kusel, 2010). However, little attention has been given to why students choose to develop their own leadership skills. Developing leadership skills at student level is becoming increasingly essential, especially as universities are looking for new leaders to engage in their own leadership structures (Duvall, 2003). In the study conducted by Cress, Astin, Zimmerman-Oster, and Burkhardt

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(2001), they emphasise the importance for universities to invest their resources in leadership development initiatives for students. In support of this study many tertiary education institutions allocate their time and resources to the development of student leadership and place much emphasis on developing programmes to assist them in achieving this (Cress *et al*., 2001; Shertzer *et al*., 2005). In spite of this, Duvall (2003) states that only a small number of universities currently have successful student leadership development programs in place. This is confirmed by Cress *et al*. (2001) who are of the opinion that merely having initiatives for leadership development might not be sufficient.

Leadership development should be integrated in every student's learning experience, preferably as part of their curriculum (Van Velsor & Wright, 2012). According to Crossan *et al*. (2013) students can become skilled at leadership in the same way as they learn to do accounting, marketing, strategic thinking and other similar skills at university level. A panel of leadership experts reached consensus that the major goals of a leadership program are to develop a students' self-knowledge of their own leadership strengths and weaknesses as well as to prepare students for their future occupations (Morgan, King, Rudd, & Kaufman, 2013). According to Nelson (2010) the world of work expects from qualified professionals to be competent leaders when they engage in their profession. In a South African context, Shokane, Stanz, and Slabbert (2004) points out that businesses are undertaking to become world leaders in the market, and that their success lies in a solid leadership pipeline. These findings are proven and emphasized by the research that was done by Rosch and Kusel (2010), that leadership are often proven by a skill set that shows that an individual has a good understanding of his or her own areas of strength and weakness and that these individuals normally have well established communication and interpersonal skills which enable them to be effective in the world of work.

1.2 RESEARCH PROBLEM

The concept of leadership and the behaviour that leaders are expected to display are often defined by school systems which measure leadership on a merit basis. Only the learners who follow these behavioural criteria are recognised as leaders and universities and

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organisations are eager to pull these learners into their structures. The school system therefore only caters for a limited number of learners with regard to developing leadership, whereas the rest are left in a leadership 'vacuum' as they failed to meet the leadership criteria at school level (Sundelowitz, Macdonald, & Stanz, 2007a). Sundelowitz, Macdonald and Stanz (2007b) are of opinion that people develop and display leadership in different phases of their lives and that not all people develop leadership at a young age. This statement provides evidence that institutions should cater for leadership development in later stages of life, such as at university level.

Lindsay, Foster, Jackson, and Hassen (2009) note that leadership initiatives are usually attended by students who view it as an element of their self-learning or personal development program. Successful student leaders seize every opportunity they get to enhance their leadership skills and they put a lot of effort into their own leadership development (Rice, 2011). Taking this into consideration, it can be asked whether students are successful leaders because of their developed leadership skills or whether it is only the successful students who put effort into the development of their leadership skills.

According to Patterson *et al*. (2013), various studies of leadership have shown that students play a significant role in the development of their own leadership skills. In a study conducted by Crossan *et al*. (2013) students indicated that they realised the value of completely understanding themselves and how self-knowledge will contribute to being more effective leaders through attending a leadership development programme. According to Cress *et al*. (2001), the demographic profile and the seniority of students play an influential role on the interest students display in leadership development. Demographic characteristics and seniority are not the only factors which play a role in the interest students show in leadership development. Cress *et al*. (2001) also state that students who view leadership as a critical aspect in their lives are more interested in attending leadership initiatives. Students reflected that just by attending the beginning of a leadership development course they could see the contribution it would make to their private and work life (Crossan *et al*., 2013).

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While previous research addressed several aspects of leadership, limited attention has been given to the underlying factors that motivate a student's participation in leadership development. It would be valuable to further explore and prove these factors. Determining how to get students more involved in leadership development programs is essential. Looking at the kind of students who are mostly involved in leadership development programs currently might bring us closer to understanding why students take part in leadership development programs and what factors influence their interest in leadership development. The following question therefore necessitates more investigation: What are the factors that motivate a student to participate in leadership development?

1.3 PURPOSE OF THIS STUDY

The main purpose of this study is to explore the contributing factors that motivate a student to participate in leadership development within a university context in South Africa.

1.4 RESEARCH OBJECTIVES

The objectives of this study are divided into objectives for the literature review and empirical research objectives. Each set of objectives is described below in terms of primary and secondary objectives.

1.4.1 Literature review objectives

The **primary objective** of the literature review is to create a theoretical framework for the definitions, importance, previous research and motivational factors of student leadership and participation in student leadership programmes.

The **secondary objectives** of the literature review are:

- To define the concept of student leadership.
- To review literature on the importance of student leadership development.
- To review research that was done on student leadership.
- To identify the reasons for students' interest in leadership development.

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1.4.2 Empirical research objectives

The **primary empirical research objective** is to explore the factors that motivate a student to participate in leadership development at the University.

The **secondary empirical research objectives** are:

- To determine the relationship between demographic factors (age, gender, race, year of study, field of study, and place of residence) and a student's participation in leadership development initiatives at the University;
- To determine the relationship between previous exposure to leadership positions and a student's need for further leadership development at the University; and
- To make recommendations for future leadership development initiatives on university level.

1.5 ACADEMIC VALUE AND CONTRIBUTION OF THE STUDY

The importance of the study is two-fold. Previous literature provides limited information on leadership development at university level. The information that is available is mainly focused on the importance of student leadership development or on the outcome of such programmes and the contributions they make to the growth of students. A knowledge gap in therefore exists in the literature on the reasons or factors that explain why students are interested in leadership development initiatives. As far as could be established, this will be the first study on the motivational factors that determine student's interest in leadership development on university level, in particular, in South Africa. From a theoretical perspective, the proposed study will contribute towards exploring the reasons why students participate in leadership development.

Determining these factors can assist universities in exposing more students to the leadership development programs that are already available. Furthermore, these factors can guide the development of further leadership development programs in such a manner as to involve more students in leadership development programs. Universities should be more efficient, organised and forward-thinking with regard to their leadership initiatives if

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they want to meet the challenges of leadership development at the higher education level (Connaughton *et al*., 2003). Therefore, from a practical perspective, the findings of the study can assist universities in developing leadership development programmes and exposing more students to such programmes. This can ideally be implemented in every student's learning experience as part of their curriculum (Van Velsor & Wright, 2012). Leadership development programmes at university level can enable universities to grow their own pipeline of leaders that can be engaged in the universities' own leadership structures (Duvall, 2003). This study will give insight into the development of leadership at university level and will in effect benefit student development and contributed to the good of humanity (Rosch & Kusel, 2010).

1.6 ASSUMPTIONS

In developing the proposed research design, the following assumptions were made:

- A quantitative research approach is the most suitable research method to explore the motivational factors.
- The quantitative data will be enriched with two qualitative open-ended questions.
- Data will be drawn from questionnaires that have been developed and administered in the higher education industry, and it has been validated.
- Participants will complete the questionnaires truthfully.
- Participants who will complete the questionnaires will understand the content of the questions asked.

1.7 DELIMITATION

The proposed research study has several limitations related to the applicable theoretical perspectives, constructs and context. Firstly, it is limited to university students from a selected South African Higher Education Institution. The study will not consider students from other universities. No limitations were placed on age, gender and race of participants, as the study included all the students that attended the leadership development course at the University.

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The literature review will primarily be limited to literature available on student leadership. The review will furthermore be limited to literature available in the English language that is published mainly between 1985 and 2015. The study will focus specifically on student leadership and not on the broad subject of leadership. Leadership styles and adult leadership are excluded from this study.

The study was based on the assumption that the University would give the researcher access to the database of students who chose to attend the leadership programme. It was assumed that the information would be sufficient to answer the research objectives of the study. It was also assumed that the students that attended the 2015 leadership course would give consent to participate in the study.

1.8 DEFINITION OF KEY TERMS

This study involves a number of key terms, namely *adolescence, hierarchical leadership thinking, leader, leadership, motivation, student, student leadership development* and *systematic leadership thinking.* The manner in which these key concepts are defined for the purpose of this study is considered below.

Adolescence: A time of transition from childhood to adulthood (see section 2.1).

Hierarchical leadership thinking: Viewing leadership as a hierarchy and rank of order (see section 2.4).

Leader: A leader is someone who represents a group to people outside the group (see section 2.1).

Leadership: The process of influencing a group to achieve a goal (see section 2.1).

Motivation: A person's native desire for stimulation and learning, which is discouraged or supported by the person's environment (see section 2.4).

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Student: A person who is studying at a place of higher education such as a university (see section 2.1).

Student leadership development: The process in which students are trained to be able to deal with complex challenges and develop their talents (see section 2.1).

Systematic leadership thinking: Viewing leadership as ecological and collaborative (see section 2.4).

1.9 CHAPTER OUTLINE OF THE STUDY

The following chapter outline will be used for the study:

Chapter 1: Introduction

This chapter provides the reader with a better understanding of the underlying problem, the purpose statement of the study, the main objectives and the motivation for this study. This chapter firstly provides background on the study topic to create a frame of reference for the subject. Secondly it explores the research problem, provides an overview of the purpose of the research and sets specific research objectives that the study will answer. This is followed by a discussion on the delimitations and key definitions of the study.

Chapter 2: Literature review

This chapter expands on the research findings of the previous studies conducted concerning the research topic. This chapter consists of the literature that aims to create a common frame of reference regarding leadership, and specifically student leadership development. Thus, chapter 2 is a clear and structured literature review based on past research findings and exploring factors impacting on and components of student leadership development.

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The literature review will be divided into the following sub sections:

- What student leadership is ;
- Why student leadership is important;
- What research was done in terms of student leadership;
- Examples of leadership initiatives ; and
- Factors that motivate students to participate in student leadership.

Chapter 3: Research design and methods

This chapter outlines the empirical research part of the study and focuses on the different methodologies that were applied to conduct the study. The discussion on the methodology includes details of the empirical research that was conducted during this study. This section includes the research strategy, the sampling method, data collection, data analysis as well as assessing the quality and rigour of the research design. The section is concluded with the ethics considerations applicable to this research study.

Chapter 4: Results

The research results are presented in this chapter. Thus this chapter focuses on inferring and portraying the results obtained from the statistical procedures as described in chapter 3. A detailed account of the results is given, with reference to descriptive statistics, the reliability of the instruments, frequency distributions, and possible correlations between constructs as well as the differences between groups. This includes the statistical analysis of the data and the statistical outcomes, which are presented by way of tables and figures.

Chapter 5: Discussion of the results

This chapter consists of the discussion of the results found in chapter 4. The results will be explained and linked to the literature review as discussed in chapter 2. The results will be interpreted in order to answer the research questions. This chapter will aim to explain

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the factors that motivate students to participate in leadership development and will include the findings and conclusions drawn.

Chapter 6: Conclusion, limitations and recommendations

Chapter 6 gives a summary of the objectives and the key findings of the study as well as a discussion on the significance of the study. Limitations of the study are addressed in this chapter and further research possibilities and recommendations are proposed, followed by a final conclusion.

1.10 CONCLUSION

Chapter 1 presented the introduction, background and motivation of this study. It appears that there is a lack of empirical evidence on the factors that motivate students to participate in leadership development within a university context. Therefore, the main purpose of this study was to explore and determine such motivational factors. Moreover, this chapter looked at the background, problem statement, and purpose of the research, the research objective and the delimitation of the study, as well as the definition of key terms. A chapter outline of the study was also provided.

The next chapter investigates the literature that exists on the research topic and will specifically focus on student leadership development and, in particular, on the factors that motivates students to participate in leadership development.

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2 LITERATURE REVIEW

2.1 INTRODUCTION

In this chapter the literature and theory of student leadership are discussed. The chapter will firstly focus on the definition and concept of leadership and specifically student leadership. The chapter will then highlight why student leadership is important and discuss the findings of previous research that was conducted on this topic as well as investigate examples of student leadership initiatives. Finally, the concept of motivation will be discussed with specific focus on what motivates students to participate in student leadership development.

2.2 WHAT IS STUDENT LEADERSHIP?

To understand the concept of student leadership it is firstly important to ask, “What is leadership?”. Leadership is a coterminous concept that changes it meaning according to the time and environment it is applied in (Bass & Bass, 2009). “Leadership is not a person or a position” (Whitehead, 2009, p. 847). Leadership is an influential relationship that occurs between the leader and the follower and the intent of such a relationship is often to achieve a shared objective (Leshnower, 2008; Wisner, 2011). Sethi (2009) defines leadership as the process of influencing a group to achieve a goal. A leader is therefore someone who represents a group to people outside the group (Bass & Bass, 2009). Leadership is also often seen as a skill that a person has and this skill can be learned (Mozhgan, Parivash, Nadergholi, & Jowkar, 2011). Therefore a leader can be seen as someone who demonstrates the competencies of leadership (Tabb & Montesi, 2000). These competencies are displayed in the person’s confidence, knowledge, social skills and a need to fulfil power positions (Whitehead, 2009).

To understand the concept of student leadership, it is important to clarify the definition of a student. For the purpose of this study a student is defined as a person who is studying at a place of higher education such as a university. It is also important to note that students fall within the adolescence or youth stage of their lives. Shek and Sun (2012) define

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adolescence as a time of transition between childhood and adulthood where the person undergoes changes in physical, personal, social and cognitive dimensions and these changes are strengthened when the person enters university. Although leadership is a common topic studied by numerous researchers, there is little consensus regarding the topic when it is applied to the youth or adolescence stage of life. According to Turkay and Tirthali (2010), youth leadership skills are conceptualised in five spheres which are: understanding the dynamics of the self and the group, decision making, management, learning and relationships. These skills can be developed through the process of leadership development. Thus, student leadership development is the process by which students are trained to be able to deal with complex challenges and develop their talents and skills (Mozhgan, 2012).

2.3 WHY IS STUDENT LEADERSHIP IMPORTANT?

The fast-changing world of today requires leaders in political, cultural, scientific, technological and social spheres of society and therefore student leadership development is a vital topic of the current era (Mozhgan, 2012; Tabb & Montesi, 2000; Yip, 2006). Leadership skills and competent leaders have become critically important to organisations in this age and time (Murphy & Johnson, 2011). A developed and advanced society will only be attainable if leaders are trained (Mozhgan, 2012). Turkay and Tirthali (2010) go so far as to make the statement that leadership development is regarded as an investment in the future of our society. This demands a generation of good leaders that are able to assist in managing the changes in the current diverse population (Tabb & Montesi, 2000). Leadership is often viewed as the solution to mismanagement faced by organizations (Whitehead, 2009). The rapidly changing workplace and practice also calls for enhanced leadership skills and universities and faculties are called upon to develop these skills in students prior to them entering the workplace (Middleton, 2013). Employers are not satisfied with the level of personal development of the graduates that they employ (Shek & Sun, 2012). Because of insufficient development of leaders in formal education systems, people who could have shown leadership skills are neglected when they enter the world of work (Liu & Nadel, 2006).

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Student leadership seems to attract more interest lately due to a perceived shortage of people that are skilled to fulfil leadership roles in their adult lives (Dempster & Lizzio, 2007). Whitehead (2009) argues that a multi-faceted approach to leadership development is needed. These approaches should look at leadership development as part of the formal academic processes, developing leadership in the work context and providing humanity with experiential leadership development (Whitehead, 2009). Wielkiewicz, Fischer, Stelzner, Overland and Sinner (2012) argue that higher education institutions are perfectly positioned to encourage interest in leadership and promote leadership development. Universities function within the formal academic process and therefore leadership development is seen as the primarily duty of these educational institutions (Connaughton *et al.*, 2003; Mozhgan *et al*., 2011). It is stated that the higher education system is responsible for the training of future leaders (Mozhgan, 2012). The question, however, is why this is so important. Student leadership development is critically important for the future of our society (Dugan, Owen, Slack, & Wagner, 2011; Mozhgan, 2012; Ngai, Cheung, Ngai, & To, 2012) Mozhgan *et al*. (2011) argue that universities have to train these leaders in order for our society to be managed by great leaders in future.

All adolescents have leadership potential that can be developed either at school level or in their journey to adulthood (Fretman & van Linden, 1999). Leadership development is crucial at the adolescent stage of life (Whitehead, 2009). According to Tabb and Montesi, (2000) emerging and promising leaders are persons between the age of 25 and 50 years. The study by Mozhgan (2012) provides evidence that leadership development programmes or initiatives on university level provide the student with opportunities to develop in various respects. These include development, motivation, awareness and regulation of the self, increased social awareness and skills, multicultural skills, enhancement of social values and higher self-confidence. All these aspects enable the student to deal more effective with life challenges and contribute to the development of humanity to a higher level. Shek and Sun (2012) add that a student's university years can be a stressful time where the person undergoes several changes and is exposed to financial responsibility, examination pressure and early adulthood demands. Leadership development of students will enable them develop their skills and to better cope with these demands.

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The main aim of leadership development is to foster effective leadership (Wisner, 2011). The development of leadership at the student level is therefore important as it results in more effective communication skills with different cultures and individuals and enhances competency development (Mozhgan, 2012). Leadership competence is critically important for today's organisations. Thoughtful and visionary leaders are needed to solve critical business issues (Tabb & Montesi, 2000).

The potential for leadership exists in every student and therefore universities should develop this potential through activities and programmes (Eich, 2008). Current student leadership programmes at different institutions vary in terms of desired outcome, length and type but all of these programmes share a specific objective which is to develop the student's leadership knowledge and capacity (Dugan *et al.*, 2011). Leadership development programmes amongst young university or college women provided evidence that the self-esteem, organisational and communication skills of participants were enhanced, especially in the participants who became involved in leadership activities after the leadership programme (Taylor, 2012). Whitehead (2009) emphasises that student leadership development is essential as it impacts the social affiliation and academic experience of a student and leads to optimal performance in students.

2.4 WHAT RESEARCH HAS BEEN DONE ON STUDENT LEADERSHIP?

Most of the literature that is available on student leadership development mainly highlights the importance of developing leaders at university level (Dugan, Owen, Slack, & Wagner, 2011; Rosch & Kusel, 2010; Van Velsor & Wright, 2012), stresses the responsibility that universities have in fulfilling a leadership development role (Boatman, 1999; Connaughton *et al*., 2003), and explains the different outcomes of student leadership development and the contribution it makes. Literature on global leadership trends confirms that universities do allocate resources to the development of student leadership and do realise the importance of developing student leadership programmes (Cress *et al*., 2001; Shertzer *et al*., 2005). Even so, it has been confirmed that only a few universities are successful in driving this process (Duvall, 2003). This is confirmed by Cress *et al*. (2001) who are of opinion that merely having initiatives for leadership development might not be sufficient.

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Leadership research and development activities have been less developed in the higher educational sector (Muijs, Harris, Lumby, Morrison, & Sood, 2006). Schneider, Paul, White, and Holcombe (1999) add that limited research exists on the correlation between individual differences and leadership behaviour, especially within the student population.

Numerous programs, initiatives and interventions are aimed at the development of leadership skills among the youth (Hindes, Thorne, Schwean, & McKeough, 2008; Stedman, Rutherford, Rosser, & Elbert, 2009). School leadership administrators assume that university programs will provide the necessary development to leaders who are identified through the school system (Whitehead, 2009). However, there seems to be significant shortcomings in this regard on a student and tertiary level. At the other end of the spectrum, the majority of leadership development is focussed on the adult level (Murphy & Johnson, 2011; Whitehead, 2009). It is, however, critical that leaders should be developed at the earliest stage possible, especially before entering the workplace or reaching mid-management levels in organisations (Murphy & Johnson, 2011). There is a notable recent interest in leadership development programmes at school and tertiary education levels. Research in this field mainly investigates the effectiveness of the leadership programme in developing more effective leaders and the results of these studies are used as the criteria for selection of students to attend future leadership programmes (Schneider, Ehrhart, & Ehrhart, 2002).

The recent heightened interest in student leadership can be due to the fact that numerous previous studies only focussed on adult leadership and that student leadership is offering a new point of entry for investigation of leadership (Dempster & Lizzio, 2007).

Universities should play the role of facilitator in assisting students to become mature and develop as leaders (Mozhgan *et al*., 2011). Academic administrators and educators should be more concerned about leadership development as leaders in academic institutions can make a vital contribution to the social affiliation level of all the students of the institution (Whitehead, 2009). According to Rouse (2010) universities have recently been placing greater emphasis on leadership skills in their selection processes of new entrant students and also as part of the curriculum. Whitehead (2009) adds that academic

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processes should involve and be integrated with leadership development. Several universities' mission statements emphasise leadership development as one of their graduate outcomes (Boatman, 1999; Eich, 2008; Wisner, 2011; Zimmerman-Oster & Burkhardt, 1999). The Agrarian University in the Ukraine's mission statement reads that the university aims to develop well-formed students that have strong leadership skills in order to build their society (Kelling & Hoover, 2005). This provides evidence of a case where a university takes responsibility of its role in leadership development. However, the Agrarian University does not currently have any formal leadership development initiative or programme in place (Kelling & Hoover, 2005). Shek and Sun (2012) provide recent observations that personal development is often emphasised by universities as part of mission and vision statements, but that these statements exist only on paper and that very few universities have developed credit-bearing programmes on student development. The University of Florida provides a leadership programme that is targeted at improving leadership skills through coaching techniques with a view to improving the leadership skills of students, thus enabling them to become more effective leaders (Campbell, Syed, & Morris, 2010). It is however suggested that, in order to achieve true leadership development, leadership assessment and coaching should be incorporated into the university's curriculum (Campbell *et al*., 2010).

Student leadership development can take place through various methods such as formal leadership programmes, individual leadership experiences and leadership activities (Dugan *et al*., 2011). Students gain leadership development through these experiences and activities (Astin, 1993). Mozhgan (2012) adds that a university's curriculum can and should facilitate the development of student leadership. At the same time, student societies and student organisations also provide a valuable platform where leaders develop and teamwork, problem-solving, self-confidence and communication skills are improved (Kelling & Hoover, 2005). Dugan *et al*. (2011) add that leadership development amongst students has become one of the main focus areas of the work done by student affairs departments. These platforms and activities are however only informal leadership development opportunities. Platforms such as student governments, student club participation, and academic project leadership are therefore providing mechanisms for

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leadership development, these are limited as they are exclusive to certain students and do not expose the general student community to leadership development (Whitehead, 2009).

2.4.1 Examples of leadership initiatives

The Hong Kong Polytechnic University developed a credit-bearing course named "Tomorrow's Leaders" which was piloted in 2010 and 2011. As part of the evaluation of the course, students had to give feedback on the programme's effectiveness in terms of holistic development and leadership. The majority of students reported that this course showed positive change and helped them to develop self-reflection and psychosocial competencies (Shek & Sun, 2012).

The Northeastern University in Boston uses assessments to evaluate applicants' leadership potential as part of their admission criteria. In this example, students who show high leadership potential are accepted by the University, even in spite of low high-school grades (Thomsho, 2009). This statement is confirmed by Dhuey and Lipscomb (2006), who argue that universities are increasingly looking at soft skills such as leadership in their admission criteria. This provides evidence that universities see the value of the leadership skills that students bring to the institution.

Manyibe (2007) studied factors that contributed to leadership development in African students studying in the United States. Results showed that campus community service expanded the students' skills and knowledge regarding leadership. Manyibe (2007) also found that gender had an influence on a person's leadership skills as many African cultures tend to train males rather than females in leadership. Gender was also a significant predictor of leadership effectiveness in a study conducted by Wisner (2011) where male scores were lower than female scores on leadership effectiveness. In the study conducted by Wielkiewicz, Fischer, Stelzner, Overland and Sinner (2012) gender was also strongly related to student's beliefs about leadership. Male students indicated a very strong conviction in hierarchical leadership whereas female students related more to systematic leadership styles. In this study it was recommended that leadership

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development should involve separating genders in order to be more effective (Wielkiewicz *et al*., 2012).

One of the main platforms where leadership is developed is within student clubs and organisations and these platforms create space for developing leaders for the future (Kelling & Hoover, 2005; Murphy & Johnson, 2011). Research also shows that participation in social activism, civic engagement and community related social projects are used in leadership development initiatives for the youth (Turkay & Tirthali, 2010). It is also evident that participation in leadership roles within student organisations improves the academic experience of these students (Whitehead, 2009). At a business level, games and virtual environments are used to develop leadership skills in people (Turkay & Tirthali, 2010). Electronic methods are also used for student leadership development. Dugan *et al*. (2011) state that electronic programmes, such as virtual communities, may be a solution to reach more students as this method is more convenient and accessible at times that suite the student than conventional methods.

2.5 WHAT MOTIVATES STUDENTS TO PARTICIPATE IN STUDENT LEADERSHIP?

In order to understand what motivates students to participate in student leadership, it is firstly important to understand the concept of motivation. University students are the leaders of the future and they are at a crucial point in their lives in discovering how their extrinsic and intrinsic motivation can influence their leadership perspectives (Bissessar, 2008). The concept of motivation stems from the self-determination theory which suggests that people have an inborn desire for learning and stimulation from being born. This desire is either discouraged or supported by the environment that the person functions in (Fairchild, Horst, Finney, & Barron, 2005). This natural desire or drive is classified as intrinsic motivation and forms part of a person's psychological needs (Fairchild *et al*., 2005). The self-determination theory identifies three psychological desires that have an impact on intrinsic motivation, namely: the desire for relatedness, the desire for autonomy and the desire for competency (Edward & Ryan, 1985). Researchers have further differentiated a number of specific forms of motivation based on the interaction between human desires and the environment humans function in. These types are 1) intrinsic

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motivation, which includes the determination to pursue an activity purely for the satisfaction or pleasure the activity brings, 2) extrinsic motivation, which includes the drive to pursue an activity out of a feeling of obligation or as a aim to an end, and 3) amotivation, which is the absence of the determination to pursue an activity and therefore is associated with failure to create a relation between the activity and the drive for behaviour (Vallerand *et al*., 1992). As stated by Bissessar (2008), students are the future leaders and understanding what motivates them in terms of leadership can enhance their discovery of the root of their intrinsic and extrinsic motivation. This is also stressed by Wielkiewicz *et al*. (2012), who states that understanding the leadership attitudes and beliefs of students will allow universities to optimally meet students' needs for leadership development. This will also enable universities to effectively use their resources to develop and enhance leadership development programmes. Wielkiewicz (2000) found that students either had a systematic or hierarchical approach towards viewing leadership. Students with a systematic belief viewed leadership as ecological and collaborative, whereas students with a hierarchical belief viewed leadership as a rank of order (Wielkiewicz, 2000).

Research further shows that leadership development programmes should be varied and flexible in order to offer multiple entry points to cater for student needs (Dugan *et al*., 2011). Dugan *et al*. (2011) add that it is critical to identify the target group when designing leadership development programmes for students as students with different demographic profiles and educational goals will have different reasons for attending such programmes. Therefore, the effectiveness of leadership development differs due to the development strategies and objectives or design of the programme (Whitehead, 2009). The differences in effectiveness of leadership programmes are often linked to the gender, ethnicity and personal behaviour of the students, as well as the students' involvement in additional student activities. Thus, the effectiveness of leadership development programmes often depends on the students themselves (Whitehead, 2009).

Astin (1993) provides evidence that student leadership development was positively influenced by a few environmental factors such as the student's interaction with other students and the faculty, volunteer work, mentoring of other students, group assignments and presentations in class, not living in their hometown, fraternity in terms of profession

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and participation in sports. A more recent study confirmed that participation in class and university activities, relations with peers and faculties and leadership experience at university level contributed to the development of student leadership (Mozhgan *et al*., 2011). It is however important that the curricula of leadership development programmes include development methods that enter the inner-world of the student (Whitehead, 2009). This means that the programmes should address the intrinsic moral agenda of the student and create an understanding of how the student will make something of themselves in society (Whitehead, 2009). Structuring leadership development programmes in alignment with this will increase students' motivation to participate in such initiatives.

In a study conducted by Mozhgan *et al*. (2011), students identified the factors that contributed to their leadership competency development. The identified factors were background factors such as their age, gender and grade points, the size of their school or campus, personality constructs, and the influence of their family, teachers and peers before entering university. It is also evident that different genders respond differently to leadership development. Female students proved to be more attracted to leadership development initiatives which emphasised cooperative/involvement-based learning methods such as student governments, classroom and club leadership, whereas male students preferred competitive situations (Whitehead, 2009). In attracting both female and male students, leadership development programmes should consist of both competitive and cooperative learning methods and providers of these programmes should be sensitive to these preferences (Whitehead, 2009). Wisner (2011) also included demographic variables in a research survey to examine whether these variables act as predictors of effective leadership. These variables included gender, previous leadership experience and class level of participants.

The reasons for students' interest in leadership development might that there is a shortage of leadership skills in the corporate world and that students want to pursue leadership roles in their future careers (Dempster & Lizzio, 2007). Schneider *et al*. (1999) identify five pillars that contribute to an individual's leadership. These are personality, behaviour, skills and ability, interest, and motivation. Evidence is provided that a need for achievement and power, ambition, and a desire for authority serve as motivational predictors of leadership

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(Schneider *et al.*, 1999). It is also argued that social affiliation and a drive for competition and power increases students' interest in leadership development (Whitehead, 2009).

2.6 CONCLUSION

This chapter focused on the literature review and provided a foundation in respect of the various aspects of student leadership and the motivation of students to participate in leadership development. This chapter established that higher education institutions are perfectly positioned to encourage interest in leadership and promote leadership development and therefore leadership development is seen as the primarily responsibility of these educational institutions (Connaughton *et al*., 2003; Mozhgan *et al*., 2011; Wielkiewicz *et al*., 2012). This chapter further discussed the findings of previous research that was conducted on this topic and investigated examples of student leadership initiatives. Finally the concept of motivation was discussed in terms of intrinsic and extrinsic motivation, as well as amotivation. In conclusion, it was established that it is critical to identify the target group when designing leadership development programmes for students as the demographic profile and objectives of students differ and result in different reasons for attending such programmes (Dugan *et al*., 2011). This emphasises the importance of exploring this research topic.

The following chapter focuses on the research methodology that was employed to obtain answers to the research objectives posed in Chapter 1.

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3 RESEARCH DESIGN AND METHODS

3.1 INTRODUCTION

This chapter outlines the empirical research part of the study, while the chapter 2 reviewed the literature and created a common frame of reference regarding leadership, and specifically student leadership development. The discussion on the methodology includes details of the empirical research that was done during this study. This section includes the research strategy and design, the sampling method, data collection, the measurement instrument, data analysis as well as assessing the rigour and quality of the research design. The section is concluded with the ethical aspects applicable to this research study.

3.2 DESCRIPTION OF INQUIRY STRATEGY AND BROAD RESEARCH DESIGN

A research design is the procedure that is used for conducting research with the purpose of finding appropriate answers to the research questions (Maree & Van der Westhuizen, 2007). A quantitative research design was used for this study with the aim of exploring a new area pertaining to student leadership. According to Maree and Van der Westhuizen (2007) quantitative research is a research method that is objective and systematic through making use of numerical data from a particular group in order to generalise the findings to the population being studied. Quantitative research enables the researcher to easily transcribe data to numerical values (Clark-Carter, 2010) and to take a broad view of explaining and describing the regularity in human behaviour (Payne & Payne, 2004).

There are two main types of quantitative research designs, namely experimental and non-experimental designs (Maree & Pietersen, 2007b). A non-experimental design was followed in this study. This means that this study was descriptive in nature and that all relevant variables were measured at a specific time without any manipulation taking place (Maree & Pietersen, 2007b).

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This study was conducted from a quantitative exploratory paradigm. This method considers the distribution of variables and the relationship between them (Trochim & Donnelly, 2008). This paradigm enabled the researcher to apply statistical analysis in order to investigate the research objectives of this study. As this study consisted mainly of the gathering of statistical data, a quantitative research approach was appropriate.

3.2.1 Outline of research design

The research design was constructed to reflect the following characteristics:

- The study consisted of empirical research;
- The research fell within the quantitative research paradigm;
- The research was exploratory in nature;
- The data consisted of primary data; and
- The primary data was gathered through survey research.

These characteristics of the research design led to a methodology that enabled the researcher to gain insight into student leadership at university level and to properly answer the research objectives of the study. Each characteristic is defined below:

- **Empirical research** is research that is based on the collection and analysis of primary data. Empirical research was relevant to this study as the study involved the collection and analysis of primary data.

- **Quantitative research** is a research process that is objective and systematic and makes use of numerical data from a particular group in order to generalise the results to the population being studied (Maree & Van der Westhuizen, 2007).

- **Exploratory research** is research conducted on a field that has not been studied and which enables the researcher to develop original ideas and a further focused research question (Struwig & Stead, 2001).

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The researcher planned to use primary data as source of data in this study which was to be collected through survey research.

- **Primary data** are data that are personally collected by the researcher (Struwig & Stead, 2001).

- **Survey research** has as a main goal collecting data that is representative of a population; the information is gathered through surveys and is used to generalise the findings of a sample to a population (Bartlett, Kotrlik, & Higgins, 2001). Survey research was used for the collection of the primary data of this study.

3.3 SAMPLING

The following section focuses on the target population, units of analysis, sampling method and sampling size of the research study. This section explains how many participants and other data sources were selected for inclusion in this study as well as how they were selected.

3.3.1 Target population, source, context and units of analysis

A research question focuses on a specific group of sampling units and these sampling units are used for measurement. The sampling units relevant to the research question are called the population (Maree & Pietersen, 2007b).

The target population for this study was students of a selected South African Higher Education Institution. Based on methods used by Rosch and Caza (2012) the participants consisted of students from the University that attended the Leadership Development Course that is annually presented by the University's MCom Industrial Psychology and Human Resource students. The primary data were collected from the University's students that attended the Leadership Development course in 2015. These data were collected through quantitative survey questionnaires.

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The population's ages ranged between 18 and 23 and 23 upwards as most students fell within the 18 to 23 category. The minimum criterion of participation in the study was that the participant had to be a current registered student at the selected University.

The motivation for using this source of data and collection technique was to be able to explore students' motivation and interest to participate in leadership development initiatives. The annual Leadership Development course presented by the MCom Industrial Psychology and Human Resource Management group is voluntary and students are invited to attend. As participation in the course is voluntarily, it gave the researcher access to a group of students who were motivated to invest in their leadership development without any obligation, or moral or legal duty. Thus, the researcher was able to investigate their raw, true motivation as attendance was not forced in any way.

3.3.2 Sampling method

There are two main types of sampling methods namely probability and non-probability sampling. The sampling method that was followed in this study falls within the non-probability sampling category. This means that the sampling method did not make use of a random selection from a population. The use of non-probability sampling holds benefits when a specific population is difficult to find (Maree & Pietersen, 2007a). Non-probability sampling was the obvious choice for this study, as a population of students who attend leadership initiatives on a voluntary basis, is difficult to find.

There are four main types of non-probability sampling. This study used a purposive sampling method. Purposive sampling is done with a specific purpose in mind (Maree & Pietersen, 2007a). Purposive sampling was applicable to this research as the study only wanted to survey the people who attended the leadership course in 2015.

3.3.3 Sample size

The primary data sample consisted of students who attended the University leadership development course in 2015. The average number of students that normally attend the

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course is about 80. A total of 78 students attended the course in 2015 and these where used as the sample group in this study.

The biographical information of the participants is discussed below. The biographical characteristics of participants include gender, age and ethnic group. A complete breakdown of all the biographical characteristics of the participants will be displayed and discussed in Chapter 4.

Table 1: Biographical characteristics of participants

		Frequency	Percent	Valid percent	Cumulative percent
Gender	Male	22	28.2	28.2	28.2
	Female	56	71.8	71.8	100.0
	Total: Gender	78	100.0	100.0	
Age	<20	11	14.1	14.5	14.5
	20-22	52	66.7	68.4	82.9
	23+	13	16.7	17.1	100.0
	Other: Missing	2	2.6		
	Total: Age	78	100.0		
Ethnic Group	Black African / Coloured / Indian	51	65.4	65.4	65.4
	White	27	34.6	34.6	100.0
	Total: Ethnic Group	78	100.0	100.0	

Table 1 indicates that the majority of the participants were female (71.8%). 66.7% of the respondents were between the ages of 20 to 22 years. The distribution of race indicated that 65.4% of the participants were black African/coloured/Indian and 34.6% were white. Black African/coloured/Indian groups were combined as there were only a few coloured and Indian participants.

3.4 DATA COLLECTION

The data collection method is the method of collecting data from the sample of respondents (Maree & Pietersen, 2007c). This section outlines the data collection method used in the study. The approach to data collection will be explained in terms of the collection of the primary data.

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- **Primary data** was collected through two methods. Firstly, the biographical information was collected through the online Qualtrics research platform. The questions were developed on the platform and students completed the biographical questions as part of the online registration process for the leadership development course. Secondly, the rest of the primary data were collected through surveys based on a structured questionnaire. These data were collected at the leadership development course on two different occasions. The leadership development course was presented on two different occasions by the MCom group to accommodate all the participants. At these two occasions the questionnaires were collected by the researcher through group administration. This means that the researcher waited while the whole group of participants completed the questionnaire, which enabled the response rate to be optimal (Maree & Pietersen, 2007c). An application for a request for permission to conduct research relating to The University population and data was submitted and approved by the University. The University also gave the researcher ethical clearance to continue with the data collection for the study.

The only possible hurdle to accessing the primary data would have been if the University did not give ethical clearance to access the sample group. This possible hurdle was overcome by presenting the academic and practical value of the study to the University and providing evidence of how the results of the study could assist the University to enhance its student leadership development in order to set the pace for other South African universities as well as universities globally.

3.4.1 Survey methods

Different survey methods can be used for collection of data, such as interviews, observations, case studies and questionnaires. A questionnaire refers to all approaches of data collection in which a participant is asked to respond to a specific series of questions which are in a predetermined order (Saunders, Lewis, & Thornhill, 2012). Questionnaires can be used in different ways, such as electronic, face-to-face, via the internet, telephonic or postal (Saunders *et al*., 2012). According to Maree and Pietersen (2007) survey

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questionnaires are the most widely used non-experimental research design that are used to obtain quantitative information which enables the researcher to explore or describe a certain topic.

For the collection of the primary data for the study, self-completed questionnaires that were completed by the participants were used. The biographical information was collected via the internet by using the Qualtrics research platform as these data formed part of the student registration for the leadership development workshop. The rest of the data were collected by the researcher at the leadership development course which was held at the University. The researcher delivered the questionnaires; attended the session where the questionnaires were completed and collected the questionnaires after completion. This method was appropriate as the researcher was able to have access to the participant group at the leadership development course and self-administration was therefore also most applicable. This was also the most cost effective solution and enhanced the success rate of participation in the study as the researcher was able to explain the purpose of the study to the participants in person. Thus, the participants had the opportunity to ask questions to the researcher prior to the data being collected. This enhanced overall credibility of the data collection process.

3.4.2 Measurement

The units of analysis that were investigated in this study will be discussed in terms of the specific attributes and characteristics that were investigated for the primary data.

The primary data collection instrument consisted of four parts:

- Section A: Biographical questions
- Section B: Open-ended questions
- Section C: The Leadership Attitudes and Beliefs Scale (LABS)
- Section D: The Academic Motivation Scale (AMS)

The following specific characteristics were investigated as part of the biographical questions which formed part of Section A: gender, age, ethnic group, home language, year

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of study, place of residence during the semester, industry in which the student intends to work after completing his/her studies and previous leadership positions held. Section B consisted of two open-ended questions. The first question was: "Why do you invest in your leadership development / why is your personal leadership development important to you?" The second question was: "What do you think you will benefit in future from attending this leadership development workshop?" No specific measurement instrument was used for the collection of this information.

Section C and D consisted of the LABS and AMS which both used Likert scaling. Trochim and Donnelly (2008) describe Likert scaling as a rating method which normally uses a disagree-to-agree response layout that ranges from one to five and the final scale result is a product of the summed individual ratings. A Likert-type scale is normally linked to an amount of statements to measure attitudes or perceptions and five-point or seven-point scales are frequently used (Struwig & Stead, 2004). The Likert scale was used to illustrate the relationship of one respondents' answer to that of another participant if these were to be compared (Kumar, 2014). A standard format of questions was used in the questionnaire. According to Clark-Carter (2010), an advantage of a standard format is that it reduces the differences in respondents' answers that could have arisen due to the way in which the question was asked.

3.4.3 Data collection instrument

Examples of the data collection instruments that were used in this study for collecting the primary data are displayed in Appendix B, C and D. The data collection instruments are discussed in detail under Section A, B, C and D as follows:

Section A: Biographical questions

The following biographical questions were included in the questionnaire that was completed through the online Qualtrics research platform. These questions formed part of the registration process for the leadership development course. The following information had to be completed by participants:

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- Gender
- Age
- Ethnic group
- Home language
- Year of study
- Place of residence during the semester
- Industry in which he/she intends to work after completing his/her studies
- Previous leadership positions held

Section B: Open-ended questions

The open-ended questions formed part of the data collection session at the leadership development course. An example of the open-ended questionnaire is displayed in Appendix B. The following questions were asked to participants in the open-ended section:

- "Why do you invest in your leadership development / why is your personal leadership development important to you?"
- "What do you think you will benefit in future from attending this leadership development workshop?"

Section C: The Leadership Attitudes and Beliefs Scale III (LABS-III)

Wielkiewicz (2000) developed the Leadership Attitudes and Beliefs Scale - III (LABS-III), a scale to measure college students' attitudes and beliefs about hierarchal and systemic leadership. The hierarchal thinking scale consists of 14 items that propose organisations should be organised in a stable hierarchical manner where power and control are focused in the higher levels of the organisational hierarchy. This type of thinking also supports the idea that the higher levels of the hierarchy are responsible and accountable for the success of the organisation as well as the security and safety of its stakeholders. This way of thinking is characterised by a belief that authority and control are cascaded downwards in the hierarchy of organisations and that those on a lower level should seek guidance from the level above them. On the other side, the systematic thinking scale consisted of 14 items that reflect an ability to link a variety of ideas and concepts to an organisation's success. This implies that ethics, cooperation of individuals to assist organisations to achieve goals, the need for long-term thinking and organisational learning all contribute to

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the organisations success. This means that organisational success is related to the interaction of a number of factors. The Systematic Thinking scale includes elements such as cooperation, environmental preservation, ethics, personal responsibility, learning and orientation toward the future. The benefit of this scale is that it assesses attitudes and beliefs of college students without the necessity of prior leadership experience. The LABS uses a 5-point Likert scale to indicate the level of agreement or disagreement. Each item is rated from 1 to 5 with 1 = Strongly Agree, 2 = Agree, 3 = Neither agree nor disagree, 4 = Disagree, and 5 = Strongly Disagree. An example of the LABS questionnaire appears in Appendix C.

Section D: The Academic Motivation Scale

The AMS measures participants' intrinsic and extrinsic motivation (Vallerand *et al*., 1992). The AMS questionnaire is based on a self-determination theory and is divided into seven subscales and a total of 28 items (Fairchild *et al*., 2005). The seven subscales of the AMS measures three ordered subscales of intrinsic motivation in the form of: 1) motivation to know, 2) motivation to accomplish things, and 3) motivation to experience stimulation. Intrinsic motivation lies on the upward part of the motivation continuum and is associated with high levels of self-determination. Intrinsic motivation to know expresses the need to perform activities for the pleasure while learning new things. Intrinsic motivation to accomplish means that a person is motivated by the satisfaction to accomplish or create new things, and intrinsic motivation experience stimulation reflects the desire to experience sensory stimulation in the form of intellectual and physical sensation (Fairchild *et al*., 2005). The AMS further measures three ordered subscales of extrinsic motivation in the form of 1) introjected regulation, 2) external regulation, and 3) identified regulation. Extrinsic motivation varies in the degree of self-determination. External regulation is associated with the lowest level of self-determination, where internalized or more integrated external motivation produces more self-determination. Thus, the continuum moves from external to integrate and along this continuum motivation begins to take on more intrinsic motivation characteristics (Fairchild *et al*., 2005). It is known that external motivation external regulation and external motivation identified are associated with future aspirations in one's career (Fairchild *et al*., 2005). The seventh subscale measures amotivation (Bissessar, 2008). Amotivation is found at the end of the continuum and can

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be defined as an absence of intent or determination to pursue a behaviour or activity due to the person's failure to establish a connection between the activity and their behaviour (Fairchild *et al*., 2005). The instrument is reliable, valid and is used in many studies. The AMS uses a 7-point Likert scale for rating of respondent answers. Each item is rated from 1 to 7 with 1 = Does not correspond at all and 7 = Corresponds exactly. An example of the AMS questionnaire is displayed in Appendix D.

3.4.4 Pre-testing

The survey questionnaires that were used to collect data were pilot tested prior to being use to collect the actual data. A pilot study tests whether the participants interpret the questions correctly and whether the response categories for the questions are appropriate (Maree & Pietersen, 2007c).

A draft copy of the questionnaires was distributed to three participants randomly chosen in a pilot study. The three participants were all students of the University. The comments and advice from the three participants added value to the refinement process of the final questionnaires. The suggestions on the structure and the content of the questionnaires were taken into account in order to increase the content validity of the questionnaires (Saunders, Saunders, Lewis, & Thornhill, 2011). The recommendations were used to make amendments prior to testing the final sample group.

The final questionnaires were designed to assess the respondents. Prospective participants were invited to complete the questionnaires at the leadership development course at the University in September 2015.

3.5 DATA ANALYSES

The biographical data was downloaded from the Qualtrics research platform in an Excel file format. The data of the other two questionnaires was captured into an Excel spreadsheet format from the original hard copies that were completed by the participants. The Excel file format enabled the researcher to upload the data to a statistical software

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package. The statistical analysis of the quantitative data was done with the aid of the Statistical Programme for the Social Sciences (SPSS) (Pallant, 2011). The data was analysed in terms of the following:

- **Descriptive statistics** were used to analyse the continuous variables in the survey data (Rosch & Caza, 2012). Descriptive statistics provided the mean, standard deviation, skewness and kurtosis.

- **Frequency distribution** is a numerical method of summarising variables where the various response categories of the variables are illustrated together with the number (frequency) of responses (Maree & Pietersen, 2007c). The frequency is also indicated as a percentage of the sample size for each of the different categories. Frequency distribution was used to describe the biographical information of the sample obtained.

- **Analysis of variance** (ANOVA) aims to test for significant differences between the means of different groups (Pallant, 2007). ANOVA was used to compare demographic groups on various scales.

- **Correlation** can differ in magnitude on a scale from -1 to 1 (Cohen, 1988). A perfect negative linear relationship is indicated by -1 (meaning that if one variable decreases the other increases). A perfect positive linear relationship is indicated by 1 (meaning that if one variable increases the other variable increases and the inverse). No linear relation among two variables is indicated by 0. Cohen (1988) suggests that if the significance value is smaller than 0.05, the correlation is statistically significant at the 5% level. However, the statistical significance of a correlation is mainly dependent on sample size. Thus Cohen (1988) recommends that a correlation value of 0.1 is small, 0.3 is moderate, and 0.5 is large. Correlation was used to determine the relationship between the variables in the study.

- **Reliability** of the questionnaires, according to Trochim and Donnelly (2008), is determined by the Cronbach's alpha coefficient (α). A questionnaire is considered

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reliable when the Cronbach's alpha coefficient is higher than 0.7 ($\alpha > 0.7$) (Trochim & Donnelly, 2008). Reliability indicates the consistency or repeatability of a measurement (Saunders *et al*., 2012). The reliability of each instrument and each subscale within the instrument was calculated.

3.6 ASSESSING AND DEMONSTRATING THE QUALITY AND RIGOUR OF THE PROPOSED RESEARCH DESIGN

The process of assessing and demonstrating the rigour and quality of a research design consists of identifying the possible sources of bias and error in the research findings, as well as techniques that can be used to overcome this possible negative impact. It is recommended that a researcher should aim to minimise potential bias or error in respondent answers and should ensure that the most appropriate research design is chosen for a study (Saunders *et al*., 2011).

According to Saunders *et al*. (2007) measurement bias can occur for two reasons namely, deliberate distortion of statistics and changes in the method data are collected. The researcher ensured that no deliberate distortion of the data took place and that the method of collecting data remained constant for the two sessions where primary data were collected. The following section will explain methods used to ensure quality and rigour in this study.

3.6.1 Validity of the study

Validity can be described as the integrity of the conclusions that are generated from the results of the study (Bryman & Bell, 2007). Validity of the study was ensured through preparation, which refers to prior planning of an event. This study involved careful preparation in terms of methods, techniques and procedures. A well designed research method was developed prior to the data collection. All relevant information was shared with participants. They were very well informed of the purpose of the study as well as the approach required to answering the questionnaires. The researcher informed the participants in person. This enhanced the credibility and obtained buy-in from the

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participants. The students completed the two questionnaires during the student leadership course at a venue at the University. This location was appropriate as students easily had access to the venue and the environment was quiet. They had sufficient time to complete the questionnaire, which improved the credibility of the study (Saunders, Lewis, & Thornhill, 2007). They were also able to ask clarifying questions to the researcher, which ensured that they understood the questions correctly.

3.6.2 Validity of the instruments

Validity with regards to a questionnaire refers to the questionnaire's ability to measure what it is intended to measure. Thus, whether the instrument measured what it was intended to and how well it did so (Foxcroft & Roodt, 2009). Questionnaire validity can refer to content validity, criterion-related validity and construct validity (Saunders *et al*., 2007).

- **Content validity** refers to the measurement constructs, thus the questions in the questionnaire. To ensure content validity, the questions should provide adequate coverage of the investigative questions (Saunders, Lewis, & Thornhill, 2012). The content validity of the questionnaires could not be determined by the researcher as the AMS and LABS questionnaires that were used had been developed and tested by other authors. Researchers who studied the AMS did not report specifically with regards to the content validity of the instrument. Studies on the AMS however found limited convergent and discriminant validity evidence (Fairchild *et al*., 2005). With regards to the Leadership Attitudes and Beliefs Scale (LABS), Wielkiewicz (2000) confirms that preliminary evidence of the LABS supports its validity. A confirmatory factor analysis showed the Leadership Attitudes and Beliefs Scale loaded on two dimensions, hierarchal and systemic thinking. Content validity was found to be present in the LABS scale in that the questions accurately reflected the two dimensions of leadership being tested. The questionnaire however lacks discriminant validity with some questions but it does load on two dimensions, as designed.

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- **Criterion-related validity** is also known as predictive validity and refers to the ability of the questions in the questionnaire to make accurate predictions of the participants. Criterion-related validity correlates one variable with another variable (Fairchild *et al*., 2005). The authors did not report any specific information on the criterion-related validity of the AMS and LABS.

- **Construct validity** is the ability of the questions to measure the presence of those constructs that were intended to be measured. Construct validity is determined by how well the measurement questions can be generalised to the constructs being measured (Saunders *et al*., 2012). Due to a small sample size being used for this study, construct validity cannot be determined. However, the researcher investigated the authors' examination of each instruments' construct validity. In the study conducted by Fairchild *et al*. (2005) construct validity evidence was provided for the AMS in the form of a well-fitted seven-factor model.

3.6.3 Reliability of the study

Reliability of a study concerns whether the results of the study are repeatable (Bryman & Bell, 2007). Reliability in this study was enhanced by retaining notes relating to the research design, the data obtained as well as the reasons for the research design that was selected for this study. This enabled the researcher to validate the choice of research method and will facilitate the understanding of other researchers who make use of this study in future (M. Saunders et al., 2007).

Replication was used as a technique to provide evidence for the quality, credibility and rigour of this study. Replication refers to the ability to replicate the findings of other studies (Bryman & Bell, 2007). Replication in this study was ensured by spelling out the procedures of the study in great detail in order for other researchers to be able to replicate the study. The detail of the research design and research methods used in this study contributes to the reliability of the study as the replication of the measures is made possible for other researchers.

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3.6.4 Reliability of the instrument

The following was reported for the reliability of each questionnaire that was used in this study:

- Academic Motivation Scale (AMS): It was initially reported that the Cronbach's alpha Coefficient for the subscales of the AMS ranged from 0.83 to 0.86, except for the subscale of extrinsic motivation which was 0.62. Test-retest reliability however indicated scores of 0.71 to 0.83 for all the subscales (Vallerand *et al*., 1992). Fairchild *et al*. (2005) reported acceptable internal consistency of the item responses which represented each of the subscales of the questionnaire.
- Leadership Attitudes and Beliefs Scale (LABS): Wielkiewicz (2000) conducted a survey of 552 participants during the development of the LABS. Results of this study showed a Cronbach Alpha Coefficient of 0.8439 on Hierarchal Thinking and 0.8792 for Systematic Thinking. Both these scores are above 0.7 and therefore indicate that both subscales of the scale demonstrate excellent reliability.

3.7 RESEARCH ETHICS

Leedy and Ormrod (2014) stress the importance of considering ethical principles when studying human beings and point out four categories of ethics to take into consideration when planning and conducting a research study, namely:

- **Protection from harm** means that researchers should not expose participants to any preventable physical or psychological harm. The researcher was particularly sensitive to and thoughtful about potential physical or psychological harm to the respondents. Embarrassment and stress of participants was avoided during data collection. The researcher clearly explained the study to participants to avoid any uncertainties and confusion. The researcher also emphasised that the participation was solely voluntary and protected the candidates' confidentiality throughout the study.

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- **Voluntary and informed participation**: Participation in the proposed study was strictly voluntary. Each potential participant received a consent form that gave a thorough introduction and explanation of the study. The participants were fully informed about the details of the study before giving their consent to participate. The researcher ensured that the participants were fully aware of the reason for the study and personally introduced the study to the participants. All the information was kept confidential and anonymous at all times and this was explained to respondents through the consent form.

- The **right to privacy** of participants should be respected. During the proposed study, no information was made available that exposed any individual in terms of identification or specific behaviour. If such information needed to be displayed, the researcher would have used it with the written permission of the respondent. This was however not necessary.

- **Honesty with professional colleagues** implies that researchers need to report their results in a honest and complete way. The researcher did not misrepresent data, fabricate data or intentionally mislead others about the findings of the study.

The researcher obtained ethical clearance from the University to make use of the students that attend the leadership development course in 2015 for primary data collection. A letter seeking informed consent was given to all students participating in the research study who attended the leadership development course in 2015. Once consent had been received from the participants, the collection of the data for the study proceeded. Consent ensured that the participants participated freely in the study and that the participants were informed that the information gained would be treated as confidential and would be used solely for the purpose of the research study.

The researcher was available at the leadership course to respond to any questions or concerns that arose while the data was being collected. The researcher answered the questions for clarification of the participants at the data collection event. The researcher confirms that no financial or non-financial incentives were used to encourage participation.

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Appendix A contains the final draft of the informed consent form that was used in this research study. The consent form includes a brief introduction to the study, the duration of the questionnaires, a statement that the participation in the study is voluntary and that the responses would be anonymous and confidential. The consent form also includes the contact details of the researcher.

In summary, the data collection was therefore aligned with the ethical guidelines as suggested by Saunders *et al*. (2012):

- Data were collected within an informed consent environment;
- Participants had the right to withdraw;
- Participants had the right to privacy, confidentiality and anonymity; and
- Participants were kept save from any harm.

3.8 CONCLUSION

This chapter focused on the methodology and processes that were undertaken in order to execute the study. This included the research design, the sample population, the unit of analysis, sampling method and data analysis. This chapter also included a discussion on the assessment of the rigour and quality of the study as well as the ethical considerations that were taken into account in this study. In the following chapter the results and findings of the data analysis are reported on and discussed.

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4 RESULTS

4.1 INTRODUCTION

Chapter 3 highlighted the methodological approach and techniques utilised in the research. This chapter focuses on the results obtained from the statistical procedures described in the previous chapter. This chapter specifically provides detail of the descriptive statistics, the reliability of the study, the results regarding the correlations between constructs and different groups, the results of the ANOVAs that were performed on the data as well as the information gained from the qualitative data.

The following assessments were administered in this study:

- Biographical questions
- Open-ended questions
- The Leadership Attitudes and Beliefs Scale (LABS)
- The Academic Motivation Scale (AMS)

The following section will focus on the descriptive statistics that were found during the data analysis.

4.2 DESCRIPTIVE STATISTICS

Descriptive statistics provide the researcher with statistical summaries of data (Struwig & Stead, 2001). Descriptive statistics deal with quantitative statements about a particular group of observations and cannot necessarily be generalised (Nunnally & Bernstein, 1994). The aim of descriptive statistics is therefore only to describe or analyse data, and not to make assumptions or make inferences about the larger population (Foxcroft & Roodt, 2009). The descriptive approach aims to determine and describe the relationship between the selected variables. The frequency distribution will be addressed under descriptive statistics, which focuses on the description of the study sample. Frequency distribution is the simplest form of analysis, which focusses on the description of the sample by means of percentage and counts of each category (Kerlinger, 1992).

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The research study obtained 78 useable responses from 78 students, indicating a hundred percent response rate. All questionnaires were utilised for the purpose of the statistical analysis. Certain categories of the biographical information were modified, but will not affect the results of the analysis. The age variable was grouped in three categories, namely 1) Under 22 years of age, 2) 20-22 years of age, and 3) Older than 22 years of age. The ethnic group variable was grouped in two categories, namely 1) White, and 2) Black African (which included the Coloured and Indian ethnic groups). The language variables were modified in three groups, namely 1) Afrikaans, 2) English, and 3) Other languages (combining the nine African languages). The place of residence variable consisted of three categories, namely: 1) UP student residence, 2) Private accommodation (which included the student commune category), and 3) Live with parents / family. The variable of which industry the student intend to work in was modified into five categories.

4.2.1 Frequency distribution

Table 2 displays the frequency distribution of the demographic data of the sample.

Table 2: Frequency distribution of demographic variables

		Frequency	Percent	Valid Percent	Cumulative Percent
Gender	Male	22	28.2	28.2	28.2
	Female	56	71.8	71.8	100.0
	Total: Gender	78	100.0	100.0	
Age	<20	11	14.1	14.5	14.5
	20-22	52	66.7	68.4	82.9
	23+	13	16.7	17.1	100.0
	Other: Missing	2	2.6		
	Total: Age	78	100.0		
Ethnic Group	Black African / Coloured / Indian	51	65.4	65.4	65.4
	White	27	34.6	34.6	100.0
	Total: Ethnic Group	78	100.0	100.0	
Home Language	English	28	35.9	37.3	37.3
	Afrikaans	17	21.8	22.7	60.0
	African Languages	30	38.5	40.0	100.0
	Other: Missing	3	3.8		
	Total: Home Language	78	100.0		
Year of study	1st year	21	26.9	26.9	26.9

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	2nd year	34	43.6	43.6	70.5
	3rd year	15	19.2	19.2	89.7
	4th year or more	8	10.2	10.2	100.00
	Total: Year of study	78	100.0	100.0	
Place of residence during the semester	UP student residence	20	25.6	25.6	25.6
	Student commune/Private accommodation	34	43.6	43.6	69.2
	Live with parents / family	24	30.8	30.8	100.0
	Total: Place of residence	78	100.0	100.0	
Industry intend to work in after completing studies	Industrials and commercial services	14	17.9	17.9	17.9
	Finance and business services	20	25.6	25.6	43.6
	Hospitality / IT / Media and other	12	15.4	15.4	59.0
	Human resource management	21	26.9	26.9	85.9
	Government	11	14.1	14.1	100.0
	Total: Industry the student intends to work in	78	100.0	100.0	

Insight into the biographical distribution of the responses is clear from Table 2. The major contribution was from female participants (71.8%). The distribution of race indicated that 65.4% of the participants were black African/coloured/Indian and 34.6% were white. Black African/Coloured/Indian groups were combined as there were only a few Coloured and Indian participants. African language groups were represented by 38.5% of the sample, English by 35.9% and Afrikaans by 21.8%. The majority of participants were in their second year of study (43.6%) and 66.7% of the respondents were between the ages of 20 and 22 years. 43.6% of the students were staying in private accommodation, 25.6% in University residences and 30.8% with parents/family. The two major industries students intended to work in were Human Resource Management (26.9%) and Finance/Business Services (25.6%).

From Table 3 the frequency distribution of previous leadership positions held by participants can be viewed. This category was a multi-response set and therefore it is displayed in a separate table.

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Table 3: Frequency distribution of previous leadership positions held

		Responses		Percent of Cases
		N	Percent	
Previous leadership position(s) held	School leader / prefect	59	48.0%	86.8%
	Sports captain	27	22.0%	39.7%
	Leader of cultural association or society	18	14.6%	26.5%
	Leader in academic association or society	8	6.5%	11.8%
	House committee	10	8.1%	14.7%
	UP student council	1	0.8%	1.5%
	Total: Previous leadership positions	123	100.0%	180.9%

As displayed in Table 3, there were 123 responses to the question of previous leadership positions held due to the fact that this category was a multi-response question. The major area of previous leadership positions was school leader/prefect, with 48% of the students having held such leadership position in their past. 22% of the participants were sports captains, 14.6% were leaders of cultural associations and 6.5% were leaders of academic associations. 8.1% of the participants indicated that they belong or belonged to their house committee and 1 of the respondents was on the University's student council.

4.2.2 Previous leadership position held

In the biographical questionnaire, respondents were allowed to choose more than one response with regards to the previous leadership positions they held. Due to the multiple response option, the analysis was done to show the frequencies in the form of multiple response cross tabulation. Table 4 displays the multiple response cross tabulation between the different genders in the study and the previous leadership positions held by the students. The distribution between genders and the leadership positions were very similar. It is evident that males were more dominant in leadership positons within sport (57.1% of males versus 31.9% of females). Females, however, dominated leadership positions in the academic environment (14.9% of females versus 4.8% of males).

Table 4: Multiple response cross tabulation for gender and previous leadership position held

			Gender:		*Total*
			Male	Female	
Previous positions	School leader / prefect	Count	18	41	59
		% within gender	85.7%	87.2%	
	Sports captain	Count	12	15	27
		% within gender	**57.1%**	**31.9%**	
	Leader of cultural association or society	Count	7	11	18
		% within gender	33.3%	23.4%	
	Leader in academic association or society	Count	1	7	8
		% within gender	**4.8%**	**14.9%**	
	House committee	Count	4	6	10
		% within gender	19.0%	12.8%	
	UP student council	Count	0	1	1
		% within gender	0.0%	2.1%	

In Table 5 the cross tabulation of ethnic groups with relation to previous leadership positons held are displayed. African/coloured/Indian representation was 93.0% in school leadership positons in comparison with 76.0% for white representation. Whites dominated sport leadership positions with a 32.1% difference and house committee positions with 14.7%.

Table 5: Multiple response cross tabulation for ethnic group and previous leadership position held

			Ethnic for multiple response		*Total*
			African / coloured / Indian	White	
Previous positions	School leader / prefect	Count	40	19	59
		% within ethnic group	**93.0%**	**76.0%**	
	Sports captain	Count	12	15	27
		% within ethnic group	**27.9%**	**60.0%**	
	Leader of cultural association or society	Count	13	5	18
		% within ethnic group	30.2%	20.0%	
	Leader in academic association or society	Count	6	2	8
		% within ethnic group	14.0%	8.0%	
	House committee	Count	4	6	10
		% within ethnic group	**9.3%**	**24.0%**	
	UP student council	Count	1	0	1
		% within ethnic group	2.3%	0.0%	

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The cross tabulation between place of residence and previous leadership positions held is displayed in Table 6. It is apparent that students living with their parents or family scored the lowest percentage representation in almost all the different areas of leadership positions.

Table 6: Multiple response cross tabulation for <u>place of residence</u> and <u>previous leadership position held</u>

			Residence for multiple response			
			UP student residence	Student commune /private accommodation	Live with parents / family	*Total*
Previous positions	School leader / prefect	Count	17	28	14	59
		% within place of residence	89.5%	90.3%	77.8%	
	Sports captain	Count	7	14	6	27
		% within place of residence	36.8%	45.2%	33.3%	
	Leader of cultural association or society	Count	3	10	5	18
		% within place of residence	15.8%	32.3%	27.8%	
	Leader in academic association or society	Count	4	3	1	8
		% within place of residence	21.1%	9.7%	5.6%	
	House committee	Count	4	4	2	10
		% within place of residence	21.1%	12.9%	11.1%	
	UP student council	Count	1	0	0	1
		% within place of residence	5.3%	0.0%	0.0%	

Table 7 indicates the cross tabulation between the industry the student intends to work in and previous leadership positions held. It is notable that 100.00% representation of students who intend to work in the government sector held school leader or prefect positions. Representation of students who held leadership positions in cultural associations or societies (55.6%) who intended to work in the government sector were also the highest across the different industries.

Table 7: Multiple response cross tabulation for industry the student intends to work in and previous leadership position held

			Industry					
			Industrials and commercial services	Finance and business services	Hospitality IT media and other	HR manage-ment	Government	*Total*
Previous positions	School leader / prefect	Count	12	17	7	14	9	59
		% within industry	85.7%	94.4%	87.5%	73.7%	**100.0%**	
	Sports captain	Count	6	7	3	10	1	27
		% within industry	42.9%	38.9%	37.5%	52.6%	11.1%	
	Leader of cultural association or society	Count	3	6	2	2	5	18
		% within industry	21.4%	33.3%	25.0%	10.5%	**55.6%**	
	Leader in academic association or society	Count	1	3	1	1	2	8
		% within industry	7.1%	16.7%	12.5%	5.3%	22.2%	
	House committee	Count	2	2	1	5	0	10
		% within industry	14.3%	11.1%	12.5%	26.3%	0.0%	
	UP student council	Count	0	1	0	0	0	1
		% within industry	0.0%	5.6%	0.0%	0.0%	0.0%	

4.2.3 Item descriptive statistics

Descriptive statistics usually include measures of central tendency (e.g. means) and variance (eg. standard deviation) (Terre Blanche, Durrheim, & Painter, 2006). The mean is the average score. The standard deviation of scores indicate the measures of dispersion or variability to which the scores are spread out (Struwig & Stead, 2001). When the data points tend to be very close to the mean, a standard deviation close to 0 is indicated, while a high standard deviation points out that the data are spread over a wider range (Terre Blanche *et al*., 2006).

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Table 8: Item descriptive statistics of the AMS

		N	Minimum	Maximum	Mean	Std. Deviation
AMS	Intrinsic motivation to know	**78**	**3.50**	**7.00**	**5.8707**	**.90040**
	Intrinsic motivation toward accomplishment	**78**	**3.00**	**7.00**	**5.6442**	**1.04797**
	Intrinsic motivation experience stimulation	**78**	**1.25**	**7.00**	**4.0545**	**1.42260**
	Extrinsic motivation identified	**78**	**3.75**	**7.00**	**6.0769**	**.81015**
	Extrinsic motivation introjected	**78**	**1.00**	**7.00**	**4.9071**	**1.53324**
	Extrinsic external regulation	**78**	**2.00**	**7.00**	**5.4968**	**1.35290**
	Amotivation	**78**	**1.00**	**3.00**	**1.2885**	**.50175**

A mean score is the arithmetic average of a collection of scores, and from Table 8 it is clear that the mean for the AMS ranges from 1.28 to 6.07. Standard deviation is a statistical index that reveals the degree of dispersion in a group of scores. This means that if the scores are all close to the central value, the standard deviation will be insignificant and small. According to Table 8 the standard deviation ranges between 0.5 and 1.53 and the range is therefore quite wide.

Table 9: Item descriptive statistics of the LABS

		N	Minimum	Maximum	Mean	Std. Deviation
LABS	Hierarchical thinking	**78**	**1.36**	**4.07**	**2.5068**	**.46111**
	Systemic thinking	**78**	**1.14**	**4.57**	**1.6326**	**.45411**

It is clear from Table 9 that the mean score (arithmetic average of a group of scores) for the LABS ranges from 1.63 to 2.5. According to this table the standard deviation ranges between 0.45 and 0.46 and is therefore small.

4.3 RELIABILITY OF THE DATA

The Cronbach alpha coefficients were calculated before any further analysis was done. This was done in order to determine the reliability of the measurements used during this study. Reliability analyses were carried out to determine the internal consistency or repeatability of each questionnaire used. The reliability analysis was carried out for each questionnaire as a whole as well as for all the subscales of each questionnaire. A questionnaire is considered reliable when the Cronbach's alpha coefficient is higher than

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0.7 (α > 0.7) (Trochim & Donnelly, 2008). Testing for reliability is essential because of the fact that decisions and interpretations cannot be based on results that cannot be repeated. The results of each of the reliability tests will be reviewed next.

Table 10: Reliability statistics for the AMS and sub scales

AMS Construct	Cronbach's alpha	Cronbach's alpha based on standardized items	N of items
Total reliability for AMS	.896	.880	28
Intrinsic motivation to know	**.714**	**.724**	**4**
Intrinsic motivation toward accomplishment	**.769**	**.757**	**4**
Intrinsic motivation experience stimulation	**.847**	**.846**	**4**
Extrinsic motivation identified	**.621**	**.634**	**4**
Extrinsic motivation introjected	**.835**	**.836**	**4**
Extrinsic external regulation	**.844**	**.853**	**4**
Amotivation	**.433**	**.536**	**4**

The Cronbach's alpha coefficient for the 28 items of the AMS is 0.896 which is above 0.7 and therefore indicates a high internal consistency of the questionnaire, as displayed in Table 10. A Cronbach alpha coefficient of 0 indicates a completely unreliable test and 1 indicates a totally reliable test. A Cronbach alpha coefficient of 0.70 or higher is considered to be acceptable (Cortina, 1993). Therefore, the Cronbach's alpha of the AMS indicates a high correlation between the items of the questionnaire and proves that this is a reliable measurement. However, 'Extrinsic motivation identified' shows a Cronbach alpha of 0.621 which is close to, but less than 0.7. This score is acceptable but should be taken into account in the interpretation of the results. The subscale 'Amotivation' shows a Cronbach alpha of 0.433 which indicates an unreliable score and should be interpreted with caution. The Cronbach alpha for the sub-tests aid in deciding which sub-tests may be removed in future research to obtain a better result.

Table 11: Reliability statistics for the LABS and sub scales

LABS Construct	Cronbach's alpha	Cronbach's alpha based on standardized items	N of items
Total reliability for LABS	.853	.874	28
Hierarchical thinking	**.694**	**.698**	**14**
Systemic thinking	**.869**	**.880**	**14**

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As displayed in Table 11 the Cronbach's alpha coefficient for the 28 items of the LABS is 0.853, which is above 0.7 and therefore indicates a high internal consistency of the questionnaire. This indicates a high correlation between the items of the questionnaire and proves that this is a reliable measuring instrument. Hierarchical thinking shows a Cronbach alpha of 0.694 which is slightly less than 0.7 but is acceptable for reliability.

4.4 CORRELATION ANALYSIS OF THE DATA

In order to answer the research objective of this study, the relationship between the AMS and the LABS should be investigated. More specifically, Pearson product-moment correlation was used for this analysis.

The correlation analysis was done to determine the relationship between all the variables. Correlation analysis is utilised to determine the direction and strength of the linear relationship amongst variables (Pallant, 2011). Correlations can differ in magnitude from -1 to +1, with -1 indicating a perfect negative linear relationship. A negative relationship means that if one variable increases/decreases, the other decreases/increases respectively. A score of +1 indicates a perfect positive linear relationship (as one variable increases/decreases, the other increases/decreases, whichever is applicable), and 0 indicates that there is no linear relation between two variables (Cohen, 1988; Huysamen, 1994). No linear relation between two variables is indicated by 0. Cohen (1988) suggests that if the significance value is smaller than 0.05, the correlation is statistically significant at the 5% level. However, the statistical significance of a correlation is mainly dependent on sample size. Thus Cohen (1988) recommends that a correlation value of 0.1 is small, 0.3 is moderate, and 0.5 is large. Table 12 indicates the correlation coefficient between all the variables in the study.

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Table 12: Correlation between demographic variables, AMS and LABS

	IM to know	*IM toward accomplishment*	*IM to experience stimulation*	*EM identified*	*EM introjected*	*EM external regulation*	*Amotivation*	*Hierarchical thinking*	*Systemic thinking*
IM to know	1.000								
IM toward accomplishment	**.635****	1.000							
IM to experience stimulation	**.497****	**.352****	1.000						
EM identified	**.503****	**.644****	**.347****	1.000					
EM introjected	**.322****	**.529****	**.372****	**.425****	1.000				
EM external regulation	.152	**.366****	**.229***	**.457****	**.538****	1.000			
Amotivation	**-.357****	**-.355****	-.064	-.212	.037	-.041	1.000		
Hierarchical thinking	-.027	-.137	**-.266***	-.064	-.217	-.148	-.092	1.000	
Systemic thinking	**-.252***	-.191	**-.291****	-.179	-.067	-.057	-.114	**.291****	1.000

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

The findings from Table 12 indicate that there is a strong significant positive correlation between all the Internal Motivation (IM) variables of the AMS, where high levels of IM to know is associated with an increase in IM towards accomplishment and IM to experience stimulation, and vice versa. Table 12 further indicates that there is a strong positive relationship between all the IM and External Motivation (EM) variables of the AMS, except for the correlation between EM external regulation and IM to know where no significant correlation was identified. The correlation between EM external regulation and IM to experience stimulation is only significant at the 0.05 level. Furthermore there is a strong negative correlation between Amotivation and IM towards accomplishment and IM to experience stimulation. Thus, high levels of amotivation are associated with a decrease in IM towards accomplishment and IM to experience stimulation and vice versa.

The correlation between the subscales of the AMS and the subscales of the LABS indicated the following: Hierarchical thinking indicated a negative correlation with IM to experience stimulation on a 0.05 level. Furthermore, systematic thinking correlated negatively with IM to know on a 0.05 level. Table 12 indicates that there is a strong negative correlation between systematic thinking and IM to experience stimulation as well as with hierarchical thinking. Thus, high levels of systematic thinking are associated with a decrease in IM to experience stimulation.

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4.5 ANOVA RESULTS

The main objective of this study was to determine the factors that contribute to motivating students to develop their leadership skills. One way analysis of variance (ANOVA) aims to test for significant differences between the means of different groups (Pallant, 2007). ANOVA was used to compare demographic groups on various scales to determine whether or not there is a significant difference between groups on a variable. A confidence interval level of 95% was used to determine significant differences where $p < 0.05$. ANOVA uses square deviations. For each of the demographic groups its own mean and value that deviate from the mean are calculated. In each ANOVA an F-ratio is calculated. This value shows the variance between groups and within the group. A high F-ratio indicates that there is more variability between groups than there is within each group. In order to distinguish which of the groups represent the significant difference, post hoc tests were used (Pallant, 2011).

The sample group of this study provided eight biographical variables for inter-group comparisons. These biographical variables were: gender, age, ethnic group, home language, year of study, place of residence, industry the student intends to work in after his/her studies, and previous leadership positions held. The differences between groups in terms of the eight variables and the AMS and LABS were explored. ANOVAs were conducted on the data and the following were found in terms of each biographical variable:

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4.5.1 Gender

Table 13: ANOVA comparison of between-subject effects of gender and subscales of the LABS and AMS

		Sum of Squares	*df*	*Mean Square*	*F*	*Sig.*
Intrinsic motivation to know	Between groups	5.022	1	5.022	6.648	.012
	Within groups	57.404	76	.755		
	Total	62.426	77			
Intrinsic motivation toward accomplishment	Between groups	9.382	1	9.382	9.484	**.003**
	Within groups	75.183	76	.989		
	Total	84.565	77			
Intrinsic motivation experience stimulation	Between groups	3.513	1	3.513	1.753	.190
	Within groups	152.318	76	2.004		
	Total	155.831	77			
Extrinsic motivation identified	Between groups	5.350	1	5.350	8.997	**.004**
	Within groups	45.189	76	.595		
	Total	50.538	77			
Extrinsic motivation introjected	Between groups	17.143	1	17.143	7.951	.006
	Within groups	163.871	76	2.156		
	Total	181.014	77			
Extrinsic external regulation	Between groups	20.353	1	20.353	12.828	**.001**
	Within groups	120.584	76	1.587		
	Total	140.937	77			
Amotivation	Between groups	.366	1	.366	1.462	.230
	Within groups	19.019	76	.250		
	Total	19.385	77			
Hierarchical thinking	Between groups	.059	1	.059	.274	.602
	Within groups	16.313	76	.215		
	Total	16.372	77			
Systemic thinking	Between groups	.167	1	.167	.810	.371
	Within groups	15.711	76	.207		
	Total	15.878	77			

It is evident from Table 13 that statistically significant differences exist between gender and Intrinsic motivation toward accomplishment as well as Extrinsic motivation identified and Extrinsic external regulation.

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4.5.2 Age

Table 14: ANOVA comparison of between-subject effects of age and subscales of the LABS and AMS

		Sum of Squares	*df*	*Mean Square*	*F*	*Sig.*
Intrinsic motivation to know	Between groups	1.650	2	.825	1.102	.338
	Within groups	54.627	73	.748		
	Total	56.277	75			
Intrinsic motivation toward accomplishment	Between groups	.609	2	.305	.287	.751
	Within groups	77.512	73	1.062		
	Total	78.121	75			
Intrinsic motivation experience stimulation	Between groups	4.162	2	2.081	1.095	.340
	Within groups	138.761	73	1.901		
	Total	142.924	75			
Extrinsic motivation identified	Between groups	1.564	2	.782	1.275	.286
	Within groups	44.774	73	.613		
	Total	46.338	75			
Extrinsic motivation introjected	Between groups	.172	2	.086	.036	.965
	Within groups	176.003	73	2.411		
	Total	176.174	75			
Extrinsic external regulation	Between groups	.278	2	.139	.076	.927
	Within groups	134.409	73	1.841		
	Total	134.687	75			
Amotivation	Between groups	.979	2	.490	1.974	.146
	Within groups	18.109	73	.248		
	Total	19.088	75			
Hierarchical thinking	Between groups	.592	2	.296	1.382	.258
	Within groups	15.650	73	.214		
	Total	16.242	75			
Systemic thinking	Between groups	.566	2	.283	1.360	.263
	Within groups	15.201	73	.208		
	Total	15.767	75			

Table 14 indicates significance levels which are greater than 0.05. This is insignificant, indicating that there is no statistically significant difference between the mean scores of the different age groups.

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4.5.3 Ethnic group

Table 15: ANOVA comparison of between-subject effects of ethnic group and subscales of the LABS and AMS

		Sum of Squares	*df*	*Mean Square*	*F*	*Sig.*
Intrinsic motivation to know	Between groups	.431	1	.431	.529	.469
	Within groups	61.994	76	.816		
	Total	62.426	77			
Intrinsic motivation toward Accomplishment	Between groups	.104	1	.104	.094	.760
	Within groups	84.461	76	1.111		
	Total	84.565	77			
Intrinsic motivation experience stimulation	Between groups	.279	1	.279	.137	.713
	Within groups	155.551	76	2.047		
	Total	155.831	77			
Extrinsic motivation identified	Between groups	.026	1	.026	.039	.845
	Within groups	50.513	76	.665		
	Total	50.538	77			
Extrinsic motivation Introjected	Between groups	.129	1	.129	.054	.816
	Within groups	180.885	76	2.380		
	Total	181.014	77			
Extrinsic external regulation	Between groups	.631	1	.631	.342	.561
	Within groups	140.306	76	1.846		
	Total	140.937	77			
Amotivation	Between groups	.121	1	.121	.477	.492
	Within groups	19.264	76	.253		
	Total	19.385	77			
Hierarchical thinking	Between groups	.220	1	.220	1.035	.312
	Within groups	16.152	76	.213		
	Total	16.372	77			
Systemic thinking	Between groups	.106	1	.106	.510	.477
	Within groups	15.773	76	.208		
	Total	15.878	77			

The statistical significant differences between ethnic groups and subscales of the AMS and LABS are indicated in Table 15. Significant levels are all greater than 0.05, which indicates that there are no significant differences between the subscales and the different ethnic groups in the study.

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4.5.4 Home language

Table 16: ANOVA comparison of between-subject effects of home language and subscales of the LABS and AMS

		Sum of squares	*df*	*Mean square*	*F*	*Sig.*
Intrinsic motivation to know	Between groups	.920	2	.460	.546	.581
	Within groups	60.586	72	.841		
	Total	61.505	74			
Intrinsic motivation toward Accomplishment	Between groups	1.905	2	.952	.870	.423
	Within groups	78.817	72	1.095		
	Total	80.722	74			
Intrinsic motivation experience stimulation	Between groups	1.708	2	.854	.401	.671
	Within groups	153.378	72	2.130		
	Total	155.087	74			
Extrinsic motivation Identified	Between groups	.504	2	.252	.365	.695
	Within groups	49.663	72	.690		
	Total	50.167	74			
Extrinsic motivation Introjected	Between groups	3.243	2	1.621	.660	.520
	Within groups	176.882	72	2.457		
	Total	180.125	74			
Extrinsic external regulation	Between groups	5.224	2	2.612	1.406	.252
	Within groups	133.798	72	1.858		
	Total	139.022	74			
Amotivation	Between groups	.114	2	.057	.254	.776
	Within groups	16.158	72	.224		
	Total	16.272	74			
Hierarchical thinking	Between groups	.023	2	.012	.053	.948
	Within groups	15.650	72	.217		
	Total	15.673	74			
Systemic thinking	Between groups	.001	2	.000	.002	.998
	Within groups	15.773	72	.219		
	Total	15.774	74			

Table 16 shows evidence that there is no significance in differences in home language in comparison to the subscales. Differences in home language are therefore insignificant in respect of the subscales.

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4.5.5 Year of study

Table 17: ANOVA comparison of between-subject effects of different year of study and subscales of the LABS and AMS

		Sum of squares	df	Mean square	F	Sig.
Intrinsic motivation to know	Between groups	7.017	3	2.339	3.124	.031
	Within groups	55.409	74	.749		
	Total	62.426	77			
Intrinsic motivation toward accomplishment	Between groups	1.279	3	.426	.379	.769
	Within groups	83.286	74	1.125		
	Total	84.565	77			
Intrinsic motivation experience stimulation	Between groups	23.628	3	7.876	4.409	**.007**
	Within groups	132.203	74	1.787		
	Total	155.831	77			
Extrinsic motivation identified	Between groups	4.313	3	1.438	2.301	.084
	Within groups	46.226	74	.625		
	Total	50.538	77			
Extrinsic motivation introjected	Between groups	2.035	3	.678	.280	.839
	Within groups	178.979	74	2.419		
	Total	181.014	77			
Extrinsic external regulation	Between groups	6.361	3	2.120	1.166	.329
	Within groups	134.576	74	1.819		
	Total	140.937	77			
Amotivation	Between groups	.163	3	.054	.209	.890
	Within groups	19.221	74	.260		
	Total	19.385	77			
Hierarchical thinking	Between groups	1.062	3	.354	1.711	.172
	Within groups	15.310	74	.207		
	Total	16.372	77			
Systemic thinking	Between groups	.495	3	.165	.794	.501
	Within groups	15.383	74	.208		
	Total	15.878	77			

The biographical variable, year of study, did not show any significant differences between the groups namely 1st years, 2nd years, 3rd years, and 4th year or more. It is apparent from Table 17 that no significant difference was found at the 0.05 significance level. However, it is evident from the table that Intrinsic motivation experience stimulation showed a significance value of 0.07, which is not much greater than 0.05 and might be worth taking note of.

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4.5.6 Place of residence

Table 18: ANOVA comparison of between-subject effects of different places of residence and subscales of the LABS and AMS

		Sum of squares	*df*	*Mean square*	*F*	*Sig.*
Intrinsic motivation to know	Between groups	.332	2	.166	.200	.819
	Within groups	62.094	75	.828		
	Total	62.426	77			
Intrinsic motivation toward accomplishment	Between groups	.660	2	.330	.295	.746
	Within groups	83.905	75	1.119		
	Total	84.565	77			
Intrinsic motivation experience stimulation	Between groups	8.175	2	4.087	2.076	.133
	Within groups	147.656	75	1.969		
	Total	155.831	77			
Extrinsic motivation identified	Between groups	.699	2	.349	.526	.593
	Within groups	49.840	75	.665		
	Total	50.538	77			
Extrinsic motivation introjected	Between groups	11.484	2	5.742	2.540	.086
	Within groups	169.530	75	2.260		
	Total	181.014	77			
Extrinsic external regulation	Between groups	1.973	2	.987	.532	.589
	Within groups	138.964	75	1.853		
	Total	140.937	77			
Amotivation	Between groups	.770	2	.385	1.552	.219
	Within groups	18.614	75	.248		
	Total	19.385	77			
Hierarchical thinking	Between groups	.989	2	.495	2.412	.097
	Within groups	15.383	75	.205		
	Total	16.372	77			
Systemic thinking	Between groups	.914	2	.457	2.290	.108
	Within groups	14.965	75	.200		
	Total	15.878	77			

Table 18 indicates that all subgroups showed insignificance between the subscales and the place of residence of the students in the study. All the results of the subscales indicated significance levels greater than 0.05, which are therefore insignificant.

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4.5.7 Industry the student intends to work in after completion of his/her study

Table 19: ANOVA comparison of between-subject effects of different industry intend to work in after completion of study and subscales of the LABS and AMS

		Sum of squares	*df*	*Mean square*	*F*	*Sig.*
Intrinsic motivation to know	Between groups	.343	4	.086	.101	.982
	Within groups	62.082	73	.850		
	Total	62.426	77			
Intrinsic motivation toward accomplishment	Between groups	1.094	4	.273	.239	.915
	Within groups	83.471	73	1.143		
	Total	84.565	77			
Intrinsic motivation experience stimulation	Between groups	.829	4	.207	.098	.983
	Within groups	155.002	73	2.123		
	Total	155.831	77			
Extrinsic motivation identified	Between groups	3.685	4	.921	1.436	.231
	Within groups	46.853	73	.642		
	Total	50.538	77			
Extrinsic motivation introjected	Between groups	9.801	4	2.450	1.045	.390
	Within groups	171.213	73	2.345		
	Total	181.014	77			
Extrinsic external regulation	Between groups	11.400	4	2.850	1.606	.182
	Within groups	129.537	73	1.774		
	Total	140.937	77			
Amotivation	Between groups	.520	4	.130	.503	.734
	Within groups	18.865	73	.258		
	Total	19.385	77			
Hierarchical thinking	Between groups	.294	4	.074	.334	.854
	Within groups	16.078	73	.220		
	Total	16.372	77			
Systemic thinking	Between groups	1.350	4	.337	1.696	.160
	Within groups	14.528	73	.199		
	Total	15.878	77			

From the ANOVA test it is clear that there are no significant differences between the different industries in which students intend to work and the subscales of the AMS and LABS. Table 19 indicates that all the significance levels are greater than 0.05 and therefore insignificant.

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4.6 QUALITATIVE DATA RESULTS

Qualitative data was collected at the leadership development course through asking the respondents to complete two open-ended questions. The participants gave their answers in a narrative paragraph form. Most of the participants gave extensive narrative answers to the two open-ended questions. This gave the researcher insight into their thinking regarding and motivation for their investment in developing their leadership. The qualitative data were clustered into categories that relate to the subscales of the questionnaires. It was interesting to find that the frequency distribution of the qualitative data corresponded with the frequency distribution of the quantitative data. This confirms that the instruments that were used to collect the quantitative data were reliable, as the qualitative data confirmed the findings of the quantitative statistics.

The first open-ended question asked to the participants was the following: “Why do you invest in your leadership development / why is your personal leadership development important to you?” The majority of the students reported that they invest in their leadership development mainly due to extrinsic motivational factors (78.21%). Furthermore, 19.23% of the students viewed leadership development as important based on their intrinsic motivation. Only 1.28% of the students reported that factors relating to systematic thinking were their reason for investing in their leadership. The following quote from the open-ended questions related to systematic thinking: “the group needs leaders (not only one), so that balance can be sustained”. 1.28% of the students indicated that hierarchical thinking encouraged them. One of these students said: “If I am a leader, I would be representing a body of people, meaning I would be influencing them and giving them direction; what they do is a reflection of what I have influenced”. 0% of the participants participated in the leadership development initiative due to Amotivation, meaning that none participated due to them not knowing why leadership development was important to them.

Figure 1 displays the frequency of the clusters which were reported under extrinsic motivation from the first open-ended question. It is evident that the majority of the students (28) were motivated to attend the leadership workshop due to their work or career objectives. 25 students were motivated by their need to support and better lead others.

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Certain qualitative responses of students' motivation for attending the leadership development workshop were noteworthy.

One student wrote: "I believe that leadership is a fundamental building block to the youth of any country."

Another student wrote: "As a final year student I am looking for a job and I believe this will help my prospective employer as I will have valuable experience to prove it."

An African female student answered question 1 as follows: "In order to be able to develop others I must start with developing myself. The leadership skills that I obtain will help other people in their quests. I need to prove to myself and others that being an African woman doesn't hinder me."

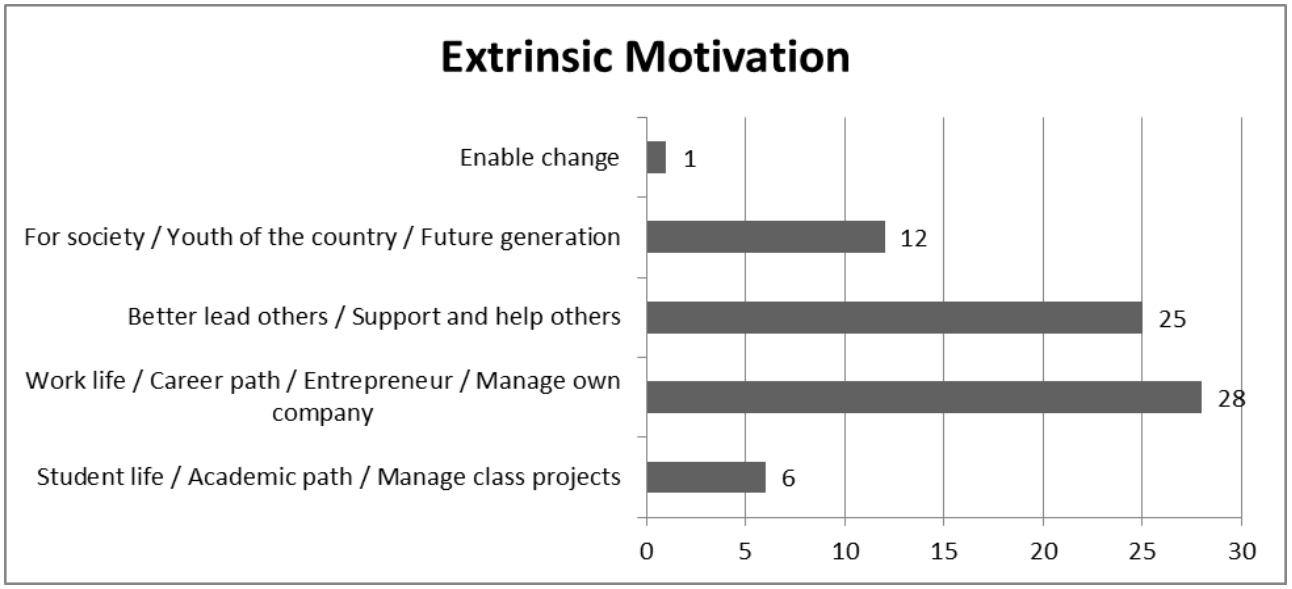

Figure 1: Frequency of clusters reported under Extrinsic Motivation from Question 1

In Figure 2 the frequency of the clusters which was reported under intrinsic motivation from the first open-ended question is displayed. It is evident that the majority of students (31) were motivated to develop their leadership abilities in order to accomplish personal growth, confidence and to strengthen their weaknesses. 12 students gained their intrinsic

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motivation from their belief that they were destined to be leaders and that it was naturally part of their being.

One student answered the question by writing: “To acknowledge flaws and better myself as a person, improve on the skills, knowledge and abilities to make myself more approachable.”

Another student wrote: “You need to know the relevant characteristics that a good leader must possess and also boost your self-confidence.”

A student who believed that they were a natural leader wrote: “I invest in my own leadership because I believe being a leader is something I am destined for.”

Figure 2: Frequency of clusters reported under Intrinsic Motivation from Question 1

The second open-ended question asked to the participants was the following: “What do you think you will benefit in future from attending this leadership development workshop?” In answering this question, the majority of the participants (70.51%) indicated that they would benefit from the leadership development in an external way (Extrinsic), and 28.21% indicated that they would benefit for their own sake (Intrinsic). 0% of the students indicated that they would benefit in terms of systematic or hierarchal leadership development and 1,28% of the participants did not know what they would benefit from leadership

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development (Amotivation). This data also corresponded to the data found in the quantitative research.

Figure 3 displays the frequency of clusters reported under extrinsic motivation for the second open-ended question. The majority (25) of students believed that their career or future organisation would benefit from them participating in a leadership development initiative. 23 students believed that they would benefit due to being able to lead more effectively and inspire others.

One student wrote: “The people I will meet with a like-minded attitude will play a role in building and forming each other, and myself included.”

Another student wrote: “These days, potential employers are more interested in what one does in the academic field as well as outside (any extra-curricular activities), so the fact that it will form part of my CV is important.”

Figure 3: Frequency of clusters reported under Extrinsic Motivation from Question 2

The frequency of clusters reported under intrinsic motivation for the second open-ended question is displayed in Figure 4. It is apparent that the majority of students (31) who were intrinsically motivated believed that they would gain competence and skills from the

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leadership development initiative. 19 students believed that they would gain knowledge and insight.

One student wrote: “My leadership skills and the way that I see leadership can improve.”

Another student wrote: “I have not had a mentor before or someone to guide me on being a leader, I see myself becoming a great lead, but I have to start somewhere, coming here and getting pointers, tips and skills, I will be able to apply to the next task that I will do.”

Figure 4: Frequency of clusters reported under Intrinsic Motivation from Question 2

4.7 CONCLUSION

This chapter revealed, reported and explained the results of various statistical processes that were done in this study. More specifically, the results of the descriptive statistics, reliabilities, correlations and ANOVAs were presented. The last section of this chapter focussed on the qualitative results that were gathered in the study.

The following chapter focuses on the discussion and interpretation of the results.

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5 DISCUSSION OF THE RESULTS

5.1 INTRODUCTION

In chapter 4 the results of various statistical procedures were documented and explained. The results presented were in the form of descriptive statistics, correlations, reliabilities and analyses of variance. Chapter 5 focusses on the discussion and interpretation of the results of the statistical analysis that was done. This chapter aims to explain the factors that motivate students' participation in leadership development and will include the findings and conclusions drawn.

5.2 REVIEW OF THE STUDY

The primary objective of this study was to explore and investigate the possible factors that might have an influence on motivating a student to participate in a leadership development programme.

The main purpose of this study was outlined by the research objectives in Chapter 1, which are once again stated below:

5.2.1 Empirical research objectives

The primary empirical research objective was to explore the factors that motivate a student's participation in leadership development at the University.

The secondary empirical research objectives were:

- To determine the relationship between demographic factors (gender, age, ethnic group, home language, year of study, place of residence, the industry the student intends to work in and previous leadership positions held) and a student's participation in leadership development initiatives at the University.

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- To determine the relationship between previous exposure to leadership positions and a student's need for further leadership development at the University.
- To make recommendations for future leadership development initiatives at university level.

In order to attempt to achieve the study objective, the following measuring instruments were administered amongst a group of students at the University:

- Biographical questions
- Open-ended questions
- Leadership Attitudes and Beliefs Scale (LABS)
- Academic Motivation Scale (AMS)

The results of the surveys were analysed and the results and findings were presented in Chapter 4. The next section provides a discussion of each section of the findings.

5.3 KEY EMPIRICAL FINDINGS

The process of obtaining the experimental findings was discussed in detail in Chapter 3, which contains an analysis of the research methodology followed in this study. In the next section the empirical findings are discussed in two phases. Phase one deals with the descriptive statistics, reliability analysis and correlations. Phase two focuses on the discussion of each objective of the study and finally a discussion of the overall findings of the study.

5.3.1 Phase one: Empirical findings

Phase one of the statistical procedure is discussed next. This includes the descriptive statistics, correlation and reliability analysis.

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5.3.1.1 *Descriptive statistics*

The AMS indicated that the item distributions had a wide range, meaning that the normal distribution of the means showed a wide separation from one another (see Table 4). In examining the results it was found that amotivation had a mean of 1.28, which was identified as an outlier. All the other subscales' means ranged between 4.05 and 6.07 which are relatively close to one another. This was also reported in previous studies, where amotivation was the least endorsed (Fairchild *et al*., 2005; Vallerand, Blais, Briere, Senecal, & Vallieres, 1993). The low endorsement of amotivation correlates with the data received from the qualitative results which indicated that 0% of the participants reported amotivation as their reason for participating in the leadership development initiative.

The descriptive statistics of the LABS indicated that the standard deviations ranged between 0.45 and 0.46 and were therefore relatively close to one another (see Table 5). It was however reported in the study by Lowhorn (2011) that the standard deviation of the LABS ranged from 4.87 to 6.49. The results found in this study indicate that the group were more homogeneous in their beliefs regarding hierarchical and systematic leadership thinking.

5.3.1.2 *Reliabilities*

Results are considered reliable when the Cronbach's alpha coefficient is higher than 0.7 ($\alpha > 0.7$) (Trochim & Donnelly, 2008). As indicated in Table 6, the Cronbach's alpha coefficient for the 28 items of the AMS is 0.896. This indicates that the scale has acceptable reliability and can consistently measure the specific dimensions of the magnitude that it is designed to measure. However, the subscale 'Amotivation' shows a Cronbach alpha of 0.433, which indicates an unreliable score and should be interpreted with caution. The Cronbach alpha for the sub-tests aid in deciding which sub-tests may be removed in future research to obtain a better result. It should be considered whether the questions that relate to Amotivation in the AMS questionnaire were correctly understood by the participants. It might be that the psychometric properties of the instruments were not suitable for the South African context in which the questionnaire was used as it seems

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as if the questions relating to Amotivation were incorrectly understood and answered. This caused low reliability of the Amotivaiton subscale. In the study conducted by Fairchild *et al*. (2005) reliability values of the subscales indicated adequate internal consistency. Bissessar (2008) also reported the reliability of the scale. It is therefore recommended that amotivation be interpreted with caution due to the unexpected results of the subscale in the South African context.

The results obtained for the Cronbach's alpha coefficient for the 28 items of the LABS was 0.853, which is above 0.7 and therefore indicates a high internal consistency of the questionnaire (see Table 7). This indicates a high correlation between the items of the questionnaire and proves that this is a reliable measuring instrument. Reliability of the instrument was also confirmed in the study of Wielkiewicz (2002). Therefore, the results obtained from the LABS are reliable for interpretation purposes in this study. Furthermore, they indicate a high degree of homogeneity between the questionnaire items.

5.3.1.3 *Correlations*

In Table 8 the Pearson product-moment correlation analysis are displayed. The correlation analysis was utilised to determine the direction and strenght of the linear relationship between variables (Pallant, 2011).

The findings indicated that there is a strong significant positive correlation between all the Internal Motivation (IM) variables of the AMS, where high levels of IM to know are associated with an increase in IM towards accomplishment and IM to experience stimulation, and vice versa. Table 8 further indicates that there is a strong positive relationship between all the IM and the External Motivation (EM) variables of the AMS, except for the correlation between EM external regulation and IM to know, where no significant correlation was identified. This correlates with Fairchild *et al*. (2005) who identify EM external regulation on the one side of the continuum where little self-determination is motivating an individual as opposed to IM to know where self-determination drives a person's desire to learn new things. The correlation between EM external regulation and IM to experience stimulation is only significant at the 0.05 level. Furthermore, the results

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in Table 8 show a strong negative correlation between Amotivation and IM towards accomplishment and IM to experience stimulation. Thus, high levels of Amotivation are associated with a decrease in IM towards accomplishment and IM to experience stimulation and vice versa. In the study conducted by Fairchild *et al*. (2005) the strongest negative correlation was also found between amotivation and the three types of intrinsic motivation. This means that someone who has a strong intrinsic motivation towards their leadership development will have very low levels of amotivation, thus they will be certain about their motives for leadership development. This was also confirmed in the qualitative results which showed that 19.23% of the students viewed leadership development as important based on their intrinsic motivation in relation to 0% reporting amotivation as their reason for participating in development initiatives. A student who portrayed strong intrinsic motivation wrote: “I invest in my own leadership because I believe being a leader is something I am destined for.”

According to Fairchild *et al*. (2005) the EM identified and EM external regulation subscales both refer to future objectives in a person’s job or career. This is confirmed by the 0.457 correlation value as obtained from Table 8, which confirms a strong positive correlation between these subscales. According to the qualitative results found in the study, the majority of the students reported that they invested in their leadership development mainly due to extrinsic motivational factors (78.21%) and 28 students particularly indicated that they were motivated by their envisaged career life, which strengthens this argument.

The results of the correlation between the subscales of the AMS and the subscales of the LABS indicated that Hierarchical thinking correlates negatively with IM to experience stimulation. This means that students who were motivated to experience sensory stimulation in the sense of intellectual sensation did not show a hierarchical belief towards leadership.

Furthermore, Systematic thinking correlated negatively with IM to know, meaning that students who were motivated to perform activities for the enjoyment of learning new things did not show a tendency towards systematic leadership thinking. Table 8 indicated that there is a strong negative correlation between Systematic thinking and IM to experience

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stimulation. Thus, high levels of Systematic thinking are associated with a decrease in desire to experience intellectual stimulation.

In this study a positive correlation of 0.291 was found between the subscales of the LABS, which indicate a moderate strength of positive correlation. In the study conducted by Wielkiewicz (2000) in developing the LABS scale, a correlation of 0.025 was found between the Hierarchical Thinking and Systematic Thinking scale, which clearly shows that it is not statistically significant. This study was based on a sample size of 676 college students. The frequency distribution of the sample indicated a strong tendency among most students to endorse the concept of systematic thinking. The result of the current study run counter to the results found by Wielkiewicz (2000). This deviation might be due to the small sample size of the current study. No significant leniency towards systematic thinking or hierarchical thinking was established with the qualitative results in order to attempt to provide more clarity on this finding.

5.3.2 Phase two: Empirical findings

5.3.2.1 *Demographic findings*

Biographical factor 1: Gender

Participation in this study was dominated by females (71.8%) in comparison to only 28.2% male participation. Manyibe (2007) found that gender had an influence on a person's leadership abilities as many African cultures believe in training males rather than females in leadership. The representation of female students was much higher than that of males. The leadership development workshop presented was open to all students and students could choose out of free will to participate. It is therefore interesting to see that females dominated participation. It can be speculated that it might be due to previous disadvantages that females experienced and that they now seize every opportunity to get leadership exposure due to being previously disadvantaged, especially within the African culture in South Africa.

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In order to further analyse the gender differences, the ANOVA analysis of the LABS and AMS subscales was compared with the male and female representation in the study in order to identify possible differences within gender and leadership beliefs and motivation. As displayed in Table 9 statistically significant differences exist between gender and Intrinsic motivation toward accomplishment as well as Extrinsic motivation identified and Extrinsic motivation external regulation. This means that males and females indicated significantly different orientation towards Intrinsic motivation to accomplish new things as well as Extrinsic motivation identified and external regulation which specifically refers to motivation regarding reward and career objectives. In all three these subscales, the mean scores of females were higher than those of the males who participated in the study.

No significant differences were found in this study with regard to how male and female students think about hierarchical and systematic leadership. Wielkiewicz (2000), however, found that male and female college students differed significantly on Hierarchical Thinking, resulting in an effect size of 0.403. Gender strongly linked to beliefs about leadership, with males having a stronger belief in hierarchical leadership, and females having a stronger belief in systemic leadership (Wielkiewicz *et al*., 2012). It was also found that a drive for competition and power improve students' interest in leadership (Whitehead, 2009). However, the findings of the current study did not correspond with these findings. In the study by Whitehead (2009) female students proved to be more attracted to leadership development initiatives which emphasised cooperation-based learning methods such as student governments, classroom and club leadership whereas male students preferred competitive situations. In this study, however, this could however not be determined as the results did not show significant differences between the two genders' hierarchical and systematic thinking.

Biographical factor 2: Age

Mozhgan *et al*. (2011) found that age factors can contribute to the leadership competency development of individuals. Furthermore Cress *et al*. (2001) emphasise that the seniority of students play an influential role in the interest students display in leadership development. It is also argued that the development of leadership skills must start at the

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earliest age possible and that leadership development should be focused on a larger variety of humanity. In a study conducted, the researchers also prove that 97% of their respondents feel strongly that the development of leadership should start before an individual reaches the age of twenty-one (Van Velsor & Wright, 2012).

The majority of students who participated in the study were between the ages of 20 and 22 years. According to the results in Table 10, no statistically significant differences were found between the mean scores of the different age groups. This means that students of different age categories experienced very much the same motivation toward leadership development. The findings in this study can thus not support or contradict the findings in the literature. The limitation in significance of the results regarding age groups might indicate that the sample size was too small and homogeneous for significant conclusions to be drawn.

Biographical factor 3: Ethnic group

The participation distribution of different ethnic groups indicated that 65.4% of the participants were black African/coloured/Indian and 34.6% were white. Black African/coloured/Indian groups were combined as there were only a few coloured and Indian participants. Thus black Africans dominated the participation. The South African population is dominated by black African citizens and the participation is therefore a reflection of the ethnic group distribution of the country.

According to the statistical analysis in Table 11, no significant differences between the subscales and the different ethnic groups in the study were found. No evidence in the relevant literature could be found to support or contradict these findings. Manyibe (2007), however, noted that many African cultures tend to train males rather than females in leadership. Interestingly, one of the African female students wrote the following in the qualitative results: “In order to be able to develop others I must start with developing myself. The leadership skills that I obtain will help other people in their quests. I need to prove to myself and others that being an African woman doesn't hinder me.” This lends support to the statement from Manyibe (2007). African females dominated the participation

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and it can be speculated that this might be due to previous disadvantages that African females experienced. Due to this they now have a strong desire for leadership development opportunities and are even more motivated towards leadership development than other ethnic groups.

Biographical factor 4: Home language

In order to analyse the home language differences, the ANOVA analysis of the LABS and AMS subscales was compared with the different home language representations in the study in order to identify possible differences within language and leadership beliefs and motivation. As indicated in Table 12, there was no significance in the differences between home languages in relation to the subscales. This indicates that there are no significant differences between the language groups in the study and their motivation towards leadership development. Thus, a student's home language did not have an effect on the student's motivation to participate in leadership development.

Biographical factor 5: Year of study

The majority of students who participated in the research were in their 2nd year of study (43.6%) and 26.9% were in their 1st year. Thus, 70% of the participants were busy with their 1st or 2nd year of studies. According to the statistical analysis it is apparent from Table 13 that no significant difference was found between the different years of study. However the analysis showed that Intrinsic motivation experience stimulation showed a significance value of 0.07, which is not much greater than 0.05. The 2nd year students indicated the lowest desire towards intrinsic motivation to experience intellectual or physical stimulation. However, no evidence in the relevant literature could be found to support these findings.

In the qualitative results a final year student wrote: "I am looking for a job and I believe this will help my prospective employer as I will have valuable experience to prove it." It was noteworthy that the mean values for the 4th and 5th year student group as well as the 3rd year student group were the highest in terms of extrinsic motivation external regulation and extrinsic motivation identified. These two subscales are known to indicate motivation for

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career objectives. Thus it indicates career objectives of the students in their 3rd, 4th and 5th year of studies played a large role in their motivation for participating in leadership development.

Biographical factor 6: Place of residence during the semester

Results from the study indicated that 43.6% of the students who participated in the study were staying in private accommodation, 25.6% stayed in University residences and 30.8% stayed with parents/family. It was however found, as indicated in Table 14, that all subgroups showed insignificance between places of residence of the students in the study in relation to the subscales. Astin (1993) provides evidence that student leadership development was positively influenced by a few environmental factors such as the students' interaction with other students and the faculty and not living in their hometown. This statement could however not be fully substantiated by the results found in this study. However, the cross tabulation between place of residence and previous leadership positions held showed that students living with their parents or family scored the lowest percentage representation in almost all the different areas of leadership positions (see Table 18). The ANOVA results in this study showed that the place of residence is an insignificant contributor towards a student's motivation to participate in leadership development. No evidence in the relevant literature could be found to support or contradict this.

Biographical factor 7: Industry the student intends to work in after completing his/her studies

According to Nelson (2010) the world of work expects from qualified professionals to be competent leaders when they engage in their profession. Specifically in a South African context, Shokane, Stanz, and Slabbert (2004) point out that businesses are undertaking to become world leaders in the market, and that their success lies in a solid leadership pipeline. The results in this study indicated that the two major industries students who participated in the study intend to work in were Human Resource Management (26.9%) and Finance/Business Services (25.6%). From the data analysis it was however found that

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there were no significant differences between the different industries in which students intended to work in relation to the subscales of the AMS and LABS, as indicated in Table 15. This means that the students' intended work industry did not have an influence on their motivation to participate in leadership development or their thinking about leadership. The cross tabulation between the industry the students intend to work in and previous leadership positions held however indicated that 100.00% of the participating students who indicated that they intend to work in the government industry previously held school leader or prefect positions and 55.6% held cultural association or society leadership positions. This finding could not be substantiated in the relevant literature.

The results from the ANOVA indicating no significant differences found between the different industries students intend to work in does not mean that the students' professions as a whole were not a primarily motivational factor towards leadership development. Dempster and Lizzio (2007) confirm that students might be interested in leadership development because there is a shortage of leadership skills in the corporate world and that students want to pursue leadership roles in their future careers. The results found in the qualitative data indicated that the majority of the students believed that their career or future organisation would benefit from them participating in a leadership development initiative (see Figure 3). This was confirmed by a participant who wrote: "These days, potential employers are more interested in what one does in the academic field as well as outside (any extra-curricular activities), so the fact that it will form part of my CV is important."

According to Wielkiewicz (2000), individuals who tend to be more hierarchical orientated may be more comfortable in organisations dominated by hierarchical thinkers. Thus, rising higher in the organisational structure and pursuing career goals would be very important for such individuals. The results obtained in Table 8 showed that hierarchical thinking correlated negatively with extrinsic motivation external regulation and extrinsic motivation identified (which indicate motivation towards career objectives). The correlation was not significant. However, it means that the participants who were extrinsically motivated in terms of career objectives did not have a strong tendency towards hierarchical thinking.

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Biographical factor 8: Previous leadership positions held

The results of the data in Table 3 indicated that 48% of the participants held a school leader/prefect position in their past. 22% of the participants were sports captains, 14.6% were leaders of cultural associations and 6.5% were leaders of academic associations. 8.1% of the participants indicated that they belong or belonged to their house committee and 1 of the participants was on the University's student council.

The school system often only caters for a limited number of learners with regards to developing leadership based on a merit system, whereas the rest are left in a leadership 'vacuum' as they failed to meet the leadership criteria at school level (Sundelowitz *et al*., 2007a). Sundelowitz *et al*., (2007a) and Sundelowitz, Macdonald and Stanz (2007b) are therefore of the opinion that institutions should cater for leadership development in later stages of life, such as at university level. It is, however, noteworthy that the majority of students who participated in the leadership development initiative had previously been exposed to leadership. The majority of participants had been in school leadership positons and almost the entire participant group held one or more leadership positions earlier in their lives. This might indicate that the students who were motivated to participate in the leadership development initiative had previously been exposed to leadership positions and therefore had an interest in further developing their leadership competence. This can be an indication that the sample group was homogeneous. Sundelowitz and Stanz (2008) make use of a bell curve as a 'model' of normality, according to which those individuals whose leadership potential is plotted on the '+' side of the mean range are highly advantaged in life. While it cannot be said that the sample group can be plotted as high potential leaders, plotted on a bell curve the whole group would fall into the same category. The fact that such a large number of the participants had held previous leadership positions indicates that these students had already been exposed to leadership previously in their lives.

The analysis from the multiple response cross tabulation indicated that no significant differences existed between previous leadership positions held and different gender groups that participated in the study (see Table 16). It was, however, noted that sports

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captain positions were dominated by males (57.1%). In the study conducted by Wielkiewicz (2000), participants who were members of varsity sport teams viewed hierarchical thinking as more important. This relates to the argument of Wielkiewicz *et al*. (2012) that males indicate a stronger belief in hierarchical leadership.

5.4 CONCLUSION

The results of the statistical analysis were interpreted and discussed in this chapter. The main focus was on exploring the possible factors that motivate students' participation in leadership development. The results were discussed in two phases. The first phase focussed on the descriptive statistics, reliabilities and correlations. The second phase focussed on the biographical factors.

To summarise, the results of the study indicated that the LABS and AMS are valid and reliable instruments for use in higher educational institutions. The results of the empirical findings of this study were unexpected. No significance in terms of hierarchical and systematic thinking was found in the descriptive statistics. The correlation analysis, however, showed a strong correlation between EM identified and EM external regulation, which correlated with findings reported in the literature. The biographical variables were analysed and it was found that gender differed significantly on the subscale Intrinsic motivation toward accomplishment as well as Extrinsic motivation identified and Extrinsic motivation external regulation. The multiple response cross tabulation for previous leadership positions held indicated that previous leadership exposure might serve as motivation for students to further develop their leadership competence. No further statistically significant relationship was found between the biographical variables.

Due to the fact that the research results showed that there are very limited statistically significant relationships between the variables, the empirical research objectives could not be reached. Thus, the study was not able to determine whether there is a significant relationship between the biographical factors and the students' participation in Leadership Development initiatives at the University. The results of the study therefore do not provide

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significant statistics in order to make recommendations for future leadership development initiatives at university level. The results however did enhance comprehension of the topic.

The last chapter of this study will focus on the conclusion and closure of the study by presenting the significance, value and future recommendations of the study.

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6 CONCLUSION, LIMITATIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

The previous chapter focussed on the discussion and interpretation of the results of the statistical procedures that were executed in the study. This chapter presents a summary of the objectives and the key findings of the study as well as the discussion on the significance of the study. Limitations of the study are addressed in this chapter and further research possibilities and recommendations are proposed, followed by a final conclusion.

6.2 SIGNIFICANCE OF THE RESEARCH

This study has theoretical, methodological and practical significance as it provided an enhanced comprehension of the factors that motivate students' participation in leadership development specifically in the South African university context. The aspects of each level of significance will be discussed in the following section.

6.2.1 Theoretical significance

This study contributes to the critical topic of student leadership, which is a vital and relevant subject in the current context within South Africa as well as the rest of the world. Student leadership has recently been under the microscope in the media at South African universities. This study emphasizes and creates an awareness of the critical importance for universities to invest their resources in student leadership development at a time that it is much needed.

A comprehensive literature study was conducted on the topic of student leadership, the importance thereof, the current state of development opportunities at universities and specifically, the factors that motivate students' participation in leadership development. The fast-changing world of today requires leaders in political, cultural, scientific, technological and social spheres of society and therefore student leadership development is a vital topic of the current era (Mozhgan, 2012; Tabb & Montesi, 2000; Yip, 2006). The

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insight gained from this study explored a concept that has never been researched in South Africa before. The research provides a framework for assessing the motivational factors, therefore it contributes to the understanding of the motivational factors that contribute to a students' interest in developing and investing in their leadership skills. Studies focussing on this unique concept are rare, if fact, a similar type of study could not be found in the literature. Therefore, this study contributes significantly to the body of content around student leadership by exploring the reasons for students' participation in leadership development.

6.2.2 Methodological significance

A well-constructed research design was put into place for this study in order to contribute to the limited available literature and research studies regarding motivational factors for the participation of students in leadership development programs. This exploratory nature of the study is apparent from the method used. More specifically, this study used inferential statistical procedures which included descriptive statistics, reliability analysis, correlations, multi response cross tabulation and analysis of variance. The study also used two open-ended qualitative questions to further explore students' motivation and to cross reference the findings from the quantitative results. Although the results of the study showed very limited significance between the variables of the study, it does not mean that the results do not expand the comprehension of the researcher and reader on the sample used and topic researched. Thus, the well-structured methodology enabled the researcher to make conclusions regarding the sample and topic under study.

This study supports the value of quantitative methods in exploring students' motivational factors. Two separate questionnaires (LABS and AMS) were used that had never been used in combination before, thus being significant in the information sourced from participants. These two questionnaires are well developed and structured questionnaires. The reliability results from these two questionnaires were of high quality. The biographical variables provided insight into the subject. This is valuable because almost no empirical research has been conducted, both in South Africa and internationally on this particular topic.

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6.2.3 Practical significance

No similar research could be found in South Africa or in the international context. As part of the formal education sector, leadership development is seen primarily as the duty of these educational institutions (Connaughton *et al*., 2003; Mozhgan *et al*., 2011). The literature confirms that universities do allocate resources to the development of student leadership (Cress *et al*., 2001; Shertzer *et al*., 2005) but only a few universities are successful in driving this process (Duvall, 2003).

This research provides universities with insight into student leadership and creates an awareness of the importance of student leadership development. More importantly, it stresses the importance of investing in student leadership. The study found that the majority of students who participated in the leadership development initiative had held a previous position of leadership. This indicates that previous leadership exposure augmented the student's motivation to further develop their leadership competence. The dilemma is that students who had never been exposed to leadership positions before might not get the needed exposure if universities do not ensure that every student gets exposure to leadership development. Van Velsor and Wright (2012) therefore strongly argue that leadership development should ideally be integrated in every university student's learning experience, preferably as part of their curriculum. This ensures that leadership development is implemented beyond the generic norm generated criteria in order to cater for the potential leadership talent which is often missed as a result of a merit deserving criteria (Sundelowitz, 2008). Sundelowitz (2008) further argues that those students who meet systemic merit deserving criteria are selected as leaders within educational systems and are the ones that organisations look at first when they make selections for future leadership roles. Therefore it is critically important that universities create leadership development opportunities for students from all walks of life to ensure that students who were not included due to the school merit systems also gets exposure to leadership development. Connaughton *et al*. (2003) confirm this by stating that the development of competent and ethical leaders are a primary responsibility of universities.

The next section outlines the limitations of this study.

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6.3 LIMITATIONS OF THE STUDY

Although this study provided relevant insight and comprehension into the topic of student leadership at university level within the South African context, it is acknowledged that this study has certain limitations characteristic of survey research. The following are specifically recognised as specific limitations of this study:

- The sample used in this study was a sample of convenience and can therefore not be generalised to the wider population of university students. The researcher chose the specific sample because it was easily accessible and the University was supportive of the study and gave the researcher access to the sample group. The leadership development initiative at the University that is presented by the MCom Industrial Psychology students can only accommodate a certain number of student participants. Thus, the capacity that could be accommodated by this leadership development initiative is limited and influenced the sample size of the study. This caused the sample size and quality to be dependent on the participation of the attendees of the initiative.
- The sample consisted of self-selected candidates. Thus the candidates that participated in the study chose to participate in the leadership development initiative of their own free will and interest. The self-selected group was therefore homogeneous and showed very little to no variance in their response to the study. The homogeneousness of the sample can be explained by the way of the bell curve effect that is used as a ‘model’ of normality. According to Sundelowitz and Stanz (2008) those individuals whose leadership potential are plotted on the ‘+’ side of the mean range are highly advantaged in life. It cannot be said that the sample group can be plotted as high potential leaders, but, when indicated on the bell curve, the whole group fell into the same category. This resulted in similar responses to the variables measured in the study. It can be argued that the sample group all shared the same motivation towards leadership development as they all chose, out of free will, to attend the leadership development initiative where this study was conducted.
- Although a comprehensive sample was needed in order to draw more significant conclusions from the study, the participation in the study remained voluntary. This

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resulted in the size of the sample being dependent on the participation of students in the leadership development workshop that was presented by the MCom Industrial Psychology students in 2015. The sample size is deemed to be too limited to draw significant conclusions from the results; however the study does provide insight into the topic researched. According to Cohen (1992), statistical power refers to the probability of detecting a relationship between predictor and criterion in a sample. If such a relationship exists in a sample, it can be drawn as conclusion in relation to the population. Thus, if one knows the value of three variables, the fourth can be calculated. The aim is therefore to find a balance between the factors whilst taking into account the resources available and the purpose of the research. The larger the number of participants in a sample group, the higher the power of the study will be (Wilcox, 2003). In a study conducted by Cohen (1992), 2 independent variables were used to test for correlation by using an alpha of 0.05. The study found that a medium effect size would require a sample size of 64 (for a power of 0.05), and for a small effect size one of 393 research participants. Taking the analysis by Cohen (1992) into consideration, the sample size of this study fell between a small and medium. This means that extreme outliers may have influenced the distribution. Sample size may limit the degree to which adequate statistical power can be achieved to provide meaningful tests for significance (Cohen, 1992).

- A second power problem concerns the restriction of range of scores (Reis & Judd, 2000). The homogeneity of the sample group may have resulted in a certain degree of restriction of range within the scores. This means that scores do not vary very much and it is therefore difficult to find associations between variables or to identify any one outcome variable (Reis & Judd, 2000). Therefore, restriction of range is found when the variances on the variables are small and unrepresentative.
- A newly developed instrument that specifically measures the motivational factors for students' participation in leadership programmes could have resulted in richer data. However, this was not cost and time effective for the study.

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In summary, the main limitations of this study are:

- The sample size used for the study: The number of units of analysis was too small and made it difficult to find significant relationships from the data. Statistical evaluations normally require a larger sample size in order to guarantee a representative distribution of the population under study. A larger sample group is needed to be representative of the larger body of students to whom results will be generalised.
- The self-selected group was homogeneous and therefore showed very little to no variance in their response to the study.

The recommendations emanating from the findings of the research are discussed next.

6.4 RECOMMENDATIONS

When considering the scope and complexity of this study field it is clear that recommendations can and should be made. The recommendations regarding the theoretical, methodological and practical perspectives are as follows:

6.4.1 Theoretical recommendations

It is evident from the literature review that there are several studies regarding student leadership. However, studies focussing on this unique concept are rare, in fact, a similar type of study could not be found in the literature. Due to the limited number of studies that explored the factors that motivate students to develop their leadership ability, future research is proposed to expand on and enhance the findings of this study.

6.4.2 Methodological recommendations

The sample group that was used in this study consisted of a heterogeneous group and there was therefore perceived variance in terms of the biographical factors of the group. Different gender and race groups were well represented in the group, which contributed to the perceived variance of the group. However, the results from the study showed no

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significant differences between the participants' cognitive thinking about leadership, their motivation to participate in leadership development and their attitudes and beliefs towards leadership in terms of hierarchal and systematic thinking.

Due to the lack of variance in the responses from candidates who participated in the study that was caused by a small sample size and self-selected group, it is recommended that similar studies in future should use an experimental design for research. The experimental design will also contribute to the internal validity of the study.

Furthermore, the results of the subscale for Amotivation in the AMS questionnaire indicated a Cronbach alpha of 0.433, which shows an unreliable score. It is therefore recommended to test the psychometric properties of the AMS within the South African context in a separate study. This will ensure that all the subscales of the instrument give reliable data to future researchers.

The study included two open-ended qualitative questions. However, it is nonetheless recommended that focus groups and interviews should be employed to further enhance questionnaire surveys.

6.4.3 Practical recommendations

The sample size used in this study contributed to the limitations thereof. Due to the limited number of students that the leadership development initiative at the University can accommodate, restriction of range was found. On a practical level it is therefore recommended that the capacity of such initiatives be enlarged to accommodate more students and create more opportunities for researchers to conduct research in the field of student leadership. This is critically important as South African universities are currently facing immense pressure from student leaders and this time of crisis calls for universities to invest in student leadership development initiatives. This makes the statement of Connaughton, Lawrence and Ruben (2003) even more relevant when they argue that leadership skills are essential to the development of humanity and that universities play a

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vital role in the development of students to become future leaders. The development of competent and ethical leaders is therefore a primary responsibility of universities.

It is also recommended that this topic be further researched in order to create awareness at universities leading to investment in the leadership development of their students. Further research will also enable universities to integrate leadership development in every university student's learning experience, preferably as part of their curriculum (Van Velsor & Wright, 2012). This will be done by allocating time and resources to the development of student leadership and by placing strong emphasis on developing programs to assist them in achieving this (Cress *et al*., 2001; Shertzer *et al*., 2005). In essence, further research on this topic will benefit student development and foster the enrichment of humanity (Rosch & Kusel, 2010).

In order to eliminate the limitations caused by a convenient sample, it is recommended that future studies use a sample that represents students from all walks of life. This means that students should be randomly chosen to participate in the study. This will ensure that students with different viewpoints, beliefs, motivation and interests will be included in the sample and will possibly eliminate the homogeneity that was found in the current study's results.

6.5 SUGGESTIONS FOR POTENTIAL RESEARCH OPPORTUNITIES

It is recommended that the methodological recommendations be included in the practical implementation of similar future studies. Future research will provide a framework for universities to understand the factors that motivate students to develop their leadership abilities. Determining the motivational factors will assist universities in exposing more students to the leadership development programs that are already available. It is therefore recommended that the group that will attend the leadership development initiative, presented by the MCom Industrial Psychology students of the University in 2016 and the years to follow be used in future studies or that a follow-up study be conducted. Interviews or focus group discussion is also recommended as a potential research opportunity in order to delve deeper into the origin of the students' motivation.

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Further research on this topic is recommended as this will enable universities to develop leadership development programs on the grounds of the motivational factors in an attempt to involve more students in leadership development programs. Ideally it can assist universities to include leadership development as part of every student's curriculum (Van Velsor & Wright, 2012). Leadership development programmes at university level can enable universities to grow their own pipeline of leaders that can be engaged in the universities' own leadership structures (Duvall, 2003). Such studies could therefore assist universities in being more efficient, organised and forward-thinking with their leadership initiative in order to meet the challenges of leadership development at the higher education level (Connaughton *et al.*, 2003).

Another related area for future research would be to determine the degree to which students' systematic and hierarchical thinking contributes to the success of organisations and organisational members (Wielkiewicz, 2000). The LABS may be used to determine the most prevalent of students' leadership beliefs in order to match them to certain organisations where they would be a better fit in terms of the culture and leadership beliefs of the organisation (Wielkiewicz, 2000). According to Wielkiewicz (2000), students who tend to be more hierarchical orientated may be more comfortable in organisations dominated by hierarchical thinkers. Thus, rising higher in the organisational structure and pursuing career goals will be very important for such individuals.

Based on the results of this study, future empirical explorations that are associated with students' motivation to participate or invest in their leadership development are recommended in order to corroborate the findings of the present study and expand the knowledge on this critical topic.

6.6 FINAL CONCLUSION

This chapter provided the final conclusions and recommendations regarding this research study by discussing the limitations and recommendations of the study as well as suggesting possible research opportunities. The findings of this study do not only provide

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valuable insights into the theory of student leadership, but also provide insight into the practical implementation of student leadership development at universities.

The findings of this study caused a predicament to the researcher. Although perceived variance was present in the sample group, as the biographical factors of the group represented a diversity of participants, the results showed that the group was largely homogeneous in the variables measured. This raises the question of whether all South African research in the higher education context might be influenced by the same factor, which calls for further investigation. The findings of the study, however, did provide insight and comprehension into student leadership development and what research has been done to date. It is indispensable that the results of this study and the current crisis that universities in South Africa are facing with regards to student leaders give rise to further research into this topic.

In conclusion, the development of student leadership is a critical issue for universities and for society as a whole. This study proposes that there is still much more to discover about the factors that motivate students to participate in student leadership development programs.

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APPENDIX A

- Informed Consent Form-

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Faculty of Economic and Management Sciences

Letter of Introduction and Informed Consent

Dept. of Human Resource Management

Exploring university students' motivation to participate in a leadership development programme

Research conducted by:
Mrs. E.H. Booysen (15121039)
Cell: 084 910 7723

Dear Participant

You are invited to participate in an academic research study conducted by Helena Booysen, a Masters Student from the Department Human Resource Management at the University.

The purpose of the study is to explore your motivation for your interest in leadership development. This will be explored by asking you questions about your academic motivation, your attitude and beliefs regarding leadership as well as your preferred leadership style.

Please note the following:

- This is an anonymous study survey. Your name will not appear on the questionnaire. The answers you give will be treated as strictly confidential as you cannot be identified in person based on the answers you give.
- Your participation in this study is very important to us. You may, however, choose not to participate and you may also stop participating at any time without any negative consequences.
- Please answer the questions in the attached questionnaires as completely and honestly as possible. This should not take more than 30 minutes of your time.
- Please read the directions of each questionnaire carefully and answer to the best of your ability. There are no right or wrong answers.
- The results of the study will be used for academic purposes only and may be published in an academic journal. We will provide you with a summary of our findings on request.
- Please contact my study leader, Professor Karel Stanz, karel.stanz@up.ac.za, (012) 420 3797 if you have any questions or comments regarding the study.

Please sign the form to indicate that:

- You have read and understand the information provided above.
- You give your consent to participate in the study on a voluntary basis.

_____ _____

Participant's signature **Date**

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APPENDIX B

- Open-ended Questionnaire -

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STUDENT LEADERSHIP DEVELOPMENT QUESTIONNAIRE

Thank you for taking part in this study which will enable Universities to better their Student Leadership Development Practices for your benefit.

Open Ended Questions

Instructions: Please complete the following questions as thorough, specific and honest as possible. You can write as much as you need.

Why do you invest in your own leadership development / Why is your personal leadership development important to you?

What do you think you will benefit in future from attending this leadership development workshop?

Thank you for completing this section. Please complete the questionnaire on the next page.

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APPENDIX C

- Data Collection Instrument: LABS -

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The Leadership Attitudes and Beliefs Scale (LABS III)

(Developed By Richard M. Wielkiewicz; Demographic Questions added by Greg L. Lowhorn)

Instructions: This short questionnaire asks several questions about your opinion regarding leadership issues. The questions were developed by an independent researcher and are not linked in any way to the University or any organisation.

Directions: Please indicate your level of agreement or disagreement by marking the appropriate number with an **X**

		RATING				
		1	2	3	4	5
		Strongly Agree	Agree	Neither agree nor Disagree	Disagree	Strongly Disagree
QUESTIONS						
1	Individuals need to take initiative to help their organisation accomplish its goals.	1	2	3	4	5
2	Leadership should encourage innovation.	1	2	3	4	5
3	A leader must maintain tight control of the organisation.	1	2	3	4	5
4	Everyone in an organisation needs to be responsible for accomplishing organisational goals.	1	2	3	4	5
5	Leadership processes involve the participation of all organisation members.	1	2	3	4	5

Thank you for completing this section. Please complete the questionnaire on the next page.

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APPENDIX D

- Data Collection Instrument: AMS -

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ACADEMIC MOTIVATION SCALE (AMS 28) (COLLEGE VERSION)

(Robert J. Vallerand, Luc G. Pelletier, Marc R. Blais, Nathalie M. Brière, Caroline B. Senécal, Évelyne F. Vallières, 1992-1993)

Instructions: This short questionnaire asks several questions about your academic motivation and why you go to university.

Directions: Using the scale below please indicate to what extent each of the following items presently correspond to one of the reasons why you go to university. Indicate your answer by marking the number with an **X.**

		RATING						
		Does not correspond at all	Corresponds a little		Correspond moderately	Corresponds a lot		Correspond exactly
		1	2	3	4	5	6	7
WHY DO YOU GO TO UNIVERSITY?								
1	Because with only a high-school qualification I would not find a high-paying job later on.	1	2	3	4	5	6	7
2	Because I experience pleasure and satisfaction while learning new things.	1	2	3	4	5	6	7
3	Because I think that an university education will help me better prepare for the career I have chosen.	1	2	3	4	5	6	7
4	For the intense feelings I experience when I am communicating my own ideas to others.	1	2	3	4	5	6	7
5	Honestly, I don't know; I really feel that I am wasting my time at university.	1	2	3	4	5	6	7

Thank you for completing this survey! You have reached the end of the survey.