An assessment of intrapreneurship in public secondary educational institutions

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Mini-dissertation submitted in partial fulfilment of the requirements for the degree Master in Business Administration at the North-West University, Potchefstroom Campus

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November 2010
Potchefstroom
ABSTRACT

Intrapreneurship is examined in this study with specific reference to six public secondary educational institutions in the Klerksdorp and Orkney Area which is situated in the North-West Province in South Africa.

The objective of the study is to assess the level of intrapreneurship within top, middle and lower management levels with the focus to provide recommendations regarding the encouragement and fostering of an intrapreneurial climate in these institutions.

A literature review was conducted to explore intrapreneurship and an intrapreneurial climate. The establishment of an intrapreneurial climate was found to be dependent on the presence of 13 constructs. The 13 constructs measuring the intrapreneurial climate of organisations and the five variables measuring the perceived success of the organisation were constructed in a questionnaire to measure the intrapreneurial climate of the participating public secondary educational institutions.

A target group of 267 personnel members was identified and questionnaires were provided to all persons in this group. A total of 121 usable questionnaires were received on which statistical analysis was conducted. The validity of each construct was individually determined by the calculation of a Cronbach Alpha coefficient and tests for both statistical and practical significance were performed to determine the effect of demographical variables on each construct as well as the variables measuring the perceived success of the organisation.

Recommendations regarding possible action steps to improve the intrapreneurial climate of public secondary educational institutions were made based on the empirical analysis as well as the literature review. Finally the study concluded with a measurement of the achievement of objectives and suggestions for further research.
ACKNOWLEDGEMENTS

The following contributors to this study are gratefully appreciated:

- Jesus Christ our Lord and Saviour for His grace, favour and wisdom granted to me to complete this opportunity successfully.
- My husband, Shaun Enslin, for all his support. It is an honour and privilege to complete our MBA degrees together.
- My family for their prayers, support, patience and understanding throughout the three years of our studies.
- Caylha, our daughter for being so patient and understanding. We love you very much.
- My study leader, Prof. Stephan van der Merwe, for his leadership, patience and sharing of knowledge in the field of entrepreneurship and research methodology.
- Christine Bronkhorst at the Ferdinand Postma Library (North-West University) for all her assistance with research.
- The Statistical Consultation Services of the North-West University for the statistical analysis of the empirical data.
- Wilma Pretorius for all her assistance with the administration involved.
- Dr. Frik Steenkamp, principal of Hoërskool Wesvalia, for his support and understanding throughout the three years.
- My colleagues and friends for their support and motivation.
- All the principals and personnel of the various public secondary educational institutions that were under investigation, for their support and willingness to partake in this study.
# TABLE OF CONTENTS

ABSTRACT ................................................................. ii
ACKNOWLEDGEMENTS .................................................. iii
TABLE OF CONTENTS ................................................... iv

CHAPTER 1: NATURE AND SCOPE OF THE STUDY

1.1 INTRODUCTION ..................................................... 1
1.2 PROBLEM STATEMENT ............................................. 3
1.3 OBJECTIVES OF THE STUDY ..................................... 4
1.3.1 Primary objective .................................................. 4
1.3.2 Secondary objectives ............................................ 5
1.4 SCOPE OF THE STUDY .............................................. 5
1.4.1 Field of study ..................................................... 5
1.4.2 Geographical demarcation ..................................... 6
1.4.3 Institutions under investigation ............................. 7
1.4.3.1 Vision .......................................................... 7
1.4.3.2 Mission ......................................................... 7
1.5 RESEARCH METHODOLOGY ................................... 8
1.5.1 Literature review ................................................ 8
1.5.2 Empirical study .................................................. 9
1.5.2.1 Questionnaire design ....................................... 9
1.5.2.2 Study population ........................................... 10
1.5.2.3 Gathering of data ........................................... 11
1.5.2.4 Statistical analysis ......................................... 11
1.6 LIMITATIONS OF THE STUDY ............................... 12
1.7 LAYOUT OF THE STUDY .......................................... 13
## CHAPTER 2: LITERATURE STUDY ON INTRAPRENEURSHIP

2.1 INTRODUCTION ........................................................................................................ 15
2.2 DEFINITIONS .............................................................................................................. 16
  2.2.1 Entrepreneurship defined .................................................................................. 16
  2.2.2 Entrepreneur defined ....................................................................................... 20
  2.2.3 Corporate entrepreneurship / Intrapreneurship defined ................................. 21
  2.2.4 Public intrapreneurship defined ...................................................................... 24
  2.2.5 Intrapreneur defined ....................................................................................... 25
  2.2.6 The entrepreneurial process defined ............................................................... 26
  2.2.7 Organisational culture and climate defined .................................................... 28
    2.2.7.1 Culture ...................................................................................................... 28
    2.2.7.2 Climate .................................................................................................... 28
  2.3 INTRAPRENEURSHIP .............................................................................................. 30
  2.3.1 Types of intrapreneurship ............................................................................... 30
  2.3.2 Dimensions of intrapreneurship ..................................................................... 30
  2.4 INTRAPRENEURIAL CLIMATE ........................................................................... 31
    2.4.1 Constructs of an intrapreneurial climate ......................................................... 32
      2.4.1.1 Entrepreneurial leadership ................................................................. 33
      2.4.1.2 Management support ........................................................................... 35
      2.4.1.3 Sponsors ............................................................................................... 36
      2.4.1.4 Tolerance for risks, mistakes and failure ........................................... 38
      2.4.1.5 Innovation and creativity .................................................................... 40
      2.4.1.6 Appropriate rewards and recognition ................................................ 42
      2.4.1.7 Vision and strategic intent ................................................................... 45
      2.4.1.8 Discretionary time and work .............................................................. 46
      2.4.1.9 Empowered teams .............................................................................. 47
      2.4.1.10 Resource availability and accessibility ............................................. 49
      2.4.1.11 Continuous and cross-functional learning ....................................... 50
      2.4.1.12 Customer orientation ........................................................................ 51
      2.4.1.13 Flat organisational structure ............................................................ 52
2.5 PERCEIVED SUCCESS OF THE ORGANISATION ........................................ 54
2.6 FACTORS THAT COULD INFLUENCE THE ESTABLISHMENT OF
INTRAPRENEURSHIP IN THE PUBLIC SECTOR ........................................ 57
2.7 A FRAMEWORK AND STRATEGIES FOR THE ESTABLISHING OF
INTRAPRENEURSHIP ............................................................................. 58
2.8 SUMMARY .......................................................................................... 68

CHAPTER 3: RESULTS AND DISCUSSION

3.1 INTRODUCTION ...................................................................................... 69
3.2 GATHERING OF DATA ............................................................................ 70
3.2.1 Study population ................................................................................ 70
3.2.2 Questionnaire (measuring instrument) used in this study .............. 71
3.2.3 Confidentiality .................................................................................. 72
3.2.4 Statistical analysis of data .................................................................... 72
3.3 RESPONSES TO THE SURVEY ............................................................... 73
3.4 DEMOGRAPHIC INFORMATION OF RESPONDENTS .......................... 73
3.4.1 Gender of respondents ........................................................................ 74
3.4.2 Racial group classification of respondents ....................................... 74
3.4.3 Age group classification of respondents ......................................... 75
3.4.4 Highest academic qualification achieved by respondents ............. 75
3.4.5 Functional departments ...................................................................... 76
3.4.6 Distribution of management level ..................................................... 77
3.5 RELIABILITY OF THE QUESTIONNAIRE ............................................. 78
3.6 ASSESSMENT OF THE INTRAPRENEURIAL CLIMATE .................... 80
3.6.1 Variables measuring intrapreneurial climate .................................. 80
3.6.2 Variables measuring the perceived success of the organisation ..... 83
3.7 RELATIONSHIP BETWEEN DEMOGRAPHIC VARIABLES AND
INTRAPRENEURIAL CONSTRUCTS INCLUDING THE
PERCEIVED SUCCESS OF THE ORGANISATION .................................... 85
3.7.1 Relationship between selected demographic variables and the intrapreneurial constructs ........................................... 86

3.7.1.1 Relationship between intrapreneurial constructs and the gender of respondents .......................................................... 87

3.7.1.2 Relationship between intrapreneurial constructs and the management levels of respondents ........................................... 88

3.7.2 Relationship between demographic variables and the perceived success factors of an organisation ........................................ 90

3.7.2.1 Relationship between perceived success factors and the gender of respondents .......................................................... 90

3.7.2.2 Relationship between perceived success factors and the management level of respondents ........................................... 91

3.8 SUMMARY ........................................................................... 92

CHAPTER 4: CONCLUSIONS AND RECOMMENDATIONS

4.1 INTRODUCTION ........................................................................... 95

4.2 CONCLUSIONS ........................................................................... 96

4.2.1 Demographic information .......................................................... 96

4.2.2 Reliability of the questionnaire used ............................................ 97

4.2.3 Assessment of the intrapreneurial climate ....................................... 98

4.2.3.1 Entrepreneurial leadership ...................................................... 99

4.2.3.2 Continuous and cross-functional learning .................................. 99

4.2.3.3 Management support ............................................................ 99

4.2.3.4 Innovation and creativity ...................................................... 100

4.2.3.5 Customer orientation .......................................................... 100

4.2.3.6 Vision and strategic intent ..................................................... 101

4.2.3.7 A flat organisational structure .............................................. 101

4.2.3.8 Discretionary time and work .................................................. 101

4.2.3.9 Empowered teams .............................................................. 102

4.2.3.10 Sponsors ............................................................................ 102
4.2.3.11 Tolerance for risks, mistakes and failure ........................................... 103
4.2.3.12 Appropriate rewards and recognition .................................................. 103
4.2.3.13 Resource availability and accessibility .................................................. 103
4.2.4 Assessment of the perceived success of the organisation .............. 104
  4.2.4.1 Customer/market measures ................................................................. 105
  4.2.4.2 Process measures .................................................................................. 105
  4.2.4.3 People development ............................................................................. 105
  4.2.4.4 Future success ....................................................................................... 106
  4.2.4.5 Financial measures ................................................................................ 106
4.2.5 Relationships between demographic variables and entrepreneurial
  Constructs ......................................................................................................... 107
  4.2.5.1 Relationship between gender and intrapreneurial climate
  constructs ......................................................................................................... 107
  4.2.5.2 Relationship between gender and perceived organisational success
  variables .......................................................................................................... 108
  4.2.5.3 Relationship between management level and intrapreneurial climate
  constructs ......................................................................................................... 109
  4.2.5.4 Relationship between management level and perceived organisational
  success variables ............................................................................................ 110
4.3 RECOMMENDATIONS .................................................................................... 110
  4.3.1 Resource availability and accessibility ..................................................... 111
  4.3.2 Appropriate rewards and recognition ....................................................... 111
  4.3.3 Tolerance for risks, mistakes and failure .................................................. 112
4.4 ACTION PLAN ............................................................................................... 113
4.5 ACHIEVEMENT OF OBJECTIVES ............................................................. 118
  4.5.1 Primary objective ..................................................................................... 118
  4.5.2 Secondary objectives .............................................................................. 119
4.6 SUGGESTIONS FOR FURTHER RESEARCH ............................................. 120
4.7 SUMMARY ...................................................................................................... 121

BIBLIOGRAPHY ................................................................................................. 122
LIST OF FIGURES

Figure 1.1: The location of the North West Province and Klerksdorp KOSH Area within South Africa ........................................ 6
Figure 1.2: Graphical layout of the study ........................................ 13
Figure 2.1: Distinct themes of the entrepreneurs ............................ 20
Figure 2.2: The Timmons model of the entrepreneurial process .......... 27
Figure 2.3: Seven dimensions of intrapreneurship ........................... 31
Figure 2.4: Model for constructs of an intrapreneurial organisation ...... 32
Figure 2.5: The relationship between innovation and creativity .......... 40
Figure 2.6: Integrated framework for intrapreneurship ..................... 62
Figure 2.7: Seven-S Framework .................................................. 63
Figure 3.1: Intrapreneurial climate analysis .................................... 82
Figure 3.2: Perceived success of the organisation analysis .................. 84
LIST OF TABLES

Table 2.1: Theories on entrepreneurship ............................................................. 18
Table 2.2: Advantages and disadvantages of working in a group .......... 49
Table 3.1: Responses to the survey ................................................................. 73
Table 3.2: Gender of respondents ................................................................. 74
Table 3.3: Race group classification of respondents ......................... 74
Table 3.4: Respondents by age group ............................................................ 75
Table 3.5: Highest academic qualification achieved by respondents ...... 76
Table 3.6: Department were respondents are working ................................. 77
Table 3.7: Management level of respondents .............................................. 78
Table 3.8: Cronbach Alpha coefficients of constructs (ranked in order of value size) ................................................................. 79
Table 3.9: Intrapreneurial climate survey results ........................................ 81
Table 3.10: Perceived organisational success survey results .................. 83
Table 3.11: Relationship between the constructs measuring intrapreneurial climate and the demographic variable gender ....................... 87
Table 3.12: Relationship between the constructs measuring intrapreneurial climate and the demographic variable management level ...... 89
Table 3.13: Relationship between the factors measuring the perceived organisational success and the demographic variable gender ................................................................. 90
Table 3.14: Relationship between the factors measuring the perceived organisational success and the demographic variable management level ........................................................................ 91
CHAPTER 1
NATURE AND SCOPE OF THE STUDY

1.1 INTRODUCTION

With change being part of our everyday lives, the failure to anticipate change in the organisation can lead to stagnation or a loss of competitive advantage which can resolve in a total organisation failure. Organisations need to stay ahead of their competitors to survive in this race for dominance which is possible when the organisation is competitive in creating new value for customers.

Intrapreneurship allows organisations to create new value, to rejuvenate and revitalise through innovation, business development and renewal which is only possible through high levels of intrapreneurial activity (Bhardawaj, Agrawal & Momaya, 2007b: 131).

Public secondary educational institutions are also faced with the challenge to become more innovative, competitive and focused on new business opportunity development. These actions are needed to generate additional funds seeing that public educational institutions have to provide their customers (learners and parents) with an excellent service and final product (senior certificate) but they have to deal with the fact that they have to deal with limited resources and various obstacles in order to achieve this goal. Some of the obstacles they are faced with is forced strikes, the minimum subsidies and supporting funds and no additional financial rewards for outstanding performs.

The competition between public secondary educational institutions is also constantly increasing which leads to the need for higher levels of intrapreneurial activity in order to gain a competitive advantage. Institutions that do not foster intrapreneurial activities will face the possibility of losing their dominant position in the market place.
The development of an intrapreneurial culture in public secondary educational institutions is a long-term process that involves the inputs and influences of numerous role players such as government, communities, the private sector, parents, educators and all the other personnel members (Burger, Mahadea & O’Neill, 2005: 90).

According to Kurakto, Ireland, Covin and Hornsby (2005: 699), middle managers have a large influence on the intensity and type of intrapreneurship in the organisation and their intrapreneurial behaviour is directly linked to the success of intrapreneurship which is mainly because of their unique position within the hierarchy of the organisation.

Taking the above stated into consideration, educational institutions therefore has the potential and ability to contribute significantly to the development of an intrapreneurial culture within their environment. Public secondary educational personnel are in this unique position to generate successful intrapreneurial activity within their institutions with the focus to obtain a competitive advantage which is crucial for their survival.

They are also in the position to inspire and motivate learners to foster a new innovative way of thinking by their leading example which could have a positive impact on the way that these learners will think and act one day. These learners are the future leaders, managers, business owners, parents and educators of tomorrow. If they are taught by example and encouraged to find, implement and foster an intrapreneurial spirit and culture it could have a large influence on the future of the country. They should also be guided to use and develop this new innovative way of thinking, to ensure a positive impact on the South African economy as well as the youth of their time creating a cycle of long term intrapreneurial development.
1.2 PROBLEM STATEMENT

South Africa is facing a situation of high unemployment rates and poverty with skewed income distribution. In order to help address these problems and contribute to sustainable economic development, it is important for the country to develop a strong entrepreneurial culture (Burger et al., 2005: 89).

This is also relevant and of utmost importance in public secondary educational institutions. Some of these institutions are facing high demands and expected outcomes which must be met with less support and resources. According to the Government Communication and Information System (GCIS, 2009: 169), most of the support given by the Department of Education is distributed to the poorest public educational institutions and provinces on the basis of relative need and backlogs.

This action and decision taken by the department is necessary and understandable but it places more pressure and responsibility on the other educational institutions and provinces not included in this group.

Institutions who are thus not classified as part of the poorest have to be thankful for the smaller amount of support and resources they do receive but they also have to take the responsibility to generate the part not received to assure that they don’t stagnate or operate on a lower standard, creating a new group of backlog institutions in the future.

Parents want their children to go to the best educational institution possible. In the case where institutions don’t provide the wanted standards, parents will send their children to another institution that does provide the desired standards and outcomes. This could mean that certain educational institutions will attract more learners while others will lose learners which could have a very negative impact on their survival.
Without a strong intrapreneurial culture in these public secondary educational institutions, personnel will thus have to deal with the possibility of lower standards and even unemployment in some cases. If these educational institutions don’t act intrapreneurial and become more innovative, creating their own resources and lifting their standards, it could have a negative impact on the economy of South Africa. The impact on the standard of education will also be influenced seeing that the personnel-learner number will increase dramatically as educators become unemployed. This will cause more the pressure on the remaining personnel to increase even more.

Public secondary educational personnel are as mentioned above the main role players for the successful implementation and maintenance of intrapreneurial programs within schools but can only be completely successful when working in a system and institution with a strong intrapreneurial climate and culture which is foster and supported by top management.

One of the main concerns is the gap that exists regarding the understanding on how to create and maintain a culture of intrapreneurship within public secondary educational institutions taking the intense pressure of completing the prescribed curriculum in time, into consideration.

Taking all the above into account it is thus clear that the determining of the existing intrapreneurial climate and the giving of recommendations for improvement while encouraging such a climate, will be beneficial to all public secondary educational institutions.

1.3 OBJECTIVES OF THE STUDY

1.3.1 Primary objective

The primary objective of the study is to evaluate the intrapreneurial climate in the public secondary educational institutions in the Klerksdorp and Orkney Area as well as to provide practical recommendations on how to enhance their intrapreneurial climate and culture with the focus to obtain and maintain a competitive advantage.
1.3.2 Secondary objectives

In order to achieve the primary objective the following secondary objectives were formulated:

- Define concepts such as entrepreneurship, the entrepreneur, corporate entrepreneurship or intrapreneurship, public intrapreneurship, the intrapreneur, intrapreneurship, the entrepreneurial process and intrapreneurial climate and culture.
- Obtain insight into the dynamics of intrapreneurship, intrapreneurial climate and culture by conducting a literature review;
- Obtain insight into the educational environment of public secondary educational institutions.
- Assess the intrapreneurial climate within the public secondary educational intuitions in the Klerksdorp and Orkney Area by the use of a questionnaire.
- Validate the reliability of the questionnaire measuring the intrapreneurial climate by means of statistical analysis.
- Examine the relationship between the demographical variables with regard to the constructs measuring the intrapreneurial climate and the perceived success of the organisation.
- Provide recommendations on how to enhance and foster an intrapreneurial climate and culture within public secondary education institutions.

1.4 SCOPE OF THE STUDY

1.4.1 Field of study

The field of this study falls within the subject discipline of entrepreneurship, with special reference to intrapreneurship.
1.4.2 Geographical demarcation

The study was conducted in the Klerksdorp and Orkney Area which is situated in the North-West Province in South Africa as illustrated in figure 1.1.

**Figure 1.1: The location of the North-West Province and Klerksdorp and Orkney Area within South Africa**

Source: Adapted from Inbound African Travel Specialist (2009)

Figure 1.1 indicates the location of the North-West Province and specifically the Klerksdorp and Orkney Area within the boundaries of South Africa.
1.4.3 Institutions under investigation

In Klerksdorp the following public secondary educational institutions were investigated: Hoërskool Wesvalia, Klerksdorp Hoërskool, Schoonspruit Hoërskool, Technical High School and New Vision High School. In Orkney, Hoërskool Orkney was also under investigation. All these schools are public secondary educational institutions that operate under the leading of the Department of Education.

The Department of Education has the following vision and mission statements:

1.4.3.1 Vision

Our vision is of a South Africa in which all our people have access to lifelong education and training opportunities, which will in turn contribute towards improving the quality of life and building a peaceful, prosperous and democratic society (Department of Education, 2010).

1.4.3.2 Mission

Our mission is to provide leadership in the construction of a South African education and training system for the 21st century by:

- Making our provincial system work by making co-operative government work.
- Breaking the back of illiteracy among adults and youths in five years.
- Developing schools as centres of community life.
- Ending conditions of physical degradation in South African schools.
- Developing the professional quality of our teaching force.
- Ensuring the success of active learning through outcomes-based education.
- Creating a vibrant further education and training system to equip youth and adults to meet the social and economic needs of the 21st century.
- Building a rational, seamless higher education system that grasps the intellectual and professional challenges facing South Africans in the 21st century.
- Dealing urgently and purposefully with the HIV/AIDS emergency in and through the education and training system (Department of Education, 2010).
Formal education in South Africa is categorised according to three levels. The first level is General Education and Training (GET) which consists of the Reception Year (Grade R) and learners up to Grade 9, as well as an equivalent Adult Basic Education and Training (Abet) qualification. The second level is Further Education and Training (FET) consisting of grades 10 to 12 in schools and all education and training from the National Qualifications Framework (NQF) levels two to four (equivalent to grades 10 to 12 in schools), and the N1 to N6 in FET colleges. The third level is Higher Education (HE) which consists of a range of degrees, diplomas and certificates up to and including postdoctoral degrees. These levels are integrated within the NQF provided by the South African Qualifications Authority (Saqa) Act, 1995 (Act 58 of 1995) (GCIS, 2009: 162).

Secondary education is thus a combination of level one and two. Learners attend school for 13 years of which the Reception Year (Grade R) and the last three (Grade 10-12) are not compulsory. In 2009, 68 129 candidates wrote the National Senior Certificate (NSC) examination, achieving a pass rate of 60.7% (GCIS, 2009: 162).

Central to the education policy framework is the contention that a high-quality education sector cannot be built by government alone. It depends on creative and dynamic partnerships between the public sector, civil society and international partners (GCIS, 2009: 175).

1.5 RESEARCH METHODOLOGY

The research conducted in this study, consisted of two phases, namely a literature review and an empirical study.

1.5.1 Literature review

The literature review was done by using the relevant journal articles, website articles, dissertations, government publications and text books in order to gain a thorough understanding on the subject of intrapreneurship.
The aim of the review was to obtain knowledge regarding the following concepts:

- Entrepreneurship.
- The Entrepreneur.
- Corporate entrepreneurship or Intrapreneurship.
- Public intrapreneurship.
- The Intrapreneur.
- The entrepreneurial process.
- Organisational culture and climate.
- Types of intrapreneurship.
- Dimensions of intrapreneurship.
- Constructs of an intrapreneurial climate.
- The perceived success of the organisation.
- Factors influencing the establishment of intrapreneurship.
- A framework and strategies that could be implemented for the establishing of intrapreneurship.

1.5.2 Empirical study

The empirical study was conducted by utilizing a suitable measuring instrument, which in the case of this study was a questionnaire (quantitative research). The questionnaire was given to the identified study population to complete. After the completion of the questionnaires the data were analysed statistically and interpreted. Finally conclusions and recommendations were provided.

1.5.2.1 Questionnaire design

A questionnaire developed by Oosthuizen (2006) and adapted by Jordaan (2008) was utilised in this study. This questionnaire is a measuring instrument that assesses thirteen constructs influencing an intrapreneurial climate in organisations by providing 65 statements in Section A to be completed on the basis of a five-point Likert scale. Personnel had to indicate their personal degree of disagreement or agreement where 1 = strongly disagree and 5 = strongly agree for each of the 65 statements.
In Section B, 17 items were identified to measure the perceived success of the organisation also on the basis of a 5-point Likert type scale as in Section A. These 17 items determine the perceived success of the organisation in terms of financial measures, customer or market measures, process measures, people development and future success. In respect of each item, respondents had to indicate the degree to which they agree or disagree with a certain statement where 1 = strongly disagree and 5 = strongly agree for each of the 17 statements.

In Section C, the demographical information (gender, race, age group, highest academic qualification, functional department and management level) of the individual correspondents was gathered.

1.5.2.2 Study population

The entire population was targeted which resulted that the study population therefore included all 267 personnel members active in the participating institutions. The number of active personnel was supplied telephonically by the principles of the various institutions. The reason for including all personnel members is due to that fact that all these members are faced with challenges on different levels which could be overcome by acting intrapreneurial. For the purpose of this study these personnel members were considered as part of management and divided into different management levels.

Each participant received a questionnaire to complete. The target was to receive at least 100 completed questionnaires which were successfully reached after 121 completed questionnaires were received and analysed for the study.

It was made clear that no one is obligated to partake in this study.
1.5.2.3 Gathering of data

A total number of 267 hard copies of the questionnaires were personally handed out to the principals of the different institutions. This opportunity was also used to explain the purpose of the study, to assure the confidentiality of participant’s information and response, to inform that this study is not compulsory and to provide them with a date of collection for the completed questionnaires.

A follow-up on the progress was done by telephonic communication with the principals to assure that the questionnaires were completed on the arranged date of collection.

1.5.2.4 Statistical analysis

The completed questionnaires were processed and analysed by the Statistical Consultation Services of the North-West University (Potchefstroom campus). The data collected were statistically analysed, by the use of Statistica (Statsoft, 2008) and SPSS (SPSS, 2008).

Descriptive statistics were employed to measure the perception of respondents regarding the different constructs measuring an intrapreneurial climate as well as the variables measuring the perceived success of the organisation. The central tendency was measured by the use of means and the scatter of the data around the mean was measured by the standard deviation determined.

Cronbach Alpha coefficients were used to determine the internal consistency or average correlation of the different items in the questionnaire with the focus to determine the reliability of the questionnaire. For the purpose of this study Cronbach Alpha coefficients of 0.7 or higher were regarded as acceptable levels of reliability.
Independent $t$-tests were performed to determine the statistical significant ($p$-values) relationship between the demographic variables and constructs measuring the intrapreneurial climate and variables measuring the perceived success of the organisation. Effect size values ($d$-values) were used to measure if differences between any of the demographic variables and the constructs of the questionnaire are of practical significance as discussed by Ellis and Steyn (2003: 51-53).

1.6 LIMITATIONS OF THE STUDY

One of the limitations which had an impact on this study is the lack of recent information and research done regarding intrapreneurship and the intrapreneurial climate of public secondary education institutions.

The fact that only institutions from the Klerksdorp and Orkney Area were included in the study can also be a limitation seeing that the findings will not be representative of the whole province or country which will mean that further research should be done.

The completion of the questionnaires was voluntary which means that not all questionnaires were completed and that the sample may not be representative of the study population chosen.

The perception that managers have regarding the intrapreneurial climate of their organisation were measured by the use of the 13 constructs of intrapreneurship while other factors common to the industry may also have an influence on the intrapreneurial behaviour of the organisation which were not included in this study.
1.7 LAYOUT OF THE STUDY

Figure 1.2 indicates the graphical layout of the study per chapter.

Figure 1.2: Graphical layout of the study

CHAPTER 1: Nature and scope of the study

This chapter introduced the nature and scope of the study in which the problem statement, primary and secondary objectives, the field of study, the public secondary educational institutions under investigation, research methodology, limitations to the study and layout of the study were discussed.

CHAPTER 2: Literature review

Chapter 2 consists of a literature review on intrapreneurship where concepts such as entrepreneurship, the entrepreneur, corporate entrepreneurship or intrapreneurship, public intrapreneurship, the intrapreneur, the entrepreneurial process, organisational culture and climate, types of intrapreneurship, dimensions of intrapreneurship, constructs of an intrapreneurial climate, the perceived success of the organisation, factors influencing the establishment of intrapreneurship and a framework and strategies that could be implemented for the establishing of intrapreneurship were discussed in detail.
CHAPTER 3: Results and discussion

Chapter 3 discusses the research methodology of the empirical study, the data gathering process, the measuring instrument utilized in this study as well as the statistical methods used to analyse the gathered data. The results of the empirical study are also presented and discussed in this chapter.

The main purpose of this chapter is to identify the current state of the intrapreneurial climate in the participating institutions.

CHAPTER 4: Conclusions and recommendations

The final chapter consists of conclusions and recommendations from the findings obtained in the study providing public secondary education institution with practical suggestions on how to enhance their intrapreneurial climate within the educational environment in order to obtain a competitive advantage.

Finally, the achievement of the objectives of the study was assessed and recommendations on future research were made.
CHAPTER 2
LITERATURE STUDY ON INTRAPRENEURSHIP

2.1 INTRODUCTION

We live in a time of global entrepreneurial revolution. Intrapreneurial acting and thinking are changing the way business is conducted at every level within the organisation. It doesn’t matter what industry or business it is or even where the organisation is situated in the world, entrepreneurship is redefining what is made, how it is made, where it is sold, and how it is distributed (Morris, Kuratko & Covin, 2002: 4). Organisations can either become victims of this entrepreneurial revolution or join the revolution and become innovative.

The ability of an organisation to be innovative has become crucial to ensure success and a competitive advantage in the modern market place (Robinson, 2001: 95). Timmons and Spinelli (2007: 13) support this argument and maintain that rapid changes and high levels of uncertainty, which are common characteristics of the global business world, require of organisations to be creative and able to respond rapidly to changes. In order to enhance the innovation of the whole organisation it is necessary to utilize the creativity of all employees and their knowledge of customer needs and competitors’ actions within the market (Oosthuizen, 2006: 246). The intrapreneur also becomes able to create something new, be more creative and act innovative by challenging existing beliefs and practices within the organisation allowing for the creation of a competitive advantage and value (Hisrich, Peters & Sheperd, 2005: 50).

In order to improve the competitive position in South Africa, managers and employees must change their mindset of doing business. The traditional (bureaucratic) way of operating should be adapted to one that is more focused on intrapreneurship which includes improved productivity and service delivery. According to Sadler (2000: 25), intrapreneurship is currently emerging as a leading force in the economy.
2.2 DEFINITIONS

2.2.1 Entrepreneurship defined

Entrepreneurship has historically referred to the inputs of an individual who takes on the probabilities in translating a vision into a successful business enterprise. Entrepreneurship however has also been defined as a process that can occur in organisations of all sizes and types (Morris & Jones, 1999: 73).

Timmons and Spinelli (2007: 79) see entrepreneurship as a way of thinking, acting and reasoning which is opportunity focused and obsessed, leadership balanced and holistic in approach. It involves the process of creation, renewal, enhancement and realization of value for all participants and stakeholders. The centre point of this process is the creation and/or recognition of opportunities accompanied by die initiative and willingness to seize these opportunities. This will require the willingness to undertake the calculated risks associated with the various opportunities. These risks involve personal as well as financial risks balancing against the potential reward that could be gained from these opportunities (Heffer, 2008: 28).

Van Aardt (2008: 11) describes entrepreneurship as the act of creating, initiating, expanding and building new ventures or organisations, the creating of an entrepreneurial team as well as the gathering of other forms of resources with the focus to utilize opportunities for long term gain. This definition of entrepreneurship thus highlights the promise of growth and long term financial gain.” Entrepreneurship also refers to the process of creating value by combining a unique combination of resources to exploit opportunities with the above mentioned as focus (Morris & Jones, 1999: 73).
Fernald, Solomon and Tarabishy (2005: 2) defined entrepreneurship as having three components:

1) It promotes innovation and change which leads to new resource combinations and new ways of doing business. Combining resources such as people, money, technologies, procedures, distribution channels, material or any other resources.

2) It seizes profit opportunities without regard to the resources currently controlled.

3) It expands existing resources through enhanced learning, bootstrapping or synergies.

Entrepreneurship as mentioned above is also a process of creating new resources or combining existing resources in new ways with the focus to develop new products, service new customers and/or enter into new markets (Kuratko, Ireland & Hornsby, 2001: 60). It is favoured by the existence of strategic capabilities such as organisation learning and innovation in organisations which allow for the creation of competitive advantages and wealth.

Kuratko and Hodgetts (2004: 30) describe entrepreneurship as a dynamic process of vision, creation and change that requires consistent passion and energy towards the formulation and implementation of new ideas and creative solutions in the market place. They conclude that entrepreneurs are individuals who recognize opportunities where others see confusion.

Table 2.1 lists and discusses the theories identified by Steenekamp (2009: 21-29), which exist on entrepreneurship.
Table 2.1: Theories on entrepreneurship

<table>
<thead>
<tr>
<th>THEORIES ON ENTREPRENEURSHIP</th>
<th>DISCUSSION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurship and economic development</td>
<td>The entrepreneurial function has been recognized as an important component of economic growth and development (Baumol, 1968: 65). Frank (1998: 513) highlights that the creative responses of entrepreneurial innovation by entrepreneurs are the main determinants of economic change.</td>
</tr>
<tr>
<td>Entrepreneurship and innovation</td>
<td>Schumpeter (1939: 102-103) states that the term ‘enterprise’ for actions focused on implementing innovation, while the term 'entrepreneur' can be defined as those individuals who carry out these activities.</td>
</tr>
<tr>
<td>Entrepreneurship and profit</td>
<td>The essence of entrepreneurship can be defined as the alertness to profitable opportunities (Hébert &amp; Link, 1989: 46).</td>
</tr>
<tr>
<td>Entrepreneurship: Function and personality</td>
<td>According to Hébert and Link (1989: 42), Cantillon states that the function of the entrepreneur includes a variety of different occupations across several functions including exchange, distribution and production. He focuses rather on the functions of entrepreneurship than the personalities of entrepreneurs.</td>
</tr>
</tbody>
</table>
Table 2.1: Theories on entrepreneurship (continued)

<table>
<thead>
<tr>
<th>THEORIES ON ENTREPRENEURSHIP</th>
<th>DISCUSSION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Entrepreneurship and risk/uncertainty</strong></td>
<td>Morris and Kuratko (2002: 41) explain that risk taking involves a willingness to chase opportunities that have a reasonable probability of producing losses or significant performance inconsistencies. Entrepreneurs thus face economic uncertainty by taking calculated risks.</td>
</tr>
<tr>
<td><strong>Entrepreneurship and social order</strong></td>
<td>Goss (2005: 217) maintains that new and emerging forms of entrepreneurship may become evident in the case where entrepreneurship is seen as a type of social action rather than a systemic function.</td>
</tr>
<tr>
<td><strong>Entrepreneurship and the combination of resources</strong></td>
<td>Hisrich <em>et al.</em> (2005: 426) argue that an important entrepreneurial resource is the ability and knowledge to obtain and recombine resources into a &quot;bundle&quot; that is unique, scarce and essential. This knowledge is acquired over time and vested within entrepreneurial employees, which make imitation from competitors very difficult.</td>
</tr>
<tr>
<td><strong>Entrepreneurship and management</strong></td>
<td>Schumpeter states that the entrepreneurial function includes the need for certain managerial functions, but it is not the distinctive role of the entrepreneur (Hébert &amp; Link, 1989: 44).</td>
</tr>
<tr>
<td><strong>Entrepreneurship and education</strong></td>
<td>The study done by Texeira (2006: 3-5) revealed a wide ranging support for the contributions of economics’ founders to higher education including Milton Friedman (the role of government in higher education), Alfred Marshall (development of individuals’ intelligence, readiness and trustworthiness) and John Stuart Mill (social, political and economic benefits).</td>
</tr>
</tbody>
</table>

*Source: Steenekamp (2009: 21-29)*
2.2.2 Entrepreneur defined

Figure 2.1 is a graphical presentation of the different distinct themes of the entrepreneur.

Figure 2.1: Distinct themes of the entrepreneur

Source: Adapted from Hébert and Link (1989: 41)

The themes of the entrepreneur indicated in figure 2.1 above is the key themes that will be evident in the research conducted below on the term ‘entrepreneur’. It furthermore propose that entrepreneurs can be business owners, managers, innovators and leaders at the same time who organize economic resources and employ production factors with the focus to do their business activities while taking the risks associated with every activity and decision made into consideration (Steenekamp, 2009: 20).

In the past the entrepreneur was seen by the larger society as robbers who utilize employees for their own personal success. By others they were described as leaders in the development of the economy of a country and as captains of industry. In reality, few entrepreneurs fit either description. In real life entrepreneurs are those people who generate successful business through hard work. Entrepreneurs are seen as the heroes of free enterprise through innovation and creativity which have helped many to develop and build large ventures from small businesses (Van Aardt, 2008: 11).
According to Torrance, Jalan and Kleiner referred to by Van Aardt (2008: 11), entrepreneurs are sensitive to deficiencies, problems, missing elements, disharmonies and gaps in knowledge; identifying the complexities and difficulties, searching for possible solutions or formulating hypotheses regarding these problem areas; testing and retesting the possible solutions and then communicating the results. Entrepreneurs are thus enabled by creativity not only in the identifying of gaps in the market place but also in finding ways to fill these gaps with new innovative ideas businesses.

Nieman, Hough and Nieuwenhuizen (2003: 9) identified some important components regarding the entrepreneur including: the ability to identify an actual business opportunity; the tendency towards undertaking risks; the ability to do functions such as leading, control, organizing and planning; the ability to start a new venture and growing it, or changing an existing business into an entrepreneurial venture through innovation and creativity; the ability to secure resources (capital, infrastructure and labour) and focus on increasing the value of the business and/or rewards (profit).

It is thus clear taking the above into account that successful entrepreneurs are opportunity identifiers, they are innovative and creative, have the managerial skills to run a business and they have a tendency towards taking risk and action. Bjerke (2007: 75-76) however concluded that entrepreneurs are not extremists. They are ordinary people who do things differently, supporting the fact that entrepreneurship can be taught successfully.

2.2.3 Corporate entrepreneurship / Intrapreneurship defined

Zahra (1991: 260) mentions that various authors use a wide range of terms to refer to corporate entrepreneurship: Corporate venture, internal corporate venture and intrapreneurship. For the purpose of this study the term intrapreneurship will be used.

Regardless of the terms used, intrapreneurship refers to the process of creating new business within established organisations with the focus to improve organisational profitability, enhance the company’s competitive position and create a better overall value (Carrier, 1996: 6).
Over the years intrapreneurship has been defined in several different ways: as a process by which individuals within organisations pursue opportunities independent of the resources that they currently control (Stevenson & Jarillo, 1990: 17-29); as doing new things and breaking away from the usual to pursue opportunities; as a character of entrepreneurship within the existing organisation (Antoncic & Robert, 2003: 9) and as the creation of new organizations by an organisation, or as an initiation of innovation, creativity and renewal within that organisation (Sharma & Chrisman, 1999: 18).

Sharma and Chrisman (1999: 11) further define intrapreneurship in their research as the process whereby an individual or a group of individuals associated with an existing organisation create a new organisation or initiate the renewal or innovation within that organisation. Intrapreneurship can also be described as 'rejuvenation' within an existing organisation (Seshadri & Tripathy, 2006: 17). Burgelman (1983: 1349) argues that intrapreneurship refers to the process whereby organisations engage in diversification through internal development. It requires new resource combinations to extend the organisation’s activities in areas not related to its current field of competence and corresponding opportunity set.

Guth and Ginsburg (1990: 50) argue that the two primary aims of intrapreneurship are strategic renewal and the creation of new venture opportunities (corporate venturing). By corporate venturing is meant intraprising or new business creating within existing organisations which may or may not result in strategic renewal, while the last implies the creation of new wealth through new combinations of resources.

Intrapreneurial processes go on inside an existing organization, regardless of its size. It does not only involve the creation of new business ventures, but also other innovative activities such as the development of new services, technologies, products, administrative techniques, strategies and competitive positions (Antoncic & Robert, 2003: 9).
What fundamentally distinguishes intrapreneurship from entrepreneurship in most cases, if not all, is the context in which the entrepreneurial act takes place (Carrier, 1996: 6).

Intrapreneurship discloses two main trends in the research. The first trend is concerned principally with the individuals who implement innovations in the organisations that employ them. The authors who subscribe to this approach can be divided into two groups. The first group presents intrapreneurship as a set of personal attributes and psychological characteristics. The second group focuses on the functions and roles of intrapreneurs and presents them as visionaries, champions of innovation, change agents and corporate entrepreneurs (Carrier, 1996: 6).

The second main trend is concerned with the intrapreneurial process, the conditions required and the factors leading to its appearance. Some authors describe intrapreneurship as an organisational mode, which can be characterized by the factors of autonomy and freedom, allowing employees to act innovative while others see it as a managerial strategy which is focused at stimulating entrepreneurial behaviour among employees and/or even as a way of helping and encouraging employees to become entrepreneurs in the organisation with the support of the organisation (Carrier, 1996: 6).

When taking the research done into account intrapreneurship is most of the time identical with innovation initiated and implemented by employees (Carrier, 1996: 6).

According to Hisrich et al. (2005: 43), the need among employees for individual expression and being allowed to do their own thing in the organisation is increasing. A lack of this freedom may encourage employees to leave organisations in search of employment elsewhere or starting their own enterprises. Employers thus came to realise the importance of creating an environment favourable to intrapreneurship that would enhance the innovativeness of employees and contribute to corporate growth and sustainability.
Robinson (2001: 95-96) highlights the fact that the intensifying competitiveness in the market environment, contributes to the increased interest in intrapreneurship. The author is of opinion that intrapreneurship can improve the market and financial performance of a company by encouraging new competencies and knowledge creation. Thornberry (2001: 526) states that intrapreneurship can serve as a solution for stagnation and the lack of innovation.

2.2.4 Public intrapreneurship defined

Morris and Jones (1999: 71) view public intrapreneurship as something that includes the pursuit to provide more efficient and effective services by using resources in innovative ways which will lead to value creation for all citizens. This definition is supported by Llewellyn and Jones (2003: 247) who argue that public intrapreneurship can be classified according to the extent of service innovation through new venture creation and innovative ways of service delivery.

According to Morris and Kuratko (2002: 305), terms like re-inventing government, reengineering and downsizing are used nowadays in relation with public sector entrepreneurship.

Borins (2000: 498) argues that most of the innovation that takes place in the public sector originates from internal organisational problems which drive the whole process. Boyett (1997: 90) maintains that public sector intrapreneurship becomes reality and kicks into action when there is a combination of an uncertain environment and devolution of power to unit management level. These statements can be confirmed by the findings reported by Littunen (2000: 301) that situational elements as mentioned above may influence the activation of individual entrepreneurial behaviour (intrapreneurship) within public sector organisations which are all factors contributing to the creation of an intrapreneurial climate within the public sector environment.
2.2.5 Intrapreneur defined

Carrier (1996: 6) explains that entrepreneurs innovate for themselves, while intrapreneurs act innovative on behalf of an existing organisation they work for. Entrepreneurs choose themselves, while intrapreneurs must be chosen or sometimes impress to be noticed and recognised by management.

However, the unsung entrepreneurial heroes (intrapreneurs) are those in organisations who act and think like entrepreneurs in the organisational context. These people are referred to as intrapreneurs and are usually those who develop new services and/products within existing organisation. The term intrapreneur can thus be defined as a person or team within an existing organisation who is involved in examining and identifying potential new market opportunities, gather the resources needed and initiating the production of new products, services and sales to new markets (Van Aardt, 2008: 11).

The intrapreneurs are, according to Luchsinger and Bagby (1987: 11), being hailed as the new business heroes. They also identified the most important elements of the intrapreneurial personality as:

- Competitive and ambitious.
- Questioning status quo.
- Frustrated by bureaucratic systems.
- Focusing on results, not activity.
- Motivated by problem-solving, change and innovation.
2.2.6 The entrepreneurial process defined

The entrepreneurial process, has a “highly dynamic, ambiguous, fluid and chaotic character”. Regular and constant changes in the process often present paradoxes that need to be managed by the entrepreneur (Timmons & Spinelli, 2007: 82-83).

The entrepreneurial process:

- Is opportunity driven.
- Is driven by a leading entrepreneur and an entrepreneurial team.
- Uses resources creatively and cautiously.
- Is dependent on a healthy and balanced organisations.
- Is holistic and integrated.
- Is sustainable.

The Timmons model (Timmons & Spinelli, 2007: 89) includes three components: opportunity, resources and the team which is balanced by the lead entrepreneur who takes responsibility and charge of the success equation.

The first component, the opportunity, is at the heart of the entrepreneurial process. The knowledge to determine the difference between what may seem like a good idea and a genuine good opportunity is a key successor in entrepreneurship. The second component, resources as mentioned above need to be used creatively and cautiously with the focus of establishing a powerful competitive weapon by the ability to do more with less. The entrepreneurial team, which is the third component, is a key and essential part for the higher potential firm and is also the biggest challenge for the lead entrepreneur to develop and maintain (Timmons & Spinelli, 2007: 89-91).

The Timmons model of the entrepreneurial process is presented in figure 2.2 below.
Figure 2.2: The Timmons model of the entrepreneurial process

In figure 2.2 the founder is presented as the axis on which the opportunity, resources, team and other forces having an influencing on the process are balanced. This emphasizes the important role the founder also known as the lead entrepreneur, has to play in achieving the predetermined goals of sustainability and growth.

Sustainability for environment, community and society

Source: Timmons and Spinelli (2007: 89)
2.2.7 Organisational culture and climate defined

2.2.7.1 Culture

Kemelgor (2002: 67-87) defines organisational culture as the shared values, believes, philosophies, expectations, ideologies, norms and attitudes that bind a group of people or employees together. Morris et al. (2002: 250) continue to define organisational culture as their basic assumptions and beliefs about what the company is about, how its people should behave, and how it identify itself in relation to its external environment.

Burns (2005: 326) mentions that culture change and can be influenced and shaped over time. According to Russel (2001: 71-72), organisational culture plays a very vital and fundamental role in motivating and shaping the corporate entrepreneurial activity among employees.

Kuratko and Welsch (2001: 722) point out that there are ways in which organisational culture can be managed with the focus to support entrepreneurship within organisations. These ways includes allowing autonomy and freedom, promoting entrepreneurial behaviour, avoiding bureaucratic barriers and encouragement of entrepreneurial behaviour from top management. This success of this is dependant on strategic leadership, personal values, believes and characteristics traits.

2.2.7.2 Climate

One’s work environment can be seen as the surroundings in which the employee finds him or herself when they come to work each day. It is defined by the set of circumstances under which employees must function as they attempt to achieve personal goals and organisational tasks. Employees develop certain perceptions about their environment based on the experiences and interactions created over time. These perceptions also include the extent to which the work environment expect or allow employees to act entrepreneurial (Morris et al., 2002: 167).
According to Timmons and Spinelli (2000: 541), organisational climate can be described along six basic dimensions:

**Clarity:**

Organisational clarity refers to being well organized, efficient and concise in the way all organisational procedures and projects are done.

**Commitment:**

It refers to the extent to which employees feel committed to the objective and goals of the organisation.

**Esprit de corps:**

It is the extent to which employees feel a sense of team spirit, cohesion and working well together as a united force.

**Responsibility:**

It refers to the extent to which employees feel personally responsible for accomplishing organisational goals without being constantly monitored.

**Recognition:**

It is the extent to which employees feel recognised and rewarded (not just monetarily) for a job well done. Focus being given for the good and not just always the mistakes.

**Standards:**

Standards refer to the degree to which management expects employees to produce high standards and excellent performance by putting pressure on them.
2.3 INTRAPRENEURSHIP

2.3.1 Types of intrapreneurship

Thornberry (2001: 526), break corporate entrepreneurship down even further, identifying four strategic types, namely: Corporate venturing (starting new ventures within the organisation), Intrapreneuring (attempt to change the mindsets of employees to be conformed the mindsets of external entrepreneurs with the focus to act more intraprendurial), Organisational transformation (involves corporate renewal in the form of innovation, new combinations and arrangements of resources with the focus of creating a sustainable economic growth and value) and Industry rulebreaking (industry change by a focus on changing the rules related to competitive engagement).

2.3.2 Dimensions of intrapreneurship

Morris and Kuratko (2002: 39) identify three dimensions of intrapreneurship, i.e. innovation, risk taking and proactiveness. According to Burns (2004: 12), intrapreneurship consists of innovation, proactiveness and new business venturing. Hisrich et al. (2005: 44) on the other hand argue that intrapreneurship include four dimensions, that is innovation, proactiveness, new business venturing and organisational self-renewal. Dess and Lumpkin (2005: 147) add two additional dimensions, namely autonomy and competitiveness.

When taking all the research being done over the years into account, seven dimensions of intrapreneurship could be identified by Jordaan (2008: 44) as illustrated in figure 2.3.
The seven dimensions of intrapreneurship as presented above include:

- **Innovation**: new ideas, creativity and experimentation.
- **Pro-activeness**: acting in expectation of future problems, changes or needs.
- **New business venturing**: new business or business units within the organisation.
- **Risk taking**: venturing into uncertainty and committing assets.
- **Organisational self-renewal**: reformulation of strategic plans, organisational change.
- **Autonomy**: self-direction and independent action.
- **Competitive aggressiveness**: strongly challenging competition to achieve entry or improve position and the value of the organisation.

### 2.4 INTRAPRENEURIAL CLIMATE

Hisrich *et al.* (2005: 45) are of the opinion that an intrapreneurial climate favours innovation, creativity and testing (experimentation). According to the authors there are thirteen factors that need to be operant in establishing an intrapreneurial climate successfully within organisations.
These factors are: new idea generations should be encouraged, organisations should make use of the latest technology, there should be tolerance for possible failure, testing and experimentation should be allowed, resources should be accessible, there should be no limitations regarding opportunities in the marketplace, management should have a long term view, teamwork should be practiced, there should be a volunteer programme, ‘champions’ should be available, a reward and recognition system should be in place and there should be the necessary support form top management (Hisrich et al., 2005: 48).

2.4.1 Constructs of an intrapreneurial climate

The thirteen constructs identified and discussed are based on the work of various authors and are in agreement with those found by Oosthuizen (2006: 130-132).

Nel (2009: 62) highlights that these constructs can be categorized into three main groups which comprises of strategy-related factors, management and support-related factors and organisational factors as presented in figure 2.4.

Figure 2.4: Model for constructs of an intrapreneurial organisation

Source: Adopted from Nel (2009: 62)
Strategy-related factors are those aspects that focus on the way in which an intrapreneurial direction for the organisation is planned and communicated to all levels of the organisation (Nel, 2009: 61).

Management and support-related factors focuses on how managers deal with their subordinates, i.e. the appointment of sponsors, acknowledgements and rewards giving for successes reached, tolerance for failure as well as the amount of discretionary time afforded (Nel, 2009: 61-62).

Organisational-related factors relate to how organisations operate and the values associated with each organisation which is a guide for their behaviour and way of doing (Nel, 2009: 62).

2.4.1.1 Entrepreneurial leadership

Vision, willingness and the courage to take charge will cause an entrepreneurial force and energy which needs to be guided (Pinchot & Pellman, 1999: 3). Nicholson-Herbert, Mkhize and Schroder (2004: 43) concur with the importance of guiding this newly generated entrepreneurial energy within the organisation by entrepreneurial, visionary or inspirational leaders.

Cohen (2004: 16) defines entrepreneurial or visionary leadership as the ability to determine and set the organisation’s vision and included in the process create systems, procedures, culture and space that will enable employees at all levels within the organisation to freely take responsible initiative and mobilise fellow employees in the organisation who share responsibilities. It is furthermore also important that top-level executives should demonstrate their own commitment towards entrepreneurship by their behaviour and example of participation in the process (Morris & Kuratko, 2002: 173).
Timmons and Spinelli (2007: 541) argue that entrepreneurial or inspirational leadership is based on know-how (expertise) and not on authority. The authors furthermore is of the opinion that entrepreneurial leaders have an excellent understanding of the relationships that exist within their teams and do not enforce their ideas on them but an approach of consensus building among team members is rather utilized.

Hisrich et al. (2005: 50) describe intrapreneurial leaders as leaders who "dreams great dreams" and have the ability to express the dream in such a manner that the team will follow - irrespective of possible obstacles that might occur in the process. Rue and Byars (2005: 346) agree that theses dreams and vision should be converted into a clear visualised roadmap, presenting detailed plans of which results are wanted as well as what needs to be done and changed to achieve them successfully.

Burns (2005: 13) defines intrapreneurial management as the ability to manage and lead the entrepreneurial organisation, encouraging, looking for new opportunities and innovation in an organised manner throughout the organisation, questioning the current order and seeking ways to create and improve a competitive advantage and create value for the organisation. According to the author it is about learning new ways to manage organisations which involves relationships and culture rather than control and discipline.

In order to achieve this all, visionary leaders must have a dual focus on the present and the future. They must understand the value and importance of maintaining best practices of the past, but they must also be willing to support renewals. They should invest time and money in recruiting and mounting employees with an entrepreneurial mindset. Entrepreneurial leaders recognise the necessity of investing in technology with the focus to improve business performance. These leaders also realise that results are measured and successes celebrated (Thomas, Harburg & Dutra, 2007: 2). The result of effective visionary leadership is to inspire employees at all level to enthusiastically undertaking to discover and pursue opportunities for growth (Cohen, 2004: 16).
2.4.1.2 Management support

Kuratko, Montagno and Hornsby (1990: 49-58) point out that the fundamental idea of management support is to encourage employees and to believe that innovation is rooted in the role of all employees. According to Brown, Davidson and Wiklund (2001: 954), managers play a very important role in establishing and maintaining an intrapreneurial spirit within an organisation, irrespective of the sector.

Management support in creating an intrapreneurial climate can be described as the willingness of management to promote and facilitate intrapreneurial activity within the organisation (Kuratko & Hornsby, 2001: 12). This can include the championing of innovative ideas or solutions and providing employees with the resources required to take these entrepreneurial actions.

Managers who are successful in establishing an intrapreneurial culture, act first in an intrapreneurial way themselves by being a living example to the rest of the employees before expecting them to act intrapreneurial (Anon, 2008b: 1). These managers ensure furthermore the sharing of knowledge and information throughout the organisation and encourage employees to work together in cross-divisional teams. Networks with other essential organisations are established and maintained and employees are encouraged to do the same. The importance of the role of business units within the core company or organisation is recognised and employees are allowed to form smaller, more approachable units (Anon, 2000: 190).

Middle level managers’ key role is to be corporate entrepreneurs. It is their responsibility to identify and exploit new opportunities, within an entrepreneurial framework and culture supported by top management. That is why Zahra (2005: 8) stresses the fact that it is specifically crucial that Middle management promote corporate entrepreneurship efforts seeing that senior managers select, evaluate and compensate middle managers who, usually, are often the champions of corporate entrepreneurship initiatives as mentioned above.
Management support can be measured by management’s receptivity to employee’s ideas, management encouragement, promoting and awarding of innovative ideas, financial support and unconditional support irrespective of possible failure (Kuratko, Hornsby, Naffziger & Montagno, 1993: 31-32). Bhardwaj et al. (2007b: 133) add that support needs to be even broader. Support must also be evident in the way that management constructs policies and unconditionally direct personnel towards entrepreneurial activities.

Burns (2005: 34) concludes that management need to:

- Supply the necessary training needed.
- Have a strong vision for the organisation.
- Communicate effectively throughout the organisation and all levels.
- Have the autonomy to delegate.
- Have a positive attitude to encourage self-efficacy and self-confidence.

2.4.1.3 Sponsors

Pinchot and Pellman (1999: 3) define a sponsor as someone that protects, coaches, and organise resources for the intrapreneurial team. Pinchot and Pellman (1999: 66) argue further that sponsors, within organisations where innovation is managed successfully, speed up projects by creating a protective bubble around these teams, allowing them to focus on getting the job done successfully. Christensen (2005: 305-322) agrees stating that employees see supportive management as something that doesn’t work against new initiatives from employees but acts as a sponsor for intrapreneurs, which fundamentally means giving them access to the resources needed to explore new opportunities. In addition to smoothing the way, clearing obstacles and providing advice, an important role of a sponsor is to encourage and sustain passion for a project (Thornberry, 2003: 342).
Sponsorships is usually seen as a component of management support (Bhardwaj et al., 2007a: 51) and as with management support, sponsorship from top management is thus required and very important to allow employees the qualities to develop an opportunity (Turner, 2002: 49). Morris and Kuratko (2002: 93) identified that sponsors are corporate managers at higher levels within the organisation, who are willing to protect intrapreneurs by creating a safe environment for these members.

Sathe (2003: 182) states that an intrapreneur should build support for his/her venture on three levels, which are line management, top management and divisional groups. The stronger the sponsorship network, the greater the support for the venture or opportunity.

Oosthuizen (2006: 279) emphasises that sponsors form a very crucial connection between intrapreneurs and top management within the organisation and act as mentors to these innovators. A sponsor can ease the negotiation process with the focus of getting support and buy-in from top management. According to Hisrich and Peters (2002: 51), various sponsors should be placed throughout the whole organisation in order to address multiple functions and disciplines. It is also viewed to be most effective when middle managers use the relationships that they have developed to build networks among colleagues to create and ensure commitment towards a common goal (Guth & Ginsberg, 1990: 8).

However, Pinchot and Pellman (1999: 150) add that sponsors should also be in a position to at a certain point in time, stand back when needed. Turner (2002: 49) highlights the danger of sponsors who refuses to renounce control and indirectly force team members to follow their ideas and instructions. It is suggested that roles and objectives should be clarified and determined from the beginning of the project to assure that the above stated is not a problem (Palmer, 2002: 102). In order for junior members as well as every other team member in the intrapreneurial team to perform to the best of their ability, it will in some cases mean that the sponsor should take on a role of lesser authority compared to his or her normal position in the organisation (Pinchot & Pellman, 1999: 7).
Van der Merwe and Oosthuizen (2008: 14) conclude that a lack of dominant managers who assist and support intrapreneurs to get their work done can reverse the process of establishing intrapreneurship within an organisation having a very negative effect on the intrapreneurial climate of the organisation.

2.4.1.4 Tolerance for risks, mistakes and failure

Organisations do not naturally seek failure, but to constantly be innovative and grow will require a degree of tolerance, as opposed to the punishment for failure (Morris & Kuratko, 2002: 10). Organisations must allow employees to take risks and show tolerance for failure when it occurs seeing that tolerance of risk, uncertainty and ambiguity are core attributes of an entrepreneur (Timmons & Spinelli, 2007: 9). Experimentation and failures are thus part of the entrepreneurial process. Turner (2002: 52) states that the fundamental quality of success commands trial and error.

However, employees in an organisation are conditioned to fear failure which leads to managers choosing established procedures and structures over new innovative ways (Ackoff, 2006: 225). Hisrich and Peters (2002: 50) agree that a culture of blaming employees for mistakes discourages and destroys the potential for innovation and it withhold the organisation the opportunity to learn and benefit from these mistakes. Dawes (2007: 21) concurs with the ability of mistakes to create new organisational knowledge.

Timmons and Spinelli (2007: 12) also echo that in the process of developing innovative products or services, some failures necessarily will occur. Morris and Jones (1999: 76) concur that top management should emphasize the fact that mistakes would be tolerated in the pursuit for creativity and improved services. Hisrich et al. (2005: 48) support this view saying that an intrapreneurial spirit can only be sustained if the internal business environment allows for new mistakes to be made out of which valuable lessons can be learned regarding the future.
According to Morris and Kuratko (2002: 41), risk taking involves a willingness to chase opportunities that have a reasonable probability of producing losses or significant performance inconsistencies. They argue further that entrepreneurship doesn’t involve irresponsible decision making, but involves a realistic awareness of the risks involved. They also attempt to manage these financial, technical, market and personal risks. Cohen (2004: 18) proposes that the criteria should be set for classifying a failure as acceptable. A criteria such as that an employee did do research, applied sound business reasoning and worked with the focus to attain a benefit for the organisation. Nicholson-Herbert et al. (2004: 44) build on this view, by affirming the need for formal structures to be put in place in which individuals are allowed to take risks and experiment. Dawes (2007: 21) warns that mistakes can be very costly, sometimes costlier than the company can afford and therefore finds favour with the proposed structures in which individuals can take risks and experiment.

Morris and Jones (1999: 76) maintain that top management must endorse the believe that intrapreneurial behaviour is appreciated, valued and needed and give employees the re-assurance that project failure does not involve unacceptably high personal risks.

The encouragement of innovation and risk taking behaviour by employees in an environment of adaptability and flexibility is the trademark of a corporate entrepreneurship culture (Kemelgor, 2002: 67-87). Kuratko and Hodgetts (2007: 59) argue that true learning takes place when failed projects are examined in detail for what can be learned. In addition employees must feel free to experiment without fear of punishment.
2.4.1.5 Innovation and creativity

Drucker (1985: 133) view innovation as the specific function of entrepreneurship. It is the way by which the entrepreneur or intrapreneur either creates new resources or provide existing resources with enhanced potential with the focus of creating wealth and value. Morris and Kuratko (2002: 104) highlight that creativity is the heart of entrepreneurship. They define creativity as the application of a person’s curiosity and mental ability to discover something new being the act of relating previously unrelated things, thus the capacity to develop new ideas, processes and concepts. A key element to assure intrapreneurship in an organisation is the active encouragement of innovation (Kuratko & Welsch, 2001: 350).

Nieman et al. (2003: 350-351) argue that creativity deals with getting an idea, while innovation deals with the implementation of that idea. Entrepreneurship thus requires innovation to assure implementation.

In figure 2.5 the relationship between innovation and creativity is illustrated.

**Figure 2.5: The relationship between innovation and creativity**

![Diagram of innovation and creativity](image)

**Source: Adapted from Bjerke (2007: 17)**

In figure 2.5 it is clear that entrepreneurial activity is dependent on both creativity and innovation in order to develop and implement new ideas with the focus to satisfy a need within the market.
According to Zhao (2005: 27), innovativeness is multi-dimensional. Three main categories can be identified:

**Radical versus incremental innovation**

Radical innovation refers to taking large jumps while incremental innovation on the other hand, involves small improvements or modifications being done (Dhliwayo, 2007: 107).

**Product versus process innovation**

Product innovation results in a new product, whereas process innovation lead to new processes (Dhliwayo, 2007: 107).

**Technological versus administrative innovation.**

Technological innovation is the adoption of new technology that has an impact on outputs while administrative innovation has to do with organisational changes. (Dhliwayo, 2007: 107).

Focusing on an organisational level, innovation can be seen as a willingness to emphasise new products, research and development, improved processes and technological improvement (Slevin & Covin, 1990: 45).
Van der Merwe and Oosthuizen (2008: 17) state that innovation should be included in leadership development programmes and that employees should be encouraged to be creative. Top management must reinforce innovative behaviour patterns by providing the necessary recognition, support and rewards to intrapreneurial employees (Morris & Jones, 1999: 76). However, many organisations experience difficulties in managing innovation, seeing that they are more familiar and at ease with managing well-known elements where outcomes are predictable. In the case where innovation requires them to step into the unknown, conservative management is left incapable of participating seeing that they feel helpless because outcomes can't be predicted and they are not familiar to the whole process (Pinchot & Pellman, 1999: 13).

It is thus clear that continuous innovation has become an essential skill to ensure sustained corporate performance in the 21st century’s global economy (Kuratko & Welsch, 2001: 347).

2.4.1.6 Appropriate rewards and recognition

Kuratko and Welsch (2004: 42) emphasise the importance that the organisation must have a reward system in place where recognition is given to individuals who attempt to exploit innovative opportunities and add value. Kuratko and Hodgetts (2007: 70) support this furthermore by arguing that rewards and reinforcement enhance the motivation of individuals to act innovative. Organisations must thus provide rewards related to performance.

Morris and Kuratko (2002: 246) stress the importance for management to clearly establish and communicate the consistency in who gets awards, why and when. When establishing the objectives to achieve in order to determine rewards given to employees, Kreitner and Kinicki (2007: 272) prescribed the following approach regarding the set of objectives.
Objectives should be:

**Specific**

The objectives set should be specific and precise, instead of being vague leaving no space for misunderstandings.

**Realistic**

Objectives should be realistic and reachable.

**Results orientated**

Objectives should be aligned with the strategic intents and vision of the company.

**Time bound**

Target dates for completion should be set clearly.

**Measurable**

Specific targets and measurable aspects should be determined and agreed on from the beginning of a project.

The evaluation system used to measure performance plays a very important role in reinforcing intrapreneurial behaviour (Jacobs & Kruger, 2001: 5). However, McBeth and Rimac (2004: 21) argue that the traditional reward criteria tend to compel management to set predictable and safe objectives which will only encourage predictable and safe behaviour, ignoring the true nature of entrepreneurship. This will eventually suppress the intrapreneurial behaviour of employees within the organisation.
Intrapreneurs should be rewarded according to their effort, energy and risk associated with the project while taking into account that some projects might take longer to realise tangible results. Goals should thus be carefully defined as mentioned above (Hisrich et al., 2005: 49).

Sathe (2003: 387) mentions that different people are motivated by different things. Some entrepreneurs might seek rewards in the form of pride and financial gains; whereas intrapreneurs value other incentives which are not always clear (Morris & Kuratko, 2002: 245). McBeth and Rimac (2004: 21) agree and state that the intrapreneurs should be given the opportunity to choose their rewards according to their achievements.

Whether rewards are monetary or not, Kuratko et al. (1993: 32) emphasise that elements such as clear goals, the precise strategic aim of the company, an excellent feedback system, positive reinforcement, individual responsibility and rewards based on results, should be present in order to effectively manage a reward system that promotes an entrepreneurial climate within the organisation.

Timmons and Spinelli (2007: 299) argue that the following aspects should be considered when implementing a rewarding system:

**Differentiation**

Team members should be rewarded in relation to their contribution.

**Performance**

Rewards should be a function of the level of individual performance.

**Flexibility**

Flexibility should be built into the reward system seeing that the changes occur on a continuous basis in the operational environment of the organisation, with related changes in the organisation.
If an appropriate reward system is implemented within a company, it will promote and cultivate intrapreneurial behaviour, as well as the retention and attraction of intrapreneurial talent (Kuratko et al., 1993: 28).

2.4.1.7 Vision and strategic intent

The first step in planning an intrapreneurial strategy is sharing the vision of innovation that the corporate leaders want to achieve throughout the whole organisation (Kuratko & Hodgetts, 2007: 63). Pinchot and Pellman (1999: 25) add that intrapreneurship should be subsequently aligned with the strategic force needed to achieve the predetermined vision set by the corporate leaders.

Burns (2005: 85) defines vision as a shared mental image of a desired future state, an ultimate of what the organisation can become. The vision must be a realistic, attractive and credible one that engages and energises employees. It is not acceptable to simply have a vision, that vision must be communicated to all stakeholders and acts as motivation and driving force.

Collins and Porras (1996: 65-77) show in their research that a vision which is shared throughout the organisation fosters commitment and creates a sense of team spirit that saturates the whole organisation. It inspires employees and provides a focus that allows individuals to contribute in ways that make the most of their expertise and talents. According to Kuratko and Welsh (2004: 355), corporate entrepreneurship results from the creative talents of employees in the organisation which stresses the need for all stakeholders to know and understand the vision.

Strategic entrepreneurship is the integration of opportunity and innovation seeking actions into value creating strategies (Sathe, 2003: 2). Van der Merwe and Oosthuizen (2008: 17) argue that it is the responsibility of top management to ensure that a clear purpose as expressed in an intrapreneurial strategy is communicated to all employees and especially to middle managers. Gupta, MacMillan and Surie (2004: 244) emphasise the need of an effective communication system within the organisation with the focus to encourage intrapreneurial behaviour patterns.
It furthermore is very important that the inputs of employees should be obtained into the strategic process at all levels within the organisation (Anon, 2008b: 1). This would give employees the freedom and confidence to exploit intrapreneurial ideas and activities since they are aware of the parameters and it would reinforce the message that intrapreneurship is a shared activity.

Going beyond the articulation and impartation of an intrapreneurial strategy, it is the responsibility of management to strive to align the organisations culture to the innovation process (Gaw & Liu, 2004: 69). This responsibility would further translate into ensuring a fitting organisational structure, support programs to encourage intrapreneurship and good human resource practice (Ireland, Kuratko & Morris, 2006: 14).

2.4.1.8 Discretionary time and work

Husted and Michailova (2002: 60-73) highlight that corporate business enterprises need to stimulate the generation and flow of ideas by taking actively part in the process of developing and shaping new ideas. This can only be achieved if resources and time are available to employees.

According to Oosthuizen (2006: 137), to make time available is to create space for idea stimulation to bubble up from individuals. This means that individuals who are innovative and those who are required to be innovative should not be hassled by bureaucracy and routine work.

Mathisen, Einarsen Jorstad and Bronnick (2004: 383) state that management should allow employees the freedom and autonomy regarding the choice of tasks and how they are to be performed. An intrapreneurial attitude and spirit should furthermore be voluntary; employees should not be forced to partake in intrapreneurial activities if they are not interested (Hisrich et al., 2005: 49).
2.4.1.9 Empowered teams

Intrapreneurship does not essentially require that anyone person, not even the leader, has the entire set of entrepreneurial characteristics and skills. Instead, these could be found throughout the whole organisation as people join forces in developing ideas in new venture, empowered or multi-disciplined teams where they contribute their intrapreneurial expertise whenever needed (Anon, 2008a: 1).

Serfontein (2006: 79) states that corporate entrepreneurship involves teams within the organisation, which are led by intrapreneurs or corporate champions, who promote entrepreneurial behaviour inside the organisation. These teams proactively get involved in risky projects that’s focus is to create new, innovative, administrative procedures, products and services that assist organisational growth and renewal.

Oosthuizen (2006: 141) cites Pinchot and Pellman who argue that entrepreneurial organisations create multi-disciplinary teams to improve innovation, and they empower these teams to make decisions. The success of these teams root from the open discussion that is a natural element of teams and their ability to look at the same issues from different perspectives which results in more diverse solutions required for complex markets problems.

Chowdhury (2005: 731) elaborates on the decision-making ability of teams by confirming the believe that teams generally make better decisions than individuals due to the incorporation of broader perspectives and more alternatives available for consideration. West and Meyer (1998: 417) echo the importance of diversity in a team and point out that disagreement can often lead to increased performance due to idea diversity. Sadler (2000: 31) also emphasises the importance of diversity in the different specialisation fields within the organisation to promote innovation.
According to Gaw and Liu (2004: 68), this is especially true and of relevance in an entrepreneurial firm, where an important intrapreneurial ability is the capability to tap into the functional experience of cross-functional teams, seeing that a product or process often consist of functional elements which lie outside the knowledge of one individual. Each team member adds certain strengths to the team and reinforces interdepartmental cooperation and dependency (Turner, 2002: 55).

A well set-up team will also ensure that all the background information and resources are available in order to make a good decision while at the same time being protected from herd-thinking phenomena (Jones & George, 2003: 482). Cohen (2004: 18) explains that small but multi-skilled teams can react quicker, have a wider range of knowledge and are more flexible, when compared to large teams compiled from a single functioning unit.

Kuratko, Ireland and Hornsby (2001: 61) emphasised the importance of new venture teams that result in so-called "collective entrepreneurship" in which the benefits of synergy are acquired. Kuratko and Hodgetts (2007: 71) define “collective entrepreneurship” as: In collective entrepreneurship, individual skills are incorporated into a group: this collective capacity to innovate becomes something greater than the sum of its parts (synergy). Over time, as group member’s work through various situations, they learn about one another’s abilities. When an organisation focuses on collective entrepreneurship, venture teams offer the organisation the opportunity to use the talents of individuals but within a context of teamwork.

Morris, Davis and Allen (1994: 73) contrast individualism with collectivism (teamwork) in order to determine the benefits of each in an intrapreneurial environment. In their view, individualism leads to a culture of control, independence and individual ambition where individuals do not place a high value on group achievements. Collectivism is seen as an action which encourages working together, placing high value on team results above individual results. Overall, the authors argue that neither individualism nor collectivism should be excessively promoted and that a balance must be found to obtain individual innovation and ambition while gaining the cooperation, benefits and group pride of collectivism (Morris, Davis & Allen, 1994: 73).
Rue and Byars (2005: 75) assert that well-functioning groups produce better results when compared to individuals working in isolation, but the authors also raise some warning points regarding the outcomes of poorly managed groups which are presented in Table 2.2.

### Table 2.2: Advantages and disadvantages of working in a group

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greater total knowledge inside groups.</td>
<td>Possibility of domination by one person or interest group.</td>
</tr>
<tr>
<td>Wider range or alternatives available to consider when making a decision.</td>
<td>“Herd-thinking” tends to force the group to agree and accept the first apparent solution without considering alternatives.</td>
</tr>
<tr>
<td>Larger acceptance of decisions due to the participation of all individuals in the decision making process.</td>
<td>Social pressure in a group can force individuals to conform.</td>
</tr>
<tr>
<td>Decisions and implications are better understood by all team members.</td>
<td>Competition in a group can undermine the importance of the goals of the group.</td>
</tr>
</tbody>
</table>

**Source:** Rue and Byars (2005: 75)

2.4.1.10 Resource availability and accessibility

Hisrich and Peters (2002: 50) argue that resources in the organisation need to be available and easily accessible for entrepreneurs to explore and develop new ideas and not be restricted. Embedded into this support is also the understanding that risks will be taken with these resources and that outcomes regarding the usage of these resources may be uncertain (Hornsby, Kuratko & Zahra, 2002: 253).
According to Timmons and Spinelli (2007: 341), four types of resources can be identified: Financial resources, human capital, assets and a business plan. Hisrich et al. (2005: 426) furthermore argue that an important entrepreneurial resource is the ability and knowledge to obtain and recombine resources into a “bundle” that is unique, scarce and essential. This knowledge is acquired over time and vested within intrapreneurial employees, which make imitation from competitors very difficult.

While it is assumed that the resources of the organisation need to be available and easily accessible (Hisrich & Peters, 2002: 50) it is also true that circumstances within the organisation can lead to the fact that entrepreneurs don’t receive the requested resources needed (Thompson, Strickland & Gamble, 2007: 48). However, situations like this can often lead to positive results (Thompson et al., 2007: 48; Timmons & Spinelli, 2007: 91) seeing that it fosters innovation by forcing the intrapreneur to “do more with less” and find more innovative ways to deal with the shortcomings.

2.4.1.11 Continuous and cross-functional learning

Burns (2005: 326) defines a learning organisation as an organisation that facilitates the learning of all its members and continuously transforms itself, changing, adapting, transforming and developing themselves in response to the changing needs that exist. The author also states that the learning organisation is more adaptable, flexible and better equipped to succeed in an unstable environment, the same environment that the entrepreneur and entrepreneurial organisations live in.

Continuous learning in organisations is an essential element in today’s complex, rapidly changing environment as mentioned by Burns (2005: 326). Cummings and Worley (2005: 482) state that continuous learning can be a source of strategic renewal, and it can enable organisations to apply and acquire knowledge faster and more effectively than competitors, thus enabling a sustained competitive advantage.
Continuous learning takes place at all levels within the organisation, from top management to lower-level employees (Cummings & Worley, 2005: 482). According to Burns (2005: 326), a learning organisation; encourages systematic problem solving, new approaches and experimentation, learns from past experiences; learns from best practices and outside experience, and is trained at transferring knowledge in the organisation. To make continuous cross-functional learning possible, sufficient learning opportunities should be provided to employees and they must be encouraged to stay in touch with new developments in their specific areas and fields (Van der Merwe & Oosthuizen, 2008: 15).

Intrapreneurship is a driving force for knowledge creation, the development of new competencies and the alteration of existing ones (Robinson, 2001: 96). However, knowledge is also a guide for intrapreneurship, seeing that intrapreneurship starts off from current knowledge and it takes a quantum leap into the unknown to create new knowledge and opportunities (Antoncic & Hisrich, 2003: 13). Dess, Ireland, Zahra, Floyd, Janney and Lane (2003: 355) point out that newly acquired knowledge can be manifested as technical knowledge, integrative knowledge (involving new combinations of resources and opportunities) and exploitive knowledge (involving new ways to take advantage of the organisations resources and opportunities with the focus to create new products and ventures).

2.4.1.12 Customer orientation

The main goal of an organisation should be customer satisfaction. Customer satisfaction is a key success factor for any organisation because it fits in with so many other success factors and is finally the core of the business. Customer satisfaction is a behaviour over which the organisation has reasonable control and is linked to good human relations (Cummings & Worley, 2005: 281). A strong focus on customer satisfaction and needs sharpens an organisations focus on innovation and instead of internal political gains within the organisation (Pinchot & Pellman, 1999: 113).
In order to establish intrapreneurship within an organisation, their focus should be to develop ways to come close to its customers, thus creating a strong consumer orientation which open doors to new opportunities like new products of services (Hisrich et al., 2005: 51). Farrel (1993: 117) identified four areas in which an organisation must ensure that it operates close to its customer: Having excellent product and service knowledge, quick response, being considerate and ensuring long-term relations with customers.

Resources should be made available to keep a record of consumers preferences, needs preferences and changes in buying behaviour. This could be done by using instruments such as consumer databases, sales records and reports, retailers complaints and opinions to determine and follow consumer behaviour patterns which could be very useful in forecasting future trends as well as future success (Jordaan, 2008: 59). Andotra and Pooja (2006: 181) indicate that knowledge acquired of a customer can result into an organisation gaining a significant advantage within the market. Appiah-Adu and Singh (1998: 390) also state that a significantly positive correlation was found between customer focus and product success rates.

2.4.1.13 Flat organisational structure

Organisational structure is that underlying construction that determines the ability of the organisation to change its processes but also the rapidness of this change (McBeth & Rimac, 2004: 20). Burns (2005: 125) explains that structure creates order in an organisation. The best structure for the organisation depends on the nature of the organisation, the strategies it is currently employing, the tasks it undertakes, environmental conditions and the size of the organisation. Echols and Neck (1998: 39) emphasise that the organisational structure of a company plays a very important role in fostering an intrapreneurial climate. Traditional hierarchical organisational structures tend to be inflexible and rigid and are not suitable for modern entrepreneurial enterprises (Dess, Lumpkin & McGee, 1999: 91). Van der Merwe and Oosthuizen (2008: 18) argue that an entrepreneurial organisational structure should be flat (horizontal) with open communication channels.
This view is supported by Oosthuizen (2006: 254) who asserts that an entrepreneurial organisational structure should allow for employee empowerment and a free flow of ideas. It has been observed by Pinchot and Pellman (1999: 112) that fresh ideas seldom fit into rigid organisational structures and that innovators are often forced to cross boundaries to get help and support elsewhere.

Hisrich and Peters (2002: 330) maintain that decentralisation, flexibility and the absence of restraining rules and regulations are typical features of the organisational structure established in an entrepreneurial organisation. Dhliwayo (2007: 112) states that a network-oriented organisational structure is more suited than a hierarchical structure in promoting innovation. An organisation with an intrapreneurial climate requires a flat organisational structure complete with teamwork, networking, mentors and sponsors (Hisrich & Peters, 2002: 47). McBeth and Rimac (2004: 20) agree explaining that it demonstrates flexibility and focus on people and teams, while being characterised by informal networks and a the support for employees’ desire for independence.

Serfontein (2006: 90) identifies three specific guidelines which should be considered, particularly when designing structures to foster entrepreneurship. These three guidelines are:

- Avoid too much structure.
- Establish separate structures.
- Maintain a sense of smallness.

Morris and Kuratko (2002: 173) prescribed further requirements of an organisational structure supporting intrapreneurship:

- Open communication channels.
- Accountability from employees.
- Lower level input opportunities into management systems.
- Reduction of hierarchical levels.
- Broad area of control for managers to support in decision making.
- Responsibility enabled by relevant levels of authority.
The increased control and autonomy over resources provided to managers by a flat organisational structure will lead to greater innovation, while more direct involvement in the decision making process will lead to higher levels of commitment (Russell, 2001: 72).

2.5 PERCEIVED SUCCESS OF THE ORGANISATION

A number of researchers (Murphy, Trailer and Hill, 1996: 15; Brancato, 1995: 121) argue that the perceived success of the organisation or the organisational performance of an intrapreneurial organisation should be measured according to multiple dimensions or variables and it should not be limited to financial performance only.

For the purpose of this study the perceived success of the organisation will be measured by financial measures, customer/market measures, process measures, people development and future success.

Financial measures

Van der Post (1997: 75) argues that the financial performance of an organisation is a firm foundation from which to draw conclusions regarding the success and effectiveness of that organisation, seeing that all efforts and systems are eventually aimed at ensuring sustainable financial returns. Over time, intrapreneurial organisations will generate better returns than their competitors (who don’t have an intrapreneurial focus) resulting in immediate rewards of successful ventures, as well as the inherent proactiveness and flexibility of intrapreneurial organisations (Zahra & Covin, 1995: 47). Empirical proof has been established to show a positive relationship between intrapreneurship and financial results in organisations (Morris & Sexton, 1996: 8) and this relationship appears to continuously strengthen (Zahra, 1995: 242).

It has been suggested that financial performance should be measured in terms of market share escalation (Murphy et al., 1996: 15) or alternatively in terms of growth in profits and turnover (Goosen, de Coning & Smit, 2002: 23).
Customer/market measures

An important success factor of an organisation lays in their ability to effectively focus on its customers (Appiah-Adu & Singh, 1998: 390). According to Jones and Sasser (1995: 93), highly successful organisations listen to their customers. Jones and Sasser (1995: 93) identified five major categories successful organisations implement to listen to their customers. These categories include: asking customers about their level of satisfaction, giving feedback to customers, doing market research on why the customer joined and/or left the organisation, spending a significant amount of time with customers and involving customers in every aspect of their organisation.

Indicators of a customer focused organisation include the ability to focus development direction and the actions of personnel on ways to satisfy customers’ needs (Strydom, Cant & Jooste, 2000: 223) and to retain customers by creating loyalty to a company’s offerings in the marketplace (Kotler & Armstrong, 2008: 19).

Process measures

Teo and King (1996: 312) view improved internal efficiency of the organisation as a non-financial indication of the success of the organisation. Successful organisations practise strategies of constant innovation and product breakthrough (Morgan, 2006: 54). Dess et al. (2003: 370) state that a measure of corporate success is related to the efficiency (“doing the right things”) and effectiveness (“doing things right”) that an organisations’ employees (as internal stakeholders) are able to employ in producing the organisations’ outputs.
People development

Another key element to ensure a successful organisation is to treat and view its employees as stakeholders in creating a people-centred organisation in which human capital is viewed as the most important asset (Kreitner & Kinicki, 2007: 4).

According to Bulut and Alpkan (2006: 67), the intrinsic and extrinsic rewards flowing from a culture of intrapreneurship, drives both organisational commitment and job satisfaction among personnel. In a study conducted by Arthur (1994: 670) it was found that the productivity was higher in organisations where employees were committed to the organisation.

Future success

All projects reveal growth curves which decrease after they have reached maturity (Timmons & Spinelli, 2007: 535) and research and development is thus needed and an important asset of intellectual stock from which new business ventures can be generated with the focus to ensure an long-term level of sustainable advantage (Ahuja & Lampert, 2001: 529).

March and Sutton (1997: 698) examined the degree of accuracy achievable when using organisational performance as a dependent variable. The authors found that various other factors were always present and that researchers must at all times be conscious of the ambivalence inherent in the determination thereof. The testing of internal perceptions regarding organisational performance is accepted as one of many (imperfect) techniques to determine this construct as a dependent variable (March & Sutton, 1997: 704).

The specific questions in the questionnaire which determined the level of each construct is set out in Annexure A.
2.6 FACTORS THAT COULD INFLUENCE THE ESTABLISHMENT OF INTRAPRENEURSHIP IN THE PUBLIC SECTOR

Public sector managers are faced with an escalating complex environment, struggling with multiple and sometimes competing expectations, strategic dilemmas and extreme demands (Pedersen & Hartley, 2008: 333).

According to Sathe (2003: 85), the following obstacles in creating an intrapreneurial climate exist:

- Lack of freedom.
- Inadequate resources.
- Poor project management.
- Inappropriate evaluation feedback.
- Lack of competition.
- Unsuitable rewards system and a lack of co-operation across levels and divisions within the organisation.
- Lack of organisational support.
- Too large workloads with high frequency of fire fighting.
- Overemphasis on the status quo, unwillingness to take risks or change.

Morris and Kuratko (2002: 364) classify barriers to corporate entrepreneurship in six groups which are systems (inflexible systems act as disincentive for entrepreneurship), structures (bureaucratic structures causes restricted communication, a lack of accountability, too many hierarchical levels, top down management, narrow span of control and responsibility without authority), strategic direction (no formal strategy and direction for entrepreneurship results in no innovation goals), policies and procedures (rigid, complex and unrealistic policies and procedures restrict innovation and creativity), people (the nature to resist change and preserve the status quo due to fair for failure) and culture (it is the cement that binds the entrepreneurial organisation together but conflicting values can have a negative impact on the effectiveness of the corporate culture).
Barriers can either be ignored, worked around or be removed. An intrapreneurial organisation is one that embraces change and manages these barriers (Burns, 2005: 147).

### 2.7 A FRAMEWORK AND STRATEGIES FOR THE ESTABLISHING OF INTRAPRENEURSHIP

When adopting intrapreneurship in the organisation a strategic choice has to be made (Jacobs & Kruger, 2001: 1). A new strategic approach should also be adopted in the organisation to assist this whole process. Dhliwayo (2007: 111) argues that the strategy adopted to foster intrapreneurship should allow for participation on all levels within the organisation.

There are a large number of options available for the implementation and establishment of and intrapreneurship within the organisation. A few of these options are:

- **Option 1:** The 14 steps to create an intrapreneurial organisation (Serfontein, 2006: 100).
- **Option 2:** Key questions that can be asked for the evaluation of the entrepreneurial process within the organisation (Kuratko & Hodgetts, 2007: 59-60).
- **Option 3:** The ten major factors tat are needed to foster innovation and creativity within the organisation (Marthisen, Einarsen, Jorstad & Bronnick, 2004: 383).
- **Option 4:** An integrated framework for intrapreneurship (Oosthuizen, 2006: 269).
- **Option 5:** A model for implementing strategies for the establishing of an intrapreneurial orientated organisation (Jacobus & Kruger, 2001: 3).
- **Option 6:** The critical managerial action steps in developing a climate of intrapreneurship (Van der Merwe & Oosthuizen, 2009: 25).

These six options are discussed in more detail in the following pages.
Option 1: The 14 steps to create an intrapreneurial organisation

Serfontein (2006: 100) cites Kuratko et al. who suggest a number of steps that can be followed when creating an entrepreneurial organisation. The steps are:

**Step 1:**
Review and examine current strategies for intrapreneurial activity.

**Step 2:**
Review the current organisational situation.

**Step 3:**
Verify whether there is a good understanding of the innovation and goals related the organisation wants to achieve.

**Step 4:**
Identify the specific objectives and goals to be reached for successful intrapreneurial strategies and the programmes needed to achieve them.

**Step 5:**
Make sure that the current systems, procedures, practices and structures don’t present obstacles to the flexibility and speed needed for innovation.

**Step 6:**
Provide the resources and tools needed for the intrapreneurial projects.

**Step 7:**
Seek for synergies across business areas.

**Step 8:**
Orientate managers to understand intrapreneurial thinking by employees.
Step 9:
Introduce and establish an intrapreneurial climate.

Step 10:
Evaluate and control intrapreneurial activities.

Step 11:
Encourage and motivate intrapreneurial activity through rewards and recognition.

Step 12:
Give the proper exposure of human resources through selected rotation.

Step 13:
Establish the principle that management must maintain commitment and give their support to intrapreneurial projects long enough for movement to occur.

Step 14:
Present a people value (not analysis), and support the concept of relying on people as the major managerial requirement and resource if intrapreneurship is to show growth and be successful.

Option 2: Key questions that can be asked for the evaluation of the entrepreneurial process within the organisation

Kuratko and Hodgetts (2007: 59-60) introduce the following key questions organisations can ask to evaluate the intrapreneurial process within the organisation:

- Does the organisation provide the opportunity for intrapreneurs to stay with the organisation?
- Are the organisation systems set up to allow and encourage risk taking and to tolerate mistakes and failure?
- Does the organisation promote self-appointed intrapreneurs?
- Are people in the organisation permitted to do the job in their own different way?
- Has the organisation implemented fast and informal ways to access resources to chase new ideas?
- Can the organisation stick with an innovation for a long enough period to determine its effectiveness, even if it may take years?
- Do intrapreneurs in the organisation face resource monopolies, or are they allowed to use the resources of other departments, divisions and outside vendors if needed?
- Are employees in the organisation more concerned with new ideas and innovation or with defending their organisational territory?
- Has the organisation developed ways to manage small and experimental products and related opportunities?
- How easy is it to create autonomous and functionally complete intrapreneurial teams within the corporate environment?

Option 3: The ten major factors that are needed to foster innovation and creativity within the organisation

However Marthisen et al. (2004: 383) identified ten major factors that are needed within an organisation to foster innovation and creativity.

These ten factors include:

1. A challenging but supportive environment.
2. Encouragement of new ideas.
3. Enough time to create new ideas and innovative opportunities.
4. Appropriate feedback.
5. Shared concern towards high level of performance and excellence.
6. An effective reward and recognition system.
7. Tolerance for failures and errors.
8. A non-threatening environment.
9. Shared commitment by employees towards specific, attainable, specific and ambitious goals.
10. Freedom and autonomy regarding the tasks to be performed as well as how these tasks are performed.
Option 4: An integrated framework for intrapreneurship

A framework as illustrated in figure 2.6 by Oosthuizen (2006: 269) is proposed for the establishment of an intrapreneurial climate within the organisation.

Figure 2.6: Integrated framework for intrapreneurship

Oosthuizen’s (2006: 269) framework as illustrated in figure 2.6 for the creation of an intrapreneurial climate within organisations consists of:

- Thirteen constructs (as discussed in 2.4.1).
- Intrapreneural teams and individuals who have specific intrapreneurial characteristics.
- Intrapreneurship as a strategic choice and drive.
- Value creation as the final goal.
Option 5: A model for implementing strategies for the establishing of an intrapreneurial orientated organisation

Jacobs and Kruger (2001: 3) propose a model for implementing strategies for establishing an intrapreneurial orientation within an organisation. The authors make use of the widely recognized McKinsey Seven-S model as a framework for addressing the formulation and implementation of business strategies. Figure 2.7 presents the Seven-S Framework.

**Figure 2.7: Seven-S Framework**

![Seven-S Framework Diagram]

**Source: Adapted from Jacobs and Kruger (2001: 10)**

**Strategy:**

The strategy can be seen as a plan or blueprint developed by an organisation that indicates the course of action (the way forward) as well as the manner in which resources should be used and allocated to reach the predetermined goals (Jacobs & Kruger, 2001: 3).

**Structure:**

An organisation’s structure indicates the salient features of the organisational chart and how the separate units of the organisation relate to one another. The structure has to include the most vital and critical activities to be performed in the organisation and should support communication and decision-making (Jacobs & Kruger, 2001: 3).
Systems:

The organisations systems must be designed with the focus to assist staff to act intrapreneurially and it must enable the organisation to find or retain staff with the needed skills for the successful implementation of the strategic plan. It also refers to the processes, procedures and routines that indicate how work should be done. There are different systems involved like recruitment and selection systems, retention systems, reward systems, control systems, innovation management information systems, competitor analysis and probable product of service line extension analysis (Jacobs & Kruger, 2001: 4).

Skills:

Skills include the unique capabilities of staff as a whole. Managers must acquire the skill of translating strategic goals into work group action and intrapreneurs should be equipped with the necessary managerial and multidiscipline skills needed to achieve predetermined goals (Jacobs & Kruger, 2001: 5).

Style:

Style includes the managerial style in the organisation which indicates “how things are done”. The management style that should be present when implementing strategies for establishing an intrapreneurial climate and orientation should be a style that:

- Reflects flexibility toward rules and plans.
- Is consistent with self-organisation.
- Is consistent with the competencies required by the strategy including situational factors involved (Jacobs & Kruger, 2001: 5-6).
Staff:

Staff features that should be present when implementing strategies for establishing an intrapreneurial orientation should include the following:

- Staff should be provided with time for reflection.
- Employees on all levels within the organisation must be allowed the freedom to act intrapreneurially.
- ‘Doers’ and ‘Boat rockers’ must be accommodated (Jacobs & Kruger, 2001: 6).

Shared value:

Actions related to the creation of shared values within an organisation that should be evident when implementing strategies for establishing an intrapreneurial orientation include the following:

- Widely shared norms of employees of the organisation including actions such as openness, autonomy and risk-taking.
- The promotion of a creative culture within the organisation by running an open system and having an integrative orientation.
- Symbolic and substantive actions of managers to promote and encourage innovation and risk-taking (Jacobs & Kruger, 2001: 7).

Option 6: The critical managerial action steps in developing a climate of intrapreneurship

According to Van der Merwe and Oosthuizen (2009: 25), following factors act as critical managerial action steps in developing a climate of intrapreneurship:
Develop an entrepreneurial vision:

Middle management should develop and communicate a vision of an inspiring future which is used to guide decisions, motivate action and inspire commitment. This vision should be based on organisational transformation which exceeds the current view of what is possible in the organisation (Van der Merwe & Oosthuizen, 2009: 25).

Recognise the critical importance of failure:

Tolerance for failure in creative ventures supports the appearance of new ideas in the entrepreneurial company. Learning from failure, rather than punishment for it, should thus be promoted in the organisation (Van der Merwe & Oosthuizen, 2009: 25).

Inspire the desire to be innovative:

Management should set the example by first establishing the nature of innovation wanted as well as the source within the organisation where it is expected to be achieved from. As a result, the entire organisational system should be updated to promote the exploration of innovation: This includes all kinds of innovation and value continuous improvement, new products and services, new process breakthroughs, new organisational patterns, new ways of working together and new internal services (Van der Merwe & Oosthuizen, 2009: 26).

Share risks and rewards with employees:

Intrapreneurship involves risk and reward and it is thus necessary that employees are exposed to some of the risk as well as the rewards associated with these risks. Rewards such as bonuses, research support, freedom or other resources for both individuals and teams should be influenced by the degree to which projects succeed or fail (Van der Merwe & Oosthuizen, 2009: 26).
Endorse intrapreneurial activities and entrust resources:

An organisational support system should be developed to assure that intrapreneurs are provided with the needed resources, autonomy and emotional support which would give individuals, who have attractive strategic proposals, the opportunity and resources to try them out (Van der Merwe & Oosthuizen, 2009: 26).

Encourage customer focus:

Customer focus should be top priority and should first be raised to the level that it becomes part of the corporate awareness. The organisational processes should also be established with the focus to stimulate dialogue in ways to improve customer satisfaction and build direct lines and networks to customers (Van der Merwe & Oosthuizen, 2009: 26).

Create an intrapreneurial architecture:

Although the core of an innovative organisation is flexibility, adaptability can’t be achieved by continuously interfering with the formal organisational structure. The organisations aim should be to develop policies and strategies that foster an effective self-organising system which enables the optimum development of innovation, networks and cross-boundary cooperation (Van der Merwe & Oosthuizen, 2009: 27).

When taking the practical distribution of intrapreneurship to the entire workforce into account, it should be remembered that intrapreneurship is not an instinctive and static feature. A significant amount of formal or informal training, experience, know-how, and a large amount of self-development goes into establishing a person as an entrepreneur (Timmons & Spinelli, 2007: 19).
2.8 SUMMARY

This chapter comprised of a detailed literature review on intrapreneurship where concepts such as entrepreneurship, the entrepreneur, intrapreneurship, public intrapreneurship, the intrapreneur, the entrepreneurial process, organisational culture and climate were defined and explained.

Further literature was provided regarding the different types of intrapreneurship as well as the dimensions of intrapreneurship that exist.

The thirteen constructs of an intrapreneurial climate, entrepreneurial leadership, management support, sponsors, tolerance for risks, mistakes and failure, innovation and creativity, appropriate rewards and recognition, vision and strategic intent, discretionary time and work, empowered teams, resource availability and accessibility, continuous and cross-functional learning, customer orientation and flat organisational structure were discussed in detail.

Seeing that it is very important for organisations to act intrapreneurial to obtain and maintain a competitive advantage it is necessary to educate them on how to do this successful. Factors influencing the establishment of intrapreneurship and a framework and strategies that could be implemented for the establishing of intrapreneurship were therefore also provided and explained.

In the next chapter an empirical study was conducted. The results obtained form this study is thus presented and defined in chapter 3. The first thirteen construct mentioned above were integrated in the questionnaire used to assess the intrapreneurial climate of the public secondary education institutions under investigation.
CHAPTER 3
RESULTS AND DISCUSSION

3.1 INTRODUCTION

The primary objectives of this study were to assess the level of corporate entrepreneurship and the perceived success of the organisation in the various public secondary educational institutions in the Klerksdorp and Orkney area and to make recommendations on the encouragement, promoting and fostering of an intrapreneurial climate within these institutions.

The empirical study was conducted by means of a self-completion questionnaire administered to the personnel within the participating schools. The questionnaires were distributed to the principals in hard copy format. The questionnaire was constructed by Oosthuizen (2006) and adapted by Jordaan (2008) to measure the perceived success of the organisation as well. The completed questionnaires were analysed by the Statistical Consultation Services of the North-West University (Potchefstroom campus). Refer to Annexure A for an example of the questionnaire.

This chapter provides insight into the methods and procedures used in gathering the information for the empirical research of this study, the sample used (including the sampling method and size), the demographic structure of the sample, the method used for gathering information, the presentation and the discussion of the research results.

The mean will be used as a measure of central tendency and the standard deviation will be used to indicate the distribution of data around the mean. The reliability of the questionnaire will be assessed by calculating Cronbach Alpha coefficients. The p-values, obtained from independent t-tests, will be used to determine if there are any statistical significant differences between the means of selected demographical variables with regard to the constructs measuring entrepreneurial climate and the perceived success of the organisation. Furthermore, effect size values (d-values), as discussed by Ellis and Steyn (2003: 51-53) will be used to indicate if there is a
practical significant difference between any demographical variables regarding the constructs.

3.2 GATHERING OF DATA

Permission was obtained from the principals of the participating public secondary educational institutions under investigation to conduct this study and to disclose the results. The principals distributed the questionnaires to their personnel. The participants had to follow the instructions on the questionnaire, complete the survey by marking the appropriate box they selected with an “X”, and return the completed questionnaires to the principals in hard copy format. The completed questionnaires were collected from the principals on the predetermined date of return.

The following details regarding the gathering of data will be discussed in more detail:

3.2.1 Study population

The target population of this study was management at the participating public secondary educational institutions in the Klerksdorp and Orkney area which included top, middle and lower management. The entire population was thus targeted and included all 267 personnel members active in the participating institutions. The number of active personnel was supplied telephonically by the principles of the various institutions.

The reason for including all personnel members is due to that fact that all these members are faced with challenges on different levels which could be overcome by acting intrapreneurial. For the purpose of this study these personnel members were considered as part of management and divided into different management levels.

The levels of management of these institutions encompass:

- Top management (PL 5-3)
- Middle management (PL 2)
- Lower management (PL 1)
It was decided to target functional positions typically populated by skilled specialist as well as lower to middle management. This decision was based on the target population’s managerial exposure and the discretionary elements of its work description. The study population thus consisted of managers working in various functional departments such as being a principal, deputy principal, department principal, teacher or administrative manager. A category “other” was also included in the questionnaire to accommodate managers working in departments other than the listed departments.

3.2.2 Questionnaire (measuring instrument) used in this study

An existing questionnaire, developed by Oosthuizen (2006) and adapted by Jordaan (2008) was used to assess the perception of the study population regarding the 13 constructs measuring the entrepreneurial climate of the organisation. An additional section, measuring the perceived success of the organisation, was added by Jordaan to the existing questionnaire.

The questionnaire consisted of three sections, namely:

Section A: Assessment of the entrepreneurial climate

Section A’s purpose is to assess the current entrepreneurial climate in the organisation. The measuring instrument assessed the 13 constructs of a climate contributing to corporate entrepreneurship with 65 statements to be answered on the basis of a 5-point Likert type scale ranging from Strongly Disagree (1) to Strongly Agree (5). In respect of each statement, respondents have to indicate the degree to which they agree or disagree with a certain statement.
Section B: Measuring the success of the organisation

In Section B of the questionnaire, 17 items were identified to measure the perceived success of the organisation on the basis of a 5-point Likert type scale as in Section A. These 17 items determine the perceived success of the organisation in terms of financial measures, customer or market measures, process measures, people development measures and long term success measures. In respect of each item, respondents have to indicate the degree to which they agree or disagree with a certain statement.

Section C: Demographical information

Section C comprised of the gathering of demographical information where participants had to indicate their gender, race, age group, highest academic qualification, functional department and management level in which they work.

3.2.3 Confidentiality

Confidentiality was ensured to all participants. Respondents’ individual results were also handled anonymously and will not be disclosed.

3.2.4 Statistical analysis of data

The data collected was analysed by the Statistical Consultation Services of the North-West University (Potchefstroom-Campus) using Statistica (Statsoft, 2008) and SPSS (SPSS, 2008). Frequency distributions will be portrayed graphically in the form of tables and bar charts. The mean will be used as measure of central tendency and the standard deviation to indicate distributions or scattering of data. The internal consistency of the different constructs was assessed by calculating Cronbach Alpha coefficients.
Independent *t*-tests were performed to determine the statistical significant (*p*-values) relationship between the demographic variables and constructs measuring the intrapreneurial climate and variables measuring the perceived success of the organisation. Effect size values (d-values) were used to measure if differences between any of the demographic variables and the constructs of the questionnaire are of practical significance as discussed by Ellis and Steyn (2003: 51-53).

### 3.3 RESPONSES TO THE SURVEY

In table 3.1 a tabular presentation is given of the responses to the survey.

<table>
<thead>
<tr>
<th>Response type</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of questionnaires distributed</td>
<td>267</td>
<td>100.00%</td>
</tr>
<tr>
<td>Number of questionnaires returned</td>
<td>132</td>
<td>49.44%</td>
</tr>
<tr>
<td>Number of questionnaires discarded</td>
<td>11</td>
<td>4.12%</td>
</tr>
<tr>
<td>Number of questionnaires analysed</td>
<td>121</td>
<td>45.32%</td>
</tr>
</tbody>
</table>

A total of 267 questionnaires were sent to respondents in the various secondary educational institutions under investigation and 132 were returned by the cut off date of 17 August 2010. The response rate was thus 49.44%, but only 45.32% of the questionnaires distributed could be analysed. Eleven questionnaires had to be discarded since those respondents completed only certain sections of the questionnaire. Ultimately 121 questionnaires were analysed.

### 3.4 DEMOGRAPHIC INFORMATION OF RESPONDENTS

Section C of the survey questionnaire captured the demographical information of respondents where they had to indicate their gender, race, age group, highest academic qualification, functional department and management level.
3.4.1 Gender of respondents

Respondents indicated their gender by selecting a block termed “Male” or “Female” in section C of the questionnaire. The results are presented in table 3.2.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>28</td>
<td>23.14%</td>
</tr>
<tr>
<td>Female</td>
<td>93</td>
<td>76.86%</td>
</tr>
<tr>
<td>Total</td>
<td>121</td>
<td>100%</td>
</tr>
</tbody>
</table>

Of the 121 respondents, 28 (23.14%) were male respondents and 93 (76.86%) were female respondents.

3.4.2 Racial group classification of respondents

Respondents were requested to indicate their racial group. Table 3.3 indicates the frequency distribution per race group.

<table>
<thead>
<tr>
<th>Racial group</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>3</td>
<td>2.48%</td>
</tr>
<tr>
<td>White</td>
<td>117</td>
<td>96.69%</td>
</tr>
<tr>
<td>Coloured</td>
<td>1</td>
<td>0.83%</td>
</tr>
<tr>
<td>Indian</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Total</td>
<td>121</td>
<td>100%</td>
</tr>
</tbody>
</table>

The majority of the respondents are white (96.69%), three (2.48%) are black and only one respondent is coloured (0.83%). No other races participated in this study.
3.4.3 Age group classification of respondents

The purpose of this question was to understand the age distribution of respondents, seeing that a group closer to retirement (60 years and older) could have different views than the group of 29 years and younger. Respondents were requested to indicate their age group in one of the predetermined categories. The results of the age group classification of the participating respondents are presented in Table 3.4.

Table 3.4: Respondents by age group

<table>
<thead>
<tr>
<th>Age group</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ 29</td>
<td>33</td>
<td>27.27%</td>
</tr>
<tr>
<td>30-39</td>
<td>31</td>
<td>25.62%</td>
</tr>
<tr>
<td>40-49</td>
<td>32</td>
<td>26.45%</td>
</tr>
<tr>
<td>50-59</td>
<td>20</td>
<td>16.53%</td>
</tr>
<tr>
<td>60+</td>
<td>5</td>
<td>4.13%</td>
</tr>
<tr>
<td>Total</td>
<td>121</td>
<td>100%</td>
</tr>
</tbody>
</table>

The majority of the participating respondents fall in the age group category of 29 years and younger (27.27%) with the second largest group (26.45%) of the respondents in the age group between 40 and 49. The third largest age group was between 30 to 39 (25.62%) years old. These three age group categories amount to 79.34% of the total responses.

Only 16.53% of the respondents fall in the age group 50 to 59 and the smallest age group (4.13%) is in the age group over 60 years respectively. All respondents completed this question.

3.4.4 Highest academic qualification achieved by respondents

The purpose of this question was to determine the respondents’ highest academic qualification seeing that their educational background could play an important role in their ability to manage, operate and sustain an entrepreneurial climate within the organisation.
Table 3.5 presents the highest academic qualification achieved by the participating respondents.

Table 3.5: Highest academic qualification achieved by respondents

<table>
<thead>
<tr>
<th>Qualification group</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower than grade 12</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Grade 12</td>
<td>8</td>
<td>6.61%</td>
</tr>
<tr>
<td>National Certificate</td>
<td>3</td>
<td>2.48%</td>
</tr>
<tr>
<td>National Diploma</td>
<td>17</td>
<td>14.05%</td>
</tr>
<tr>
<td>Degree</td>
<td>23</td>
<td>19.01%</td>
</tr>
<tr>
<td>Post graduate degree</td>
<td>67</td>
<td>55.37%</td>
</tr>
<tr>
<td>Missing information</td>
<td>3</td>
<td>2.48%</td>
</tr>
<tr>
<td>Total</td>
<td>121</td>
<td>100%</td>
</tr>
</tbody>
</table>

Most of the respondents (55.37%) have a post graduate degree. From table 3.5 it can be derived that the three groups which make up the majority of the respondents, obtained a National Diploma (14.05%), a degree (19.01%) or a post graduate qualification (55.37%) respectively. Three respondents (2.48%) did not indicate his/her highest academic qualification.

3.4.5 Functional departments

Respondents from different functional departments deal with different types of challenges on a day-to-day basis. The different working conditions might have an effect on the presence or absence of an entrepreneurial climate. In table 3.6 the different functional departments are indicated.
Table 3.6: Department were respondents are working

<table>
<thead>
<tr>
<th>Functional department</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal</td>
<td>1</td>
<td>0.83%</td>
</tr>
<tr>
<td>Deputy principal</td>
<td>4</td>
<td>3.31%</td>
</tr>
<tr>
<td>Department principal</td>
<td>12</td>
<td>9.92%</td>
</tr>
<tr>
<td>Teacher</td>
<td>96</td>
<td>79.34%</td>
</tr>
<tr>
<td>Administrative</td>
<td>7</td>
<td>5.79%</td>
</tr>
<tr>
<td>Missing information</td>
<td>1</td>
<td>0.83%</td>
</tr>
<tr>
<td>Total</td>
<td>121</td>
<td>100%</td>
</tr>
</tbody>
</table>

The largest functional department within the participating public secondary education institutions were teachers (79.34%). The other departments included the principals (0.83%), deputy principals (3.31%), department principals (9.92%) and administrative personnel (5.79%). Only one of the respondents (0.83%) did not respond to this question.

3.4.6 Distribution of management level

The purpose of including the management level in the demographical data, was to determine if managers at different levels have different perceptions about the entrepreneurial activity within the organisation. For the purpose of this study, participating managers were classified as being top (PL 5-3), middle (PL2) or lower (PL1) managers. Table 3.7 presents the management level of the participating respondents.
Table 3.7: Management level of respondents

<table>
<thead>
<tr>
<th>Management level</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top management (PL 5-3)</td>
<td>6</td>
<td>4.96%</td>
</tr>
<tr>
<td>Middle management (PL 2)</td>
<td>16</td>
<td>13.22%</td>
</tr>
<tr>
<td>Lower management (PL1)</td>
<td>84</td>
<td>69.42%</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>2.48%</td>
</tr>
<tr>
<td>Missing information</td>
<td>12</td>
<td>9.92%</td>
</tr>
<tr>
<td>Total</td>
<td>121</td>
<td>100%</td>
</tr>
</tbody>
</table>

The highest number of respondents (69.42%) who participated in this study, fall within the lower management level. Only 4.96% of the respondents were in the top management level, with 13.22% in the middle management level. Twelve respondents (9.92%) did not indicate their management level.

3.5 RELIABILITY OF THE QUESTIONNAIRE

To be able to assess the internal consistency between the items in the research instrument, Cronbach Alpha coefficients were calculated. A Cronbach Alpha coefficient is based on the average correlation of variables within a test (Struwig & Stead, 2004: 132). The larger the value of the Cronbach Alpha coefficient, the higher the internal consistency and the more reliable the scale used (Struwig & Stead, 2004: 133). The closer the Cronbach Alpha coefficient is to 1.0 the greater the internal consistency of the items in the scale. According to Nunnally and Bernstein (1994: 265), the Cronbach Alpha coefficient should be equal or greater than 0.7 for an acceptable reliability. Field (2005: 688) notes that questionnaires designed to measure knowledge and intelligence should have Cronbach alphas above the customary cut-off value of 0.7, but concedes that questionnaires designed to measure attitudes may have alphas lower than 0.7 and still have acceptable levels of reliability.

Table 3.8 indicates the Cronbach Alpha coefficients of the constructs measuring the entrepreneurial climate and perceived success within the organisation.
Table 3.8: Cronbach Alpha coefficients of constructs (ranked in order of value size)

<table>
<thead>
<tr>
<th>No</th>
<th>CONSTRUCT</th>
<th>Cronbach Alpha coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CONSTRUCTS MEASURING ENTREPRENEURIAL CULTURE</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Appropriate rewards and recognition</td>
<td>0.875</td>
</tr>
<tr>
<td>10</td>
<td>Resource availability and accessibility</td>
<td>0.868</td>
</tr>
<tr>
<td>9</td>
<td>Empowered teams</td>
<td>0.841</td>
</tr>
<tr>
<td>3</td>
<td>Sponsors</td>
<td>0.807</td>
</tr>
<tr>
<td>1</td>
<td>Entrepreneurial leadership</td>
<td>0.804</td>
</tr>
<tr>
<td>11</td>
<td>Continuous and cross-functional learning</td>
<td>0.781</td>
</tr>
<tr>
<td>12</td>
<td>Customer orientation</td>
<td>0.765</td>
</tr>
<tr>
<td>7</td>
<td>Vision and strategic intent</td>
<td>0.751</td>
</tr>
<tr>
<td>4</td>
<td>Tolerance of risks, mistakes and failure</td>
<td>0.741</td>
</tr>
<tr>
<td>5</td>
<td>Innovation and creativity</td>
<td>0.729</td>
</tr>
<tr>
<td>13</td>
<td>Flat organisational structure</td>
<td>0.726</td>
</tr>
<tr>
<td>2</td>
<td>Management support</td>
<td>0.702</td>
</tr>
<tr>
<td>8</td>
<td>Discretionary time and work</td>
<td>0.696</td>
</tr>
<tr>
<td></td>
<td>PERCEIVED SUCCESS OF THE ORGANISATION</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Financial measures</td>
<td>0.856</td>
</tr>
<tr>
<td>3</td>
<td>Process measures</td>
<td>0.844</td>
</tr>
<tr>
<td>2</td>
<td>Customer/market measures</td>
<td>0.831</td>
</tr>
<tr>
<td>4</td>
<td>People development</td>
<td>0.808</td>
</tr>
<tr>
<td>5</td>
<td>Future success</td>
<td>0.635</td>
</tr>
</tbody>
</table>

The results as indicated in table 3.8 suggest that the research instrument used in this study to access the intrapreneurial climate within the public secondary educational institutions under investigation, has acceptable reliability, since only one of the constructs, i.e. **Discretionary time and work** (0.696), had a lower Cronbach Alpha coefficient than 0.7. For the purpose of this study, this construct will be included in the research as confirmed by Field’s (2005: 688) view and due to the fact that it is so close to 0.7.
In terms of the constructs measuring the perceived success of the organisation, one of the variables i.e. **Future success** (0.635), had a lower Cronbach Alpha coefficient than 0.7. For the purpose of this study, the **Future success** variable will also be included as confirmed by Field’s (2005: 688) view.

## 3.6 ASSESSMENT OF THE INTRAPRENEURIAL CLIMATE

### 3.6.1 Variables measuring intrapreneurial climate

After the reliability of the statements related to the 13 constructs has been established, the results can be assessed.

As previously mentioned, a Likert scale was used to evaluate the 65 statements. In respect of each statement, respondents had to indicate their degree of disagreement (1) or agreement (5) with the statement’s content. A higher number representing agreement with the statement suggests that the statement is perceived to be untrue and a low number representing disagreement with the statement suggests that the statement is perceived to be true.

In a normal distribution, most of the values lie within an interval of plus and minus one standard deviation above and below the mean. The more distributed the data, the larger the standard deviation (Levine, Stephan, Krehbiel & Berenson, 2006: 118). The results of the means analysis for the 13 constructs are presented in table 3.9.
Table 3.9: Intrapreneurial climate survey results

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>n</th>
<th>( \bar{x} )</th>
<th>s</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>121</td>
<td>4.023</td>
<td>0.740</td>
</tr>
<tr>
<td>2</td>
<td>121</td>
<td>3.758</td>
<td>0.688</td>
</tr>
<tr>
<td>3</td>
<td>121</td>
<td>3.668</td>
<td>0.807</td>
</tr>
<tr>
<td>4</td>
<td>121</td>
<td>3.538</td>
<td>0.741</td>
</tr>
<tr>
<td>5</td>
<td>121</td>
<td>3.754</td>
<td>0.731</td>
</tr>
<tr>
<td>6</td>
<td>121</td>
<td>3.100</td>
<td>1.043</td>
</tr>
<tr>
<td>7</td>
<td>121</td>
<td>3.715</td>
<td>0.763</td>
</tr>
<tr>
<td>8</td>
<td>121</td>
<td>3.686</td>
<td>0.751</td>
</tr>
<tr>
<td>9</td>
<td>121</td>
<td>3.669</td>
<td>0.783</td>
</tr>
<tr>
<td>10</td>
<td>121</td>
<td>3.100</td>
<td>0.957</td>
</tr>
<tr>
<td>11</td>
<td>121</td>
<td>3.825</td>
<td>0.774</td>
</tr>
<tr>
<td>12</td>
<td>121</td>
<td>3.724</td>
<td>0.724</td>
</tr>
<tr>
<td>13</td>
<td>121</td>
<td>3.713</td>
<td>0.739</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>121</strong></td>
<td><strong>3.636</strong></td>
<td><strong>0.788</strong></td>
</tr>
</tbody>
</table>

The average mean of all constructs as evaluated by managers was \( \bar{x} = 3.636 \), indicating that the occurrence of the intrapreneurial constructs within the public secondary educational institutions under investigation, is more than 3.636 out of five on the Likert scale. It seems that the constructs for an entrepreneurial climate has a strong presence, but there are still room for improvement and enhancement. The average standard deviation was 0.788.

The results of the survey are graphically represented in a clustered bar chart in figure 3.1 that compare the values across the constructs ranked from the highest to lowest mean score.
The lowest agreement was found with statements indicating the presence of three of the 13 constructs including Resource availability and accessibility ($\bar{x} = 3.100$), Appropriate rewards and recognition ($\bar{x} = 3.100$) and Tolerance of risks, mistakes and failure ($\bar{x} = 3.538$), evaluated means below the average mean ($\bar{x} = 3.636$). All three these constructs, however still had a mean above three out of five.

The other 10 constructs being Entrepreneurial leadership ($\bar{x} = 4.023$), Continuous and cross-functional learning ($\bar{x} = 3.825$), Management support ($\bar{x} = 3.758$), Innovation and creativity ($\bar{x} = 3.754$), Customer orientation ($\bar{x} = 3.724$), Vision and strategic intent ($\bar{x} = 3.715$), Flat organisational structure ($\bar{x} = 3.713$), Discretionary time and work ($\bar{x} = 3.686$), Empowered teams ($\bar{x} = 3.669$) and Sponsors ($\bar{x} = 3.668$) evaluated had a mean ranked higher than the average mean of 3.636 indicating a higher rate of agreement.
The two constructs with the highest mean (strongest agreement to the presence thereof) were *Entrepreneurial leadership* ($\bar{x} = 4.023$) and *Continuous and cross-functional learning* ($\bar{x} = 3.825$).

### 3.6.2 Variables measuring the perceived success of the organisation

The results of the mean analysis of the variables determining the perceived success of an organisation are presented in table 3.10.

#### Table 3.10: Perceived organisational success survey results

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>n</th>
<th>$\bar{x}$</th>
<th>s</th>
</tr>
</thead>
<tbody>
<tr>
<td>1  Financial measures</td>
<td>121</td>
<td>3.436</td>
<td>1.021</td>
</tr>
<tr>
<td>2  Customer/market measures</td>
<td>121</td>
<td>3.951</td>
<td>0.712</td>
</tr>
<tr>
<td>3  Process measures</td>
<td>121</td>
<td>3.906</td>
<td>0.866</td>
</tr>
<tr>
<td>4  People development</td>
<td>121</td>
<td>3.766</td>
<td>0.988</td>
</tr>
<tr>
<td>5  Future success</td>
<td>121</td>
<td>3.537</td>
<td>1.011</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>121</strong></td>
<td><strong>3.719</strong></td>
<td><strong>0.920</strong></td>
</tr>
</tbody>
</table>

The average mean of all constructs regarding the perceived organisational success as evaluated by managers was $\bar{x} = 3.719$. The average standard deviation was 0.920.

The results of the survey are graphically represented in a clustered bar chart in figure 3.2 that compare the values across the constructs ranked from the highest to lowest mean score.
Three of the five variables including **Customer/market measures** ($\bar{x} = 3.951$), **Process measures** ($\bar{x} = 3.906$) and **People development** ($\bar{x} = 3.766$), evaluated had a mean above the average mean ($\bar{x} = 3.719$) indicating a relative strong presence regarding the perceived success of the organisation. However, all the variables measuring the perceived organisational success were reported by respondents to have a mean above three.

The construct **Financial measures** ($\bar{x} = 3.436$) have the lowest average score indicating a lower agreement to the statements determining the presence thereof, but are still above the being three out of five on the Likert scale. **Customer/market measures** ($\bar{x} = 3.951$), has the highest average score (strongest agreement to the presence thereof).
The following is an explanation of the variables determining the respondents’ perceived success of the organisation:

**Financial measures** \( (\bar{x} = 3.436; s = 1.021) \). Some of the managers were of the opinion that the organisation has experienced growth in profits, turnover and market share over the past few years, while others did not fully agree.

**Customer/Market measures** \( (\bar{x} = 3.951; s = 0.712) \). Managers pointed out that the organisation take good care of their customers and that the organisation has a high customer retention rate keeping customers’ needs in mind.

**Process measures** \( (\bar{x} = 3.906; s = 0.866) \). Managers were of the opinion that the competitive position of the organisation has improved over the past few years due to the improvement of the effectiveness and efficiency of the organisation.

**People development** \( (\bar{x} = 3.766; s = 0.988) \). Managers indicated that although employees are not always viewed as the most valuable asset of the organisation, they are fairly committed to the organisation.

**Future success** \( (\bar{x} = 3.537; s = 1.011) \). Some of the managers are positive about the future success of the various institutions under investigation, while others don’t fully agree with the statements associated with this construct.

### 3.7 Relationship between Demographic Variables and Intrapreneurial Constructs Including the Perceived Success of the Organisation

The independent (two-sample) \( t \)-test was used to test for statistical significance (\( p \)-values). For the purpose of this study, the simple conservative approach was applied and the \( t \)-test that doesn’t assume equal variances was used (Elliott & Woodward, 2007: 59).
A small $p$-value (for example smaller than 0.05), indicates statistical significance (Ellis & Steyn, 2003: 51). However, Ellis and Steyn (2003: 51) caution against the disadvantage of using the $p$-value seeing that larger sample sizes tend to result in smaller $p$-values without necessarily indicating statistical significance in practice.

In order to overcome this, the $d$-value was also calculated. For the purpose of this study, the $d$-values also known as effect sizes will be interpreted according to Cohen’s’ guidelines with: Small effect ($d = 0.2$), medium effect ($d = 0.5$) and large effect ($d = 0.8$). Results with medium effects can be considered as visible effects and with $d \geq 0.8$ as practically significant, seeing that it is the result of having a large effect (Field, 2005: 32; Ellis & Steyn, 2003: 51-53).

The relationship between selected demographical variables and the 13 constructs measuring the intrapreneurial climate of the organisation, as well as the relationship between the selected demographical variables and the perceived success of the organisation were therefore tested with an independent $t$-test (statistical significance) and effect size (practical significance).

### 3.7.1 Relationship between selected demographic variables and the intrapreneurial constructs

The purpose and focus of the analysis to determine the relationship between selected demographic variables and entrepreneurial constructs is to determine if there exists a significant difference between the evaluations based on the mean score for example male and female respondents with regard to a specific construct.

The demographic data will be analysed as follows:

- Gender: Male and female.
- Management level: Top and middle management versus lower management.
3.7.1.1 Relationship between intrapreneurial constructs and the gender of respondents

Table 3.11 indicates the relationship between the 13 constructs measuring entrepreneurial climate and the demographic variable gender, with mean ($\bar{x}$), standard deviation (s), t-test (p-value) and effect sizes (d-value).

Table 3.11: Relationship between the constructs measuring intrapreneurial climate and the demographic variable gender

<table>
<thead>
<tr>
<th>Construct</th>
<th>Male</th>
<th>Female</th>
<th>Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>$\bar{x}$</td>
<td>s</td>
</tr>
<tr>
<td>Leadership</td>
<td>28</td>
<td>3.764</td>
<td>0.835</td>
</tr>
<tr>
<td>Support</td>
<td>28</td>
<td>3.655</td>
<td>0.696</td>
</tr>
<tr>
<td>Sponsors</td>
<td>28</td>
<td>3.629</td>
<td>0.742</td>
</tr>
<tr>
<td>Tolerance for risk</td>
<td>28</td>
<td>3.564</td>
<td>0.740</td>
</tr>
<tr>
<td>Innovation</td>
<td>28</td>
<td>3.700</td>
<td>0.814</td>
</tr>
<tr>
<td>Rewards</td>
<td>28</td>
<td>3.014</td>
<td>1.055</td>
</tr>
<tr>
<td>Vision</td>
<td>28</td>
<td>3.671</td>
<td>0.837</td>
</tr>
<tr>
<td>Discretionary time</td>
<td>28</td>
<td>3.629</td>
<td>0.744</td>
</tr>
<tr>
<td>Empowered teams</td>
<td>28</td>
<td>3.513</td>
<td>0.865</td>
</tr>
<tr>
<td>Resources</td>
<td>28</td>
<td>3.032</td>
<td>0.997</td>
</tr>
<tr>
<td>Continuous learning</td>
<td>28</td>
<td>3.807</td>
<td>0.709</td>
</tr>
<tr>
<td>Customer orientation</td>
<td>28</td>
<td>3.636</td>
<td>0.630</td>
</tr>
<tr>
<td>Flat structure</td>
<td>28</td>
<td>3.623</td>
<td>0.673</td>
</tr>
</tbody>
</table>

One of the thirteen constructs, **Entrepreneurial leadership** (p-value = 0.034), obtained a p-value smaller than 0.05. This indicates that females are statistically significantly more positive than males with regard to the construct **Entrepreneurial leadership**.

None of the other p-values were smaller than 0.05 indicating that no statistically significant correlation between the gender of respondents and these 12 constructs could be found.
When taking the $d$-values into account it is clear that the **Entrepreneurial leadership** construct had a small to medium effect regarding practical significance since this construct had a $d$-value of 0.40 which is higher than 0.20 but smaller than 0.50.

The other 12 constructs had $d$-values of 0.24 and smaller indicating only a small to almost no effect. It therefore could be stated that gender has an insignificant effect on the rating of these 12 construct tested.

There is, however, also no practical significant difference ($d < 0.8$) in the mean values between the perceptions of males and females with regard to the 13 constructs measuring the intrapreneurial climate.

### 3.7.1.2 Relationship between intrapreneurial constructs and the management levels of respondents

Table 3.12 indicates the relationship between the 13 constructs measuring intrapreneurial climate and the demographic variable management level (top management and middle management; lower management), with mean ($\bar{x}$), standard deviation ($s$), $t$-test ($p$-value) and effect sizes ($d$-value).
Table 3.12: Relationship between the construct measuring intrapreneurial climate and the demographic variable management level

<table>
<thead>
<tr>
<th>Construct</th>
<th>MANAGEMENT LEVEL</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Top &amp; Middle</td>
<td>Lower</td>
<td>Comparison</td>
<td></td>
<td></td>
</tr>
<tr>
<td>n   [ \bar{x} ] [ s ]</td>
<td>n   [ \bar{x} ] [ s ]</td>
<td>p</td>
<td>d</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Leadership</td>
<td>22   4.291 0.534</td>
<td>84   3.946 0.800</td>
<td>0.059 0.43</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Support</td>
<td>22   3.980 0.645</td>
<td>84   3.720 0.714</td>
<td>0.125 0.36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Sponsors</td>
<td>22   4.091 0.638</td>
<td>84   3.555 0.823</td>
<td>0.005 0.65</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Tolerance for risk</td>
<td>22   3.773 0.674</td>
<td>84   3.468 0.752</td>
<td>0.087 0.41</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Innovation</td>
<td>22   3.955 0.728</td>
<td>84   3.704 0.739</td>
<td>0.158 0.34</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Rewards</td>
<td>22   3.418 0.864</td>
<td>84   2.984 1.091</td>
<td>0.087 0.40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Vision</td>
<td>22   3.918 0.727</td>
<td>84   3.652 0.742</td>
<td>0.135 0.36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Discretionary time</td>
<td>22   3.955 0.662</td>
<td>84   3.634 0.762</td>
<td>0.074 0.42</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 Empowered teams</td>
<td>22   3.925 0.768</td>
<td>84   3.600 0.783</td>
<td>0.085 0.42</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 Resources</td>
<td>22   3.382 0.881</td>
<td>84   3.023 0.971</td>
<td>0.119 0.37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 Continuous learning</td>
<td>22   4.182 0.644</td>
<td>84   3.729 0.803</td>
<td>0.016 0.56</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 Customer orientation</td>
<td>22   4.018 0.653</td>
<td>84   3.624 0.742</td>
<td>0.025 0.53</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13 Flat structure</td>
<td>22   3.902 0.746</td>
<td>84   3.700 0.737</td>
<td>0.256 0.27</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Three of the 13 constructs including Sponsors (\(p\)-value = 0.005), Continuous and cross-functional learning (\(p\)-value = 0.016) and Customer orientation (\(p\)-value = 0.025) obtained \(p\)-values smaller than 0.05 which indicates that top and middle management are relative significantly more positive than lower management with regard to the construct Sponsors.

The other 10 constructs’ \(p\)-values were bigger than 0.05, indicating that one management level is not statistically more positive than the other levels regarding any of these 10 constructs measuring an intrapreneurial climate.

Taking the \(d\)-values into account, three constructs including Sponsors (\(d\)-value = 0.65), Continuous and cross-functional learning (\(d\)-value = 0.56) and Customer orientation (\(d\)-value = 0.53) had a medium effect regarding the practical significance.
The other 10 construct’s effect sizes had a small to medium effect showing little statistical significance. The lowest \( d \)-value regarding these ten constructs is 0.27 for the construct Flat organisational structure and the highest \( d \)-value is 0.43 for the construct Entrepreneurial leadership which is closer to a medium effect.

There is, however, also no practical significant difference \((d < 0.8)\) in the mean values between the perceptions of top and middle versus lower management levels with regard to the 13 constructs measuring the intrapreneurial climate.

### 3.7.2 Relationship between demographic variables and the perceived success factors of an organisation

#### 3.7.2.1 Relationship between perceived success factors and the gender of respondents

Table 3.13 indicates the relationship between the factors measuring the perceived success of the organisation and the demographic variable gender, with mean \((\bar{x})\), standard deviation \((s)\), \(t\)-test \((p\)-value\) and effect sizes \((d\)-value\).

<table>
<thead>
<tr>
<th>GENDER</th>
<th>Financial</th>
<th>Customer/market</th>
<th>Process</th>
<th>People development</th>
<th>Future success</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>(\bar{x})</td>
<td>s</td>
<td>n</td>
<td>(\bar{x})</td>
</tr>
<tr>
<td>Male</td>
<td>28</td>
<td>2.988</td>
<td>1.146</td>
<td>92</td>
<td>3.572</td>
</tr>
<tr>
<td>Female</td>
<td>92</td>
<td>3.572</td>
<td>0.945</td>
<td>93</td>
<td>4.006</td>
</tr>
</tbody>
</table>

Only one of the variables, Financial measures \((p\)-value = 0.007\) obtained a \(p\)-value smaller than 0.05. This indicates that females are statistically significantly more positive than men regarding the Financial measures variable measuring the perceived success of the organisation.
When using the $d$-values, one of the constructs, **Financial measures** ($d$-value = 0.51) had a medium effect regarding the practical significance. Four of the five constructs’ effect sizes are too small to be of any practical significance.

There is, however, thus no practical significant difference ($d < 0.8$) in the mean values between the perceptions of males and females with regard to the 5 variables measuring the perceived success of the organisation.

### 3.7.2.2 Relationship between perceived success factors and the management level of respondents

Table 3.14 indicates the relationship between the factors measuring the perceived success of the organisation and the demographic variable management level (top management; middle management and lower management), with mean ($\bar{x}$), standard deviation ($s$), $t$-test ($p$-value) and effect sizes ($d$-value).

**Table 3.14: Relationship between the factors measuring the perceived organisational success and the demographic variable management level**

<table>
<thead>
<tr>
<th>Factor</th>
<th>Top &amp; Middle</th>
<th>Lower</th>
<th>Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$n$  $\bar{x}$  $s$</td>
<td>$n$  $\bar{x}$  $s$</td>
<td>$p$</td>
</tr>
<tr>
<td>1 Financial</td>
<td>22  3.394  1.189</td>
<td>83  3.474  0.985</td>
<td>0.747</td>
</tr>
<tr>
<td>2 Customer/market</td>
<td>22  4.136  0.610</td>
<td>84  3.919  0.728</td>
<td>0.201</td>
</tr>
<tr>
<td>3 Process</td>
<td>22  4.000  0.720</td>
<td>84  3.925  0.873</td>
<td>0.710</td>
</tr>
<tr>
<td>4 People develop</td>
<td>22  3.924  0.931</td>
<td>84  3.722  1.008</td>
<td>0.398</td>
</tr>
<tr>
<td>5 Future success</td>
<td>22  3.636  0.902</td>
<td>84  3.524  1.026</td>
<td>0.640</td>
</tr>
</tbody>
</table>

None of the $p$-values are smaller than 0.05. This indicates that top and middle management levels are not statistically significantly more positive than lower management levels regarding any of the factors indicating perceived success of the organisation.
When taking the $d$-values into account, the variable **Customer/market measures** (0.30) only had a small to medium effect. There is, however, thus no practical significant difference ($d < 0.8$) in the mean values between the perceptions of the different management levels with regard to the 5 variables measuring the perceived success of the organisation.

### 3.8 SUMMARY

The empirical study as discussed in this chapter used a questionnaire to investigate the 13 constructs of an intrapreneurial climate in an organisation, as well as the five variables evaluating the perceived success of an organisation with the focus to attempt to assess the intrapreneurial climate within the various public secondary educational institutions. The questionnaire consisted of three sections. Section A consisted of the assessment of the entrepreneurial climate, Section B measured the perceived success of the organisation and Section C gathered the respondents’ demographical information.

The target population of this study was management at the participating public secondary educational institutions in the Klerksdorp and Orkney area which included top, middle and lower management. The entire population was thus targeted and included all 267 personnel members active in the participating institutions. The number of active personnel was supplied telephonically by the principles of the various institutions.

The demographic information of the respondents were analysed in terms of gender (28 males and 93 females), race (3 black, 117 white and 1 coloured), age group ($\leq 29 = 33; 30-39 = 31; 40-49 = 32; 50-59 = 20; 60+ = 5$), highest academic qualification (67 of respondents obtained a post graduate degree and 107 obtained a degree above a national certificate level), functional departments (most of the respondents were teachers 96 thus 79.34%) and distribution of management levels (the largest group of employees were lower managers, 69.42%).
Cronbach Alpha coefficient values were used to determine the internal consistency and reliability among items in the questionnaire. After the results have proven to have an acceptable reliability, the mean and standard deviation for responses on each construct were calculated. Test of statistical and practical significance were also conducted to quantify the significance of observe influences by demographic variables on results.

All 13 constructs testing for the presence of an intrapreneurial climate as well as the five variables testing the perceived success of the organisation were found to be acceptable based on their Cronbach Alpha coefficients.

The average mean calculated for the study was $\bar{x} = 3.636$ and the standard deviation was 0.788. Three of the 13 constructs, Tolerance of risks, mistakes and failure $(\bar{x} = 3.538)$, Appropriate rewards and recognition $(\bar{x} = 3.100)$ and Resource availability and accessibility $(\bar{x} = 3.100)$, evaluated had a mean below (low agreement) the average mean $(\bar{x} = 3.636)$. The two constructs with the highest mean were Entrepreneurial leadership $(\bar{x} = 4.023)$ and Continuous and cross-functional learning $(\bar{x} = 3.825)$ had a mean above (strongest agreement) the average mean.

The average mean of all variables regarding the perceived organisational success as evaluated by managers was $\bar{x} = 3.719$. Three of the five variables Customer/market measures $(\bar{x} = 3.951)$, Process measures $(\bar{x} = 3.906)$ and People development $(\bar{x} = 3.766)$, evaluated had a mean above the average mean $(\bar{x} = 3.719)$ indicating a relative strong presence of an intrapreneurial climate. All of the five variables measuring the perceived organisational success were reported by respondents to have a mean above three.
A further analysis was conducted to determine the relationship that exist between selected demographic variables and responses regarding the 13 corporate entrepreneurial constructs as well as the variables measuring the perceived organisational success was conducted. The effect of the demographic variables, gender and management level was analysed and various small to moderate effect sizes were determined. The effect sizes in most of the other cases were too small to be of any practical significance.

In the next chapter conclusions will be drawn from the findings discussed in this chapter and recommendations will be made on how to foster an intrapreneurial climate within public secondary educational institutions.
CHAPTER 4

CONCLUSIONS AND RECOMMENDATIONS

4.1 INTRODUCTION

The purpose of this final chapter on the assessment of intrapreneurship in public secondary educational institutions is to discuss the implications and draw conclusions from the findings of the empirical study as presented in chapter 3.

This chapter will mainly consist of two sections, keeping the primary and secondary objectives in mind as formulated in chapter 1.

The first section will focus on the conclusions drawn from the results of the literature study as well as the findings of the empirical study. The relevance of the relationships between demographic variables such as gender, race, age group, highest academic qualification, functional department and managerial level as well as the constructs of an intrapreneurial climate and perceived organisational success will also be illustrated.

The second section of the chapter will contain proposals and guidelines on the fostering of an intrapreneurial climate within public secondary educational institutions. The aim will be to equip these institutions to move from their current state to a more desirable future state characterised by an environment conducive to intrapreneurial activity that will improve their competitive position within the market.

Lastly, adherence to the objectives of the study is determined and areas subject to further research are proposed.
4.2 CONCLUSIONS

The conclusions will follow the basic structure of the questionnaire, and will firstly address the demographic information, then the evaluation of the Cronbach Alpha coefficient to establish the reliability of the measurement used for the assessment of the constructs of an entrepreneurial climate and the perceived organisational success will be discussed. A discussion on the current entrepreneurial climate according to the constructs and the perceived organisational success will follow and finally the relationship between selected demographic variables and the constructs tested will be focused on.

4.2.1 Demographic information

Demographic information of respondents was obtained regarding gender, race, age group, highest academic qualification, functional departments and management level. From the results of the questionnaire, the following conclusions about demographical information can be drawn:

- The gender representation in the public secondary educational institutions under investigation is uneven, with approximately two thirds (76.86%) identified as female, and one third (23.14%) as male.
- Most of the personnel, who responded to the item on race, are white (96.69%).
- There is an almost equal distribution between the number of respondents regarding the age of managers with 27.27% in the age group younger than 29 years, 25.62% between the ages 30-39 and 26.45% in the age group between 40 and 49. It could be advantageous for the organisation, seeing that younger managers are not always as set in their ways as older managers but on the other hand, older managers could have more experience which could be carried over to the younger generation of managers.
- The largest group (55.37%) of respondents have a post graduate degree, with a smaller portion of respondents having a degree (19.01%) or National Diploma (14.05%).
Most of the respondents were teachers (79.34%). The other categories comprised of 0.83% (Principal), 3.31% (Deputy principal), 9.92% (Department principal) and 5.79% (Administrative).

The largest group of respondents (69.42%) were on a lower management level which is expected of any organisation, where the total number of lower managers is more than top and senior managers.

4.2.2 Reliability of the questionnaire used

Taking the results of the questionnaire measuring the 13 intrapreneurial climate constructs into account, only one of the constructs, Discretionary time and work (0.696), had a lower Cronbach Alpha coefficient than 0.7 but the coefficient is still very close to 0.7. In terms of the constructs measuring the perceived success of the organisation, only one of the variables, Future success (0.635), had a lower Cronbach Alpha coefficient than 0.7. Both the Discretionary time and work construct and Future success variable were included in this study based on Field’s (2005: 688) view. Statements used to test this construct and variable could, however be investigated to improve the internal consistency of the questionnaire.

The results as indicated in table 3.8 suggest thus that the research instrument used in this study to access the intrapreneurial climate within the public secondary educational institutions under investigation, has an acceptable reliability, since five of the constructs have a Cronbach Alpha coefficient of higher than 0.8 and 12 of the constructs had Cronbach Alpha coefficients higher than 0.7. Four of the five variables measuring the perceived organisational success also had coefficients higher than 0.8.
4.2.3 Assessment of the intrapreneurial climate

An average score of $\bar{x} = 3.000$ on the five point Likert scale was used as a benchmark for the purpose of making recommendations in this study seeing that no norms currently exist and all results can be seen as relative.

The average mean of all independent constructs as evaluated by managers was 3.636 which can be regarded as a “just above average” score in terms of the five point Likert scale and predetermined benchmark average mean of 3.000 used.

The mean scores of $\bar{x} < 3.000$ are thus interpreted as being indicative of the perceptions of managers that certain constructs have lower than average prevalence in public secondary educational institutions and therefore indicates areas that require improvement and development. On the other hand mean scores of $\bar{x} > 3.000$ are interpreted as being indicative of a higher than average prevalence, identifying areas that could be built on to further improve the intrapreneurial climate within the organisation.

Taking all the results discussed in chapter 3 into account it is clear that the current climate in the public secondary educational institutions are averagely entrepreneurially focused. Ten of the 13 constructs evaluated had a mean ranked higher than the average mean of $\bar{x} = 3.636$ which for the purpose of this study, indicates a relative strong prevalence of corporate entrepreneurship constructs within public secondary educational institutions seeing that all these constructs had a mean closer to four than to three which indicates a slight agreement with the relevant items.

Conclusions for each individual construct are discussed in the order from the construct that obtained the highest mean rating to the construct that received the lowest mean rating.
4.2.3.1 Entrepreneurial leadership

This construct received the highest rating with $\bar{x} = 4.023$. It seems that, from the respondents’ perspective, leaders take a long-term and opportunity-obsessed view of the organisation while inspiring the workforce to think and act innovative. Most of the respondents agreed that the leaders lead by example and personnel are willing to follow them as it is also clear that management challenges the status quo. The organisation’s value system is furthermore also well known.

An intrapreneurial climate would be rejuvenated through this style of leadership, because it leads to rousing employees at any level to strongly venture to discover and pursue opportunities for growth (Cohen, 2004:16).

4.2.3.2 Continuous and cross-functional learning

**Continuous and cross-functional learning** have the second highest rating with a mean score of $\bar{x} = 3.825$.

Respondents agreed to some extend with the statement that people are keen to share knowledge within the organisation and that personnel are encouraged to talk to their colleagues in other departments of the organisation about new ideas. Employees are encouraged to stay abreast of developments within their functional fields and to share their knowledge with others. The organisation seems to develop their employees, and employees are allowed to attend workshops and seminars to keep them abreast of developments.

4.2.3.3 Management support

This construct obtained the third highest rating score of $\bar{x} = 3.758$. Respondents are of the perception that management do encourage employees to develop new ideas that could have a positive influence on the organisation and the creation of these innovative ideas is a fairly regular occurrence in the organisation. Respondents also agreed that top management is receptive and supportive of their suggestions and ideas.
4.2.3.4 Innovation and creativity

The construct, **Innovation and creativity**, obtained the fourth highest mean of $\bar{x} = 3.754$. Respondents fairly agreed that they are provided with the chance to be creative and try out new methods of conducting their jobs and that their organisations are willing to quickly implements these improved work methods. Training is provided and allowed to ensure that innovative new processes are implemented effectively and employees are inspired to think "out-of-the-box" with the focus to be more innovative.

4.2.3.5 Customer orientation

This construct obtained a mean of $\bar{x} = 3.724$ and was ranked as the fifth highest score. Respondents tend to agree that customers are treated as very important stakeholders and that product and service innovations are driven by a strong customer orientation. Respondents are thus of the opinion that resources and innovations are aimed at customer satisfaction and that customer feedback is regularly obtained. It also seems as if resources are spent in determining customer needs and satisfaction.

This is considered to have a positive impact on the intrapreneurial climate of the organisation seeing that customers are the reason for the organisations’ existence and customer satisfaction is the only path to financial sustainability and a competitive advantage for the organisation (Cummings & Worley, 2005:281).
4.2.3.6 Vision and strategic intent

The **Vision and strategic intent** construct, obtained the sixth highest score with a mean of $\bar{x} = 3.715$. This means that employees are well informed about the organisational vision and strategies. Respondents agreed that management has made effort in clarifying what the vision and strategy of the organisation is as well as its purpose and relevance to personnel in their own specific departments. The vision and strategies of the organisation can assist employees in setting priorities. There is also an average buy-in from employees into the value system of the organisation.

4.2.3.7 A flat organisational structure

Respondents rated this construct at number seven, with an average mean of $\bar{x} = 3.713$. Employees agreed that their key performance areas are being determined in co-operation with their supervisors and that they are given ample opportunity for independence, freedom and autonomy in deciding on how they do their work. Respondent are also of the opinion that personnel need to be guided to some degree when making decisions about their work, and that the degree of hierarchical control do exist in their organisations.

4.2.3.8 Discretionary time and work

With a mean score of $\bar{x} = 3.686$ the construct, discretionary time and work, is ranked eighth of the 13 constructs evaluating the entrepreneurial climate, just above the average mean of $\bar{x} = 3.636$.

Employees agreed to some extend that although no one is forced to develop new ideas and methods within the organisation, an employee with a good idea is given time to develop that idea within working hours and an individual who has initiated a new idea is allowed to carry it through to completion or implementation. The creativity of personnel is also to some level enhanced by allowing employees time during working hours to explore new ideas and by providing ample opportunities for leaning and growth.
4.2.3.9 Empowered teams

This construct was ranked ninth with a mean score of $\bar{x} = 3.669$ just above the average mean of $\bar{x} = 3.636$, meaning that respondents slightly agree with that empowered teams or multi-disciplined teams are used effectively.

4.2.3.10 Sponsors

This construct obtained a tenth place with a mean score of $\bar{x} = 3.668$, a score just below empowered teams with a mean of $\bar{x} = 3.669$ in ninth position. Respondents perceive this construct as fairly positive seeing that many of the respondents agreed that the management have the courage, commitment and skills to be effective champions of corporate entrepreneurial initiatives.

They also agreed to some extend that their managers help them to get their work done by removing obstacles in their way which was also true regarding their perception that their organisations have people with influence that protect, coach, support and find resources for a corporate entrepreneurial projects and its team. This thus makes it easier for originators of new ideas to implement their new plans and procedures due to the support rendered by influential people within the organisation.

Respondents were neutral regarding their assessment of the ease to build coalitions of sponsors to help the successful implementation of projects within the organisation.

4.2.3.11 Tolerance for risks, mistakes and failure

The Tolerance for risks, mistakes and failure construct, obtained the third lowest score ($\bar{x} = 3.538$) which is below the average mean of $\bar{x} = 3.636$.

Employees were fairly neutral in their assessment of the value placed on projects involving calculated risk. Respondents were also neutral in agreeing that their institutions has been build up by taking calculated risks at the right times, and that big risks to keep ahead of their competitors is taken only occasionally. They were more
positive regarding the fact that they will be forgiven in the case were a mistake has been made. It is also evident that an average amount of support for small, experimental projects is available.

4.2.3.12 Appropriate rewards and recognition

Appropriate rewards and recognition ($\bar{x} = 3.100$) and Resource availability and accessibility ($\bar{x} = 3.100$) are the two constructs which received the lowest overall rating.

Respondents are of the opinion that individuals who implement successful innovative ideas do rarely receive additional rewards and compensation. They slightly agree with the statements that supervisors will give special recognition for outstanding work performance and that employees are rewarded according to their job performance.

The focus should rather be placed on recognition of successful intrapreneurial behaviour rather than criticism to enhance a positive intrapreneurial climate within the organisation.

4.2.3.13 Resource availability and accessibility

As mentioned above this construct is one of two constructs with the lowest mean score of $\bar{x} = 3.100$. Although this average mean score is still above the three out of five rating on the Likert scale, it should be evaluated in comparison to the other constructs’ mean scores as well as the average mean of $\bar{x} = 3.636$.

Managers are of the perception that resources are not always readily accessible in pursuance of new ideas and opportunities. It is also evident that financial resources are not easily available to get new project ideas started and that a lack of options for financial support exists within the organisation. According to management the process for accessing and acquiring resources to pursue new opportunities as not streamlined, it is very difficult to attract resource commitment for entrepreneurial ventures and it takes time for approval of resources to be granted.
4.2.4 Assessment of the perceived success of the organisation

A Likert scale was also used to assess how managers perceive the success of the organisation. In this section the perceived success of the organisation was evaluated through 17 statements in terms of five variables. The variables are Financial measures, Customer/market measures, Process measures, People development and Future success.

The average mean score of all five variables is $\bar{x} = 3.719$. This is fairly high indicating that respondents agree to a large extent with the statements provided. Only one of the variables, **Future success** obtained a Cronbach Alpha of 0.635 which is lower than 0.7. Although this variable is lower than 0.7 it was still used seeing that it is close enough to 0.7.

Variables are presented and discussed in a ranked order from the variable that received the highest mean rating to the variable that received the lowest mean rating.
4.2.4.1 Customer/market measures

This variable was rated the highest of all the organisational success variables with an average mean score of $\bar{x} = 3.951$ which is above the average mean of $\bar{x} = 3.719$.

This indicates that respondents strongly agreed that taking care of customers is the organisation’s top priority. The organisation will thus focus on customer needs when developing new product or services which will result in the customer satisfaction and a competitive advantage.

For the purpose of this study customers includes learners and their parents.

4.2.4.2 Process measures

With a mean score of $\bar{x} = 3.906$, this variable was ranked second of the five perceived organisational success variables evaluated which is also higher than the average mean of $\bar{x} = 3.719$.

Respondents strongly agreed with the statements that the effectiveness, efficiency and the competitive position their organisations have improved over the past few years.

4.2.4.3 People development

This variables’ mean score ($\bar{x} = 3.766$) is ranked as the third highest of the five perceived organisational success variables. Although this score is lower in comparison to the first tow variables, it is still above the average mean of $\bar{x} = 3.719$ and the $\bar{x} = 3.000$ midpoint of the Likert scale.

Management agreed that employees are viewed as a relative important asset of the organisation and they perceived that personnel have a moderate to highly commitment towards the organisation. Respondent however did not think that the morale or job satisfaction of the employees has improved over the past few years.
4.2.4.4 Future success

The **Future success** variable obtained the second lowest mean score of $\bar{x} = 3.537$ which is lower than the overall average mean of $\bar{x} = 3.719$.

Respondents agree in some cases that during difficult economic periods, investments in research and development or innovative projects continue and no significant financial cuts are made. They are also to some extend of the opinion that the image (stature) of their organisation, relative to their competitors, has grown over the past few years.

4.2.4.5 Financial measures

This variable was rated the lowest of all the organisational success variables with an average mean score of $\bar{x} = 3.436$ which is also lower than the average mean of $\bar{x} = 3.719$ but still higher than the Liker scale midpoint of $\bar{x} = 3.000$.

Respondents agreed so some extend that the organisation has experienced growth in turnover, profits and market share over the past few years.
4.2.5 Relationships between demographic variables and intrapreneurial constructs

Conclusions regarding the analysis of the significance of relationships between demographic variables such as gender (male versus female) and management level (top management and middle management versus lower management), and the intrapreneurial constructs as well as perceived success of the organisation are indicated and discussed below.

De Villiers (2008:164) is of the opinion that if a visible difference in terms of the $d$-value is determined, it would mean that when the managers are divided into two groups for example male and female and an outside person were to spend time with each of these groups, then he or she would be able to identify that one of these groups will be more positive towards a specific construct or variable than the other group.

4.2.5.1 Relationship between gender and corporate intrapreneurial climate constructs

Based on the results of the analysis regarding the relationship between gender and the intrapreneurial climate constructs, it is clear that gender does not noticeably influence respondents’ perceptions of an intrapreneurial climate within public secondary educational institutions.

One of the thirteen constructs, Entrepreneurial leadership ($p$-value = 0.034), obtained a $p$-value smaller than 0.05. This indicates that females are statistically significantly more positive than males with regard to the construct Entrepreneurial leadership. None of the other $p$-values were smaller than 0.05 indicating that no statistically significant correlation between the gender of respondents and these 12 constructs could be shown.
It is clear that the Entrepreneurial leadership construct only had a small to medium effect regarding practical significance since this construct had a $d$-value of 0.40 which is higher than 0.20 but smaller than 0.50. The other 12 constructs had $d$-values of 0.24 and smaller indicating only a small to almost no effect. Gender thus has an insignificant effect on the rating of these 12 construct tested.

There exists thus no practical significant difference ($d < 0.8$) in the mean values between the perceptions of males and females with regard to the 13 constructs measuring the intrapreneurial climate.

4.2.5.2 Relationship between gender and perceived organisational success variables

One of the variables, Financial measures ($p$-value = 0.007) obtained a $p$-value smaller than 0.05. This indicates that females are statistically significantly more positive than men regarding the Financial measures variable measuring the perceived success of the organisation.

Financial measures had a medium effect regarding the practical significance with a $d$-value of 0.51. The other four variables’ effect sizes were too small to be of any practical significance.

There is thus no practical significant difference ($d < 0.8$) in the mean values between the perceptions of males and females with regard to the 5 variables measuring the perceived success of the organisation.
4.2.5.3 Relationship between management level and intrapreneurial climate constructs

Based on the results of the analysis regarding the relationship between management level and intrapreneurial climate constructs, it has been concluded that the management level does not have a practical significant influence on respondents’ perceptions of the intrapreneurial climate within public secondary educational institutions.

Three of the 13 constructs, Sponsors ($p$-value = 0.005), Continuous and cross-functional learning ($p$-value = 0.016) and Customer orientation ($p$-value = 0.025) obtained $p$-values smaller than 0.05 indicating that top and middle management are relatively significantly more positive than lower management with regard to the construct Sponsors. The other 10 constructs’ $p$-values were bigger than 0.05, indicating that one management level is not statistically more positive than the other levels regarding any of these 10 constructs measuring an intrapreneurial climate.

The same three constructs, Sponsors ($d$-value = 0.65), Continuous and cross-functional learning ($d$-value = 0.56) and Customer orientation ($d$-value = 0.53) had a medium effect regarding the practical significance while the other 10 construct’s effect sizes had a small to medium effect showing little statistical significance.

As mentioned above no practical significant difference ($d < 0.8$) in the mean values between the perceptions of top and middle versus lower management levels with regard to the 13 constructs measuring the intrapreneurial climate exist.
4.2.5.4 Relationship between management level and perceived organisational success variables

The results indicated no statistical significant difference ($p < 0.05$) in the mean values between the perceptions of top and middle management and lower management with regard to all the perceived organisational success variables. None of the $p$-values are smaller than 0.05. This indicates that top and middle management levels are not statistically significantly more positive than lower management levels regarding any of the variables indicating perceived success of the organisation.

It is also evident that in all instances the effect sizes were too small to be of any practical significance since none of the effect sizes even came close to a large effect ($d$-value = 0.8). The factor **Customer/market** ($d$-value = 0.30) had a small to medium effect. There is, however, thus no practical significant difference ($d < 0.8$) in the mean values between the perceptions of the different management levels with regard to the 5 variables measuring the perceived success of the organisation.

### 4.3 RECOMMENDATIONS

From the conclusions drawn on the 13 constructs measuring an intrapreneurial climate and the five variables measuring the perceived success of the organisation, it was evident that the overall climate in public secondary educational institutions is relative favourable to intrapreneurial behaviour. It is thus very important that these institutions will focus on enhancing their strong constructs even more and to improve on the problem areas identified.

After the intrapreneurial constructs were evaluated three areas (resource availability and accessibility, rewards and recognition and tolerance for risks, mistakes and failures) were identified which need special attention to ensure the optimal improving, fostering and enhancing of the current intrapreneurial climate in public secondary educational institutions. All three these areas received a rating of less than $\bar{x} = 3.636$. The areas to be developed are discussed in order from the one that received the lowest mean rating to the area that received the mean rating closest to $\bar{x} = 3.636$. 
Recommendations were only provided for these three problem areas identified but it does not mean that the other constructs should be neglected and treated as “perfect”. As stated above it is very important to focus on enhancing the stronger constructs to an even more favourable state and to improve on the problem areas with the focus to obtain a sustainable competitive advantage in the market place.

The following recommendations were made regarding the three identified problem areas:

4.3.1 Resource availability and accessibility

Systems should be ready and in place through which resources are made easily available and accessible in chase of new ideas and opportunities which can be done by allocating resources specifically to new entrepreneurial ventures.

According to Jordaan (2008:121), easy access to resources should be ensured by the systems used within the organisation. This means that:

- Capital should be made available in advance with the focus to support intrapreneurial efforts as fast as possible to ensure a successful “kick-start”.
- The latest technology should be used to increase productivity levels, and personnel should also be trained as how to use the new employed technology to ensure optimal success.
- Simplified processes and procedures to access resources should be employed.
- Bootstrapping, focusing on doing more with less, should be encouraged but it should not restrict new intrapreneurial ventures.

4.3.2 Appropriate rewards and recognition

Intrapreneurs should be rewarded according to their effort, energy and risk associated with the entrepreneurial projects employed (Hisrich et al., 2005:49). According to Van der Merwe and Oosthuizen (2008:17), employees should be fittingly recognised and rewarded in relation to their job performance as well as the value added to the organisation.
It is thus very important that rewards are not only allocated to areas of higher production rates, but that it is also focused on rewarding activities that are enhancing the corporate entrepreneurial climate within the organisation. Jacobs and Kruger (2001:5) stress this fact that the evaluation system used to measure performance should reinforce corporate entrepreneurial behaviour. A key step in any reward system is the evaluation system used to measure an individual's performance (Thompson, Fulmer & Strickland, 1992:446).

A compensation system comprising of a combination of fixed salary and incentives is proposed (Kuratko et al., 2001:62). Incentives can be monetary or non monetary as discussed in chapter 2 (section 2.4.1.6).

Focus can also be placed on profit sharing based on the organisation's profitability or even project profitability. By sharing financial information including the profits made from certain project with employees, a sense of coherence and understanding regarding the difference they are making can evolve, motivating them to work even harder, be more profit driven and be more creative in the up coming projects.

4.3.3 Tolerance for risks, mistakes and failure

Personnel within public secondary educational institutions should be allowed to take calculated risks and to test new ideas, procedures and methods with the knowing that new mistakes will not be punished and will be viewed as part of a learning process. Managers should thus focus on sharing risks and rewards with employees.

To ensure buy-in from employees regarding the value system of the organisation, top management should stress the fact that mistakes would be tolerated in the quest for creativity without risking the safety and positions of employees. This can be done by aligning the different value systems and the identification of the few dominant values including aspects such as innovation, creativity, risk taking and tolerance for failure.
4.4 ACTION PLAN

In chapter 2, the causal factors which highlight the need for and benefits of an intrapreneurial climate were identified and presented. A number of implementation options (section 2.7) were also provided and explained in detail which could be used by organisations and specific public secondary educational institutions, planning to incorporate an intrapreneurial climate as part of their strategy.

Hisrich et al. (2005: 51-52) also suggest the following guidelines for the implementation of an intrapreneurial climate in public secondary educational institutions:

Obtain management commitment

The first and one of the most important steps is to obtain commitment from the management team.

Although the construct entrepreneurial leadership has been identified as the strongest construct, it is crucial that management (especially top and middle management) lead by example to ensure that lower management will voluntarily follow them. For the new adopted strategy to be successful, top management should be involved from the start and stay involved and dynamic throughout the process.

As evident in the results, the leaders in the participating public secondary educational institutions do take a long term view and it should remain as such.

General introduction to organisation

Intrapreneurship and the new strategy that the institution will follow with the focus to obtain a competitive advantage and to overcome the gap between their current state and desired state could be explained, motivated and illustrated to all personnel members during personnel meetings and planning sessions.
At these meetings or planning sessions, emphasis should be placed on communicating a clear purpose and why change is needed to reach the proposed end-state. An analysis of the institutions current state, shortcomings and barriers to intrapreneurship should be presented and practical solutions to overcome or manage the stated problem areas should be identified by involving the inputs of all personnel members.

Agreement should be sought from all personnel members on aspects regarding the intrapreneurial strategy, guidelines to be followed and the appointment of sponsors to the process.

It is very important that principals handle the whole introduction process very carefully seeing that resistance to change is a reality. Personnel will require compelling reasons to believe that top management is committed and that this change is really needed. Educational personnel especially teachers are faced with a lot of pressure completing their yearly curriculum and other school activities and will only be willing to be part of additional projects if it is really necessary for the organisation and if they are motivated to be committed.

**Expectation clarification and resource allocation**

The agreement reached during the meetings and planning sessions mentioned above should be developed into accepted procedures determining the way in which intrapreneurship will be managed. The specific focus areas identified by top management where intrapreneurial effort must be implemented should be combined with procedures in order to identify leaders to appoint for the process. Some general areas where management needs to be involved should thus be identified as well as the resources needed.

The only problem is that the resources needed usually involve money which is not always available in all public educational institutions as explained earlier. The global economic crisis has further placed a damper on the availability of money which will mean that sponsors should be involved and therefore the timing of starting with such a strategy should be planned very carefully.
Technological leveraging

The use of technology (especially information technology) to improve efficiency and flexibility is not an unknown concept in the participating public secondary educational institutions.

However, efforts should be concentrated to specifically support intrapreneurship by allowing intrapreneurs to have access to electronic information shared by universities, government agencies, learners, parents, trade organisations and suppliers. They should also have access to a live index of marketing, technical, financial and managerial specialists who can assist them in their decision making.

A good measure of effective assistance rendered by information technology systems would be that intrapreneurs use less than an agreed-upon percentage of their discretionary time on preparatory paperwork or trying to source information.

Training

While meetings and planning sessions were held to communicate the purpose of intrapreneurship to all personnel members, selected individuals will need to undergo dedicated training in intrapreneurship with a corporate focus.

Intrapreneurship specialist could be invited to do workshops at the different institutions focusing for example on aspects such as the introduction to intrapreneurship, intrapreneurial breakthrough processes, creative thinking, idea development process, examining of barriers, facilitators and triggers to intrapreneurial thinking and venture planning.

In addition, effective usage of all information systems (see discussion above) should be demonstrated to personnel members as well.
Customer propinquity

It is very important to gather intelligence on customers thus in the case of the public secondary educational institutions intelligence on learners and their parents. The intelligence gathered must be communicated to all management levels. Even the lowest level must know who their customers are, what their needs are and what issues they experience within the specific institution.

This could be done by asking current learners how they feel about their school, visiting parents to help create an understanding of the current and future needs of parents and their children. A customer satisfaction survey could also be conducted.

Productivity increase

In the case of public secondary educational institutions productivity increase can refer to either better academic, sport or culture results obtained by learners through more effective ways of educating and training or more learners applying to be accepted in these institutions.

In the first instance institutions can make use of sport or culture specialist to ensure specialised training. They can also focus on recruiting the best specialist educators to ensure outstanding academic results.

In the case where increase productivity focuses on an increase number of learners applying for acceptance in an institution it can be reached by effective marking strategies and a new innovative way of thinking, attracting the top learners from the primary institutions.
Support structures

A support structure needs to be in place for the intrapreneurial strategy to be successful.

It is proposed that support be given in the form of mentors located in middle to top management levels (principals, deputy principals and department principals) of the organisation. These mentors should help intrapreneurs by acting as advisors and defenders helping intrapreneurs to effectively sell an idea to top management and ward off undue attacks on new projects.

The success of mentorship should be monitored by means of monthly reports submitted to top management in which support rendered to intrapreneurial projects should outlined.

Clarify rewards

An additional reward system should be in place for innovative ideas. This could mean that different teams have different reward systems. Individual employees should also be rewarded for implementing new innovative projects.

Seeing that the participating institutions only receive a small amount of financial support from the government, financial rewards might be a problem which could be solved by involving sponsors or by giving a percentage of saving of a project back to the personnel member or team that implemented the project.

Other ways (section 2.4.1.6) to reward personnel members that do not have a financial implications would be allowing them discretionary time to work on projects that is viewed as important by them, to allow them to do a variety of work or to reward them by acknowledging their outstanding intrapreneurial performance.
Evaluation system

An evaluation system must be established which can be utilised to get rid of poor intrapreneurial performing projects whilst boosting promising ventures.

An evaluation system must firstly consist of a default level of intrapreneurial activity which should be determined in each department, prior to launching intrapreneurship. The second element includes continuous measurement which should take place after the implementation of intrapreneurship to ensure that intrapreneurial activity is regularly monitored with the focus to determine the success of the initiative. The third element focuses on laying down criteria according to which decisions are made on whether intrapreneurial projects may proceed. The last element includes knowledge repository which involves the act of documenting both successful and failed projects thoroughly in the evaluation system, in order to increase organisational knowledge.

For a detailed discussion on the constructs of intrapreneurship, section 2.4.1 should be consulted.

4.5 ACHIEVEMENT OF OBJECTIVES

The evaluation of the success of this study is based on the achievement of the research objectives set in chapter 1, section 1.3.

4.5.1 Primary objective

The primary objective of the study was to evaluate the intrapreneurial climate in the public secondary educational institutions in the Klerksdorp and Orkney Area as well as to provide practical suggestions as how to enhance their intrapreneurial climate and culture with the focus to obtain and maintain a competitive advantage.

The primary objective was achieved by realising the secondary objectives of the study.
4.5.2 Secondary objectives

In order to achieve the primary objective the following secondary objectives were formulated:

- Define concepts such as the intrapreneur, intrapreneurship, corporate entrepreneurship and intrapreneurial climate and culture with special emphasis on the public sector.
- Obtain insight into the dynamics of intrapreneurship, intrapreneurial climate and culture by conducting a literature review.
- Obtain insight into the educational environment of the public secondary education institutions.
- Assess the intrapreneurial climate within the public secondary education intuitions in the Klerksdorp and Orkney Area by the use of a questionnaire.
- Validate the reliability of the questionnaire measuring the intrapreneurial climate by means of statistical analysis.
- Examine the relationship between the demographical variables with regard to the constructs measuring the intrapreneurial climate and the perceived success of the organisation.
- Provide recommendations as how to enhance and foster an intrapreneurial climate and culture within public secondary education institutions.

The first two objectives were reached by means of a literature review as presented in chapter two. All the different concepts were defined and discussed in section 2.2. The dynamics of intrapreneurship were discussed in section 2.3 where the dimensions and types of intrapreneurship were examined in detail. The constructs of an intrapreneurial climate in an organisation were discussed in section 2.4.1.

The third objective, which focuses on obtaining insight into the educational environment of the public secondary education institutions, was achieved in chapter one where an overview on the educational environment were provided in section 1.4.3.
The fourth objective obtained by measuring the current intrapreneurial climate of the various public secondary educational institutions by means of a questionnaire which the results were presented and discussed in chapter 3. The fifth objective to validate the reliability of the questionnaire measuring the intrapreneurial climate by means of statistical analysis was also conducted in chapter 3, section 3.5 and chapter 4 in section 4.2.2.

The sixth objective which was to examine the relationship between the demographical variables with regard to the constructs measuring the intrapreneurial climate and the perceived success of the organisation were discussed in chapter 3, section 3.7 and chapter 4, section 4.2.5.

The last objective which was to provide recommendations to ensure and promote an intrapreneurial climate in public secondary educational institutions was attained in chapter four with specific focus in section 4.3. A framework and strategies for establishing an intrapreneurial climate was also provided in chapter 2 (section 2.7).

4.6 SUGGESTIONS FOR FURTHER RESEARCH

Based on the findings of the study, the following suggestions are made regarding considerations pertaining future research on corporate entrepreneurship in public secondary educational institutions.

The scope of the study was limited to institutions from the Klerksdorp and Orkney Area in the North-West province of South Africa which are not representative of the whole province or country. The views of more public secondary educational institutions should be obtained and added to this study. A comparison between the different provinces can be investigated.

As an existing questionnaire was used, the opportunity therefore also exists to compare different industries and sectors with each other.
Current studies focus on the benefits which could be gained by implementing intrapreneurship and the characteristics of an intrapreneurial climate which would support it. Research should be performed on an actual (successful or not) implementation of intrapreneurship in a public secondary educational institution, in order to study the pitfalls, obstacles, solutions, consequences and effect experienced.

4.7 SUMMARY

Conclusions drawn from the empirical research results provided in chapter three were discussed in more detail in this chapter. The basic demographics of gender, race, age group, highest academic qualification, functional department and managerial level as well as the constructs of intrapreneurial climate and perceived organisational success were firstly discussed.

The Cronbach Alpha coefficient which determine the reliability of the various items evaluating each construct of an intrapreneurial climate and the variables measuring the perceived success of the organisation were discussed after which each of these 13 constructs present in an intrapreneurial climate and the five variables testing the perceived organisational success were examined in relation to the results obtained from the questionnaires distributed.

The relationships between the demographic variables (being male and female; and top and middle management versus lower management) were discussed in order to identify statistically significant variances regarding the different perceptions.

The second section (section 4.3) of the chapter contains recommendations and an action plan (section 4.4) on the fostering of an intrapreneurial climate within public secondary educational institutions with the focus to move them from their current state to a more desirable future state.

Lastly, the chapter concluded by addressing the achievement of all the objectives of the study and by recommending possible future research that could be done based on this study.


SPSS, INC. 2008. SPSS ® 16.0 for Windows, Release 16, Copyright © by SPSS Inc., Chicago, IL: SPSS.


TEIXEIRA, P.N. 2006. Markets in higher education: can we still learn from economics' founding fathers? (Research & occasional paper series, CSHE.4.06). [Web:] http://cshe.berkeley.edu/publications/docs/ROP.Teixeira.4.06.pdf [Date of access: 4 April 2010].


ANNEXURE A – QUESTIONAIRE
Note: All responses are confidential and neither the individual nor the organisation would be identified in any report or release.
Dear Respondent

Corporate entrepreneurship is becoming increasingly important for the competitiveness of Secondary Educational Institutions as we face dynamic competition unleashed by globalisation as well as by local competitors. Internal environmental factors play a crucial role in translating entrepreneurship into performance. Corporate entrepreneurship (intrapreneurship) with concomitant creativity and high rates of responsiveness should be the preferred mode of operations in Secondary Educational Institutions as a whole.

Educational institutions play a very important role in South Africa. The role of management therefore becomes crucial as the responsibility lies with them to move the bottom line.

With the 2007 Global Entrepreneurship Monitor (GEM) Report again indicating that South Africa performs poorly in comparison to other emerging economies in terms of entrepreneurial activity and development, attention should be focused on interventions which support and encourage business initiatives and development.

Very little to no research has been conducted on corporate entrepreneurship in Secondary Educational Institutions in South Africa. Corporate entrepreneurship in Secondary Educational Institutions should therefore emphasise the establishment of business models, processes and structures in the educational sector so as to increase the level of corporate entrepreneurship in the various departments within Secondary Educational Institutions in South Africa.

The focus of this research study is on management in Secondary Educational Institutions in die Klerksdorp and Orkney area.

This questionnaire attempts to measure the intrapreneurial climate in your school in order to determine whether it is conducive to foster an intrapreneurial spirit. Your contribution is highly valued and appreciated.

Please complete every question / statement to ensure the validity and reliability of the study.

GENERAL INSTRUCTIONS

Virtually all questions may be answered by ticking (X) or highlighting the relevant block. Use the following key to indicate your preference:

<table>
<thead>
<tr>
<th>SCALE</th>
<th>TERM USED</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>4</td>
<td>Slightly agree</td>
</tr>
<tr>
<td>3</td>
<td>Neither agree nor disagree</td>
</tr>
<tr>
<td>2</td>
<td>Slightly disagree</td>
</tr>
<tr>
<td>1</td>
<td>Strongly disagree</td>
</tr>
</tbody>
</table>

Please select the number which best describes your opinion about a specific question or statement. In the example beneath, the respondent slightly agreed to the statement listed.

<table>
<thead>
<tr>
<th>A03</th>
<th>The principal helps me to get my work done by removing obstacles in my way.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly disagree</td>
<td>Slightly disagree</td>
<td>Neither agree nor disagree</td>
<td>Slightly agree</td>
<td>Strongly agree</td>
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</tr>
</tbody>
</table>
SECTION A: CORPORATE ENTREPRENEURIAL CLIMATE

This section consists of 65 statements. Please indicate to what extent you agree or disagree with each statement. Please mark the applicable block with a cross (X).

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Slightly Disagree</th>
<th>Neither agree nor disagree</th>
<th>Slightly Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>A01</td>
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<td>A25</td>
<td></td>
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</tr>
<tr>
<td>A26</td>
<td>Personnel are given ample opportunity for independence and freedom in how they do their work.</td>
<td>Strongly Disagree</td>
<td>Slightly Disagree</td>
<td>Neither agree nor disagree</td>
<td>Slightly Agree</td>
</tr>
<tr>
<td>-----</td>
<td>------------------------------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>A27</td>
<td>This school has a specific value system which we all know and live up to.</td>
<td>Strongly Disagree</td>
<td>Slightly Disagree</td>
<td>Neither agree nor disagree</td>
<td>Slightly Agree</td>
</tr>
<tr>
<td>A28</td>
<td>Those employees who come up with innovative ideas on their own receive management's encouragement for their activities.</td>
<td>Strongly Disagree</td>
<td>Slightly Disagree</td>
<td>Neither agree nor disagree</td>
<td>Slightly Agree</td>
</tr>
<tr>
<td>A29</td>
<td>Our school has people with influence that support, coach, protect, and find resources for an intrapreneurial project and its team.</td>
<td>Strongly Disagree</td>
<td>Slightly Disagree</td>
<td>Neither agree nor disagree</td>
<td>Slightly Agree</td>
</tr>
<tr>
<td>A30</td>
<td>We occasionally take big risks to keep ahead of our competitors.</td>
<td>Strongly Disagree</td>
<td>Slightly Disagree</td>
<td>Neither agree nor disagree</td>
<td>Slightly Agree</td>
</tr>
<tr>
<td>A31</td>
<td>This school provides me with the chance to be creative and try out new methods of doing my job.</td>
<td>Strongly Disagree</td>
<td>Slightly Disagree</td>
<td>Neither agree nor disagree</td>
<td>Slightly Agree</td>
</tr>
<tr>
<td>A32</td>
<td>Management will give me special recognition if my work performance is outstanding.</td>
<td>Strongly Disagree</td>
<td>Slightly Disagree</td>
<td>Neither agree nor disagree</td>
<td>Slightly Agree</td>
</tr>
<tr>
<td>A33</td>
<td>Great effort has been made to clarify what the vision and strategy of the school mean to us in our own department.</td>
<td>Strongly Disagree</td>
<td>Slightly Disagree</td>
<td>Neither agree nor disagree</td>
<td>Slightly Agree</td>
</tr>
<tr>
<td>A34</td>
<td>Nobody at the school is forced to develop new ideas.</td>
<td>Strongly Disagree</td>
<td>Slightly Disagree</td>
<td>Neither agree nor disagree</td>
<td>Slightly Agree</td>
</tr>
<tr>
<td>A35</td>
<td>Top management encourages the establishment of teams from various departments whenever needed for a project.</td>
<td>Strongly Disagree</td>
<td>Slightly Disagree</td>
<td>Neither agree nor disagree</td>
<td>Slightly Agree</td>
</tr>
<tr>
<td>A36</td>
<td>Resources are readily accessible in pursuance of new ideas and opportunities.</td>
<td>Strongly Disagree</td>
<td>Slightly Disagree</td>
<td>Neither agree nor disagree</td>
<td>Slightly Agree</td>
</tr>
<tr>
<td>A37</td>
<td>Our school has open communication channels in which all personnel's participate.</td>
<td>Strongly Disagree</td>
<td>Slightly Disagree</td>
<td>Neither agree nor disagree</td>
<td>Slightly Agree</td>
</tr>
<tr>
<td>A38</td>
<td>Our school involves customers (learners) in service and product development.</td>
<td>Strongly Disagree</td>
<td>Slightly Disagree</td>
<td>Neither agree nor disagree</td>
<td>Slightly Agree</td>
</tr>
<tr>
<td>A39</td>
<td>I have autonomy to decide how to do my work.</td>
<td>Strongly Disagree</td>
<td>Slightly Disagree</td>
<td>Neither agree nor disagree</td>
<td>Slightly Agree</td>
</tr>
<tr>
<td>A40</td>
<td>Our leaders lead by example and people are eager to voluntarily follow them.</td>
<td>Strongly Disagree</td>
<td>Slightly Disagree</td>
<td>Neither agree nor disagree</td>
<td>Slightly Agree</td>
</tr>
<tr>
<td>A41</td>
<td>The creation of innovative ideas is a regular occurrence in our school.</td>
<td>Strongly Disagree</td>
<td>Slightly Disagree</td>
<td>Neither agree nor disagree</td>
<td>Slightly Agree</td>
</tr>
<tr>
<td>A42</td>
<td>Our organisation's managers have the skills, commitment and courage to be effective champions of intrapreneurial initiatives.</td>
<td>Strongly Disagree</td>
<td>Slightly Disagree</td>
<td>Neither agree nor disagree</td>
<td>Slightly Agree</td>
</tr>
<tr>
<td>A43</td>
<td>This school supports many small and experimental projects realising that some will undoubtedly fail.</td>
<td>Strongly Disagree</td>
<td>Slightly Disagree</td>
<td>Neither agree nor disagree</td>
<td>Slightly Agree</td>
</tr>
<tr>
<td>A44</td>
<td>Training is provided to ensure that innovative new processes are implemented effectively.</td>
<td>Strongly Disagree</td>
<td>Slightly Disagree</td>
<td>Neither agree nor disagree</td>
<td>Slightly Agree</td>
</tr>
<tr>
<td>A45</td>
<td>In this school effective intrapreneurs are generally rewarded.</td>
<td>Strongly Disagree</td>
<td>Slightly Disagree</td>
<td>Neither agree nor disagree</td>
<td>Slightly Agree</td>
</tr>
<tr>
<td>A46</td>
<td>The vision and strategies of the school often help me in setting priorities in my work.</td>
<td>Strongly Disagree</td>
<td>Slightly Disagree</td>
<td>Neither agree nor disagree</td>
<td>Slightly Agree</td>
</tr>
<tr>
<td>A47</td>
<td>I am allowed time at work to explore new ideas I believe have potential.</td>
<td>Strongly Disagree</td>
<td>Slightly Disagree</td>
<td>Neither agree nor disagree</td>
<td>Slightly Agree</td>
</tr>
<tr>
<td>A48</td>
<td>Project teams have choices in recruiting and selecting new team members.</td>
<td>Strongly Disagree</td>
<td>Slightly Disagree</td>
<td>Neither agree nor disagree</td>
<td>Slightly Agree</td>
</tr>
<tr>
<td>A49</td>
<td>The process for accessing and acquiring resources to pursue new opportunities is streamlined so that approval is quickly granted.</td>
<td>Strongly Disagree</td>
<td>Slightly Disagree</td>
<td>Neither agree nor disagree</td>
<td>Slightly Agree</td>
</tr>
<tr>
<td>A50</td>
<td>Personnel are encouraged to stay abreast of developments in their functional fields and to share their knowledge with others.</td>
<td>Strongly Disagree</td>
<td>Slightly Disagree</td>
<td>Neither agree nor disagree</td>
<td>Slightly Agree</td>
</tr>
<tr>
<td>A51</td>
<td>We regularly ask our customers (learners) to give their opinions of our service and product offerings.</td>
<td>Strongly Disagree</td>
<td>Slightly Disagree</td>
<td>Neither agree nor disagree</td>
<td>Slightly Agree</td>
</tr>
<tr>
<td>A52</td>
<td>The degree of hierarchical control is relatively low in our school.</td>
<td>Strongly Disagree</td>
<td>Slightly Disagree</td>
<td>Neither agree nor disagree</td>
<td>Slightly Agree</td>
</tr>
<tr>
<td>A53</td>
<td>Our leaders seek to maximise value from opportunities.</td>
<td>Strongly Disagree</td>
<td>Slightly Disagree</td>
<td>Neither agree nor disagree</td>
<td>Slightly Agree</td>
</tr>
<tr>
<td>A54</td>
<td>Senior managers allow innovators to bend rules and rigid procedures in order to keep promising ideas on track.</td>
<td>Strongly Disagree</td>
<td>Slightly Disagree</td>
<td>Neither agree nor disagree</td>
<td>Slightly Agree</td>
</tr>
<tr>
<td>A55</td>
<td>In this school it is easy to build coalitions of sponsors to help projects succeed.</td>
<td>Strongly Disagree</td>
<td>Slightly Disagree</td>
<td>Neither agree nor disagree</td>
<td>Slightly Agree</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Strongly Disagree</td>
<td>Slightly Disagree</td>
<td>Neither agree nor disagree</td>
<td>Slightly Agree</td>
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</tr>
<tr>
<td>A56</td>
<td>If you make a mistake in this school you will be forgiven.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>A57</td>
<td>Personnel are inspired to push their boundaries and to think &quot;out-of-the-box.&quot;</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>A58</td>
<td>Personnel are rewarded in relation to their job performance.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>A59</td>
<td>There is considerable buy-in from personnel into the value system of the school.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>A60</td>
<td>Our school provides ample opportunities for learning and growth.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>A61</td>
<td>Cross-functional teams are characterised by diversity based on the skills required by the project.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>A62</td>
<td>Attracting resource commitment for entrepreneurial ventures in this school is relatively easy.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>A63</td>
<td>Personnel are willing to assist others and share knowledge and skills even if it is not required from them.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>A64</td>
<td>Customers (learners) are treated as very important stakeholders.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>A65</td>
<td>Personnel determine their key performance areas in cooperation with their supervisors.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
This section consists of 17 statements. Please indicate to what extent you agree or disagree with each statement. Please mark the applicable block with a cross (X).

| B01 | Our school develops product/services with learners’ needs in mind. | 1 | 2 | 3 | 4 | 5 |
| B02 | The competitive position of our school has improved over the past few years. | 1 | 2 | 3 | 4 | 5 |
| B03 | Our school has experienced growth in market share over the past few years. | 1 | 2 | 3 | 4 | 5 |
| B04 | Our personnel are highly committed to our school. | 1 | 2 | 3 | 4 | 5 |
| B05 | During difficult economic periods, investments in research and development/innovative projects continue and no significant financial cuts are made. | 1 | 2 | 3 | 4 | 5 |
| B06 | Our school has a high customer (learner) retention rate. | 1 | 2 | 3 | 4 | 5 |
| B07 | Our customers (learners) are loyal to our school. | 1 | 2 | 3 | 4 | 5 |
| B08 | In our school, personnel are viewed as the most valuable asset of the organisation. | 1 | 2 | 3 | 4 | 5 |
| B09 | Taking care of customers (learners) is our school’s top priority. | 1 | 2 | 3 | 4 | 5 |
| B10 | The morale (job satisfaction) of our personnel has improved over the past few years. | 1 | 2 | 3 | 4 | 5 |
| B11 | Our customers (learners) are satisfied with our school’s product/service offerings. | 1 | 2 | 3 | 4 | 5 |
| B12 | The image (stature) of our school, relative to our competitors, has grown over the past few years. | 1 | 2 | 3 | 4 | 5 |
| B13 | Our school has experienced growth in turnover over the past few years. | 1 | 2 | 3 | 4 | 5 |
| B14 | The effectiveness (doing the right things) of our school has improved over the past few years. | 1 | 2 | 3 | 4 | 5 |
| B15 | Personnel in our school understand the needs of our customers (learners). | 1 | 2 | 3 | 4 | 5 |
| B16 | Our school has experienced growth in profits over the past few years. | 1 | 2 | 3 | 4 | 5 |
| B17 | The efficiency (doing things right) of our school has improved over the past few years. | 1 | 2 | 3 | 4 | 5 |
SECTION C: BACKGROUND INFORMATION

The following information is needed to help with the statistical analysis of data for comparisons among different interest groups. All your responses will be treated confidentially. Your assistance in providing this important information is appreciated. Please mark the applicable block with a cross (X).

<table>
<thead>
<tr>
<th>C01</th>
<th>Indicate your age group</th>
<th>≤ 29</th>
<th>30 - 39</th>
<th>40 - 49</th>
<th>50 - 59</th>
<th>60+</th>
</tr>
</thead>
<tbody>
<tr>
<td>C02</td>
<td>Indicate your gender</td>
<td>Male</td>
<td>Female</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C03</td>
<td>Indicate your race</td>
<td>Black</td>
<td>White</td>
<td>Coloured</td>
<td>Indian</td>
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<td>C04</td>
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THANK YOU VERY MUCH FOR YOUR VALUED INPUT.