Thinking style preference profile of the contemporary administrative professional.

THINKING STYLE PREFERENCE PROFILE OF THE CONTEMPORARY ADMINISTRATIVE PROFESSIONAL

AJ VENTER

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THINKING STYLE PREFERENCE PROFILE OF THE CONTEMPORARY ADMINISTRATIVE PROFESSIONAL

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DECLARATION BY THE AUTHOR

I hereby declare that the dissertation on the THINKING STYLE PREFERENCE PROFILE OF THE CONTEMPORARY ADMINISTRATIVE PROFESSIONAL has been submitted in accordance with the requirements for the Master's Degree in Technology at the Department of Office Management and Technology, Tshwane University of Technology. I further declare that the dissertation is my own work and that all references used and quoted have been acknowledged.

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ABSTRACT

THE THINKING STYLE PREFERENCE PROFILE OF THE CONTEMPORARY ADMINISTRATIVE PROFESSIONAL

The challenges that administrative professionals and executive officers face in the new world of work (also referred to as the contemporary work arena) are well known to us. Executive officers are pressurised to deliver exceptional results in a global competitive world. Administrative professionals have had to shift from a manual clerical work environment to a technological, complex and accelerated work environment.

The aim of this research was to establish the ideal thinking style preference profile of the administrative professional for optimal functioning in the new work environment. The findings were obtained by means of a literature study, a case study and structured interviews. The thinking style preference profile of the participants was measured by means of the NBI®, a diagnostic tool that revealed their preferred thinking preferences as reflected on the four-quadrant model. The administrative professionals were also assessed to quantify their preferred distinct type on the NBI® 8-Dimension Model which showed that the administrative professionals are either evenly balanced or stronger in one type of thinking style of a quadrant than in the other. The results showed that the administrative professionals at the Tshwane University of Technology predominantly had left brain thinking style preferences.

The executive officers of the Tshwane University of Technology were required to prioritise the roles and responsibilities of an administrative professional in terms of their importance within the four basic management functions of an executive officer. The roles and responsibilities were linked to the four-quadrant model. The survey examined the expectations with regard to the roles and responsibilities of the administrative professional as perceived by the executive officers in the new world of work. The findings revealed that executive officers at the Tshwane University of Technology prefer administrative professionals to demonstrate a more right brain thinking style preferences.

The changes in the professions of both the administrative professional and the executive officer were examined by means of a literature study. A comparison was drawn between the literature review, the findings of the thinking style preference profile of the administrative professional in the case study, and the outcome of the structured interviews held with executive officers.

The relationship provided evidence that the administrative professional is required to demonstrate more right brain thinking style preferences to enable her to support the executive officer effectively. The study concluded that the current administrative professional has not yet adopted the preferred thinking style preferences for effectively supporting her executive officer in the new world of work.

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LIST OF ACRONYMS

AGB	Association of Governing Boards of Universities and Colleges'
ERM	Enterprise Risk Management
HBDI	Herrmann Brain Dominance Instrument
IAAP	International Association of Administrative Professions
ICT	Information and Communication Technologies
MBTI	Myers Briggs Type Indicator
NACUBO	National Association of College and University Business Officers
NBI®	Neethling Brain Instrument
NSA	National Secretaries Association
OPSA	Association for Office Professionals of South Africa
UoT	University of Technology

CHAPTER 1

1. INTRODUCTION

1.1 Background

Research conducted by Koopman (2007) of the International Association of Administrative Professions (IAAP), Grulke and Silber (2000:115), Eksteen (1994:2) and Domeyer (2005:9) shows that the career of the administrative professional has become increasingly complex and specialised. The technological changes brought about by the Internet (a collection of millions of computers forming local and large area networks through telephone cables and satellite links around the world) may turn out to be the most dramatic of them all (Sifonis, in Grulke and Silber, 2000:ix-x). The administrative professional has had to adapt from the role of a pool typist in the early 1900s to one of "supportive administrator" in the new world of work.

Eksteen (1994:3-1) is of the opinion that the administrative professional forms part of the company and its activities; therefore, one can deduce that the working style of the administrative professional has also changed over the past 600 years. The administrative professional has progressed from the role of executing duties on the instruction of the manager, to that of performing vital "information management" functions, independent thinking and decision-making.

Domeyer (2005:15) elaborates that, in view of the transformation of the workplace, administrative professionals will have to change their approach to their posts and careers to an increasingly entrepreneurial one. The most successful contemporary administrative professional will possess knowledge of business management principles and a technical aptitude for computer applications, and will have a vigilant and highly developed perceptive understanding of the needs of an organisation for it to reach its full potential. This implies that not only a new set of knowledge and skills are required, but also different thinking style preferences.

Executive officers need support from their administrative professionals to achieve the goals of the organisation. The expectations in terms of quality, timeliness of output, knowledge of the new concepts, tools and time management are very high. The development of new information technologies and tools demand a periodical refreshing knowledge and skills from administrative professionals. Executive officers are overloaded by information and official duties; therefore they need skilful administrative professionals to systematise information and perform an important new role as change agent. The supportive role of the contemporary administrative professional revolves around the execution of the four basic management functions of planning, organising, staffing and controlling.

When we examine the work environment of the contemporary administrative professional, it includes the executive officer. Griffin (1993:6) points out that the executive officer in the new world of work faces a variety of interesting and challenging situations, namely time utilisation, globalisation that brings about increased complexities, domestic competition, government regulation and pressure by stakeholders. Rapid changes in the work environment aggravate the challenging situation of the executive officer. The technological developments witnessed have transposed the market place from industrial capitalism to a knowledge-based economy that is characterised by competition, information technology, globalisation and a more holistic way of thinking. The executive officer is required to demonstrate innovations, alternative working methods and expanding boundaries, whether for himself or for his subordinates.

Institutions in the market-place are not the only ones that have to adjust to the new world of work. The globalisation of economic, cultural, political and intellectual institutions, along with the increasing interdependence of nations, has resulted in rapid changes, challenges and opportunities facing the contemporary higher education sector. The changes in higher education institutions are mainly from a private to a public system of mass education. The work environment of both the corporate and higher education sector is included in this study.

Specific changes in higher education institutions are examined by Etzkowitz and Leydesdorff (1997:1-3) in terms of the observation that universities are moving away from the traditional functions of cultural memory and education towards technology transfer, the formation of firms and establishment of research contracts. This change of focus places universities in a new alignment with the industrial sector, for example the capitalisation of knowledge. These technological changes have also impacted significantly on the administrative professional's role with regard to the utilisation, assimilation and processing of information.

The overall aim of this study is to investigate whether the administrative professional (also referred to as a secretary, administrative assistant, office co-ordinator, office manager and personal assistant) is changing her thinking style preference to adapt to the new roles, responsibilities, skills and attributes required in the new world of work (also referred to as the contemporary work arena) that will enable her to effectively support a more dynamic manager, who in turn is developing through the influence of global expectations.

The researcher, being an administrative professional herself, has experienced technological advances over the past 20 years that have encouraged her to attempt to determine the impact of this phenomenon on the thinking style preferences of the administrative professional. The thinking style preference profiles provide an invaluable basis for understanding processes of thinking, and hence opportunities to interpret and solve business problems, different styles of management, production, communication and teamwork.

Studies regarding the specific functions of the two brain hemispheres started with the neurobiologist Robert Sperry's research on the split-brain (Neethling & Rutherford, 1996:68). He discovered that, under certain conditions, each hemisphere can hold different thoughts and intentions (Carter, 2009:8-12).

The MacLean's Triune Braine Model allocates the specialised functions of the brain based on human evolution: the human brain developed sequentially as a reptilian brain and then as a mammalian brain, which was eventually capped by the neocortex. Herrmann combined the elements of MacLean and Sperry's theories into a four-part model representing the Whole Brain Model.

"This four-quadrant model serves as an organising principle of how the brain works: four thinking styles metaphorically representing the two halves of the cerebral cortex (Sperry) and two halves of the limbic system (MacLean)" (Herrmann, 1996:12-15). Herrmann's Whole Brain Model displays mental preferences that affect behaviour in most areas of a person's life, and not abilities or competencies.

Following the development of the Herrmann Brain Dominance Instrument (HBDI) the Torrance Left/Right Brain instrument was developed by Paul Torrance and Dr Kobus Neethling between 1988 and 1991. This instrument suggests that each hemisphere hosts two specific thinking processes.

Research done with large groups of people provided evidence of their responses to specific stimuli that identified the four different thinking styles referred to as the Neethling Brain Preference Model. The Neethling Brain Instrument (NBI®) (hereafter referred to as NBI®) is a computer assessment instrument that quantifies the degree of a person's preference for a specific mode of thinking. This finding examined the correspondence with the four-quadrant model of Herrmann. The NBI® consists of 30 questions that can be completed on the internet to establish the participant's thinking preferences. The results are processed electronically. A numeric value is assigned to each quadrant, indicating the strength of preference for that quadrant. Ongoing research by Dr Kobus Neethling resulted in the development of the 8-Dimension Model in 2004. This Model divides each of the four quadrants into two distinct types of thinkers. If a person answers an additional 15 questions, the 8-Dimension Model can reveal that that person is either evenly balanced or stronger in one type of thinking style of a quadrant than in the other (Neethling & Rutherford, 1996:87, NBI® Practitioner Training Manual, 2000:2-16, 65-66).

According to Loriaux (1968:1), the work of the administrative professional in the early 1900s involved activities such as taking down letters in shorthand, transcribing these letters from shorthand onto the typewriter, attending to the manager's inward and outward mail, filing and indexing documents, attending to the pleasant appearance and tidiness of the manager's office, and so on. These tasks of the traditional secretary are categorised as forming part of the "lower left (L2) thinking style preference".

Research conducted by Neethling and Rutherford (1996:91) indicates that a person with a strong lower left (L2) thinking style preference would prefer to organise and keep track of essential information, see to the timely implementation of projects, keep a firm hand on financial matters, and regard security in relation to confidential documents as a priority.

The new world of work needs individuals showing one or more turn-on items in each of the four quadrants of the brain. Turn-on activities are those activities that the individual finds more interesting, more stimulating, more pleasurable and more fulfilling to perform that she finds other work. When given a choice, an individual will select the activity of her preference.

It is the kind of work that does not require constant external rewards because the work is rewarding in itself. This more distributed selection of turn-on activities in the thinking style preference profile results in a whole-brain profile that is typical of the executive officers and administrative professionals, whose work demands a broader understanding of the greater world of thinking preferences (Herrmann, 1996:26-28).

In this study, the NBI® served as a diagnostic tool to assess and reveal the relationship between the thinking style preference profiles of the administrative professionals and the executive officers during a study conducted at the Tshwane University of Technology. The ensuing results were compared to determine whether the current thinking style preference of the existing administrative professional matches the ideal profile of the executive officer.

1.2 Problem statement

Against the background of my discussion in the preceding section, the main problem addressed in this study was formulated as follows:

Is the thinking style preference profile of the contemporary administrative professional appropriate for optimal effectiveness in the new world of work environment, in the context of a university of technology (UoT)?

1.3 Research aims and objectives

1.3.1 Objective

The purpose of this study is to assess the ideal thinking style preference profile of the contemporary administrative professional at a higher education institution, and the applicability and impact thereof on her natural preferences to perform certain tasks and master certain skills effectively.

1.3.2 Research questions

This study was guided by the following questions:

1.3.2.1 *Qualitative questions*

- What were the skills needed in the early 1900s (prior to the new world of work) by the administrative professional to do her work? What was the thinking style preference profile associated with these skills?
- What is the preferred thinking style preference profile of contemporary administrative professionals needed for optimal effectiveness in the new world of work environment, in the context of a university of technology?
- What are the skills of an executive officer in the higher educational context? What is the thinking style preference profile associated with the skills of an executive officer in the new world of work?

- What is a thinking style preference profile and how is it applicable to this study?

1.3.2.2 *Quantitative questions*

- What is the thinking style preference profile of the administrative professional at the Tshwane University of Technology in terms of the four-quadrant profiles?
- What is the thinking style preference profile of the administrative professional at the Tshwane University of Technology in terms of the 8-Dimension Model?
- What thinking style preference profile do the executive officers at the Tshwane University of Technology prefer that the administrative professional should demonstrate in order to fulfil an effective support function?
- What is the generic thinking style preference profile of the administrative professional at the Tshwane University of Technology in terms of their current job profiles?

1.4 Research design and methodology

The data sources utilised to conduct the study are outlined in the following paragraphs.

1.4.1 The research paradigm

Denzin and Lincoln (2000:19) explain that a paradigm is the "net that contains the researcher's epistemological, ontological and methodological premises". They maintain that all research is interpretive as it is guided by "a set of beliefs and feelings about the world and how it should be understood and studied".

In an attempt to address the research questions, a quantitative and qualitative research approach was utilised, secured in the post-positivist/interpretivist paradigms. The ontology in terms of post-positivism (quantitative research approach) is a singular reality.

The researcher rejects or fails to reject the research questions (Creswell & Clark, 2007:24). While ontology in terms of constructivism (qualitative research approach) is multiple realities for example, the researcher provided quotes to illustrate different perspectives by means of a literature study. Creswell and Clark (2007:24) describe epistemology in terms of post-positivism as distance and impartiality. For example, the researcher objectively collected data on instruments. The thinking style preference profiles of the administrative professionals were assessed by means of the NBI®.

While epistemology in terms of constructivism is, for example, closeness, the researcher visited participants at their sites to collect data. The researcher conducted structured interviews with executive officers.

1.4.2 Research design

The research design applied to collect and analyse the data of this study is summarised below.

1.4.2.1 *Mixed-method approach*

The mixed-method approach is defined as an approach where the investigator collects and analyses data, integrates the findings, and draws inferences using both qualitative and quantitative approaches or methods in a single study or program of inquiry" (Teddlie & Tashakkori, 2006:12-28). The different mixed-method approaches are known as triangulation design, embedded design, explanation design and exploratory design (Creswell & Clark, 2007:59). As discussed in the previous paragraph, the research approaches used in this study were both qualitative and quantitative research. Triangulation was applied in this study by comparing the literature study with the results of the case study and cross-validating them with the data of the structured interviews conducted with executive officers at the Tshwane University of Technology.

1.4.2.2 *Qualitative and quantitative approaches*

Qualitative approaches identified by Denzin and Lincoln (2000:3) are case study, personal experience, introspection, life story, interview, artefacts, cultural texts and productions, observational, historical, interactional, and visual texts. In this study the researcher utilised the case study approach. A literature study carried out by means of books, research articles and the internet examined the history of the administrative professional, her new role and responsibilities and the changing role of the executive officer. The data obtained from the structured interviews conducted with executive officers was applied to draw conclusions.

The *quantitative research approaches* is the intensive study of many features of a number of phenomena in order to obtain an in-depth understanding of it (Miller & Brewer, 2003:193). The quantitative research approach was applied to establish the thinking style preference profiles of 24 administrative professionals at the Tshwane University of Technology in terms of the four-quadrant- and 8-Dimensional Model. The NBI® served as a diagnostic tool to assess and reveal the relationship between the thinking style preference profiles of the administrative professionals and the executive officer during a study conducted at the Tshwane University of Technology.

1.4.3 Research methodology

1.4.3.1 *Selection of participants*

Thirty-one administrative professionals employed at the Tshwane University of Technology, a higher education institution, were approached to participate in the case study on a voluntary basis. It was decided that the criteria for participation would be administrative professionals reporting to top management at the Tshwane University of Technology. These administrative professionals work on a one-to-one basis with their executive officers. Of the 31 candidates who were approached, 24 participated in the case study. The participants completed the Neethling Brain Profile questionnaires using the NBI® to determine their current dominant thinking style preferences.

1.4.3.2 *Data collection*

Qualitative data collection during this study was done by means of a literature study and structured interviews.

The 24 executive officers of the 24 administrative professionals who participated in this study were approached to complete a questionnaire that entailed the evaluation of an administrative professional. The executive officers could complete the questionnaire and return it via e-mail to the researcher. Interviews were held with the executive officers who were unable to complete the questionnaire due to personal time constrains.

The remaining seven executive officers of the administrative professionals who did not participate in the study were invited to participate in the pilot study to refine the questionnaire. Five executive officers participated in the pilot study.

The literature study involved books, research articles, the internet and dissertations. A comparison was drawn between the literature review, the findings of the thinking style preference profile of the administrative professional in the case study, and the outcome of the structured interviews held with executive officers.

One *quantitative data collection measure*, namely the NBI® was used to profile the thinking style preferences of the participants. The NBI® consists of 30 questions to establish the participant's personal profile. There is no right or wrong answer and no good or bad profile. Each subject scores a total of 300 points. However, the spread of the points over the four quadrants, which represent their thinking processes, have important implications for the participants.

1.4.3.3 *Data analysis*

To be able to create the final text, the researcher needs to analyse the data. The data analysis process according to Creswell and Clark (2007:129) was applied in this study.

The *qualitative data* derived from steps set out in Creswell and Clark's (2007:129) data analysis techniques, namely to organise and prepare the data, read the data, start to analyse the data in detail, identify subjects and sub-subjects, discuss the subjects and interpret and explain the data. The literature study was colour-coded in terms of categories determined by the four quadrants of the NBI®. The findings of the literature study were correlated with the information obtained from the structured interviews conducted with the executive officers and with the thinking style preference profiles of the administrative professionals who participated in the case study.

The *quantitative data* of this study emanated from the computerised NBI®. The specific instruments that focus on the way people perceive their work environment were applied to measure the participants thinking style preference profile in four and eight dimensions.

The participants were issued with a username and password to complete the assessment on-line. A question with four possible responses was posted to each of the subjects. The participants had to arrange their personal thinking preferences from the strongest to the lowest. The choices for each question are based on the thinking processes belonging to the four different quadrants. The scoring was completed automatically. The thinking style preference profiles were delivered to Solutionsfinding and constructed by practitioners. A report gave a description of each of the participants' thought preferences divided into the four and eight dimensions, and made recommendations based on the latter (Op ten Berg, 2010:3-6). The data was verified by the independent research psychologist, Dr Liezel Korf.

1.4.4 The trustworthiness of the research

1.4.4.1 *Credibility and transferability of the research: qualitative component*

- Credibility

In this study triangulation and crystallisation were utilised to evaluate discrepant data in order to increase the credibility of the research study.

Triangulation

Mathison (in Golafshani, 2003:603) elaborates on this by saying: "Triangulation has raised an important methodological issue in naturalistic and qualitative approaches to evaluation [in order to] control bias and establishing valid propositions, because traditional scientific techniques are incompatible with this alternative epistemology."

In this study, the researcher used triangulation (the use of a range of data sources) to obtain information from the structured interviews conducted with the executive officers, which was interpreted with the results from the case study and the themes that emerged from the literature study. As such, triangulation as a strategy was utilised to facilitate a comprehensive understanding of the phenomenon being studied.

Crystallisation

Moustakas (in Denzin & Lincoln, 2000:345) defines crystallisation as follows: "In crystallisation, the three core steps are collapsed into an extended period of intuition-rich immersion with the text. It is the interpreter, as an editor, who serves as the organising system in the editing style."

In this study different data-collection techniques were utilised to facilitate crystallisation and to increase the reliability of this study. As mentioned previously, an external expert from Solutionsfinding was used to verify the colour coding done by the researcher. An independent research psychologist verified the interpretation of the data that was done by the researcher.

- Transferability

According to Bryman (2004:273-274), "transferability" parallels external validity. He defines external validity as "the degree to which findings can be generalised across social settings". In this study the qualitative research approach entails the study of a small group who shared certain characteristics. He further stated: "Qualitative findings tend to be oriented to the contextual uniqueness and significance of the aspect of the social world being studied."

1.4.4.2 *Reliability and validity: quantitative component*

Joppe (in Golafshani, 2003:598) defines *reliability of quantitative research* as follows: "The extent to which results are consistent over time and an accurate representation of the total population under study is referred to as reliability and if the results of the study can be reproduced under a similar methodology, then the research instrument is considered to be reliable." Investigations about the reliability and validity of the NBI® are done in order to update the existing research information at regular intervals (Korf, 2004:2).

The *reliability* of the instrument was administered and repeated on the same sample after a period of time. A high correlation between the two administrations was found. Internal consistency measures were also applied to examine the reliability of the instrument. These measured the degree to which items "grouped together" as intended. The value of >0,70 obtained was regarded as acceptable.

Joppe (in Golafshani, 2003:599) provides the following explanation of the *validity of quantitative research*: "Validity determines whether the research truly measures that which it was intended to measure or how truthful the research results are. In other words, does the research instrument allow you to hit 'the bull's eye' of your research object? Researchers generally determine validity by asking a series of questions, and will often look for the answers in the research of others."

To define whether the NBI® measures the constructs that it purports to measure, *validity* correlations with the NBI® and the Myers Briggs Type Indicator (MBTI) were done (Korf, 2004:2). The theoretical expectations in terms of strength and direction of correlations were confirmed. Correlations ranged from 0,20 to 0,70 and where no correlations were expected, the correlations were negligible. This adds to evidence of both convergent and discriminant validity.

1.4.5 Role of the researcher

In qualitative studies, the researcher is a vehicle through which data will be collected and interpreted.

In quantitative research, the researcher collects data specifically related to one or a few variables, each variable is measured by specific predetermined methods, much attention is given to the validity and reliability of the measuring instruments and the researcher tends to remain objectively separated from the subject matter.

1.4.5.1 *Ethical measures*

The researcher obtained the approval of the Research Ethics Committee of the Tshwane University of Technology to engage with human participants. Each of the 24 administrative professionals who indicated their willingness to participate received an informed consent letter to be signed prior to the online assessment. The informed consent letter stipulated the purpose of the study, what would be required of participants, potential benefits, participants' rights regarding voluntary participation and confidentiality, and the anonymity of the study.

1.4.6 Limitations

The range of the study was limited as only one institution was involved. Due to the high costs involved in the administration and scoring of the measure used in this study, it was decided, *inter alia*, to limit the current research to one institution only.

Only administrative professionals at the Tshwane University of Technology formed part of this study, and, as such, the results cannot be generalised to include the general population of administrative professionals. The influence of the administrative professional's immediate executive officer on her effectiveness was not investigated. The administrative professionals who participated in this study could not be considered as a random sample and generalisations could not be made. The reasons why some administrative professionals decided not to participate remain unknown. In terms of their NBI® scores, non-participants may very well differ from those who did participate.

1.5 Concept clarification

In order to ensure a clear understanding of concepts, definitions of the key concepts in the context of this study will now be provided.

1.5.1 Administrative professional

The International Association of Administrative Professionals (2007) defines "administrative professional" as follows: "An administrative professional is an individual who is responsible for administrative tasks and co-ordination of information in support of an office-related environment and who is dedicated to furthering their personal and professional growth in their chosen profession."

In this study, the administrative professional will be referred to as a female, therefore the dual gender reference of "his/her" will be omitted.

1.5.2 Thinking style preference profile

Dominance provides the basis for the measurement of physical differences in the human body, based on dominant characteristics such as left- and/or right-handedness. Nature has provided a physical characteristic called "dominance" to differentiate the development between the right hand and arm, and the left hand and arm. The more dominant hand and arm develop to a higher level of dexterity so that this limb is used more frequently. This results in most of the world's population exhibiting a dominant hand and arm. Approximately 90 percent of people are right hand and arm dominant. This same concept of dominance may be applied to the paired structures of the brain. One member of the pair, through increased use due to preference, develops to a higher level than the non-dominant one. The principal thinking structures in the brain exhibit the same duality characteristic of the other paired structures of the body (Herrmann, 1996:16). As dominance of one structure over its partner develops through life's experiences, the degree of that dominance becomes evident from the mental preferences the person exhibits (Herrmann, 1996:16). The brain dominance will be elaborated on Chapter 2.

1.5.3 Executive officer, chief executive officer and the manager

The term “manager” is used as a collective word describing the managers of an organisation, whereas “management” is the process of utilising an organisation’s resources to achieve objectives and goals. The study comprises the work environment of managers in the private sector as well as in a higher education institution.

Different definitions of general terminology such as “manager” and “chief executive officer (CEO)” are quoted in order to explain the use of the term “executive officer” in this study. The influence of the different levels of management in an organisation is also addressed. According to Le Roux, De Beer, Ferreira, Hübner, Jacobs, Kritzinger, Labuschagne, Stapelberg and Venter (1999:109-110) and Griffin (1993:11), managers can be differentiated according to their level in the organisation, for example, top, middle-, and first-line managers. Top managers form the relatively small group of executive officers responsible for:

- General management (controlling the organisation).
- Strategic planning, such as systematic structuring and/or adaptation of the organisation’s objectives, especially long-term objectives.

Viewing the profile of an executive officer defined above as well as the roles and responsibilities of top managers, it is apparent that the vice-chancellor of a higher education institution should be classified in the new world of work as a chief executive officer (CEO). The deputy vice-chancellors should be classified as “... other executive offers ...” in this context.

Kallaus and Keeling (1991:3), Griffin (1993:6) and Odgers (2005:6) define a manager as follows: “A manager is someone whose primary responsibility is to carry out the management process. In particular, a manager is someone who plans and makes decisions, organises, leads, and controls human, financial, physical, and information resources.”

Le Roux *et al.* (1999:109-110) and Griffin (1993:11) elaborate on the responsibilities of middle management:

- Medium- to short-term planning.
- Greater degree of technical knowledge is required.
- Direct involvement in human and other resources.

With regard to the profile of a manager described in the above definition, and the role and responsibilities of middle management, it is evident that it fits the profile of academic deans and directors of a higher institution.

It is the opinion of Smith, Bargh, Bocock and Scott (1999:113-114), Deem (1998:47) and Jansen (2004:293-314) that the organisational changes in the higher education sector have contributed towards the shift from academic leaders to executive managers.

The organisational changes with regard to the "increased international competition, a faster pace of technological development and the downsizing of firms to core competencies have made companies more receptive to external sources of innovation" (quoted from Soete, 1997:2) are discussed in Chapter 5. The new language accompanying this shift led, to the designation of "executive officer".

The researcher therefore decided to use the contemporary uniform title of "executive officer" to refer to the vice-chancellor, deputy vice-chancellors, academic deans, directors, CEOs and managers in this study.

1.6 Division of chapters

1.6.1 Chapter 1: Introduction

This chapter outlines the background, problem statement, research aims and objectives, research design and methodology, concept clarification, division of chapters and a summary.

1.6.2 Chapter 2: The concept of brain dominance and thinking style preferences

Chapter 2 provides a clear understanding of the theory of brain dominance, the concept of thinking style preferences and the NBI®, a diagnostic tool used as a measurement. The most prominent perspectives of the theory of the brain are discussed in terms of several theories, namely the neurobiologist Robert Sperry's split brain theory, MacLean's Triune Braine Model and Ned Herrmann's Whole Brain Model. This relates to the overall aim of the study as indicated in paragraph 1.3, namely to establish the appropriate or ideal thinking style preference profile of the administrative professional to be enable to fulfil her role in the new world of work effectively.

1.6.3 Chapter 3: The history of the administrative professional's profession

The aim of this chapter is to study all the data relevant to the career of the administrative professional, to compare the historical role, responsibilities, abilities and attributes of the administrative professional, as well as the responsibilities, abilities and attributes of the contemporary administrative professional. The shift in the thinking style preferences and the processing of information from a historically predominantly left brain thinking style preference to a more right brain thinking style preferences based on her new role and responsibilities is explored.

1.6.4 Chapter 4: The changing role of the administrative professional

This chapter expounds the impact of the changing work environment on the thinking processes and thinking styles preferences of the administrative professional. Profound changes related to the information era are identified. The influence of these changes on the administrative professional's roles, responsibilities, attributes and skills are addressed. This relates to the overall aim of the study to compile an ideal thinking style preference profile for the administrative professional to complement the identified thinking style preference profile of an executive officer.

1.6.5 Chapter 5: The changing role of the executive officer

This chapter examines the changes and challenges experienced by the executive officer from before World War II to the current work environment. An explanation is given of how the demands of the new work environment impact on the role of the executive officer. The attributes required by the executive officer for effectively meeting these challenges are identified, with specific reference to thinking processes. A comparison is drawn from the literature study to indicate the ideal thinking style preferences of the administrative professional to complement the identified thinking preference profile of an executive officer.

1.6.6 Chapter 6: Research design and methodology

In this chapter, the researcher presents the research design and methodology in terms of the selected paradigm approach and the research design. The research methodology with regard to the selection of participants, data collection and data analysis of qualitative and quantitative research approaches is addressed. The trustworthiness of the research, the role of the researcher and limitation of the study are observed.

1.6.7 Chapter 7: Research results and interpretation of the case study

In this chapter, the collection of data, the analysis thereof and the findings are described. It includes the interpretation of the NBI® and the structured interviews conducted with the executive officers. A comparison was drawn between the administrative professional's thinking style preference profile and the generic thinking style preference profile of an administrative professional.

1.6.8 Chapter 8: Conclusions and recommendations

This chapter contains the conclusion reached with regard to the comparison made between the thinking style preferences of the administrative professional at the Tshwane University of Technology and the ideal thinking style preferences of the contemporary administrative profession. Recommendations are made pertaining to training and further research.

1.7 Summary

This chapter offered an introduction and overview of the planned research project. The rationale and contextualisation of the research project were discussed, as well as the purpose of the study, the research questions and research problem statement. Certain concepts were clarified as these relate to the theme of this research in the next chapter.

CHAPTER 2

2. THE CONCEPT OF BRAIN DOMINANCE AND THINKING STYLE PREFERENCE

2.1 Introduction

The researcher, being an administrative professional herself, has experienced how the work environment of the administrative professional changed radically over the past almost 20 years, from working on an electrical typewriter to progressing to the computer, from following orders to independent decision-making. This experience encouraged the researcher to attempt to determine the impact of this phenomenon on the thinking preferences of the administrative professional.

The aim of this chapter is to provide a clear understanding of the theory on brain dominance and the concept of thinking style preferences. This relates to the overall aim of the study as indicated in Chapter 1 (paragraphs 1.3.1 and 1.3.2), namely to establish the appropriate or ideal thinking style preference profile of the administrative professional to be able to fulfil her role in the new world of work effectively. The most prominent theories on thinking style preferences of the basic three parts of the brain will be discussed namely the theories of Sperry, McClean and Herrmann. The instruments for assessing thinking style preferences, the Herrmann Brain Dominance Instrument (HBDI) and the NBI®, will also be discussed.

2.2 The physical brain

Before the concept of brain dominance can be discussed, a brief overview of the composition of the brain will be given.

2.2.1 The different parts of the brain

According to Ornstein and Thompson (1984:22), different studies in the past decades have revealed that the processes of evolution constructed the brain in a particular manner, referred to as the "architecture" of the brain. Dickmann, Stanford-Blair and Rosati-Bojar (2004:23), Carter (2009:56-57) and Bloom (in Michels, 2001:2-7) demonstrate the changing relationships between the hindbrain, the midbrain and forebrain by means of a medial illustration of the human brain. This illustration gives an understanding of how our mental capacities have adjusted to our environment (refer to Figure 2-1). Paragraph 2.2.4 elaborates on the illustration.

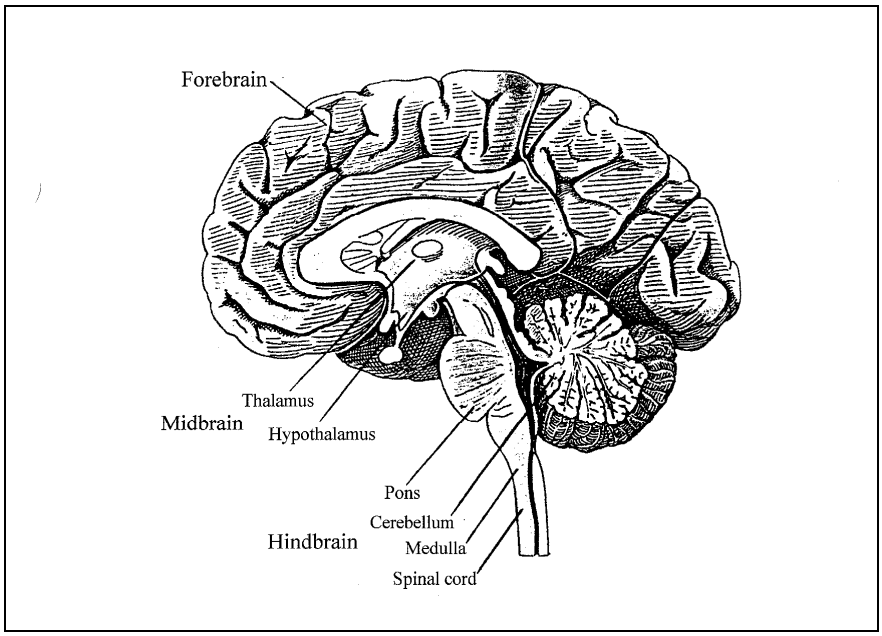

Figure 2-1: Hindbrain, midbrain and forebrain
(Bloom in Michels, 2001:7)

2.2.2 The hindbrain

Research conducted by Ornstein and Thompson (1984:24) revealed that the hindbrain is the oldest part of the brain and is, also referred to as the reptile brain, since it is the most primitive part of the brain (Grové, 1996:79).

The hindbrain consist of structures called the pons, cerebellum and medulla oblongata, which are associated with various functions such as bridging the central nervous system from one part of the brain to another; co-ordination and muscle tone, cardio-respiratory function, digestion and swallowing (Sternberg in Michels, 2001:2-10).

2.2.3 The midbrain

Ornstein and Thompson (1984:24) state that the midbrain consists of the uppermost portion of the brainstem. Grové (1996:79) refers to the midbrain as the mammalian brain. The mammalian brain is responsible for the physiological processes like breathing, regulation of the flow of blood and maintenance of the body's temperature. Vision, hearing and controlling movement are also functions of the midbrain (Sternberg in Michels, 2001:2-10).

2.2.4 The forebrain

The cerebral cortex, also referred to as the forebrain, is the most sophisticated part of the brain and its primary function is to control all the thinking processes, as illustrated in Figure 2-1 by Sternberg (in Michels, 2001:2-10). Also see Figure 2-2 and Figure 2-4 (Grové, 1996:80; Ornstein & Thompson, 1984:24-31).

2.2.4.1 *Cerebral cortex*

The cerebral cortex is responsible for receiving and processing sensory information, thinking processing, cognitive processing, planning and sending motor information. These functions of the cerebral cortex are linked to the principle of the whole thinking style preference profile to indicate how the brain works (refer to Figure 2-3).

2.2.4.2 *Limbic system*

The limbic system is a group of cell structures in the centre of the brain, immediately above the brainstem. Homeostatic mechanisms located in the limbic system regulate the maintenance of body temperature, blood pressure, heart rate and sugar levels in the blood.

The limbic system is also involved in the emotional reactions that have to do with survival, such as procreation or self-protection, for example, shelter and food. Figure 2-2 and Figure 2-4 examine the relevance of the limbic system to the thinking style preferences.

2.2.4.3 *Thalamus*

The thalamus is a primary relay station for information coming into the brain and transmits information to the correct regions of the cerebral cortex.

2.2.4.4 *Hypothalamus*

The hypothalamus controls the endocrine system, the autonomic nervous system, regulates internal temperature and behaviour related to species survival, plays a role in controlling consciousness and is involved in emotions, sexual responses, pleasure, pain and stress reactions.

Although the structure of the brain has long been known to us, neuroscientists only discovered as recently as 25 years ago, by means of brain-imaging technology, how the brain creates thoughts, emotions and perceptions. Neurobiologist Roger Sperry discovered that, under certain conditions, each hemisphere can hold different thoughts and intentions (Carter, 2009:8-12).

This discovery led to the concept of brain dominance and will be elaborated on in the following paragraphs.

The discussions about and explanations and descriptions of the thinking style preference profiles in the following paragraphs are based on the NBI® Practitioner Training Manual (Rutherford and Neethling: 2000).

2.3 Theoretical background of the origin of the concept of brain dominance

MacLean's Triune Braine Model allocated the specialised functions of the brain based on human evolution: the human brain developed sequentially as a reptilian brain and then as the mammalian brain, which, in turn, was finally capped by the neocortex.

Herrmann (1996:11-12) states that researchers such as Robert Ornstein, Roger Sperry, Joseph Bogen and Michael Gazzanaga provided convincing evidence obtained through their experiments that the brain is specialised, and that the differences in specialisation are located in each hemisphere. The popularisation of the left brain/right brain theory was formed by clinical evidence that the brain is made up of only two specialised hemispheres. Each hemisphere is mainly responsible for the opposite half of the body. The left side of the brain controls movements and receives information from the right side of the body; the right side of the brain controls the left side of the body.

Figure 2-2 illustrates the physiological interaction between the left and right hemispheres. The hemispheres are connected by the corpus callosum and the two halves of the limbic system that are joined by the hippocampal commissure.

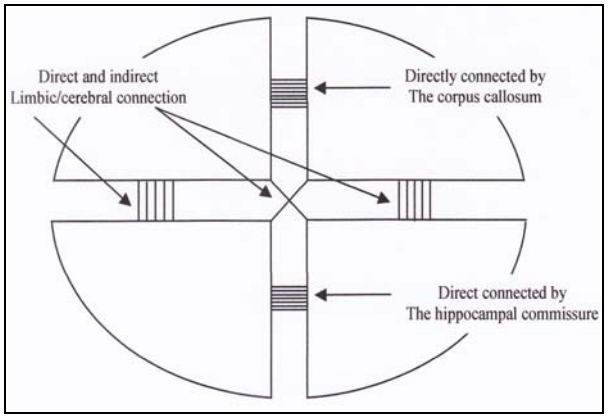

Figure 2-2
The interconnected brain system
(Craig, 1987:243)

Ornstein and Thompson (1984:38) emphasise that the two hemispheres communicate with one another, although each hemisphere is specialised to handle different tasks. The left hemisphere is much more integrated and capable in language and logical thinking. Michels (2001:3-26) specifies the attributes that concern the primary functions of the left hemisphere as detail, language processing and linear analysis. The main functions of the right hemisphere are images, movement, emotion and intuition.

Herrmann (1996:12) tabulated (as shown in Table 2-1) clinical and experimental evidence of hemispheric dominance as published in the Science News, Volume 109 of April 1976.

Table 2-1

Hemispheric dominance

(Herrmann, 1996:12)

LEFT HEMISPHERE (RIGHT SIDE OF BODY)	RIGHT HEMISPHERE (LEFT SIDE OF BODY)
Speech/Verbal	Spatial/Musical
Logical, Mathematical	Holistic
Linear, Detailed	Artistic, symbolic
Sequential	Simultaneous
Controlled	Emotional
Intellectual	Intuitive, creative
Dominant	Minor (quiet)
Worldly	Spiritual
Active	Receptive
Analytic	Synthetic, Gestalt
Reading, writing, naming	Facial recognition
Sequential ordering	Simultaneous comprehension
Perception of significant order	Perception of abstract patterns
Complex motor sequences	Recognition of complex figures

With this tabulated clinical experimental evidence and MacLean's Triune Brain Model, the "stage was set for the popularisation of the left brain/right brain dichotomy" (Herrmann, 1996:12-13). Herrmann combined the elements of MacLean and Sperry's theories into a four-part model representing the Whole Brain Model as shown in Figure 2-4.

"This four-quadrant model serves as an organising principle of how the brain works: four thinking styles metaphorically representing the two halves of the cerebral cortex (Sperry) and two halves of the limbic system (MacLean)" as demonstrated in Figure 2-3 (Herrmann, 1996:12-15).

The representation of the two hemispheres shown in Figure 2-3 is indicated as "cerebral" and "limbic". L1 and R1 in the cerebral mode represent the cognitive modes associated with the cortex and L2 and R2 represent the more visceral, emotional modes associated with the limbic system.

L1 and L2 specialised in left mode thinking processes – logical, analytical, quantitative and fact-based modes contained in the cerebral left quadrant. Planning, organising, attention to detail and sequential modes are processed in the limbic left quadrant.

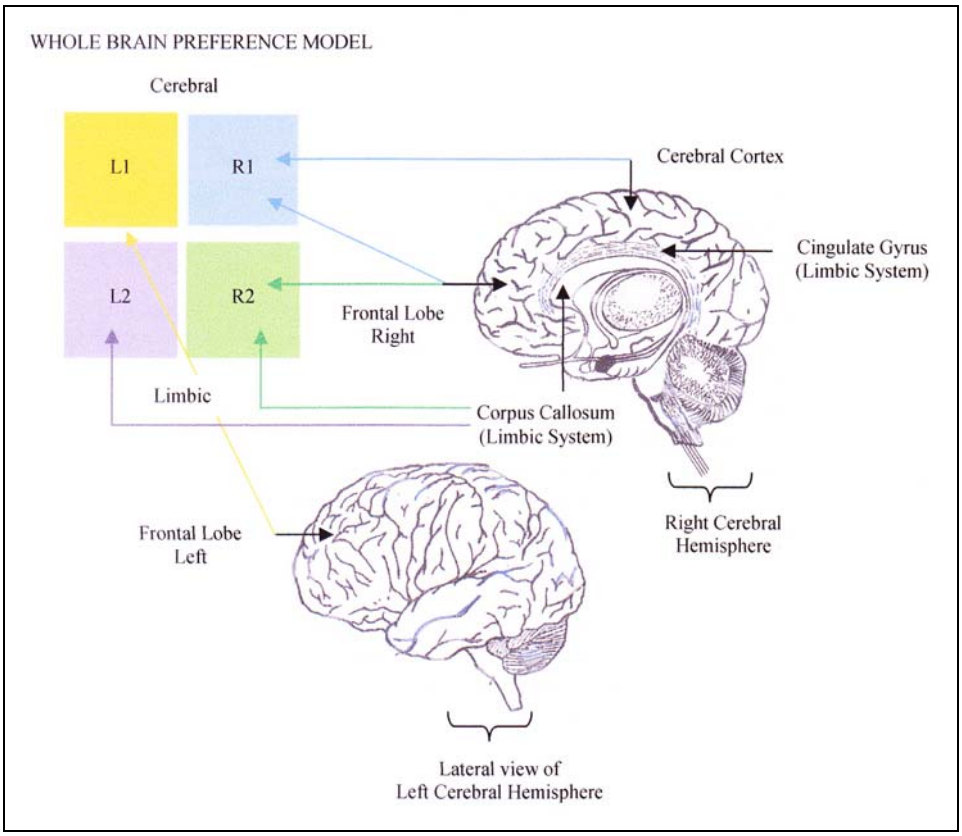

Figure 2-3

Lateral and medial view of the brain

(Herrmann, 1996:14; Dickmann, Standford-Blair & Rosati-Bojar, 2004:21-23)

In contrast, the more synthesising, integrating, holistic and intuitive modes are associated with the cerebral right quadrant and the interpersonal, emotional, kinesthetic and feeling modes are associated with the right limbic quadrant (Craig, 1987:242). A metaphorical model emerged indicating the thinking preferences associated with one or more of the quadrants of the brain as shown in Figure 2-4. Herrmann's Whole Brain Model displays mental preferences that affect behaviour in most areas of a person's life, and not abilities or competencies.

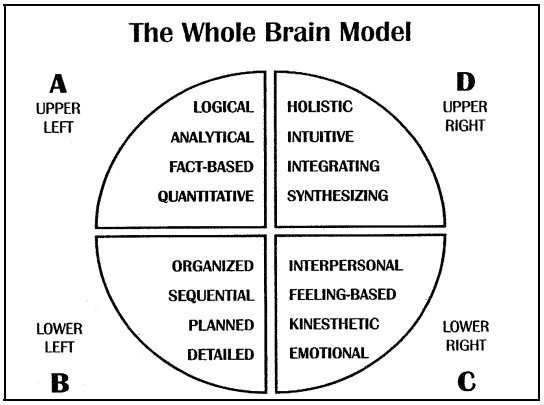

Figure 2-4
Herrmann's Whole Brain Model
(Herrmann, 1996:15)

Herrmann (1996:16) states that "dominance provides the basis for measurement of differences". He explains the concept of brain dominance as follows:

"As dominance of one structure over its partner develops through life's experiences, the degree of that dominance becomes evident from the mental preferences the person exhibits."

Covey (2004:130) is of the opinion that although people use both the left and right hemispheres of the brain, one of the hemispheres is generally dominant in each individual. People process the information of a situation according to either their left or right thinking style preference, giving rise to the tendency for people to stay in their "comfort zone" based on their dominant hemisphere.

As discussed in Chapter 4, changing from a left brain thinking style preference to a more right brain thinking style preference might be necessary for success in the new world of work.

The discussion above provided background for understanding the different functions of the brain and the metaphoric representation of an individual's thinking preferences reflected in the four-quadrant model. For the purpose of this study, the thinking style preference is defined as the current thinking style an administrative professional would most prefer if she had the choice or opportunity.

The development of an instrument to measure an individual's preferred mode of thinking will now be discussed.

2.4 Measuring thinking style preference

Although the data- collection and analysis are discussed and defined in Chapter 1 and Chapter 6, a more detailed interpretation is provided in the paragraphs below.

Ned Herrmann (1996:7-18) developed the Herrmann Brain Dominance Instrument (HBDI) in August 1979 to "quantify the degree of a person's preference for each of the four styles". The basis of the assessment is a paper- and- pencil questionnaire about the different means people use to solve problems, to carry out tasks or projects and to make decisions. The numeric values are distributed on the four-quadrant model indicating the preferences, and not the competencies, of the individual.

2.4.1 Four-quadrant profiles

2.4.1.1 *The NBI® Instrument(s)*

After the development of the Herrmann Brain Dominance Instrument came the "Torrance Left/Right Brain instruments" developed by Dr Paul Torrance and Dr Kobus Neethling between 1988 and 1991. These instruments suggest that each hemisphere host two specific thinking processes.

Research done with large groups of people provided evidence of their responses to specific stimuli, which identified the four different thinking styles referred to as the Neethling Brain Preference Model. The NBI® is a computer assessment instrument that quantifies the degree of a person's preference for a specific mode of thinking.

The instruments include:

- Personal, education and business instruments

NBI®- general adult, teacher/trainer, senior student, student, skills, job, personal negativity, parenting style, leadership style, creativity style, relationship style, learning style, eating habits, and 360.

- Sport instruments

NBI®- rugby, rugby referee, soccer, golf, netball, tennis and cricket.

These instruments add value and insight to personal development, personal and family relationships, team- building strategies, creativity and leadership, conflict control and resolution, new employee selection and employee retention.

For the purpose of this study, the NBI® General Adult instrument was used to assess the thinking style preferences of the administrative professionals who participated in the case study (see research results and interpretation in Chapter 7). The ideal thinking style preference profile of an administrative professional was generated with the NBI® Job instrument (see Figure 4-2).

A person is issued with a username and password to complete the assessment on-line. The NBI® profile is a 30- or 15-question diagnostic survey that indicates personal thinking preferences, skills or styles. A question with four possible responses is posted to each of the subjects who then have to arrange their personal thinking preferences from the strongest to the lowest. The choices for each question are based on the thinking processes belonging to the four different quadrants. The scoring is completed automatically. The thinking style preference profiles are delivered to Solutionsfinding and constructed by practitioners.

A report gives a description of a person's thought preferences divided into the four quadrants, and makes recommendations based on the latter (Op ten Berg, 2010:3-6). The results are processed electronically. A numeric value is assigned to each quadrant, indicating the strength of preference for that quadrant (Neethling & Rutherford, 1996:87, NBI® Practitioner Training Manual, 2000:2-16, 65-66).

2.4.1.2 *Interpretation of NBI® Instrument*

The thinking style preference profile has to be seen holistically and not as separate quadrants, as the quadrants impact on each other. The quadrant "scores" are indicated as follows (see research results and interpretations, Chapter 7):

- 95+: very strong
- 80 – 94: strong
- 72 – 79: strong average (also considered as strong)
- 65 – 71: average (also considered as supportive)
- 50 – 64: low
- -50: very low

Figure 2-5 below demonstrates the divided preferences with symbols, for example R1, R2, L2 and L1, that will be used in the research report. When a person receives the analysis of her/his thinking style preference profile, the following descriptions regarding the scores obtained in each of the four quadrants will appear (the activity associated with the score is underlined):

- A **high score** in a quadrant indicates that, for example,
  - A person requires the ability to gather and research information
  - A person is being able to take a decisive stance at times, remaining unbiased

- A person possess the skills to work in a focused and accurate way
- A person is comfortable with routine and repetitive tasks

- An **average score** in a quadrant indicates that, for example,
  - A job may require some clear goal setting
  - Although some sharing of ideas and cooperation will be required, it probably does not have a very strong priority

- A **low score** in a quadrant indicates that, for example,
  - A job that does not require a traditional and rule-bound approach
  - This job requires little repetition, routine and administration
  - The emphasis is not on bringing people together

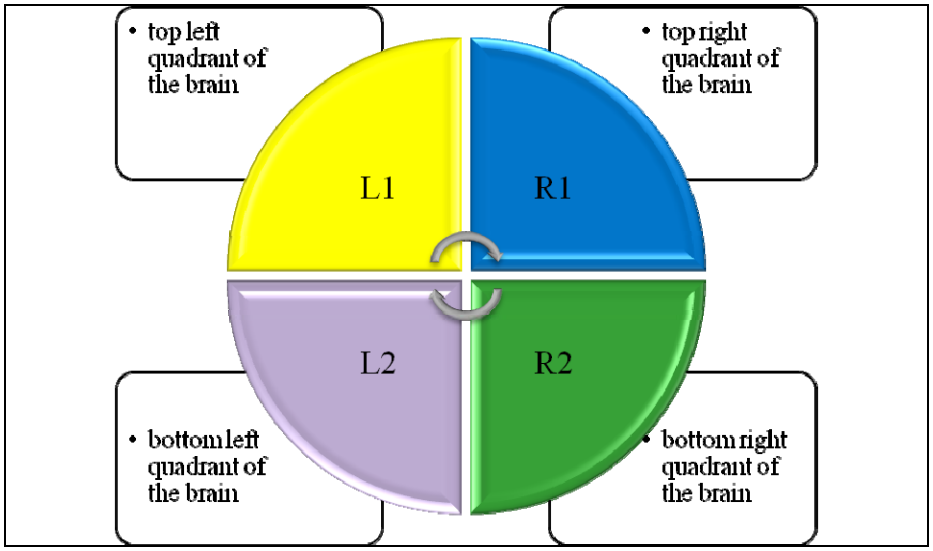

Figure 2-5

Illustration of four-quadrants

The specialised functions located in the different hemispheres are discussed in paragraph 2.4.2. The specialised functions required of the contemporary administrative professional and the executive officer were compared and listed in Table 5-1 according to the different hemispheres. The colour applied to the words (Chapters 4, 5 and 7) describing the different thinking style preferences correspond with the colour prescribed by the Kobus Neethling Group.

Ongoing research by Dr Kobus Neethling resulted in the development of the 8-Dimension Model in 2004. It is explained below.

2.4.2 The Neethling Whole Brain 8-Dimension Model

The 8-Dimension Model divides each of the four quadrants into two distinct types of thinkers. When a person answers an additional 15 questions the 8-Dimension Model can indicate that a person is either evenly balanced or stronger in one type of thinking style of a quadrant than in the other.

The two distinct types of each quadrant are as follows:

2.4.2.1 R1 – *Strategist* and *Imagineer*

The *Strategist* prefers:

- To connect past and future
- To see the vision, even to make forecasts and predictions
- To challenge existing approaches and to ask the "Why?" questions
- A challenge and therefore unfamiliar territory and new experiences
- To consider a variety of possibilities
- Not to shy away from risk when involved in designing future trends

The *Imagineer* prefers:

- To think in pictures
- To use metaphors and images to describe experiences
- To draw pictures, doodle and scribble when listening to someone
- To play around with impossible ideas
- To daydream, fantasise and think beyond the ordinary
- To be reflective and meditative
- To often be unsystematic and to do things "my way"
- To nurture "strange" ideas

2.4.2.2 *R2 – Socialiser* and *Empathiser*

The *Socialiser* prefers:

- To work with others in groups
- To spend free time in the company of others
- To be surrounded by people and be part of gatherings and crowds
- To bring people together at work or when entertaining
- To share information
- To reach consensus and to encourage others to participate in sharing ideas
- To be outgoing and energetic when in the company of others

The *Empathiser* prefers:

- To assist and reach out to others
- To serve others through a caring, sensitive and unobtrusive attitude
- To depend on intuition
- To encourage others to achieve
- A positive, hopeful and caring environment
- The companionship of a few friends and family (or animals)
- To place the needs of others above his/her own

2.4.2.3 *L2 – Organiser* and *Stalwart Preserver*

The *Organiser* prefers:

- To plan, organise and arrange things
- To follow an orderly, detailed and systematic approach
- To implement and to put things into action
- To work according to a schedule or a "to do" list
- To administer and oversee tasks
- Priorities such as perseverance, effectiveness and usefulness

The *Stalwart Preserver* prefers:

- Circumstances where traditions and well-proven methods and practices are respected
- Rules and regulations to be in place

- To work in a methodical and cautious manner
- A neat and secure environment

2.4.2.4 *L1 – Analyst* and *Realist*

The *Analyst* prefers:

- To get to the essence of things
- To dig deeper to achieve results
- To be involved in financial and investment matters
- To connect a figure or measurement to things
- Certainty
- To calculate, probe, research and examine conditions

The *Realist* prefers:

- Clarity of thinking
- Concrete information
- To focus on a specific goal or outcome
- No distractions
- Achievable and clearly defined goals
- No clutter and confusion
- To weigh pros and cons
- To understand all possible consequences

The discussion in paragraphs 2.3 and 2.4 provided insight into how the concept of brain dominance originated and how the thinking style preferences are measured. In the summary below an explanation is given of how the thinking style preferences relates to the research study.

2.5 Summary

The thinking style preference profiles provide understanding of and opportunities to solve business problems, interpret different styles of management and improve production, communication and teamwork. In this study, the NBI® served as a diagnostic tool to assess and reveal the relationship between the thinking style preferences of the administrative professionals and the executive officers during a case study conducted at the Tshwane University of Technology.

The ensuing results were compared to determine whether the current thinking style preferences of the administrative professional complement the identified thinking style preference profile of the executive officer. The results of the study are expounded in Chapter 7.

CHAPTER 3

3. THE HISTORY OF THE ADMINISTRATIVE PROFESSIONAL'S PROFESSION

3.1 Introduction

The aim of this chapter is to provide a historical background of the development of the administrative professional's profession in an attempt to provide a clear understanding of the increasingly complex and specialised work environment of the contemporary administrative professional. The historical influences with regard to the development of the administrative professional's profession will be discussed in order to be able to determine the ideal thinking style preference profile of the contemporary administrative professional. Furthermore, this chapter will explore the shift in the thinking style preferences and the processing of information from a historically predominantly left brain thinking style preference to a more right brain thinking style preference based on her new role and responsibilities which will be discussed in Chapter 4.

3.2 The historical background of the administrative professional's profession

In this section, a historical overview will be provided of how the role of the administrative professional has changed and developed over time.

The origin of the concept of "secretary" is unknown. The role originated from the natural need for a person to whom confidential matters could be entrusted, and who could act as an assistant to a principal. Historically, it is known that secretaries existed in Rome prior to the establishment of the Empire. They were usually educated men who took dictation as "scribes", and frequently acted as trusted advisers (Koopman, 2007).

Research conducted by Koopman (2007), the associate editor of the International Association of Administrative Professions, provides evidence that the existence of secretaries can be traced back to the Renaissance era. During this era the secretaries' tools of the trade ranged from chisels for scribes used on stone to styluses applied to surfaces of clay, wood, or wax tablets. The Romans replaced these methods with parchment and reed pens. The shorthand system was implemented as part of the preparation and training of secretaries.

In the early Renaissance period, from the fourteenth to the seventeenth century, members of the aristocracy had secretaries who functioned quite similarly to contemporary administrative professionals in terms of their reading and writing skills, the recording of business transactions, record keeping (filing) and handling correspondence, except that it was a position held only by men. Most had a command of several languages, including Latin, and were required to have what we would consider today as a broad-based education and expertise gained through experience. With the increasing growth in commerce and trade, people of wealth and power needed secretaries (confidants and trusted agents) to handle correspondence on private or confidential matters, and particularly on matters of state (IAAP, 2007).

Harding (1998:3) states that office work prior to the Industrial Revolution was done by poorly paid clerks, seated on high stools at large desks and painstakingly copying out letters in fine copperplate writing. Clerks worked an 11-hour day for a few shillings a week. It was the norm for them to supply their own wood or coal for the office stove and to clean their own offices. Conversation with colleagues during office hours was forbidden, and permission to leave the room had to be granted by the manager.

Koopman (2007) points out that apart from performing stenographic duties, these secretaries maintained account books and were known for their exemplary penmanship skills. They worked long hours at their "secretary" desks, which served as their filing and workstations. As world trade increased in the fifteenth and sixteenth centuries, secretaries often attained an elevated status and held prominent positions.

The designation of secretaries frequently included titles such as “personal” or “private”. Men continued to dominate the secretarial field until the invention of the first commercial typewriter in 1870. In the wake of the Industrial Revolution, 1760 – 1850 (Du Toit in Kroon, 1995:27) the manual typewriters revolutionised the creation of business documents, as it was the first major advance in writing technology in centuries (Garfield, 1986:113; Webster, 1993:77).

Harding (1998:3) is of the opinion that the invention of the typewriter was only the beginning of companies growing into the industrial era. The new industrial era required a higher demand for clerical, professional and managerial personnel to manage the increased volume of paperwork.

Koopman (2007) states, since the introduction of the typewriter in 1875, more women accessed the office workforce, starting in various clerical roles. Business offices faced a paperwork crisis during the industrial expansion at the turn of the century. Women adapted favourably to new technologies such as adding and calculating machines, telephones and typewriters that were now mainly operated by them. Many women held, or aspired to hold, positions as secretaries, so they attended secretarial schools to attain superior working skills. The demand for female secretaries became so enormous that it outpaced the supply, resulting in men with the title of secretary to become a minority group in the 1930s. Since then, women have dominated the office workforce, being promoted from stenography pools, or as graduates of business colleges or secretarial schools. They were all seeking the professional status and remuneration previously enjoyed by their male counterparts.

However, the introduction of the typewriter in 1875 was not the only reason for women entering the office workforce. According to Henderson (2004:242) and Noble (1972:43-44), recognition for the need for change was given from a patriarchal notion of “administration by gentlemen” in colonial times through to equal employment opportunities for women that were created. Women assumed a variety of government jobs during the First World War while men were engaged in war. The effect of World War I, which lasted from 1914 to 1922, is illustrated by the following quote:

“The war had profound economic consequences. Millions were killed, permanently disabled and seriously injured. Macro- and micro-economic consequences devolved from the war. Families were altered by the departure of many men. With the death or absence of the primary wage earner, women were forced into the workforce in unprecedented numbers. At the same time, industry needed to replace the lost labourers sent to war. This aided the struggle for voting rights for women (Wikipedia Encyclopedia, 2010:1-43; Noble, 1972:43-44).

Within 17 years after World War I, World War II resulted in 1939 from the power struggle in Europe that was never fully resolved by the First World War. The Second World War left the political alignment and social structure of the world significantly changed. By the end of the World War II in 1945 the European economy had collapsed, with 70% of the industrial infrastructure destroyed. At the end of the war, the United States produced roughly half of the world’s industrial output. By the early 1970s, though, this dominance had lessened significantly (Wikipedia Encyclopedia, 2010:1-37; Van Rensburg & Scholtz, 1972:213). With the global wars a thing of the past, countries started to re-build their economies. One result of the achievements in technology and engineering during the two wars was the world’s first programmable computers, namely Z3, Colossus, and ENIAC. The development of the electric typewriter is one of these achievements.

Harding (1998:3) states that although the electric typewriter had already been developed in 1920, during the First World War, it was introduced at organisations in the 1950s only, and was soon followed by the development of calculators, the first computers and copying machines. These technological developments greatly enhanced the performance of routine office tasks.

Loriaux (1968:5) mentions that stenographic duties were still customary during the 1960s. The administrative professional had to efficiently transcribe letters dictated by the manager before typing a master copy on the typewriter. She had to be a good stenographer and had to have an adequate shorthand speed. This enabled the stenographer to represent letters as briefly and as distinctively as possible during dictation by the executive officer.

The shorthand system introduced in 1837 by Isaac Pitman reproduced speech by means of signs and strokes. Fast and accurate typing skills were essential for the administrative professional in the 1960s.

Harding (1998:3) confirms that the pace of the office worker accelerated in the 1960s after IBM had patented the single-element typewriter in 1961. Shortly thereafter, in 1964, the selectric-memory typewriter followed. It was the forerunner of word processing equipment initiated in the 1970s. Anderson *et al.* (1970:19) concur with Koopman (2007) and Harding (1998:3) that, due to these technological advancements, continued education was imperative to the career success of the administrative professional.

As a result, a group of secretaries in America's heartland was motivated to become the core of an organisation – the National Secretaries Association (NSA) that would help to professionalise the profession. Ms F Overbey was the founder of the National Secretaries Association (now known as the IAAP) in 1942. It was the National Secretaries Association that first administered the Certified Professional Secretaries' Examination as a standard of excellence for the profession in 1951. Anderson *et al.* (1970:19) add that the National Secretaries Association opened membership to men in 1967.

Fries *et al.* (1974:7) state that the purpose of the NSA was to raise the standards of secretarial performance. The NSA became so popular that it had to establish chapters (local society branches) in the United States to be able to provide support to all the administrative professionals. There are currently 640 chapters worldwide to provide the following:

- Study courses, workshops and seminars for educational, professional and personal development
- Affiliation with external business operators with similar interests
- A subscription to NSA's official magazine, *The Secretary,* and other NSA publications

In summary, from the above discussion of the historical background of the administrative professional's profession it is evident that, apart from the requirement of technical skills, for example, fast and accurate typing skills, little evidence could be found of other more right-brain activities and task requirements. The abilities, attributes, roles and responsibilities of copying out letters in fine copperplate writing and, transcribing letters dictated by the manager before typing a master copy on the typewriter, all refer to a predominantly left brain thinking style preference, more specifically the L2 thinking style preference profile. The following skills and attributes as identified in the historical background mostly fall in the L2 profile: timely and effective implementation, organising and arranging facts, structured, conservative, controlled, detailed, and procedural.

3.3 Terminology in the administrative professional's work environment

3.3.1 Secretary

Koopman (2007) explains the etymology of the word "secretary" as follows:

- The earliest use of the word "secretary" was probably with reference to people who acted as trusted agents of a king. The king would have entrusted correspondence of private or secret matters, particularly matters of state, to this person.

- The English lexicographer Samuel Johnson (IAAP, 2007) quotes Shakespeare in his dictionary in the year 1755, "Call Gardiner to me, my new secretary". Johnson also described a secretary as "one entrusted with the management of business; one who writes for another". The English philosopher, Francis Bacon (IAAP, 2007), a contemporary of Shakespeare, wrote: "That which is most profitable is acquaintance with secretaries, and employed men, of ambassadors."

- In 1806 Noah Webster (IAAP, 2007) described a secretary as "one who writes for another".

- The word “secretary” is derived from a Latin word that means “secret”. Originally, it meant “one entrusted with the secrets and confidences of a superior”. In Middle English, a secretary was known as a secretarie and in Middle Latin as a secretarius.

- The IAAP (2007) also found that, from the 13th to the 16th century, the French version of the word, namely “secretaire”, meant a confidant. This word became an administrative term meaning ”someone who transcribes or arranges for another”.

- The IAAP (2007) quotes the definition of a secretary from the first Merriam-Webster Dictionary that was greatly expanded by 1847:

  “Secretary: A person employed by a public body, or by a company or by an individual, to write orders, letters, dispatches, public or private papers, records, and the like. Thus legislative bodies have secretaries whose business is to record all their laws and resolves. An officer whose business it is to manage the affairs of a particular department of government; as the Secretary of State …”

- According to Koopman (2007), the word “secretary” is currently stereotyped as a “person who types correspondence” or a “dictation-taker”. The term “administrative professional” is recommended as a collective term for office support staff by the International Association of Administrative Professionals (IAAP) as a more accurate description for the administrative and information management functions of today’s office support staff.

Vinnicombe (1980:9) adds the following to the above terminology:

- “The word ‘secretary’ is derived from the Latin “secretum”, and in medieval times a secretary was the person who dealt with the correspondence of the king, or other high-ranking person, and consequently with confidential and secret matters.”

The following definition appears in the dictionary of Webster (1993:2):

- "An executive assistant who possesses a mastery of office skills, who demonstrates the ability to assume responsibility without direct supervision, who exercises initiative and judgement, and who makes decisions within the scope of assigned authority."

3.3.2 Stenographers versus secretaries

Anderson, Lee, Russon, Wentzell and Horack (1970:2) and Fries, Rowe, Travis and Blockhus (1974:2) are of the opinion that some of the duties and responsibilities of the stenographer and the secretary overlap with one another. Stenographers were allowed to answer the telephone or perform other clerical duties in the office. Excepting for stenographic duties, additional responsibilities were given to the administrative professional that required a greater ability to make decisions and exercise initiative, for example to relieve her employer of routine duties and minor administrative detail. This will be elaborated on in Chapter 4.

3.4 The historical development of office technology

As discussed in the previous section, excellent typing skills, whether on a typewriter or a computer, have been and always will be a vital skill in the administrative professional's profession. The evolution in office technology not only impacted on the administrative professional's work environment, but also on her role and accompanying thinking preferences, which are the focus of this study. Automated systems not only increased the pace of processing documents, but also expanded the role of the administrative professional. An example would be the mastery of a new software program that will enable her to contribute to the planning of the budget. In this section, evidence will be provided of the thinking style preferences required to adapt to this new technology and her new role.

Research conducted by Beattie and Rahenkamp (1981:729) show that Queen Anne of England granted the first known patent for a typewriting device to Henry Mill, an English engineer, on 7 January 1714. The typewriting device invented by Mill was described as "an artificial machine for the impressing or transcribing of letters singly or progressively one after another as in writing". Shermer (in Linstone, 1999:81) states that the approximately 112 typewriters with a wide range in design that were developed between 1714 and 1860 were only the beginning of the changes that technological innovation brought to the profession of the administrative professional. Beattie and Rahenkamp (1981:729) mention that 153 years passed before the first US commercial typewriter, namely a Milwaukee printer, was patented by Christopher Latham Sholes in 1867. William Detroit built the first typewriter capable of practical work, although it lacked a keyboard. It was operated by a rotating wheel that caused typing to be moved to the printing point. Four years later, Xavier Progin, a Frenchman, conceived and built the first machine to utilise individual type bars that converged at a common printing point. Subsequently, many inventive efforts followed until Remington introduced the typewriter to the market in 1874. Improvements continued until 1895 when the machine that resembles the instrument we know today was developed (Beattie & Rahenkamp, 1981:729).

Anderson *et al.* (1970:95) and Harding (1998:182) point out that the development of office equipment led to time- and labour savings. The typewriter was the utensil that was mainly associated with the administrative professional in her work situation. The typewriter evolved in several models, ranging from the manual typewriter with a carbon ribbon to the single-element typewriter with a "golf ball/daisy wheel" and the electronic typewriter with a correction mechanism and storage memory. Memory typewriters were converted to word processors. Memory typewriters did not have the benefit of full or half screens like word processors, but they did display a single line showing about 30 characters. Although the basic skills, for example fast and accurate typing, were still of importance, with the improvement of the typewriter the correction mechanism and storage memory enabled the administrative professional to accelerate her work. More documents could be typed and distributed per working day.

The next technological innovation was the development of word processors. Gladieux and Swail (1999:44-45) state that technological evolution made it possible for text, data and images to be delivered anywhere in the world at any time by means of the Internet and the World Wide Web. The shift from an industrial society to being dependent on information and knowledge in the information era has forever changed the work of the administrative professional.

Harding (1998:187) and Harrison (1978:170) mention that the term "word processing" was first coined by IBM in the mid 1960s to represent the linking of a typewriter to a computer processor. The main functions of word processing are concerned with the storage, retrieval and subsequent editing of text. Data processors are included in the term word processing. They are described as computers that handle enormous quantities of business data.

Dedicated word processors were systems "dedicated" to and designed specifically for word processing (Harding, 1998:190). They were followed by mainframe computers that were located in controlled environments due to their size – they were huge and highly sensitive machines (Harding, 1998:190-197). The minicomputers were introduced in the mid-1960s. They differ in size, cost and power from the more expensive mainframes. The first microcomputers made their market appearance in 1977. Microcomputers or personal computers (PCs) function as a small business computer system with applications packages such as database and file management, spreadsheets, graphics, electronic mail, desk-top publishing and integrated applications (Harding, 1998:198).

To summarise, the innovations in technology, from typewriters to microcomputers, illustrate that the administrative professional continually had to adapt by acquiring new skills and attributes to cope with the changes in the work environment. An administrative professional demonstrating technical aptitude, that is, a willingness to adopt new technology, will be able to adapt with ease to the use of new technology.

From the above discussion it seems as if thinking style preferences such as initiating and adapting to change, risk taking, experimenting with and trying alternatives, flexibility and focusing on the future implications of change are becoming more prominent. These are all preferences associated with a right brain thinking style preference profile, in particular the R1 quadrant.

3.5 The development of the administrative professional's profession

As illustrated in the previous section, the development of office equipment over the past few years, from manual typewriters to microcomputers, influenced the career path of the administrative professional. Apart from the innovations in office technology, additional influences on the development of the career path will now be discussed.

3.5.1 The development of the administrative professional's function

Vinnicombe (1980:3-8) provides evidence that the following historical factors have influenced the work environment and subsequently the role of the administrative professional:

3.5.1.1 *Growth of white-collar work*

Vinnicombe (1980:3-8) points out that the number of white-collar employees increased by 203 percent from 1911 to 1971 due to the industrial revolution. As part of the production process, authority was practised and decisions were taken by white-collar employees that occupied sub-ordinate positions in the organisation. The administrative professional's role evolved in the organisation due to managers holding positions of authority that were traditionally associated with decision-making processes.

3.5.1.2 *The development of the bureaucracy*

Vinnicombe (1980:3-8) mentions that bureaucratic characteristics such as impersonality of personal contact, a separation between administration and management and an emphasis on written communication had a primary influence on the role of administrative professionals in organisations.

The need for a substantial administrative component in organisations originated from the increased complexity of communication and co-ordination associated with having large numbers of staff.

3.5.1.3 *The role of women in the office*

Vinnicombe (1980:3-8) adds that women's entry into the office was encouraged by the introduction of the typewriter in Great Britain in 1875. The classification of skills associated with the typewriter created the foundation of a standard female hierarchy in offices. At the introductory level is the pool typist, and the highest position is that of personal secretary. The personal secretary's primary role is to identify herself completely with her employer's interests and to ensure his comfort and peace of mind.

3.5.1.4 *The changing needs of companies*

Hobson (1968:i) indicates that the need for an administrative professional, then known as a personal assistant, became evident in the 1960s. An efficient executive has to concentrate on the imperative functions to avoid lagging behind in a marsh of detail leaving him no time for his essential functions of planning, organising and appraisal.

This was made possible through the vitally important personal assistant (also referred to as a private secretary) who took care of managing the multitudinous tasks not readily delegated to subordinates, and who regulated the flow of traffic to the office of the executive officer. The executive officer experienced interruptions in the form of visitors and telephone calls, which required delegation through various staff members to enable him to manage his workload. The roles and responsibilities of the administrative professional are elaborated on in Chapter 4.

3.5.1.5 *Role of technology*

Vinnicombe (1980:1-2) notes that with the introduction of word-processing units, it became necessary to review the role of the administrative professional. The introduction of word-processing units changed the structure of the secretarial hierarchy and the design of their work. It affected the traditional secretarial hierarchy, from pool typist to group secretary through to private secretary, as indicated in Figure 3-1.

Two groups were formed: those who worked in the word-processing units, and those who worked as personal assistants and administrators. Figure 3-1 illustrates the differences of the responsibilities of the typist, group secretary and private secretary. Although the time allocated for typing differed between the typists and the private secretary, it is apparent that significant time was still spent on typing. The expanded roles and responsibilities are also discussed in paragraph 4.5.1 to emphasise the activities "towards a greater emphasis on natural development rather than acquisition (organic)", as indicated in Figure 3-1.

New technical expertise, institutional roles and structures emerged from the introduction of information technology. As time elapsed, managers have become more computer literate, which led to a decrease in copy typing, shorthand and dictaphone skills. Dillard and Ruchala (2005:611) state that machines are the physical manifestations, professions are the intellectual manifestations, and administrative hierarchies are the organisational manifestations. This implies that it was inevitable that certain skills, for example, shorthand, would no longer be required, and therefore certain specialised positions, such as stenographers, would become obsolete. Technological innovations resulted in the role of the administrative professional as we know it today.

To summarise the historical development of the administrative profession, Whalen (1989:2) and Strydom (1988:9) are of the opinion that in the contemporary office, workers process information and communicate just as in the traditional office. The change is the enormous increase in the volume and speed of information flow through the office.

Whalen (1989:2) concurs and states that the office worker has had to learn to operate new equipment such as the computer, and to adapt to more efficient methods of working to manage the heavier workload. These changes brought challenges and opportunities for well-trained and specialised office workers.

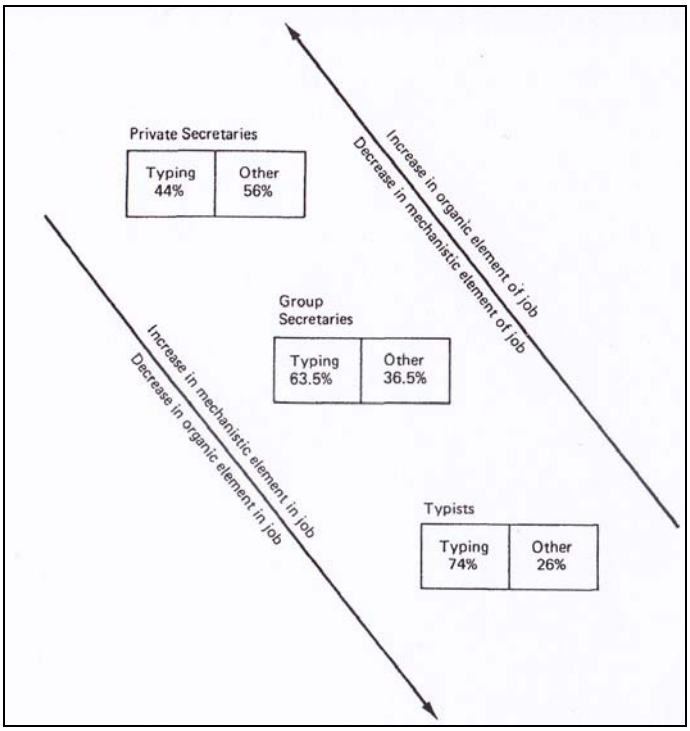

Figure 3-1

The profiles of secretaries' jobs

(Vinnicombe, 1980:24)

From the discussion in this section, it is evident that the administrative professionals have experienced a fast changing working environment. They had to adapt their abilities, attributes, roles and responsibilities from routine work to obtain skills in computer literacy, working independently, making decisions and dealing with responsibilities.

The literature review in this chapter illustrated the contrast between the traditional methods and the new world of work methods of handling information flow in the organisation.

3.5.2 Summary

This chapter explicates the historical development of the profession of the administrative professional and the typical tasks expected of the administrative professional prior to the new world of work. Historically, tasks such as performing stenographic duties, transcribing letters dictated by the executive officer, typing and skills such as accuracy, attention to detail, planning and punctuality, were prominent in the role of the administrative professional, or secretary, as it was previously known. These are mostly tasks and skills associated with the left brain thinking style preference. It summarised the following relationship between these tasks and the left brain thinking style preferences:

Performing stenographic duties and transcribing letters on a type writer had to be done accurately. The secretary had to be detail-orientated in order to efficiently establish and correct typing errors. She had to manage her time with the purpose to take dictation from the executive officer, as well as to type and distribute the correspondence promptly. Therefore, historically the skills needed by administrative professionals were mainly associated with the left brain thinking style preferences.

In the next section the new world of work in which the contemporary administrative professional find herself will be discussed.

CHAPTER 4

4. THE CHANGING ROLE OF THE ADMINISTRATIVE PROFESSIONAL

4.1 Introduction

The purpose of this chapter is to examine the aspects of the changing role of the administrative professional in the new world of work. The impact of this changing work environment and role expectations on the thinking style preferences of the administrative professional will be discussed. Improvements associated with the information era have brought about changes that have influenced and shaped the administrative professional's roles, responsibilities, attributes and skills. This chapter will conclude with a summary of the ideal thinking style preference profile, as illustrated in Figure 4-2, for the optimal functioning of the administrative professional in the new work environment. It will commence with a discussion of the new world of work.

4.2 The new world of work

4.2.1 Defining the term

The term "new world of work" is used to refer to the profound changes identified to indicate how the market place transposed from industrial capitalism to a knowledge-based economy. Although the provision of educational services is different from the ordinary business of supplying goods and services in the market place, the higher education environment is included in the "new world of work" terminology, as its outputs result in course offerings, graduations, research results, publications and community services (Karmel, 2001:133). The knowledge-based economy is characterised by competition, information technology, globalisation and a more holistic way of thinking.

These characteristics derived from the advancements in communications and information technology (Ford & Angermeier, 2008:269; Kang, 1999:31). Holmstrom and Kaplan (2001:121), Perrons (2003:66) and Linstone (1999:83) concur by stating that the development of communication and information technologies, specifically the Internet, has had profound implications for national and international organisational activities and structures. Some implications are:

- The increase in productivity
- Maintaining work-life balance
- New ways of organising and production distribution
- New methods of exchanging existing goods
- New goods and services
- Market opportunities and competition growth through deregulation

Perrons (2003:66) and Linstone (1999:83) state that instead of emphasising the development of new technologies, attention should rather be given to the ways in which technological developments occur in a capitalist and increasingly global economy. Reference is made to existing services such as training, including adult training, marketing, advertising and public relations offered by means of CD-ROMs, memory sticks, videos and brochures. These services are increasingly being provided through the Internet and are known as e-training, e-marketing and e-public relations.

The development of communication and information technologies also forces educational institutions to cross traditional boundaries. In this regard, El-Khawas (1999:11) submits that technological developments have increased the feasibility of electronic learning. Rowley (2000:325) concurs and states that:

"Universities and their staff must recognise and respond to their changing role in a knowledge-based society. Universities need to consciously and explicitly manage the processes associated with the creation of their knowledge assets and to recognise the value of their intellectual capital to their continuing role in society, and in a wider global marketplace for higher education."

The impact of changing technology with regard to virtual workplaces, globalisation, shifting organisational boundaries and the restricted workplace will be elaborated on in Chapter 5.

Holmstrom and Kaplan (2001:140) and Prahalad and Hamel (1990:4) also claim that it is inevitable that companies will have to exploit their core competencies such as the collective learning in the organisation (the coordination of diverse production skills and the integration of multiple streams of technologies) more speedily than competitors to make growth, fast adapting to changing opportunities and participation in the market-orientation process possible.

Bencin (in Varner, 2002:38) concurs with the above with the following statement:

"The nature of business in today's world requires creative thinking and more reliance on the visceral, intuitive thought processes. The left brain thinking style preferences of management that is so logical and orderly must be counter-balanced with the intuitive, experimental and non-verbal part of the brain."

It was inevitable that the development and implementation of technology would have resulted in a rapidly changing working environment. This is in contrast to the former slower working methodology, as explained in Chapter 3; therefore the term "new world of work" originated. In the following section a brief overview is given of the evolution of the new world of work that started during the 1980s and is still continuing.

4.2.2 Evolution of the new world of work

The next section provides an overview of the evolution of the business environment that illustrates how the shift from the industrial era to the information era resulted in an increase in business correspondence and the need for administrative professionals to relieve executive officers from their daily routine tasks.

4.2.2.1 *The industrial era*

According to Codrington (2005:6), and Robbins and Coulter (2009:42-46), the Industrial Era dominated from the mid 18th century to the 1950s. In this era, the printing press distributed large volumes of information to more people, in cheaper and faster formats, such as newspapers. During this era, mechanisation and industrialisation ruled, and leadership was granted to those with the most academic training and work experience.

Although human power was replaced with machine power and factories instead of individual businesses manufactured goods, it was inevitable that human power would still be needed to order stock and control stock levels, predict demand and assign tasks to employees. This was the start of the "manager". Some of the formal theories that were developed to guide the managers, namely the scientific management movement, the administrative movement and the human relations movement, will be discussed below (Quible, 2001:9, Robbins & Coulter, 2009:-42).

- Scientific management movement

During the late 1800s and early 1900s, the founder of the scientific management movement, Frederick W Taylor, was greatly concerned with the emphasis organisations placed on production. The purpose of scientific management was to increase the output of the employees, therefore specialisation in only a few tasks became apparent. The operating efficiency of management also had to increase (Rue & Byars, 2009:23-25). Bradley and Wood (1994:7) refer to it as the evolution of the "quality movement".

During this era, most managers concentrated on "quality as conformance" as introduced by Deming and Crosby (in Bradley, 1994:8). Both writers emphasised that when in control of processes, production would conform to specifications.

- Administrative movement

Robbins and Coulter (2009:44) observed that the administrative movement was started by Henri Fayol and Max Weber during the 1930s. The objective of the administrative movement was based on the premise of the company operating as a whole or total entity, rather than on specific, isolated functions. Henri Fayol introduced the five functions that managers perform: planning, organising, commanding, co-ordinating and controlling. These functions enhance and improve the co-ordinating and managing of various organisational actions. The way in which executive officers apply these management functions in the new world of work will be discussed in Chapter 5. Bradley and Wood (1994:17) and Kruger (in Kroon, 1995:53) add that during this phase the company's classic management systems, for example, strategic planning, budgeting and control, capital investment, competitive analysis, performance measurement and reward incentives were integrated into quality management development.

- Human relations movement

According to Du Toit (in Kroon, 1995:36-37), the human relations movement of the 1940s and 1950s originated as a result of the need to built employee moral to enhance productivity. This period emphasised concern for individuals and groups and as a result organisations started to provide employees with growth opportunities and challenges, bearing in mind the employees' reaction to psychological and social conditions.

4.2.2.2 *The Information Era*

The Information Era was built on the successes of the Industrial Era between 1980 and the 1990s (Grulke & Silber, 2000:15). Codrington (2005:6) describes the Information Era as the time when computers and networks were initiated in the middle of the 20th century.

Service-driven industries became the main employers in the developed world as they started to overshadow the agricultural, mining and manufacturing industries which had dominated the Industrial Era.

Concurrent with the above, David (2005:xii) emphasises that the business world of today is considerably different and more complex than it was during the late 1900s and continues to be so. In this new world of work, people experience:

- Improving economies
- Rising interest rates
- Extensive outsourcing
- A migration of workers to developing countries
- More attention to business ethics
- Disclosure of government budget deficits
- Continued globalisation
- Rising unemployment
- A European Union of 24 countries instead of 12
- An intense rivalry in almost all industries

It is not only institutions in the market-place that have to adjust to the new world of work. Globalisation of economic, cultural, political and intellectual institutions, along with the increasing interdependence of nations resulted in rapid changes, challenges and opportunities facing the contemporary higher education sector. The apparent changes in higher education institutions are mainly from a private to a public system of mass education. Jansen (2004:305-306), El-Khawas (1999:7) and Morey (2004:134-147) observe that the impact of technology on teaching, learning and assessment made it essential for higher education institutions to expand their instructional programmes.

The feasibility of technology contributes to stronger market competition with respect to the adult learner. Primary attention shifted from education of the youth to the education of adult learners and this forced traditional higher education institutions to cross their boundaries. Alternative modes such as web-based teaching and learning with technology (previously known as "telematic") programmes are another adaption to consider. Globalisation and its effect on higher education are discussed in Chapter 5.

A review of the literature indicates the changes that have taken place in the work environment since the Industrial Era. This also had an effect on the thinking style preferences of the administrative professional and the executive officer. In this regard, Herrmann (1996:12-18), Neethling and Rutherford (1996:83-113) and McAdam (2002:226-228) illustrate how the thinking style preferences of the administrative professional and executive officer have been influenced over the past decade. From the above description of the new world of work the assumption can be made that changing from the predominantly left brain thinking style preference (analytical, logical, objectivity, structured, procedural and detailed) to more emphasis on right brain thinking style preferences (synthesis, exploration, strategy, empathy, sensitivity and co-operation) would be required for success for both the administrative professional and the executive officer.

In the next section the influence of technology on the changing role of the administrative professional will be discussed.

4.3 Influences of technology on the changing role of the administrative professional

As opposed to the discussion in Chapter 3 about the development of office technology and its general impact on the administrative professional's work environment, this section will focus specifically on the influence of office technology on the role and responsibilities of the administrative professional.

Significant technological innovations transformed the traditional workplace from reporting to one manager to working in a team environment with the emphasis on the ability to work interdependently. These technological changes also impacted significantly on the administrative professional's role pertaining to the utilisation, assimilation and processing of information.

One influence of technological changes observed by Garfield (1986:114) is that administrative professionals have been spending less time on tedious and repetitive tasks since automated systems became decentralised. For example, administrative professionals now have the opportunity to learn to use spreadsheet software that can assist in planning budgets. This allows them to play a more integrated role in the efficient functioning of the office.

Grulke and Silber (2000:115) point out that the most prominent characteristics of the majority of careers in the 2020s will be entrepreneurship, flexibility, risk-taking and innovation in the high-technology and services industries, and in leisure, tourism and education. The indications are that in the new world of work, new tasks require the ability to apply knowledge in the form of skills. With the pace of change increasing rapidly, emphasis is on continuous training and development and therefore experience is no longer in high demand. Grulke and Silber (2000:115), Robbins and Coulter (2009:204) and Newman (in Deem, 1998:50) are of the opinion that the response of organisations to environmental changes has had an influence on the hierarchical structure of the organisation.

The traditional pyramid line function has changed to a more flattened curve where team-based work, attention to long-term goals and the need for leadership have increased. This broadens the scope of the administrative professional's role, as she has become an important team member. In Chapter 5 the effect of these organisational changes on the role of the executive officer will be explored.

Badenhorst *et al.* (1997:74), Martin (2003:10) and Kruger (in Kroon, 1995:62) point out that although technological progress and innovation have made our lives more comfortable, it has become a challenge for the administrative professional to handle the additional increase in productivity. Furthermore, exciting opportunities with more decision-making responsibilities are created by technology, which release administrative professionals from certain clerical and simplified tasks, enabling her to take on more challenging roles. Technological progress derived from research and development has also resulted in new products, processes, methods and management approaches that add to the complexity of the administrative professional's role.

It is evident from the above discussion that significant technological innovations have had and continue to have considerable influence on the role of the administrative professional. It is imperative for her to keep up with the changing and advancing technologies and with how the new expectations in terms of output, knowledge, tools and time management affect her.

These technological innovations are also applicable to the changing role of the administrative professional and the executive officer in public sector institutions like the higher education institution where this study was conducted. According to Deem (1998:55), it is of the utmost importance that higher education institutions should keep abreast of the new developments and ensure that the skills of the labour force are upgraded through education and training. This influences the core activity of higher education institutions and implies that the pressure from outside and inside the higher education institution affects the role of the administrative professional and the executive officer dramatically. The impact of changing technology pertaining to the virtual workplace, flexible work arrangement and empowering of employees are explained in Chapter 5.

The recent mergers of higher education institutions have also impacted on the way the administrative professional perceives and adapts to change. Skills and attributes such as future connection, team-work, sharing knowledge, assisting and strategising became increasingly important for success.

The thinking style preferences associated with change are flexibility, holistic thinking and strategic thinking which are all related to the right brain thinking style preference profile.

The effect of technological innovations on the roles, responsibilities, abilities and attributes of the administrative professional will now be discussed.

4.4 Diverse roles and job titles

4.4.1 Diverse roles

Across the world the term "secretary" is falling away and being replaced with "administrative professional", "office manager", and "executive administrator". Campbell's (1992:2) and Harding's (1998:275) perspective on the factors contributing to this change in job titles is that the administrative professional contributes to the success of the company and therefore she can no longer be seen as a status symbol, as discussed in Chapter 3, but as an essential support member of the company. They explain that the word "secretary" has different meanings to different people, and that secretaries even perform different roles in different companies. The following factors influence the role, skills required of and meaning of a secretary:

- The size and structure of the organisation
- The organisation's geographical location
- Whether it is in the public or private sector
- The nature of its activities, for example, manufacturing or service
- The position of the manager in the organisation's hierarchy
- The manager's external involvements and commitments
- How much the manager is away from the office, for example, due to travelling
- How much work is delegated to the administrative professional

- Whether the administrative professional has her own span of control, that is, subordinates to whom she may delegate work

- Whether the administrative professional works exclusively for one manager or for a number of individuals

- Where the administrative professional's office or work area is in relation to that of her manager(s)

- The information revolution

As the office work environment evolved, as discussed in paragraph 4.2.2, different titles and descriptions were distinguished, which will now be discussed.

4.4.2 Job titles

Webster (1993:6), Harding (1998:247) and Harrison (1978:294) note that a distinction between office workers is created. Top- and middle management's office workers are known as an office manager, personal assistant, private secretary, or secretary.

The job titles for office workers who report to more than one manager and are responsible for general administrative duties are: junior secretary, shorthand typist, audio typist, copy typist, word processor operator, clerks, office junior, receptionist and telephonist. Specialised titles followed the implementation of official training for administrative professions. According to Anderson *et al.* (1970:4) and Webster (1993:6), these specialised fields were known as legal administrative professional, medical administrative professional, technical administrative professional, education administrative professional and the travel administrative professional. All the job titles listed above are replaced with the preferred term "administrative professional" that covers a large variety of positions to demonstrate the scope of their work in the new world of work.

The participants that form part of this study were from a higher education institution, the Tshwane University of Technology, where the job titles are as follows:

- Personal assistants reporting to the vice-chancellor and/or deputy vice-chancellors
- Executive secretaries reporting to the executive and/or associate deans
- Secretaries reporting to directors.

These participants reports to top- and middle management at the University.

4.5 The role and responsibilities of the administrative professional

In response to the discussion in paragraph 4.3 on the influences of technology on the administrative professional's role, a more detailed discussion will follow to explain their expanded roles and responsibilities in the new world of work.

Historically, the requirements and duties examined by Loriaux (1968:1) were as follows:

- Taking down letters and other documents in shorthand under dictation.
- Transcribing letters and other documents on the typewriter either from shorthand notes or, if the manager uses a dictating machine, by listening to the recorded message (audio typing).

In the new world of work, taking down letters and transcribing letters from shorthand have mainly been replaced with:

- Composing routine letters and memoranda on instruction from the manager.
- The manager drafts correspondence and e-mails it to the administrative professional to prepare for distribution.
- Attending to the manager's inward and outward e-mails.

- Filing and indexing documents pertaining to the manager's duties. Many of these documents may be of a confidential nature.
- Producing filed documents without delay at any time when needed by the manager.
- Maintaining and operating a follow-up (reminder) system to ensure that certain matters and jobs are dealt with at the correct time.
- Keeping a diary, mostly electronically, of the manager's engagements and ensuring that all such engagements are kept or that suitable action to reschedule appointments is taken.
- Arranging meetings for the manager and seeing to all the requirements needed for such meetings.
- Frequently attending meetings and taking verbatim minutes of the proceedings.
- Seeing to the pleasant appearance and tidiness of the manager's office, and of her own.
- Receiving callers and attending, with affability and tact, to their business.
- Receiving and giving, efficiently and pleasantly, telephone messages.
- Knowing, at any time how and where to contact the manager.
- Protecting the manager against importunate callers or inconvenient interruptions.
- Dealing efficiently with routine situations during the manager's absence and referring emergencies to his deputy.
- Keeping to herself all confidential business with which she becomes acquainted in the course of her work.
- Giving assistance to the manager when his social and business activities coincide.

The literature review as discussed in Chapter 3 points out that there is and will always be a similarity in the responsibilities of the administrative professional of the past and the administrative professional who finds herself in the new world of work.

However, paragraph 4.5.1 explains the expanded roles and responsibilities of the modern-day administrative professional.

4.5.1 Expanded roles and responsibilities of the administrative professional

Berezin (in Vinnicombe, 1980:13) is of the opinion that the impact of technological innovations in the office environment during the early 1980s led to the conclusion that the responsibilities of the administrative professional made a transition to a greater emphasis on "organic" activities. These "organic" activities are (Figure 3-1 in paragraph 3.4, Chapter 3 illustrates the "organic" activities):

- The job description is more difficult
- The input/output is less controllable
- The problems are less predictable
- The task elements are largely cognitive
- The dynamic interaction is more vital to productivity
- The creativity/innovation areas are less circumscribed
- The development is less visible
- The peer competition is less visible
- The multi-channel communication is more essential to effectiveness
- The success is relatively dependent on particular boss support

In this regard, Berezin (in Vinnicombe, 1980:13) states that private secretaries should act more as "personal assistants" than as mere typists. Le Roux *et al.* (1999:270) agree with Berezin (in Vinnicombe, 1980:13) by defining the function of the administrative professional as follows:

"The administrative function (role) can be defined as being concerned with the services of obtaining, recording and analysing information; and communicating the results to management who then can safeguard the assets, promote the affairs and achieve the objectives of the enterprise."

Quible (2001:6), Kallaus and Keeling (1991:3) address the considerable diversity with regard to the roles and responsibilities of the administrative professional in paragraph 4.5.1.1 to 4.5.1.4. Their definition of "administrative office management" reveals the expanded role and responsibilities of the contemporary administrative professional:

"Administrative office management is the process of planning, organising and controlling all the information-related activities and of leading or directing people to attain the objectives of the organisation."

Administrative professionals have several important roles and responsibilities within the four basic management functions of planning, organising, staffing and controlling. It is for this reason that these basic management functions were incorporated in a structured interview (see Appendix) conducted with executive officers of the Tshwane University of Technology to investigate how they perceive the administrative professional's expanded roles and responsibilities. These roles and responsibilities were aligned with the executive officer's function and a comparison was drawn (refer to Table 5-1, Chapter 5). The results and interpretation of the structured interviews are discussed in Chapter 7.

As mentioned above, the roles and responsibilities of the administrative professional are distinct yet interrelated with the functions of the executive officer and the latter are performed simultaneously with management skills.

Although detailed discussions, interpretations and the research results are presented in Chapter 5 and Chapter 7, correlations and links between the support role of the administrative professional and the executive officers' functions and skills will be indicated in the literature review in paragraphs 4.5.1.1 to 4.5.1.4. The model (as illustrated in Figure 5-2) proposed by Lussier (2008:13) is used as a directive.

To demonstrate the link between the expanded roles and responsibilities of the administrative professional (as illustrated in Figure 4-1) and the specialised functions located in the different hemispheres, colour is applied to the words describing the different thinking style preferences as measured by the NBI®.

The colour coding was applied as follows:

R1

R2

L2

L1

Whole brain

4.5.1.1 *Planning function*

- Initiate goals and objectives for each of the office functions and services, for example, layout, environment, telecommunications, word processing, automation, electronic data processing, records management, forms design, reprographics, mail services and control.

- Do research to keep abreast of new developments in the field to propose possible changes with regard to existing functions and services to maintain a state-of-the-art in relation to her work.

- Identifying and designing new administrative operating systems according to the need for implementing new administrative functions and services.

- Introducing procedures to assist with the attainment of goals and objectives.

- Determining means of implementing desired changes.
- Defining space and equipment needs.

Figure 5-2 in Chapter 5 illustrates the interrelationship of management skills- and functions (Lussier, 2008:13). The main activity "to plan" is categorised as an L2 thinking style preference. Lussier (2008:13) links the planning function to the decision-making skills of the executive officer. The executive officer applies all four quadrants (L1, L2, R1 and R2) during decision-making to conceptualise the situation and select alternatives to solve the problem.

However, the functions within planning can be categorised in all four quadrants, demonstrating how the roles and responsibilities of the administrative professional are distinct from, yet interrelated with the functions of the executive officer. The latter are performed simultaneously with management skills.

4.5.1.2 *Organising function*

- Establishing the most effective means of organising resources to achieve goals and objectives.
- Seeking and communicating the most effective way for employees to perform specific tasks.
- Adopting efficient work methods and procedures.
- Ensuring the maximum utilisation of the organisation's office equipment.
- Developing and coordinating administrative processes for maximising organisational and individual productivity.
- Anticipating effective methods and techniques when implementing changes.
- Specifying effective procedures for evaluating equipment that is considered for acquisition.

As mentioned above, the roles and responsibilities of the administrative professional are distinct from, yet interrelated with the functions of the executive officer, and the latter are performed simultaneously with management activities. The organising function is related to the interpersonal skills of the executive officer (Lussier, 2008:13). Interpersonal skills with regard to understanding, communication and relationships are categorised as R2-quadrant thinking. Although the process of "organising" is categorised in the L2-quadrant, the functions within the organising function is associated with right brain thinking style preference. The purpose of the link between the thinking style preferences and the management functions is to emphasise the understanding of the right brain thinking style preference needed by the executive officer to organise human resources (Figure 5-2 in Chapter 5 illustrates the interrelationship).

4.5.1.3 *Staffing function*

- Assisting with and anticipating the selection procedures, including placement and orientation of employees.
- Offering growth opportunities and experiences for employees.
- Facilitating appropriate training experiences – coaching new staff and/or assistants in administrative work.
- Establishing rapport with all team members to facilitate a positive team spirit.
- Ensuring a realistic job description for the administrative professional.

Although Lussier (2008:13) did not link the staffing function to a managerial skill, the literature review (see Chapter 2) indicates that the staffing function can also be linked to the interpersonal skills of the executive officer. The staffing function is applied to recruit, select and develop human resources to meet the organisational goals. All of these activities are categorised as R2-quadrant thinking.

The relation demonstrates the understanding of the right brain thinking style preference needed by the executive officer to establish good relationships with people. Figure 5-2 in Chapter 5 illustrates the interrelationship.

4.5.1.4 *Controlling function*

- Developing efficient procedures for controlling the quantity and quality of work processed in areas for which the administrative professional is responsible.
- Ensuring continuity of work flow across all administrative functions.
- Utilisation of efficient procedures in determining the status of unfinished work.
- Maintaining the department's budget.
- Ensuring that methods and procedures are cost-effective.
- Motivating employees to be cost conscious.
- Suggesting effective assessment procedures for use in suggesting why actual results (for example, quantity output, degree of accuracy, customer survey) fail to conform with anticipated results.
- Seeking procedures for dealing with employees who fail to comply with organisation's rules and policies.
- Implementing strategies for taking corrective action when and where necessary.

Figure 5-2 in Chapter 5 illustrates the interrelationship of management skills- and functions (Lussier, 2008:13). Lussier (2008:13) links the controlling function to the managerial technical skills. Although the controlling function and technical skills are categorised as left brain thinking style preference, the executive officer needs to work with people to perform the tasks. The right brain thinking style preference processes are always applied where people are involved and exhibit the importance of utilising right brain thinking style preference such as empathy, sensitivity and co-operation when interacting with people who have to perform tasks.

From the above discussion on the expanded roles and responsibilities, it is clear that the administrative professional acts as the support structure within any project and company to assist the executive officer in achieving the goals of the organisation. The expectations in terms of quality, timeliness of output, knowledge about the new technology, applying creative problem-solving to ambiguous issues and situations, ethical conduct and time management, are non-negotiable (Du Preez in Kroon (1995:274); Domeyer (2005:16); Eksteen (1994:2-7, 3-1); Swanepoel in Badenhorst *et al.* (2001:92); Isaman (2002:10); Spencer & Pruss (2000:303); Finniss in Martin (2003:12); Quible (2001:2) and Le Roux *et al.* (1999:280)).

The expanded roles and responsibilities as discussed in this chapter are summarised in Table 4-1. It can be concluded from this information that right thinking processes, which are holistic, intuitive, synthesising, integrating, emotional, interpersonal and kinetic, are necessary in the new world of work (also refer to Figure 2-4, in Chapter 2, illustrating Herrmann's Whole Brain Model). The information in Table 4-1 will be compared with the attributes of the executive officer observed from the literature review as set out in Chapter 5 and compared with the findings in Table 5-1, in Chapter 5.

The main factors influencing the administrative professional's role and responsibilities as discussed in paragraph 4.4.1, as well as the expanded roles and responsibilities, are indicated in Figure 4-1. The expanded roles and responsibilities are indicated in **red**. Furthermore, her ability to prioritise visitors and to exercise business etiquette and protocol associated with important high-level visitors is of a great asset.

In summary, it is evident from the above discussion that the successful administrative professional should have knowledge of business management principles as well as a technical aptitude for computer applications, together with a heightened awareness of the needs of an organisation. With the functions in the workplace becoming automated, the administrative professional should use her sophisticated interpersonal skills, or emotional intelligence to anticipate needs, responds to concerns and to provide the "interface" lacking in computers. The expanded roles and responsibilities of the administrative professional as discussed imply that she needs a new set of abilities and attributes to be efficient in her adapted role.

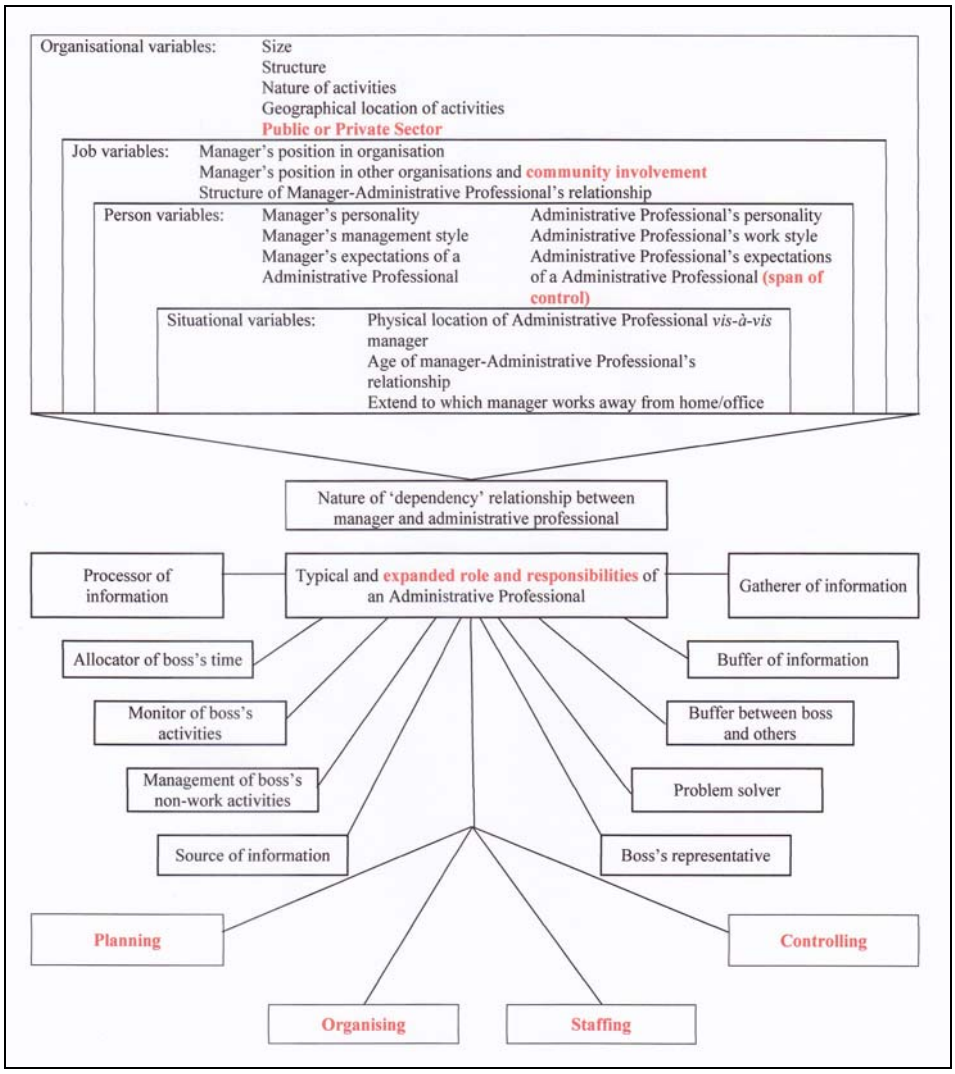

Figure 4-1

Factors influencing the administrative professional's role and responsibilities (Vinnicombe, 1980:55)

Table 4-1: The relationship of the expanded roles and responsibilities to the different hemispheres

ADMINISTRATIVE PROFESSIONAL			
L1	• Initiating and attainment of goals and objectives • Research to keep abreast • Identifying needs • Determining means • Defining space and equipment needs • Effective means of organising • Equipment and procedure utilisation • Individual productivity • Implementing techniques • Realistic job description • Controlling the quantity • Procedures are cost-effective • Actual results fail to conform – degree of accuracy • Strategies for taking corrective action • Coaching new staff and/or assistants • Ensuring continuity of work flow • Effective way for employees to perform	R1	• Maintaining a state-of-the-art in relation to her work • Introducing procedures • Implementing desired changes • Defining space and equipment needs • Developing techniques and procedures • Anticipating and selecting effective methods • Offering growth opportunities • Suggesting why actual results • Designing new systems • Strategies for taking corrective action • Coaching new staff and/or assistants • Ensuring continuity of work flow
L2	• Implementing and operating of functions, services and changes • Procedures to introduce, assist or select • Organising resources • Seeking specific tasks • Adopting efficient work methods • Controlling the quantity and quality • Maintaining the budget • Individual productivity • Evaluating equipment • Coaching new staff and/or assistants • Ensuring continuity of work flow • Employees who fail to comply	R2	• Assisting with the attainment of goals • Facilitating appropriate training • Establishing rapport with all team members • Suggesting effective assessment • Seeking and communicating the most effective way to employees • Coaching new staff and/or assistants • Customer survey • Need for implementing new administrative functions • Ensuring continuity of work flow

4.6 The skills, abilities and attributes of the administrative professional

The administrative professional should be able to re-address and put her abilities into practise, making the most of her attributes. By learning how to utilise them effectively, she can fulfil her potential and position herself favourably in her career. A brief overview of the required skills, abilities and attributes based on her expanded roles and responsibilities will now be discussed. Although the following qualities of the personal assistant were identified by Loriaux (1968:2) 40 years ago, they are still and will always be applicable:

- Knowledge and the acquisitions of technical skills.
- The proficiency to exercise good and successful human relations.

Loriaux (1968:43) also defined the following attributes of the private secretary, increasing and maintaining her efficiency:

- Accuracy is the ability to do one's work without mistakes or according to a given high standard of performance.
- Carefulness is a willingness to watch details and show caution in one's work, to avoid errors or ill-timed decisions.
- Charm is the power to attract other people's liking or admiration and to delight them by one's pleasant approach.
- Conscientiousness springs from a sense of duty and causes work to be done with thoroughness and timeous completion.
- Co-operation is readiness to combine one's efforts with those of others towards a worthy end.
- Courtesy or good manners are the art of showing refinement in speech and behaviour when meeting people.

- Dignity is evidenced by a desire for elevation of manner and is characterised by self-respect.

- Diligence is the willingness to apply oneself persistently to one's tasks.

- Enthusiasm is the ardent endeavour to promote the interest of a cause, person or organisation and is born out of the faith one possesses in the worthiness of such cause, person or organisation.

- Honesty is uprightness and sincerity in actions and speech.

- Initiative is willingness to experiment, to undertake departure from simple routine coupled with the ability to face up to unforeseen circumstances or to improvise to meet new situations.

- Loyalty is the desire to remain true to one's employer or organisation under all circumstances.

- Patience is the ability to endure trying situations with an equal temper or to show evenness of mind in the face of difficult circumstances.

- Perseverance is determination to reach the goal set in spite of difficulties or disagreeable features.

- Punctuality is the duty to commence work in time and involves the obligation to be at one's place of business before the opening time.

- Reliability is the quality which makes one worthy of being entrusted with given duties or the performance of given actions with a minimum of supervision.

- Self-criticism is the willingness and ability to pronounce judgement against oneself, and to practice introspection to ascertain whether one is not oneself the cause of difficulties encountered in one's work.

- Tact is the skill of handling other people's feelings without causing hurt or embarrassment.

- Trust involves the capacity of keeping to oneself other people's secrets and confidences.

Concurrently with the roles and responsibilities discussed in paragraph 4.5.1, the skills, abilities and attributes of the administrative professional have also expanded. Domeyer (2005:15) is of the opinion that the contemporary administrative professional relies on a sophisticated mix of skills and experience in a variety of disciplines, including technology, human resources and business processes, to do her job effectively. She creates an essential relationship facilitating the flow of information and ideas among teams of employees, consultants and business connections. In view of the transformation of the workplace, administrative professionals will have to change their current approach to their posts and careers to one of an increasingly entrepreneurial nature. The following key abilities, represented by the acronym "ACTION", are quoted from Domeyer (2005:15) as "must-have skills". These skills were included in the structured interview conducted with the executive officers of the Tshwane University of Technology in order to obtain their viewpoint on the importance thereof. The results are discussed in Chapter 7.

4.6.1.1 *Analysis*

The analytical skill is based on "3-C thinking" – critical, creative, and connective. Critical thinking involves evaluating information and making recommendations based on an understanding of the company's strategic objectives.

4.6.1.2 *Creative thinking*

Creative thinking means developing innovative solutions to problems and challenges.

4.6.1.3 *Connective thinking*

Connective thinking enables administrative professionals to perceive the links between people, data and ideas, and then use these ties to work more effectively.

4.6.1.4 *Collaboration*

Collaboration requires the administrative professional to be able to quickly establish a rapport and facilitate team building with co-workers on-site, and off. As a result, sensitivity and responsiveness to diverse work styles and personalities are needed.

4.6.1.5 *Technical aptitude*

Technical aptitude involves a willingness to adopt new technology, research the best technological solutions for an organisation, and train colleagues on how to use the latest tools.

4.6.1.6 *Intuition*

The administrative professional with well-tuned intuition will proactively identify the best ways to provide support based on the goals and processes of the business, as well as the needs and work styles of colleagues.

4.6.1.7 *Continuous education*

Continuous education requires the administrative professional of the future to actively seek information sources and utilise multiple modes of learning, from traditional classroom seminars to online workers. The most successful individuals will continually expand their knowledge base by pursuing subjects that enhance their productivity.

4.6.1.8 *Negotiation*

The negotiation skill involves using tact, diplomacy, empathy and business savvy to engage in productive discussions with vendors and employees that result in positive outcomes.

In addition, Quible (2001:9) identifies, among others, the following essential skills that an administrative professional should possess:

4.6.1.9 *Technical skills*

It is required of the administrative professional to be able to utilise the continuous increasing amount of new technology that is currently available or will be available in the future to its maximum potential.

4.6.1.10 *Conceptual skills*

The administrative professional who has conceptual skills at her disposal will be enabled or able to analyse a wide variety of situations, both technical and non-technical, as a prelude to solving problems. MacKenzie (2009:12) emphasises the need for the contemporary administrative professional to step out of her comfort zone, believing in herself, to take up more challenging work. Challenging work will broaden the administrative professional's frame of reference, which will contribute to the ability to imagine (that is, not to put herself in a position of "not having an idea of what it entails").

4.6.1.11 *Human skills*

Human skills enable the administrative professional to work through a chain of command, and with all personnel, including sub-ordinates, peers and as superiors. The administrative professional should be aware that teamwork involves interacting and working with people whom she is not necessarily fond of or agrees with. However, it is of the utmost importance to work in a team to succeed in accomplishing goals on time. An administrative professional with the ability to combine sensitivity, logical thinking and creativity to enable her to resolve problems is a great attribute to the organisation.

The above literature review supports the viewpoint that each profession requires specific attributes and skills, and that people are qualified by virtue of specific attributes and skills for a number of professions. The administrative professional is required to apply learned skills and knowledge. To gain experience, to be part of team working and contributing to problem-solving in the work arena will broaden the administrative professional's work experience. To achieve this, training and education are needed, namely the combination of theory and practice.

The administrative professional can only benefit from a sound theoretical background and the personal attributes required for success in her career (Swanepoel in Badenhorst *et al.,* 2001:105). The correlation of the skills, abilities and attributes discussed above with the thinking style preference profiles will be elaborated on in Chapter 7.

Bozeman (2003:3) and Johnson (1994:45) are of the opinion that the personal attributes of the administrative professional have successfully changed course in line with business structures and new technologies. Administrative professionals are regarded as the centre point or hub of communication in the office. It is therefore expected of the administrative professional to have outstanding interpersonal communication skills, provide excellent customer-service, participate in project teams, plan meetings and special events, and be positive front-line public relations ambassadors for their employers. Those administrative professionals who demonstrate independence, offer practical solutions to problems, and make suggestions for improving work processes, will be pursued by employers.

The finding of the literature review was also confirmed by the information obtained during the structured interviews with executive officers at the Tshwane University of Technology, namely that preference is given to right thinking processes. They identified the following skills and abilities as essential for effective administrative support:

- Ability to plan ahead
- Self-initiator
- People management
- Ability to take broad, general instructions and break them into manageable work packages
- Identify nuisance tasks and be able to handle them independently
- Ability to anticipate the needs of the executive officer and suggest solutions timeously

- Initiative in managing the office administration
- Understanding the work environment
- Planning the programme of the executive officer
- Connective thinking

4.7 Summary

The roles and responsibilities as set out in paragraphs 4.5.1.1 to 4.5.1.4 have been linked to the four thinking style preferences located in the different hemispheres, as illustrated in Table 4-1. The skills, abilities and attributes discussed in paragraphs 4.6.1.1 to 4.6.1.11 can be categorised as predominantly related to right brain thinking style preferences, referring to conceptual, human, collaboration, intuition and negotiation. The remaining analytical, technical and continuous education skills, abilities and attributes are mostly related to left brain thinking style preferences.

The purpose of the study was to compare the thinking style preferences of the administrative professionals in this case study with the literature review in this chapter, the generic profile of an administrative professional compiled by Solutionsfinding (refer to Figure 7-2, in Chapter 7), and the outcome of the structured interviews held with executive officers at the Tshwane University of Technology. Based on the literature review in this chapter on the expanded roles and responsibilities of the contemporary administrative professional, the new skills, attributes and abilities required and the structured interviews with the Tshwane University of Technology's executive officers, the following ideal thinking style preference profile, as illustrated in Figure 4-2, for the contemporary administrative professional can be compiled. This ideal thinking style preference profile will be compared with the thinking style preference profiles of the participants in the case study conducted with the administrative professionals of the Tshwane University of Technology.

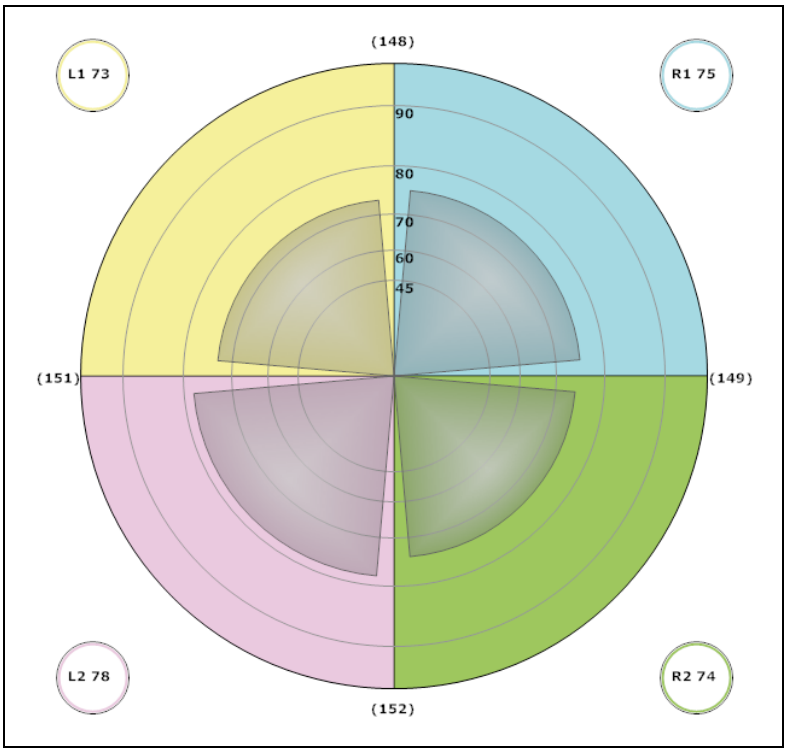

Figure 4-2

The ideal thinking style preference profile of the administrative professional Solutionsfinding

CHAPTER 5

5. THE CHANGING ROLE OF THE EXECUTIVE OFFICER

5.1 Introduction

This chapter will examine the future leadership challenges which have resulted in a need to re-invent the position of the executive officer (also referred to as chief executive officer (CEO), academic administrators and managers). The attributes of the executive officer to effectively address these challenges will be identified with specific reference to thinking processes. This relates to the overall aim of the study to compile an ideal thinking style preference profile of the administrative professional to complement the identified thinking style preference profile of an executive officer.

Although the stages of the evolution in management during the different eras were discussed in Chapter 4, this chapter will review how the work environment evolved from before World War II to the current work environment. The focus will be on how this transformed work environment, the impact on the role of the executive officer and more specifically the executive officer in a higher education institution, which forms the context of this study.

In this study, the executive officer will be referred to as a male, therefore the dual gender reference of "his/her" will be omitted.

5.2 The evolution of the managerial working environment

Hoy and Miskel (in Varner, 2002:23) are of the opinion that leadership has been a source of study for centuries, to the extent that the Greek philosopher, Aristotle (384-322BC) (Verster, Theron & Van Zyl, 1986:32) claimed that, from the moment of birth, individuals are destined to be leaders or followers.

This belief was the beginning of the trait theory of leadership. The evolution of the work environment in which leadership has to be exercised was discussed in Chapter 4. Its impact on the development of management as a profession will now be discussed.

5.2.1 Pre-World War II (prior to 1939)

Sharp (1991:2-3) claims that, prior to World War II, different views on the development of managers existed. One opinion was that the best way to learn management was to manage. Conversely, Morey (2004:132) notes that the United States played a dominant role during the nineteenth century in terms of the training of managers by formalising its commercial schools and emphasising business in the curricula. When World War II caused a scarcity of management to administer the increased production and sales due to the demand of the armed forces, the formalising of commercial schools came in useful.

5.2.2 Post-World War II (after 1945)

The Serviceman's Readjustment Act (GI Bill) made it possible for the government of the United States of America to transform the scarcity of management, since it made provision for financial support for tertiary education to veterans of World War II (Morey, 2004:132; Frances, in Peterson, 1980:21). Access to higher education increased as a result of unemployment after World War II. As discussed in Chapter 4, technology began to change at an unprecedented rate after World War II. Therefore, workers expected more autonomy in the work environment. This explains the changes in the workplace that initiated a different approach to executive development. These changes in the work environment were a major reason for implementing new styles of management and management training (Sharp, 1991:3).

5.3 The development of management as a profession

Smith (2007:33) points out that the concept of management is not a new phenomenon. The most familiar example is the management techniques the Egyptians used to build the pyramids. Du Toit (in Kroon, 1995:27-28) notes that management is put into practice when a person shows initiative in organising and leading a group of people in order to satisfy a common objective as a team.

Taking initiative in organising and leading a group of people resulted in the development of management principles. The development of technology together with the effect it has had on trade and industry has contributed to knowledge about management.

Du Toit (in Kroon, 1995:27-28) and Smith (2007:34) state that, in the Industrial Revolution, these principles of management originated with the building of a factory in Birmingham in 1800 to not only manufacture steam engines, but also to manufacture with steam engines. This manufacturing process had to be planned and controlled. The machinery was economically located under one roof that allowed the worker of the individual household to manufacture goods centrally. The manager's essential role became to exercise direct control and lead his labour force to greater productivity, which necessitated more time spent on planning, organisation and control. All this relates to the scientific management movement founded by Frederick Taylor to increase production efficiently, as discussed in Chapter 3. This approach is experienced in the new world of work where technological changes have major implications for production. Paragraph 5.6.1 elaborates on this matter (Torrington & Weightman, 1985:19; Robbins & Coulter, 2009:278).

Smith (2007:38) writes that with increased trade and industry "under one roof", the supply and demand were larger than before. Planning to increase productivity became important, and the "entrepreneur" took up a new role, known as "manager". The essential role of the manager changed with the emphasis on achievement and administrative principles. The function of management as an independent discipline became significant and is elaborated on in paragraph 5.5. Attributes such as skills that made managers competent were identified and discussed in paragraph 5.4. According to Boyatzis (in Smith, 2007:26), managers could be trained to achieve these competencies. The acquisition of these competencies can support the key processes by which managers achieve the goals set by the organisation.

The key processes of management identified by Henry Fayol are planning, organising, commanding, co-ordinating and controlling. There are also additional management functions, for example, decision-making, communication, co-ordination, delegation and disciplining. For the purpose of this study, only the processes of planning, organising, staffing and controlling will be examined and discussed in paragraph 5.5 (Dyck & Neubert, 2009:15-20; Smith, 2007:38).

The above demonstrates the general development of management as a profession. These rapid changes that involved the development of computer and telecommunication innovations also influenced educational management. In the context of this study, reference is made to top and middle management. Reference is made throughout the study to the relationship between management skills and management functions, which are distinct yet interrelated (drawn by Lussier, 2008:13 and illustrated in Figure 5-2) and the importance of the support role of the administrative professional in the execution of the management functions. A literature review on management skills and how the managing functions, for example, planning, organising, staffing and controlling affects executive officers in a higher education institution will be discussed.

5.4 Management skills

Managerial positions comprise a wide range of activities that require management skills and attributes (also known as "competencies") to carry out their duties (Griffin, 1993:19; Le Roux *et al.,* 1999:112-113, Smith, 2007: 21-29; Lussier, 2008:7-10).

The following attributes are identified by Bristow (in Smith, 2007:27): communication, self-management, organisational ability, influence, teamwork, interpersonal skills, analytical ability, results orientation, customer focus, developing people's potential, strategic ability, commercial awareness, decision-making, planning, leadership, self-motivation, specialist knowledge, flexibility, creativity, initiative, change orientation, dealing with information, concern for quality, reliability, ethical approach, financial awareness and negotiating skills.

Many of these attributes form part of the skills required by a manager. For the purpose of this study, the skills needed at different managerial levels will be concentrated on.

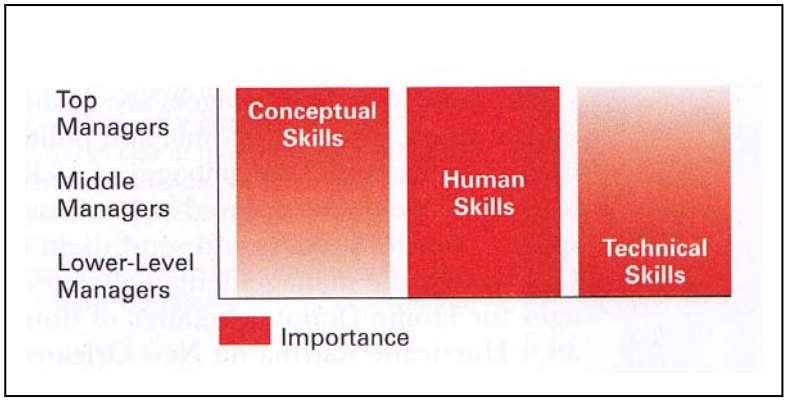

Figure 5-1

Skills needed at different managerial levels

(Robbins & Coulter, 2009:27)

5.4.1 Decision-making skills

Decision-making skills are important on top- and middle management level, as shown in Figure 5-1 (Robbins & Coulter, 2009:27). The ability of an executive Officer to conceptualise situations and select an alternative plan of action to solve a certain problem or a series of problems is important for effective planning. Decision-making skills are based on several other skills, including conceptual skills, diagnostic, analytical and critical-thinking skills, quantitative reasoning skills and time management skills. Lussier (2008:13) correlates decision-making skills with the management planning function as illustrated in Figure 5-2.

The implications of this for the thinking style preference profile and the support role of the administrative professional is examined in paragraph 4.5.1.1 of Chapter 4 and paragraph 7.4 of Chapter 7.

5.4.2 Interpersonal skills

As reflected in Figure 5-1 (Robbins & Coulter, 2009:27), interpersonal skills are of the utmost importance for all the levels of management to demonstrate communication skills in order to convey information to sub-ordinates and to work effectively with people individually and in teams.

The executive officer should have the ability to understand, motivate, encourage and discipline sub-ordinates in such a way that individuals will meet the goals and objectives of the organisation. Interpersonal skills are also referred to as human skills and are based on several other skills, including: communicating skills, team skills, diversity skills, power, political, negotiation and networking skills, motivation skills, conflict management skills and ethics skills. Interpersonal skills are interrelated with the organising and staffing function (Lussier, 2008:13). The implication of this for the thinking style preference profile and the support role of the administrative professional are examined in paragraphs 4.5.1.2 and 4.5.1.3 of Chapter 4 and 7.4 of Chapter 7.

5.4.3 Technical skills

As a result of the specialised knowledge required by an industry or a process, technical skills are critical for the first-level manager, as illustrated in Figure 5-1 (Robbins & Coulter, 2009:27). The executive officer needs technical skills to apply techniques, procedures and resources in his area of responsibility. Therefore, technical skills enable the executive officer to understand certain tasks and operations and will assist in the objectives of the organisation being reached, for example, IT, financial and legal systems and the influences of the external environment. The controlling function is interrelated with the technical skills of the executive officer (Lussier, 2008:13). In paragraph 4.5.1.4 of Chapter 4 and paragraph 7.4 of Chapter 7 the relationship is discussed with the thinking preference profile and the support role of the administrative professional.

The management skills explained above are in line with the abilities and skills of the administrative professional, as discussed in Chapter 4. The administrative professional and the executive officer rely on a variety of these skills to do their work effectively. The different abilities and skills of the executive officer are allocated to diverse thinking preference quadrants. The management skills that can be categorised as predominately right brain thinking style preference are, for example, conceptual and interpersonal skills. Analytical and technical skills are categorised as predominately left brain thinking style preference processes. Decision-making skills access all four quadrants of the thinking style preferences.

The comparison between the management skills- and functions will proceed in the following section. Figure 5-2 illustrates the interrelationship of management skills and functions.

5.5 Management function

The supportive role of the administrative professional with regard to the execution of the management functions that were discussed in Chapter 4 contributes to the achievement of the organisation's goals. As mentioned in paragraph 5.3, Henri Fayol (Dyck & Neubert, 2009:7-11; Smith, 2007:38) proposed that executive officers perform five functions, namely planning, organising, commanding, coordinating and controlling. For the purpose of this study, these functions were reduced to four functions, namely planning, organising, staffing and controlling, as discussed in paragraphs 5.5.1 to 5.5.4 (Le Roux *et al.,* 1999:115-126, Robbins & Coulter, 2009:23-24; Smith, 2007:56-141).

To demonstrate the link between these management functions and the specialised functions located in the different hemispheres, the same colour coding previously used in Chapter 4 is applied to the words describing the different thinking style preferences as measured by the NBI®.

5.5.1 Planning function

Planning can be described as the processes during which the executive officer determines future objectives and develops plans to achieve, integrate and coordinate these objectives. These planning activities are also referred to as strategic planning and can be linked to the right brain thinking style preferences. Other examples are connecting ideas to create something different and new, initiating change, future orientation, idea generation and seeing the bigger picture. The left brain thinking style preference processes are to set goals, to put plans into action and planning.

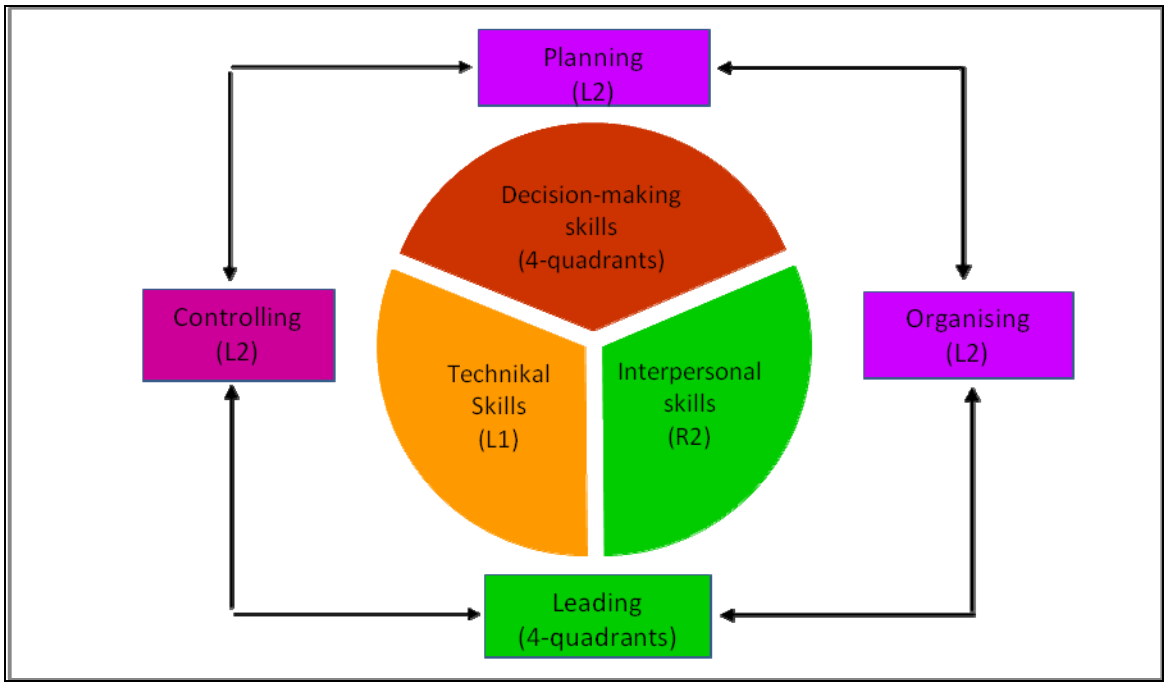

Figure 5-2

Management skills and functions

(Lussier, 2008:13)

Decision-making skills access all four-quadrants of the thinking style preferences. In paragraph 4.5.1.1 of Chapter 4 and paragraph 5.4 of this chapter an explanation is provided of the interrelationship between the planning function, decision-making skills and the supportive role of the administrative professional. The results of the latter are examined in Chapter 7.

5.5.2 Organising function

The organising function allows the executive officer to facilitate the work in order to accomplish established plans and goals. Predominately right brain thinking style preferences are associated with the organising function, for example, the preference to think about big things while doing small things, preference to encourage and assist subordinates, linking of ideas, risk-taking and holistic thinking. Thinking style preferences such as to be logical, to focus, to be organised, to plan, and attention to detail are all connected to the left brain thinking style preferences.

The interrelationship between the organising function and the interpersonal skills is elucidated in paragraph 4.5.1.2 and paragraph 5.4. A correlation between the functions and skills is drawn in Chapter 7.

5.5.3 Staffing function

To motivate subordinates, resolve conflicts, establish effective communication channels and influence subordinates to achieve the said goals entails important human interpersonal skills and right brain thinking style preferences to be applied by the executive officer throughout the staffing function. Examples of right brain thinking style preferences are aspects such as reaching out and adding value to the lives of workers, to be personally involved and the sharing of information with workers.

The interrelationship between the staffing function and the interpersonal skills is introduced in paragraph 4.5.1.3 of Chapter 4 and paragraph 5.4. The implications of the latter in the new world of work are discussed in Chapter 7.

5.5.4 Controlling function

The controlling function entails that the executive officer compares, monitors and controls actual results with anticipated results. The left brain thinking style preferences associated with the controlling function implies the ability to examine and measure, to be accurate, to plan, to be structured and to enjoy solving problems. The controlling function requires mostly left brain thinking style preferences, for example, to investigate, to measure, to take corrective action, to be able to forecast, and to solve problems. The interrelationship between the controlling function and the technical skills are addressed in paragraph 4.5.1.4 of Chapter 4 and paragraph 5.4. The effect of the latter on the support role of the administrative professional is explained in Chapter 7.

One can conclude that the above discussion about the four management functions provides evidence that to be able to delegate effectively, being a successful communicator, to think critically, to be able to manage work load and time, to identify clear roles for employees, to create an environment of openness and trust and to address and deal with challenges are all important managerial skills.

In the new world of work, including the higher education environment, executive officers deal with macro influences on the micro working environment. The introduction of e-learning, security threats, ethical issues, global economic and political uncertainties and technological advancements has not only increased the pace of change, but have also forced executive officers to reconceptualise their managerial initiatives (Marshall, 2007:1). In the next section, attention will be given to how this new work environment impacts on the role of the executive officer.

5.6 Changes affecting the executive officer's profession

Griffin (1993:6) points out that the executive officer in the new world of work faces a variety of interesting and challenging situations, including time utilisation, globalisation that enforces increased complexities, domestic competition, government regulations and pressure applied by stakeholders. Rapid changes in the work environment aggravate the challenging situation of the executive officer. Profound changes were also discussed in Chapter 4, when the term "new world of work" was defined.

Specific changes in higher education institutions were examined by Etzkowitz and Leydesdorff (1997:1-3) in anticipation of the fact that universities would move away from the traditional functions of cultural memory and education to technology transfer, the formation of firms and establishing research contracts. The change of focus placed universities in a new alignment with the industrial sector, for example, the capitalisation of knowledge.

The traditional functions also include a shift of internal responsibility with regard to quality control and renewal towards external influences. For example, the board of directors include members of industry (Engwall, Levay & Lidman, 1999:78). Figure 5-3 shows some of the most important changes management face. These changes affect the way that managers plan, organise, lead and control (Robbins & Coulter, 2009:27-28). Figure 5-3 below serves as a guideline in the following discussion about the effect of these changes on the work environment of the executive officer.

5.6.1 Changing technology

Executive officers are exposed to the competitive factor due to rapid change in technology. As automation replaced certain tasks done by people, for example, automatic mail sorters and machinery in factories, it was expected of employees to increase their productivity to enable the organisation to compete.

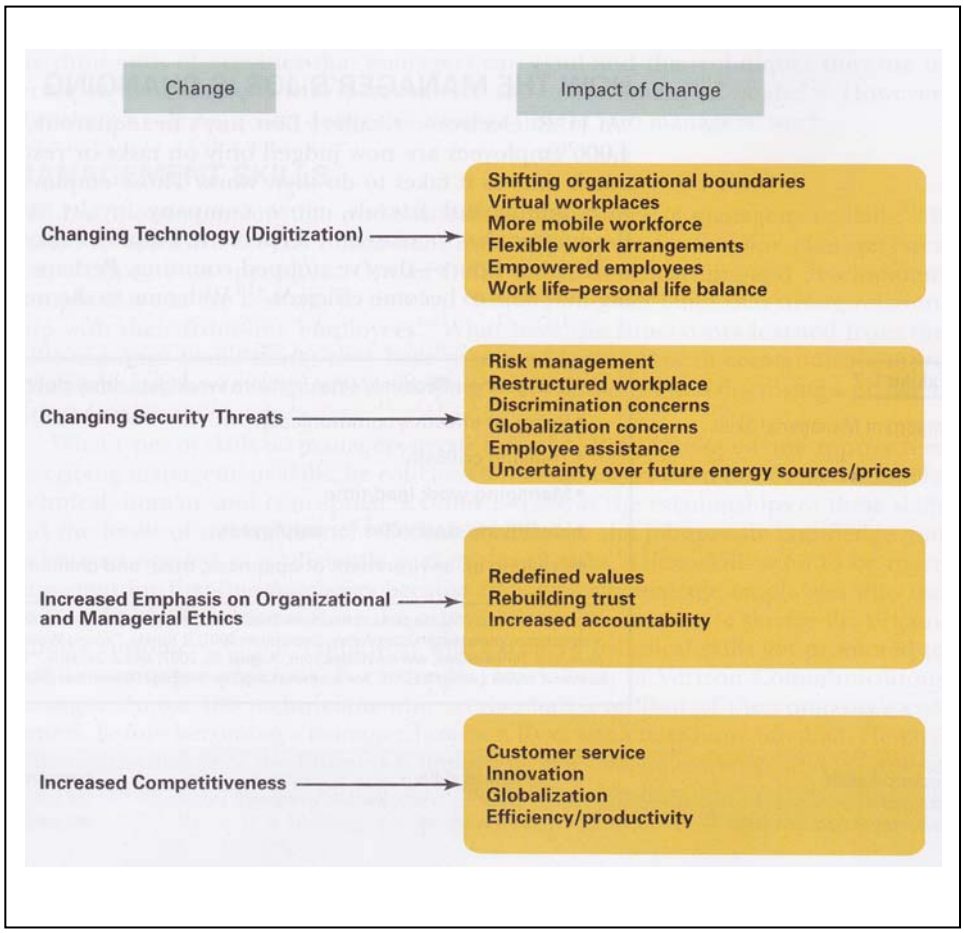

Figure 5-3

Changes affecting a manager's job

(Robbins and Coulter, 2009:28)

The effect of technological progress and innovation can also be examined in teaching, learning and assessment within the higher education environment, in both contact and distance education institutions, and required the *shifting of organisational boundaries*. Technological advances enable higher education institutions to offer alternative modes of delivery, which include Internet and myTUTor programmes (Jansen, 2004:306).

This mode of delivery became more popular as many students choose part-time studies. The traditional medium of instruction for site-based learners was replaced with the electronic medium, for example, printed study guides, notes and tests. These changes influenced the traditional managerial styles of executive officers in the higher education environment with regard to emphasis on finance and budgeting, planning, personnel management, student administration, quality assurance and communication (Gladieux & Swail, 1999:43 -47).

The pace and volume at which information is distributed is the effect of the rapid development of technology (Torrington & Weightman, 1985:97-98). Therefore, executive officers have to introduce new equipment and work practices to employees. *Virtual workplaces* and *flexible work arrangements* (as illustrated in Figure 5-3) are new challenges for the executive officer. Employees need support and guidance from the executive officer with regard to the visibility and accountability brought about by the implementation of an enterprise-wide information system (Robbins & Coulter, 2009:278).

A *more mobile workforce* originated from the virtual workplace that encounters fast communication processes such as e-mail, voice mail, tele-conferencing- and videoconferencing and intranets, enabling executive officers to provide employees with sufficient information to take fast decisions. To cope with the increased work demands, executive officers had to *empower employees* (Robbins & Coulter, 2009:342-401).

Apart from the above mentioned challenges as identified in the literature review, the executive officers at Tshwane University of Technology acknowledged during the structured interviews that information overload and insufficient time are a challenge, as well as the *empowering of employees*. Opportunities such as continuous education and day courses to improve skills are promoted by the executive officers. This will improve support services in the institution.

Increased work load and travel demands as a result of the rapid change in technology have led to executive managers being expected to accommodate a diverse workforce with regard to *a balance between work life and- personal life*. The benefits introduced by organisations for male and female employees include on-site child-care, flexitime, job sharing, time off for school functions, telecommuting and part-time employment (Robbins & Coulter, 2009:238).

5.6.2 Changing security threats

An analysis of the external and internal environment encompasses the identification of security threats with regard to risks, restructured workplaces, discrimination concerns, globalisation concerns, employee assistance and uncertainty about future energy sources and prices.

Executive officers make use of historical data, whether it be personal experiences or from secondary information, that allow them to identify *risks*. According to Robbins and Coulter (2009:310), risk can be defined as "a situation in which the decision maker is able to estimate the likelihood of certain outcomes, it can be opportunities or threats".

The Tshwane University of Technology's Draft Risk Management Policy Framework (2010:1-2) notes that *risk management* became practice in higher education institutions to enhance and embed their risk management processes that are required in the new ways of reporting and monitoring risk exposures. The Higher Education Funding Council for England (HEFCE) (2005:3-4) states that risk management provides the ability to systematically identify, assess and seize opportunities and to promote healthy self-criticism within institutions in ways that were not necessarily possible before.

The Tshwane University of Technology's Draft Risk Management Policy Framework (2010:1-2, 36) states that Enterprise Risk Management Committees (ERMs) and Risk Management Policies provide guidelines to respond to changes in the education environment, including business- and insurable risks, and to make informed decisions under conditions of uncertainty.

The Tshwane University of Technology has identified the following risk categories:

- Strategic
- Funding
- Academic excellence
- Operational
- Reputational (including short learning programmes)
- Infrastructure and facilities
- Financial
- Human resources
- Information technology
- Student affairs and residence operations
- Compliance (legal and regulatory)
- Safety, health and environmental
- Business continuity

For the higher education institution to be successful, risks should be managed by executive officers across all organisational levels, which include the Council, Executive Management, deans, directors and academic departments.

The summit of the Association of Governing Boards of Universities and Colleges' (AGB) and the National Association of College and University Business Officers (NACUBO) (2007:3-4) identified that risks cannot be eliminated, but that enterprise risk management can enable an institution to manage them efficiently and effectively.

The *restructured workplace* is another important change that is a possible threat to the executive officer. Organisational effectiveness originates, among others, from executive officers who support and encourage a diverse workforce. The executive officer who values a diverse workforce will enhance employee morale and more creative solutions. The executive officers' planning, organising, staffing and controlling should consider a heterogeneous workforce in terms of gender, race, ethnicity, and age, cultural differences that encompass traditions, history, religious beliefs and deep-seated values (Robbins & Coulter, 2009:70).

Higher education institutions are affected by the restructured workplace in terms of the new career opportunities emerging from the information- and knowledge-based revolution. Curriculum models need to be re-developed to foster the development and continuous adaptation of emerging knowledge and skills caused by the changes (Pillay, Boulton-Lewis & Wilss, 2004:1-2).

Naidoo (2003:249-250) observes that the restructuring of the higher education environment reveals a security threat concerning the *global trend* to retreat from means of funding and regulation. This resulted in the claim that market competition within and between higher education institutions would create more efficient and effective institutions. Geographic barriers between countries collapsed with globalisation. However, organisations are facing the risk of terrorist attacks and trading countries that falter due to declining economy. The World Trade Organisation and the International Monetary Fund are structures to isolate and address potential problems (Robbins & Coulter, 2009:99-102).

Vaira (2004:483-492) finds that the impact of change in terms of *globalisation* concerns affected aspects of higher education institutions such as policy-making, priorities and structure of governance related to the higher education sector, organisation and academic work and identity, reshaping its role, relationships, redefining values and features confronted by globalisation processes. These processes entail efforts to conciliate, adapt, translate and assemble the new with the old. Globalisation concerns are not limited to these processes.

Information and communication technologies (ICTs) are applied efficiently in the globalised environment. These technologies are integrated for didactic purposes internally and to construct distance education learning systems. Naidoo (2003:249-250) is of the opinion that the implementation of funding frameworks will eliminate the security threat of *uncertainty over future (energy) sources/prices*. Economic prosperity van be fostered by countries (including for-profit providers universities and organisations) investing to increase access to higher education (full-time, part-time and on-line).

The above literature review shows that the restructuring of the workplace, risk management (the lack of financial resources) and employee assistance (skills development) - the latter two listed by executive officers of the Tshwane University of Technology during the structured interviews - can be related to the impact of change (refer to Figure 5-3).

5.6.3 Increased emphasis on organisational and managerial ethics

Robbins and Coulter (2009:81-129) state that "an ethical culture is high in risk tolerance and low to moderate in aggressiveness, and it focuses on means as well as outcomes". The factors that affect the executive officers' *ethical* and unethical behaviour include an individual's level of moral development (pre-conventional, conventional, or principled), individual characteristics (*values* and personality variables – ego strength and locus of control), structural variables (structural design, use of goals, performance appraisal systems and reward allocation procedures), organisational culture (shared values and cultural strength), and issue intensity (greatness of harm, consensus of wrong, probability of harm, immediacy of consequences, proximity to victims and concentration of effect).

The changes in the workplace have reinforced leadership qualities such as *trust and credibility*. Executive officers have to gain the trust of their workers by addressing empowerment and self-management teams and believing they will conscientiously fulfil their responsibilities. Honest, credible leaders are competent and inspiring.

Trust and its dimensions, which include integrity, competence, consistency, loyalty and openness, are significant in job outcomes, job performance, organisational citizenship behaviour, job satisfaction and organisational commitment (Robbins & Coulter, 2009:400).

The enhancement of the culture of the higher education institution in terms of educational service can be accomplished by (Harcleroad in Peterson, 1980:101):

- Redefining the values
- Rebuilding the trust
- Increasing accountability

During the structured interviews conducted with executive officers of the Tshwane University of Technology, the opinion was expressed that micro- and macro instability such as the recession, the reputation of the institution and success rate (to bridge the gap between high schools and higher institutions) emphasised the impact of change regarding the values, trust and accountability (refer to Figure 5-3).

5.6.4 Increased competitiveness

Executive officers are faced with changes to strategies that will ensure a competitive advantage and sustain it. A competitive strategy will define competitive advantage, for example, which products or services to offer and the target audience. Customer satisfaction can be influenced by customer service. Executive officers should therefore attend to employee attitudes and behaviours by providing employees with *customer service* training (Robbins & Coulter, 2009:186-190).

Research done by Dolinksy (1994:27-30) and Hemsley-Brown and Oplatka, (2006:4-20) reveals that higher education institutions need to evolve a more *customer-focus culture* to gain a competitive edge. This embraces the utilisation of a formal strategy framework to ensure quality service to customers, which includes:

- More awareness of the customer's (student's) needs. The provision in brochures of the required information of the services offered in a higher education institution will assist them to exercise the correct choice of University.

- To conduct a market analysis to establish market position with regard to international students, mature students and high-school learners. The information will contribute toward a higher education institutional image to gain a competitive edge.

- A framework to minimise and address customer (student) complaints is crucial for ensuring a university's success. The inability of higher education institutions to meet the students' needs will affect their enrolments.

It is important for organisations to be competitive and they should therefore also be concerned with *innovation*. Although organisations have the choice to decide on the emphasis of their innovation efforts, basic research is the key to a sustainable competitive advantage (Robbins & Coulter, 2009:29, 34, 191). Lueddeke (1999:235-246) and Vaira (2004:492) state that it is important for higher education institutions to identify initiatives to become more competitive. *Innovation* is associated with change as a result of limited resources that affect the high demands relating to virtual courses and increase in enrolments. Restructuring by means of innovation determines the future role, structures and priorities, competitive strengths and market niches, eliminates weaknesses and increases productivity in the higher education environment.

Mok (2000:148) argues that the higher education environment also experiences the impact of *globalisation* in terms of its managerial approach. With the physical territorial boundaries between nation-states that have gradually disappeared, a shift from elite to mass higher education is experience regarding efficiency, maximum outputs and increased enrolments. This paradigm shift strengthens the idea that education should be cost-effective concurrent with managerialism.

Executive officers are facing a new ideology of students being clients – this resulted from students studying outside their home country, emphasising access instead of selection and a market-driven curriculum that contains practical courses. They are also facing the appearance of a new dialogue that relies on mission statement, system outputs, audits, strategic plans, cost centres and public relations. Participation in the education market became inevitable. Executive officers are selling their skills and knowledge and the higher education institutions are adopting an entrepreneurial approach to competitiveness.

Bovée, Thill, Wood and Dovel (1993:10, 671-672) and Robbins and Coulter (2009:23, 444) maintain that "efficiency measures whether an organisation is using the appropriate amount of resources in attaining its goal". To attain competitiveness, executive officers should use resources such as people, money and equipment efficiently while improving goods and *services* to better achieve their goals. (The executive officer deals with scarce inputs – including resources such as people, money, and equipment – he is concerned with the efficient use of those resources.)

Karmel (2001:132136) is of the opinion that *efficiency and effectiveness* started to surface at higher education institutions as a result of the large number of enrolments an emphasis on outcomes. As a result of the Commonwealth decreasing funding of universities since the mid-1990s, higher education institutions were forced to improve their efficiency and earn more of their own revenue. Higher education institutions sought alternative sources of revenue to maintain competitive efficiency with the implementation of quality assurance procedures by means of rewards for good performance.

Kruger (in Kroon, 1995:51-63) and Venter (in Kroon, 1995:73-76) confirm that an organisation in the new world of work experiences a fast transformational environment as a result of technological progress and innovation. Executive officers have to create continual interchange between technology, the internal- and external environment. Interchange will prevent stagnation and promote change, adjustment and renewal within the organisation. The technological changes in the new world of work are known as new equipment, tools, operating methods, automation and computerisation.

Executive officers have to introduce those changes to the employees. These technological changes imposed the management principle of "scientific management", as discussed in paragraph 5.3, namely "scientific management implemented changes that would increase production efficiency" (Robbins & Coulter, 2009:278). Advances in micro technology such as word processors, photocopiers, software systems such as bulk SMS systems and 3D-cards contributed to the increased productivity. It is expected of the executive officer to familiarise himself with new managerial skills to motivate employees to increase productivity.

Hugo, Badenhorst-Weiss, Van Biljon and Van Rooyen (2006:9-28) point out that organisations have to adjust their business strategies and organisational structures in order to compete in the global market and become more internationally orientated. An important part of strategic planning is the continuous supply of raw materials, components and services. Therefore, purchasing and supply planning should be integrated with the organisation's general planning. The competitive position, profitability and market share of the organisation will be influenced by effective strategic purchasing and supply planning. The impact of change when competitiveness is increased will be factors such as efficiency and productivity; globalisation and customer service (as illustrated in Figure 5-3). In the structured interviews conducted with executive officers at the Tshwane University of Technology it was also mentioned that the lack of human resources and skills to provide good service was a challenge.

5.7 Summary

When taking into consideration the impact that technological progress and innovation has on the executive officer's profession, as set out in paragraphs 5.6.1 to 5.6.4, and comparing it with the thinking style preference profiles, the following can be concluded:

Bearing in mind the aspects of *changing technology*, the executive officer demonstrates R1 thinking style preferences, for example, adapting to new innovation, alternative working methods and expanding boundaries, whether for himself or subordinates. Aspects of *changing security threats*, for example risk and employee assistance, also requires predominantly R1 thinking style preferences.

The thinking style preferences associated with the R1 profile are risk taking, global thinking and growing by restructuring the workplace. Innovation with regard to increasing competiveness is also related to R1 thinking style preference profile. A comparison was drawn (see Table 5-1) of the thinking style preferences of the administrative professional and the executive officer (the activities associated with the thinking style preferences are underlined). The comparison demonstrates that more right brain thinking style preferences are required in the new world of work.

The aspects of *increased emphasis on organisational and managerial ethics* and *increased competitiveness* can be associated with the R2 thinking style preference profile. For example values, ethics and customer service are associated with care, concern and consumers. Very few left brain thinking style preferences are indicated, for example, trust, accountability, efficiency and productivity.

From the comparison above, the conclusion can be made that it seems as if right brain thinking style preferences are imperative for the executive officer in the new world of work.

Table 5-1: Comparison of thinking style preferences of the administrative professional and the executive officer

	ADMINISTRATIVE PROFESSIONAL	EXECUTIVE OFFICER
L1	• Initiating and attaining of goals and objectives • Research to keep abreast • Identifying needs • Determining means • Defining space and equipment needs • Effective means of organising • Equipment and procedure utilisation • Individual productivity • Implementing techniques • Realistic job description • Controlling the quantity • Procedures are cost-effective • Actual results fail to conform – degree of accuracy • Strategies for taking corrective action • Coaching new staff and/or assistants • Ensuring continuity of work flow • Effective way for employees to perform	• Plans to achieve, integrate and coordinate • Processes are to set goals • Such as to be logical, to focus • Subordinates, resolve conflicts • Compare, monitor and correct actual results • To be accurate • To enjoy solving problems • For example to investigate, to measure • Technical skills were addressed • Decision-making

	ADMINISTRATIVE PROFESSIONAL	EXECUTIVE OFFICER
L2	• Implementing and operating of functions, services and changes • Procedures to introduce, assist or select • Organising resources • Seeking specific tasks • Adopting efficient work methods • Controlling the quantity and quality • Maintaining the budget • Individual productivity • Evaluating equipment • Coaching new staff and/or assistants • Ensuring continuity of work flow • Employees who fail to comply	• To put plans into action and planning • The organising function help to facilitate the work • The controlling function entails ability to be able to examine and measure • Attention to detail • Decision-making
R1	• Maintaining a state-of-the-art in relation to her work • Introducing procedures • Implementing desired changes • Defining space and equipment needs • Developing techniques and procedures • Anticipating and selecting effective methods • Offering growth opportunities • Suggesting why actual results • Designing new systems • Strategies for taking corrective action • Coaching new staff and/or assistants • Ensure continuity of work flow	• Determining future objectives and developing plans to achieve, integrate • Strategic planning • Decision-making • Connecting ideas to create something different and new, initiating change, and seeing the bigger picture • Linking of ideas, risk-taking and holistic thinking. • Correct actual results with anticipated results • Being able to forecast • Decision-making
R2	• Assisting with the attainment of goals • Facilitating appropriate training • Establishing rapport with all team members • Suggesting effective assessment • Seeking and communicating the most effective way to employees • Coaching new staff and/or assistants • Customer survey • Need for implementing new administrative functions • Ensuring continuity of work flow	• Facilitate the work • Preference to encourage and assist subordinates • Staffing function entails conflict resolution • Effective communication channels and influencing subordinates • Reaching out and adding value to the lives of workers • Sharing information • Interpersonal skills • Decision-making

CHAPTER 6

6. RESEARCH DESIGN AND METHODOLOGY

6.1 Introduction

In this chapter, the researcher presents the research process in terms of the selected paradigmatic approach, research design and research methodology with regard to the qualitative and quantitative research approaches applied in this study. The quality criteria are described that uphold the ethical considerations that the researcher adhered to in undertaking the study.

The following problem statement and objectives were determined at the start of this study:

6.2 Problem statement

Is the thinking style preference profile of the contemporary administrative professional appropriate for optimal effectiveness in the new world of work environment, in the context of a university of technology (UoT)?

6.3 Research aims and objectives

6.3.1 Objectives

The purpose of this study was to assess the ideal thinking style preference profile of the contemporary administrative professional at a higher education institution, and the applicability and impact thereof on her natural preferences to perform certain tasks and master certain skills effectively.

6.3.2 Research questions

This study was guided by the following questions:

6.3.2.1 *Qualitative questions*

- What were the skills needed in the early 1900s (prior to the new world of work) by the administrative professional to do her work? What was the thinking style preference profile associated with these skills?

- What is the preferred thinking style preference profile of contemporary administrative professionals needed for optimal effectiveness in the new world of work environment, in the context of a university of technology?

- What are the skills of an executive officer in a higher education context? What is the thinking style preference profile associated with the skills of an executive officer in the new world of work?

- What is a thinking style preference profile, and how is it applicable to this study?

6.3.2.2 *Quantitative questions*

- What is the thinking style preference profile of the administrative professional at the Tshwane University of Technology in terms of the four-quadrant profiles?

- What is the thinking style preference profile of the administrative professional at the Tshwane University of Technology in terms of the 8-Dimension Model?

- What thinking style preference profile do the executive officers at the Tshwane University of Technology prefer that the administrative professional should demonstrate in order to fulfil an effective support function?

- What is the generic thinking style preference profile of the administrative professional at the Tshwane University of Technology in terms of her current job profiles?

The research design to conduct this study will be outlined in the following paragraphs.

6.4 Research design and methodology

The principle of a research design is to "provide a framework for the collection and analysis of data" (Bryman, 2004:27). A research design should reflect a range of dimensions of the research process, such as:

- Expressing causal connections between variables
- Generalising to larger groups of individuals than those actually forming part of the investigation
- Understanding behaviour and the meaning of that behaviour in its specific social context
- Having a temporal (over time) appreciation of social phenomena and their interconnections

Bryman (2004:27) states that a research method is "simply a technique for collecting data. It can involve a specific instrument, such as a self-completion questionnaire or a structured interview schedule, or participant observation whereby the researcher listens to and watches others".

The data sources used to conduct this study will be outlined in the following paragraphs.

6.4.1 The research paradigm

Miller and Brewer (2003:220) explain that the word "paradigm" comes from the Greek word "paradigm", meaning pattern, a theoretical structure or a framework of thought that acts as a template. Kuhn (in Miller, 2003:220) describes a paradigm as "a set of scientific and metaphysical beliefs that make up a theoretical framework in which scientific theories can be tested, evaluated, and, if necessary, revised".

Denzin and Lincoln (2000:19-20) differentiate four theoretical paradigms, namely positivist and post-positivist, constructivist-interpretive, critical and feminist-post-structural.

Rutherford (2009:113) summarise these four paradigms as follows:

- The positivists and post-positivist paradigms work from within a realist and critical realist ontology and objective epistemologies and rely upon experimental, quasi-experimental survey and rigorously defined qualitative methodologies.

- The constructivist-interpretive paradigm assumes a relativist ontology (there are multiple realities), a subjectivist epistemology (knower and participant co-create understanding) and a naturalistic (in the natural world) set of methodological procedures. Findings in these paradigms are usually presented in terms of the criteria of grounded theory or pattern theories.

- In the feminist-post-structural paradigms it is assumed that the real world makes a material difference in terms of race, class and gender.

- The critical paradigm includes the Marxist and emancipator models.

The research paradigm applied in this study will be discussed below.

6.4.1.1 *The research paradigm of this study*

Denzin and Lincoln (2000:19) explain that a paradigm is the "net that contains the researcher's epistemological, ontological and methodological premises". They maintain that all research is interpretive as it is guided by "a set of beliefs and feelings about the world and how it should be understood and studied".

In an attempt to address the research questions, a quantitative and qualitative research approach was utilised, secured in the post-positivist/interpretivist paradigms. The ontology in terms of post-positivism (quantitative research approach) is a singular reality. The researcher rejects or fails to reject the research questions (Creswell & Clark, 2007:24). While ontology in terms of constructivism (qualitative research approach) is multiple realities, the researcher provided quotes to illustrate different perspectives by means of a literature study.

Creswell and Clark (2007:24) describe epistemology in terms of post-positivism as distance and impartiality, for example, the researcher objectively collects data on instruments. The thinking style preference profiles of the administrative professionals were assessed by means of the NBI®. As epistemology in terms of constructivism is, for example, closeness, the researcher visits participants at their sites to collect data. The researcher conducted structured interviews with executive officers.

From the above the constructivist-interpretive paradigm can be adopted as a paradigm for this study. The research design of this study is elaborated in the following paragraphs.

6.4.2 Research design

The research design applied to collect and analyse the data of this study is summarised below.

6.4.2.1 *Mixed-method approach*

The mixed-method approach is defined as an approach "where the investigator collects and analyses data, integrates the findings, and draws inferences using both qualitative and quantitative approaches or methods in a single study or programme of inquiry" (Teddlie & Tashakkori, 2006:12-28). According to Miller and Brewer (2003:326), the combination of various approaches strengthens each contrasting approach more than cancelling the weaknesses of its counterparts. There are different mixed-method approaches, known as triangulation design, embedded design, explanation design and exploratory design (Creswell & Clark, 2007:59). Miller and Brewer (2003:327) state that triangulation is most commonly found in some combination of qualitative and quantitative approaches.

As discussed in the previous paragraph, the research approaches used in this study were both qualitative and quantitative research. Triangulation was applied in this study by comparing the literature study with the results of the case study and cross-validating it with the data of the structured interviews conducted with executive officers at the Tshwane University of Technology.

Leedy and Ormrod (2010:93) expound research approaches as follows: “To extract meaning from the data, we employ what is commonly called research methodology.” They also mentioned that data and methodology are inextricably intertwined. Methodology is used for a particular research problem according to the nature of the data that will be collected to resolve the problem.

6.4.2.2 *Qualitative and quantitative approaches*

- Qualitative research approach

According to Leedy and Ormrod (2010:95), qualitative research is used to seek better understanding of complex situations. This research approach is the observation of a situation to build a new theory.

Blaikie (2010:204, 216) explains that a qualitative research approach is the qualitative analysis of collected data and the reporting of these results. He further mentions that “the use of qualitative methods in any kind of research poses a similar set of problems; combine case studies and qualitative methods and the problems are exacerbated”.

The qualitative approaches identified by Denzin and Lincoln (2000:3) are case study, personal experience, introspection, life story, interview, artefacts, cultural texts and productions, observational, historical, interactional, and visual texts. In this study, the researcher utilised the case study approach. A literature study comprising books, research articles and the internet examined the history of the administrative professional, her new role and responsibilities and the changing role of the executive officer. A qualitative research approach was also used to determine the changing role of the executive officer in the new world of work.

It was important to identify the attributes of an executive officer in the higher educational context. The aim was to establish the thinking preference profile associated with these attributes of an executive officer in the new world of work. The data obtained from the structured interviews conducted with executive officers was applied to draw conclusions.

- Quantitative research approach

Bogdan and Biklen (in Golafshani, 2003:597) define quantitative research as follows:

"Charts and graphs illustrate the results of the research, and commentators employ words such as 'variables', 'populations' and 'result' as part of their daily vocabulary … even if we do not always know just what all of the terms mean … [but] we know that this is part of the process of doing research. Research, then, as it comes to be known publicly, is a synonym for quantitative research."

The quantitative research approaches is the intensive study of many features of a number of phenomena in order to build an understanding of it in depth (Miller & Brewer, 2003:193). The quantitative research approach was applied to establish the thinking style preference profiles of 24 administrative professionals at the Tshwane University of Technology in terms of the four-quadrant- and 8-Dimension Model.

The NBI® served as a diagnostic tool to assess and reveal the relationship between the thinking style preference profiles of the administrative professionals and the executive officers during a study conducted at the Tshwane University of Technology.

6.4.3 Research methodology

6.4.3.1 *Selection of participants*

Thirty-one administrative professionals employed at the Tshwane University of Technology, a higher education institution, were approached to participate in the case study on a voluntary basis.

It was decided that the criteria for participation would be administrative professionals reporting to top management at the Tshwane University of Technology. These administrative professionals work on a one-to-one basis with their executive officers. Of the 31 candidates who were approached, 24 participated in the case study. The participants completed the Neethling Brain Profile questionnaires using the NBI® to determine their current dominant thinking style preferences.

6.4.3.2 *Data collection*

- Qualitative data collection

Qualitative data collection during this study was done by means of a literature study and structured interviews.

The 24 executive officers of the 24 administrative professionals who participated in this study were approached to complete a questionnaire that entailed the evaluation of an administrative professional. The executive officers could complete the questionnaire and return it to the researcher via e-mail. Interviews were held with the executive officers who were unable to complete the questionnaire due to personal time constrains. The remaining seven executive officers of the administrative professionals who did not participate in the study were invited to participate in the pilot study to refine the questionnaire. Five executive officers participated in the pilot study.

Books, research articles, the internet and dissertations were researched in the literature study. A comparison was drawn between the literature review, the findings of the thinking style preference profile of the administrative professionals in the case study, and the outcome of the structured interviews held with executive officers.

- Quantitative data collection

One quantitative data collection measure, namely the NBI®, was used in order to profile the thinking style preferences of the participants. The NBI® consists of 30 questions to establish the participant's personal profile. There is no right or wrong answer and no good or bad profile.

Each subject scores a total of 300 points. The spread of the points over the four quadrants, which represent their thinking processes, have important implications for the participants.

6.4.3.3 *Data analysis*

Creswell (2003:190) defines data analysis as follows: "The process of data analysis involves making sense out of text and image data. It involves preparing the data for analysis, conducting different analyses, moving deeper and deeper into understanding the data, representing the data, and making an interpretation of the larger meaning of the data."

The steps that were followed in this study with regard to qualitative and quantitative data analysis are explained in Table 6-1. This procedure was compiled by Creswell and Clark (2007:129) and the selection given comprises the exact text, and should thus be regarded as a quotation.

Paragraph 6.4.3.2 presents a detailed explanation of the process through which the data was collected, simplified, organised and interpreted. The paragraphs below explain how the data was analysed according to a process similar to Creswell and Clark's (2007:129) method expounded in Table 6-1 and similar to the data analysis procedure defined by him. The data analysis process of this study is not exactly according the Creswell and Clark's framework, therefore the researcher refers to "a similar process".

- Qualitative data analysis

The qualitative data derived from steps set out in Creswell and Clark's (2007:129) data analysis techniques, namely to organise and prepare the data, read the data, start to analyse the data in detail, identify subjects and sub-subjects, discuss the subjects and interpret and explain the data.

The literature study was colour coded in terms of categories determined by the four-quadrants of the NBI®. The findings of the literature study were correlated with the information obtained from the structured interviews conducted with the executive officers and with the thinking style preference profiles of the administrative professionals who participated in the case study.

Table 6-1

Procedure in qualitative and quantitative data analysis

(Creswell & Clark, 2007:129)

QUANTITATIVE PROCEDURE	GENERAL PROCEDURES IN DATA ANALYSIS	QUALITATIVE PROCEDURE
• Coding data by assigning numeric values • Cleaning the database • Recoding or computing new variables for computer analysis • Establishing codebook	Preparing the data for analysis	• Organising documents and visual data • Transcribing text • Preparing data for computer analysis
• Visually inspecting data • Conducting a descriptive analysis • Checking for trends and distributions	Exploring the data	• Reading through the data • Writing memos • Developing qualitative codebook
• Choosing an appropriate statistical test • Analysing to answer research questions or test hypotheses • Reporting inferential tests, effect, sizes, confidence intervals • Using quantitative statistical software programs	Analysing the data	• Coding the data • Assigning labels to codes • Grouping codes into themes (or categories) • Interrelating themes (or categories) or abstracting to smaller set of themes • Using qualitative software programs
• Representing results in statements of results • Providing results in tables and figures	Representing the data analysis	• Representing findings in discussions of themes or categories • Presenting visual models, figures, tables
• Using external standards • Validating and checking the reliability of scores from past instrument use • Establishing validity and reliability of current data	Validating the data	• Using researcher, participant, and reviewer standards • Employing validation strategies (e.g., member checking, triangulation, peer review)

The researcher used a code system for the questionnaire whereby the executive officers had to prioritise the roles and responsibilities of the administrative professional on a scale ranging from “unimportant” to “critically important”.

A similar code system with the priorities to be scaled from "not applicable" to "essential" was used for the abilities and attributes section. The responses were compared to the thinking style preference profile of the participants by means of encoding the data on a Microsoft Office Excel Spreadsheet.

- Quantitative data analysis

The quantitative data of this study emanated from the computerised NBI®. The specific instruments that focus on the way people perceive their work environment were applied to measure the participants' thinking style preference profile in four and eight dimensions.

The participants were issued with a username and password to complete the assessment on-line. A question with four possible responses was posted to each of the subjects. The participants had to arrange their personal thinking preferences from the strongest to the lowest. The choices for each question were based on the thinking processes belonging to the four different quadrants. The scoring was completed automatically. The thinking style preference profiles were delivered to Solutionsfinding and constructed by practitioners. A report gave a description of each of the participants' thought preferences divided into the four and eight dimensions, and made recommendations based on the latter (Op ten Berg, 2010:3-6). The interpretation of the data was verified by the independent research psychologist and psychometrist, Dr Liezel Korf.

As a last step in the data analysis and interpretation, the qualitative data and quantitative data were jointly interpreted in terms of the existing literature by means of triangulation. The data analysis of the questionnaires and the NBI® was presented in tables and SmartArt graphics such as segmented cycles.

6.4.4 The trustworthiness of the research

6.4.4.1 *Credibility and transferability of the research: qualitative component*

- Credibility

Bryman (2004:275) states as follows: "The establishment of the credibility of finding entails both ensuring that research is carried out according to the canons of good practice and submitting research findings to the members of the social world who were studied for confirmation that the investigator has correctly understood that social world."

In this study triangulation and crystallisation were utilised to evaluate discrepant data in order to increase the credibility of the research study.

Triangulation

Mathison (in Golafshani, 2003:603) elaborates on this by saying: "Triangulation has raised an important methodological issue in naturalistic and qualitative approaches to evaluation (in order to) control bias and establishing valid propositions, because traditional scientific techniques are incompatible with this alternative epistemology."

In this study, the researcher used triangulation (the use of a range of data sources) to obtain information. The structured interviews conducted with the executive officers were interpreted with the results from the case study and the themes that emerged from the literature study. As such, triangulation as a strategy was utilised to facilitate a comprehensive understanding of the phenomenon being studied.

Crystallisation

Moustakas (in Denzin and Lincoln (1994:345) defines crystallisation as follows: "In crystallisation, the three core steps are collapsed into an extended period of intuition-rich immersion with the text. It is the interpreter, as an editor, who serves as the organising system in the editing style."

In this study, different data-collection techniques were utilised to facilitate crystallisation and to increase the reliability of this study. As mentioned previously, an external expert from Solutionsfinding was used to verify the colour coding as done by the researcher. The interpretation of the data was verified by the independent research psychologist, Dr Liezel Korf.

- Transferability

According to Bryman (2004:273-274), "transferability" parallels external validity. He defines "external validity" as: "The degree to which findings can be generalised across social settings." In this study, the qualitative research approach entailed the study of a small group who shared certain characteristics. Bryman (2004:273-274) further stated that: "Qualitative findings tend to be oriented to the contextual uniqueness and significance of the aspect of the social world being studied."

6.4.4.2 *Reliability and validity: quantitative component*

Joppe (in Golafshani, 2003:598) define *reliability of quantitative research* as: "The extent to which results are consistent over time and an accurate representation of the total population under study is referred to as reliability and if the results of the study can be reproduced under a similar methodology, then the research instrument is considered to be reliable." Investigations on the reliability and validity of the NBI® are made in order to update the existing research information at regular intervals (Korf, 2004:2).

The *reliability* of the instrument was administered and repeated on the same sample after a period of time. A high correlation between the two administrations was found. Internal consistency measures were also applied to examine the reliability of the instrument. These measured the degree to which items "grouped together" as intended. The value of >0,70 obtained is regarded as acceptable.

Joppe in Golafshani (2003:599) provides the following explanation on *validity of quantitative research*: "Validity determines whether the research truly measures that which it was intended to measure or how truthful the research results are.

In other words, does the research instrument allow you to hit 'the bull's eye' of your research object? Researchers generally determine validity by asking a series of questions, and will often look for the answers in the research of others."

To define whether the NBI® measures the constructs that it purports to measure, *validity* correlations with the NBI® and the Myers Briggs Type Indicator (MBTI) were done (Korf, 2004:2). The theoretical expectations in terms of strength and direction of correlations were confirmed. Correlations ranged from 0,20 to 0,70 and where no correlations were expected, the correlations were negligible. This added to evidence of both convergent and discriminant validity.

6.4.5 Role of the researcher

Henning (2008:10) mentioned that when a researcher embarks on a study he becomes one of the members of the research committee and he develop himself as a research instrument.

Leedy and Ormrod (2010:95) explain the task and role of the researcher as follows:

"In qualitative studies, the researcher is a vehicle through which data will be collected and interpreted. Their work is sometimes exploratory in nature, and they may use their observations to build theory from the ground. In quantitative research the researcher collects data specifically related to one or a few variables, each variable is measured by specific predetermined methods, great attention is given to the validity and reliability of the measuring instruments and the researcher tends to remain objectively separated from the subject matter."

6.4.5.1 *Ethical measures*

The researcher obtained the permission of the Research Ethics Committee of the Tshwane University of Technology to engage with human participants. Each of the 24 administrative professionals who indicated their willingness to participate received a informed consent letter to be signed prior to the on-line assessment.

The informed consent letter stipulated the purpose of the study, what would be required of participants, potential benefits, participants' rights regarding voluntary participation and confidentiality and anonymity of the study.

6.4.6 Limitations

The range of the study was limited as only one institution was involved. Due to the high costs involved in the administration and scoring of the measure used in this study, it was decided, *inter alia*, to limit the current research to one institution only.

Only administrative professionals at the Tshwane University of Technology formed part of this study, and, as such, the results cannot be generalised to include the general population of administrative professionals. The influence of the administrative professional's immediate executive officer on her effectiveness was not investigated. The administrative professionals who participated in this study could not be considered as a random sample and generalisations could not be made.

The reasons why some administrative professionals decided not to participate remain unknown. In terms of their NBI® scores, the non-participants may very well differ from those who did participate.

6.5 Summary

In this chapter, the selected paradigmatic perspective as well as the research design, data collection and data analysis techniques were discussed. In conclusion, the role of the researcher, the quality criteria and the ethical considerations were described.

In the next chapter, the results of the study will be presented and interpreted in relation to the findings of the literature review.

CHAPTER 7

7. RESEARCH RESULTS AND INTERPRETATION

7.1 Introduction

In the previous chapter, the methodological processes related to this research study were discussed. This chapter aims to present the results and to triangulate the qualitative and quantitative data gathered. A brief overview of the research process follows.

Data collection and analysis using the qualitative method were accomplished mainly through structured interviews conducted with executive officers. The participants were presented with short statements on the role, responsibilities, skills, abilities and attributes of the administrative professional to be prioritised according to a scale. A summary pertaining to the results will be expanded on in paragraph 7.6.

The quantitative data of this study emanated from the computerised NBI®. This source of data was applied in order to obtain the thinking style preference profiles of the administrative professionals who participated in the case study. The results were compared with the ideal thinking style preference profile compiled by means of a literature study, as well as with the results obtained from the questionnaires used in the structured interviews conducted with executive officers.

The results of this research study will now be presented, beginning with a summary of the biographical information of the administrative professionals who formed part of the case study.

7.2 Summary of biographical information

Table 7-1

Biographical information

BIOGRAPHICAL INFORMATION OF CANDIDATES				
CANDIDATE	**YEARS OF EXPERIENCE**	**AGE**	**EDUCATION LEVEL**	**POST CATEGORY**
1	37	54	Grade 12 Typing III	Non-academic
2	30	52	Certificate Executive Secretary	Academic
3	15	34	Grade 12	Non-academic
4	28	46	Grade 12	Non-academic
5	35	60	Grade 12 N Cert: Typing N Cert: Shorthand	Academic
6	30	55	Secretarial Certificate	Academic
7	19	52	Grade 12	Non-academic
8	34	57	Grade 12	Non-academic
9	25	54	Grade 12	Non-academic
10	32	54	Secretarial Diploma	Academic
11	15	35	N Dip: Marketing	Non-academic
12	5	29	N Dip: Office Management and Technology	Non-academic
13	16	39	B Tech: Business Administration	Non-academic
14	13	36	B Tech: Office Management and Technology	Academic
15	37	60	Grade 12	Academic
16	4	25	B Tech: Office Management and Technology	Non-academic
17	27	51	Secretarial Certificate	Non-academic
18	24	42	N Cert: Legal Practice	Non-academic
19	25	45	National Secretarial Certificate	Management
20	15	38	B Tech: Office Management and Technology	Non-academic
21	25	44	Grade 12	Non-academic
22	25	44	Grade 12 Secretarial Certificate	Non-academic
23	31	49	N Cert: Private Secretary	Non-academic
24	17	36	N5 National Certificate	Non-academic
AVERAGE	**23,5**	**45,5**		

Table 7-1 provides an overview of the biographical information of participants with regard to years of experience, age, qualification and their work environment.

The table illustrates that the average age of the participants is 45,5 years. Their average years of experience are 23,5. The average of 23,5 years experience as an administrative professional could be an indication that these participants started their profession as administrative professionals when they were expected to carry out mostly basic administrative tasks such as accurate typing, attention to detail, planning and punctuality (as discussed in Chapter 3). These are mostly tasks and skills associated with the left brain thinking style preferences.

Taking the average age of 45,5 years into consideration, it can be interpreted that the expectation twenty years ago when they started their careers as administrative professionals was that they should be skilled in stenographic transcribing and typing. Those skills could be obtained by means of a certificate and/or Grade 12. Figure 7-1 illustrates that 66,6% of the participants fall within this category. The requirements for administrative professionals in the new world of work were addressed paragraph 4.3, Chapter 4, emphasising that continuous training and development manifested as a result of the increasing pace of change. As a result of knowledge becoming obsolete as the work environment evolved, experience became of less value.

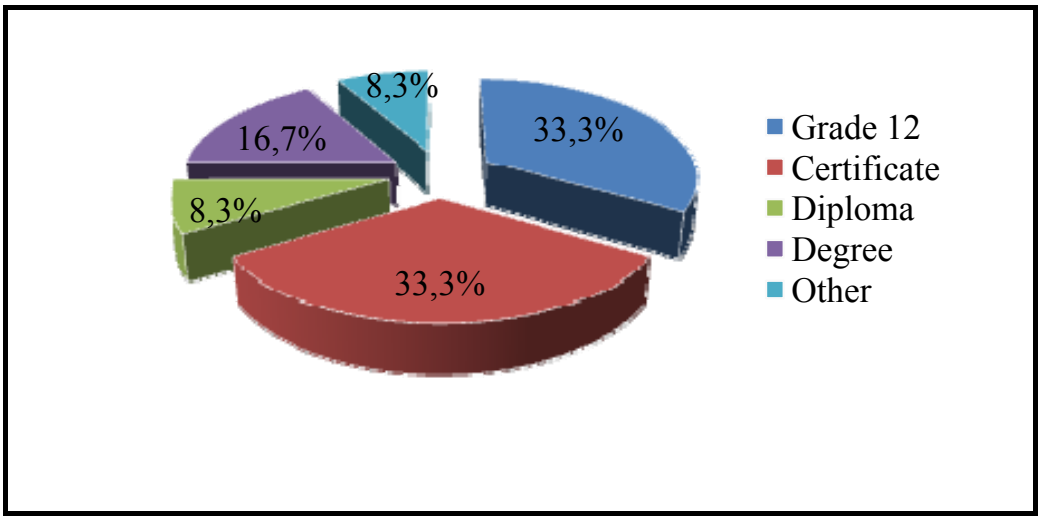

Figure 7-1

Qualifications of candidates

The latter is emphasised in the following statement by Matthews and Candy (in Pillay, 2004:1): "The transition from the industrial era to the emerging 'knowledge era' involves moving from:

- Routine work to complex tasks;
- Sequential activities to parallel, iterative activities;
- Narrow skills and knowledge to those that are specialised and deep; and
- Gradual to rapid skill obsolescence."

7.3 Results of the NBI® four quadrants

The results of the NBI®, which was utilised to assess the administrative professionals' degree of thinking style preferences for each of the four quadrants (as discussed in Chapter 1 and Chapter 2) are presented in Table 7-2.

Table 7-2 shows the average scores that the participants obtained in the NBI®. The total score for a profile is 300. The interpretation of these average scores according to the "NBI® quadrant scores" (listed in paragraph 2.4.1.2, Chapter 2 and in Table 7-3 below) demonstrates that the participants have a **strong left** brain thinking style preference profile (scores between 80-94 are strong preference) with an **average right** brain thinking style preference profile (scores between 65-71 are average preference).

Observing these total average scores it would appear that the participants:

- predominately prefer (55,53%) to apply analytical, logical, objective, structured, detail and procedural thinking preferences associated with the left brain thinking style preference profile (L1 and L2); and
- have less of a preference (44,43%) to apply synthesis, exploration, strategic, empathic, sensitivity and co-operative thinking preferences associated with the right brain thinking style preference profile (R1 and R2).

Table 7-2

Results of the NBI® four quadrants

CANDIDATE	R1	R2	L2	L1
1	67	61	77	95
2	64	54	88	94
3	69	55	90	86
4	73	58	84	85
5	52	56	95	97
6	74	49	76	101
7	78	78	77	67
8	65	83	77	75
9	86	52	83	79
10	63	70	82	85
11	68	74	78	80
12	69	64	89	78
13	69	59	83	89
14	56	78	81	85
15	66	66	85	83
16	74	84	84	58
17	56	83	82	79
18	65	66	78	91
19	66	59	78	97
20	63	62	99	76
21	74	84	68	74
22	67	49	95	89
23	67	73	87	73
24	79	53	75	93
TOTAL AVERAGE SCORES	**67,9**	**65,5**	**82,9**	**83,7**

The interpretations of the thinking style preference profiles are listed in paragraph 2.4.2, Chapter 2. A comprehensive explanation of these average scores obtained in the NBI® is provided below.

Table 7-3

Results of the NBI® four quadrants in percentage

NBI® QUADRANT SCORES	R1		R2		L2		L1	
	NUMBR OF PARTICIPANTS	PERCENTAGE	NUMBR OF PARTICIPANTS	PERCENTAGE	NUMBER OF PARTICIPANTS	PERCENTAGE	NUMBER OF PARTICIPANTS	PERCENTAGE
95+ Very strong	0	0	0	0	3	12,5	4	16,7
80-94 Strong	1	4,17	4	16,7	12	50	11	45,82
72-79 Strong average	6	25	4	16,7	8	33,33	7	29,16
65-71 Average	11	45,83	3	12,5	1	4,17	1	4,16
50-64 Low	6	25	11	45,8	0	0	1	4,16
-50 Below low	0	0	2	8,3	0	0	0	0

Table 7-3 shows the percentages obtained in the different quadrant categories. For the purpose of interpretation of Table 7-3 the categories **Very strong preference** (scores above 95) and **Strong preference** (scores between 80 – 94) will be combined:

Left brain quadrants:

- 62,5% of the participants have either a **very strong** (12,5%) or a **strong** (50%) preference for **L2** thinking
- 62,52% of the participants have either a **very strong** (16,7%) or a **strong** (45,82%) preference for **L1** thinking

Right brain quadrants:

- 4,17% have either a **very strong** (0) or **strong** (4,17%) preference for **R1** thinking
- 16,7% of the participants have a **very strong** (0%) or **strong** (16,7%) preference for **R2** thinking

When the categories **Low** and **Below low** are combined, the following can be concluded:

- 25% of the participants have a **low** preference for **R1** thinking
- 54,1% of the participants have either a **low** (45,8%) or a **below low** (8,3%) preference for **R2** thinking

To summarise the above analysis, one might conclude that:

- The majority (62,51%) of the participants have either a **very strong** or a **strong left** brain thinking style preference profile (L1 and L2), which shows that they are comfortable in a work environment commonly associated with left brain thinking style preferences. They are comfortable with tasks that require precision, accuracy and analysis based on factual information. They also feels secure when working with technical data, and enjoy step-by-step planning and implementation of procedures attending to detail;
- The majority of the participants have either a **low** (45,8%) or **below low** (8,3) preference (54,1%) for **R2** thinking styles. It is unlikely that the participants will enjoy interaction with others as they prefer working on their own or most likely in a small team. Their preference for R1 thinking is also relatively low, which implies that activities such as searching for alternatives, integrating new ideas, taking risks and being involved in strategy are all activities that they will tend to avoid or neglect.

The 8-Dimension Model will now be discussed.

7.4 Results of the NBI® 8-Dimension Model

The 8-Dimension Profile reveals that each quadrant shows two distinct types of thinkers, for example that a person may be stronger in one type of thinking style of a quadrant than in the other or it may reveal that a person is balanced in the two types of thinking. The latter demonstrate that the four-quadrant profile cannot be compared with the eight-dimension profile as it gives different results.

The results of the NBI®, which was utilised to assess the administrative professionals' degree of the eight-dimension thinking style preferences (as discussed in Chapter 1 and Chapter 2) are presented below.

Table 7-4

Results of the NBI® 8-Dimension Model

CANDIDATE	R1		R2		L2		L1	
	Strategist	Imagineer	Socialiser	Emphathiser	Preserver	Organiser	Realist	Analyst
1	75	25	56	44	62	38	62	38
2	44	56	31	69	62	38	62	38
3	88	12	38	62	62	38	69	31
4	50	50	38	62	62	38	31	69
5	75	25	50	50	75	25	50	50
6	69	31	69	31	56	44	69	31
7	50	50	31	69	69	31	88	12
8	38	62	12	88	88	12	69	31
9	44	56	56	44	50	50	44	56
10	0	0	0	0	0	0	0	0
11	50	50	62	38	50	50	75	25
12	81	19	44	56	69	31	38	62
13	0	0	0	0	0	0	0	0
14	44	56	44	56	50	50	44	56
15	81	19	38	62	62	38	50	50
16	69	31	75	25	38	62	56	44
17	75	25	31	69	56	44	62	38
18	56	44	12	88	56	44	62	38
19	75	25	44	56	56	44	62	38

CANDIDATE	R1		R2		L2		L1	
	Strategist	Imagineer	Socialiser	Emphathiser	Preserver	Organiser	Realist	Analyst
20	56	44	38	62	62	38	69	31
21	19	81	31	69	69	31	81	19
22	62	38	44	56	50	50	25	75
23	44	56	25	75	38	62	44	56
24	44	56	25	75	75	25	69	31
TOTAL AVERAGE SCORE	**58,59**	**41,41**	**40,64**	**59,36**	**59,86**	**40,14**	**58,23**	**41,77**

Table 7-4 illustrates the average scores of the participants obtained in the NBI® 8-Dimensional Profile. The total score for a profile is 400. The participants had to answer an additional 15 questions to obtain the distinctive results.

There were two participants who did not answer the 15 additional questions, therefore only the results of 22 participants were used to calculate the average scores. The reason for not completing the 15 additional questions is unknown to the researcher. The interpretation of these average scores according to the NBI® 8-Dimensional Profile is provided in paragraph 2.4.1.2, Chapter 2, and in Table 7-5 below.

These total average scores reveal that it seems that as if the participants are demonstrating a "balanced" thinking style preference in each of the distinct quadrants. The percentages within the distinct quadrants do not differ extensively. As mentioned in paragraph 7.3, the majority participants have either a **very strong** or a **strong left** brain thinking style preference profile (L1 and L2). Within the distinct quadrant of the **L2** thinking style preference profile, the participants showed a preference to be **preservers** (average score of 59,86) instead of **organisers** (average score of 40,14). The participants prefer to work in an environment and/or circumstances where traditions and well-proven methods and practices are respected and where rules and regulations are in place, and to work in a methodical and cautious manner.

Regarding the L1 quadrant, participants demonstrate a slightly stronger preference for **realist** as opposed to **analyst**. Therefore the participants will be comfortable in a work environment containing concrete information, where the focus is on a specific goal or outcome, with no distractions, during which achievable and clearly defined goals are set with no clutter and confusion.

Table 7-5 demonstrates the percentage obtained in the different eight-dimension categories.

Table 7-5

Results of the NBI® 8-Dimension Model in percentage

NBI® EIGHT-DIMENSIONAL SCORES	R1				R2				L2				L1			
	Strategist	Percentage	Imagineer	Percentage	Socialiser	Percentage	Emphathiser	Percentage	Preserver	Percentage	Organiser	Percentage	Realist	Percentage	Analyst	Percentage
80-94 Strong	3	14	1	5	0	0	2	9	1	5	0	0	2	9	0	0
72-79 Strong average	4	18	0	0	1	5	2	9	2	9	0	0	1	5	1	5
65-71 Average	2	9	0	0	1	5	4	19	3	14	0	0	5	23	1	5
50-64 Low	6	27	9	41	4	18	9	40	14	63	6	27	8	35	6	27
-50 Below low	7	32	12	54	16	72	5	23	2	9	16	73	6	28	14	63

The literature study conducted and the ideal thinking style preference profile in Chapters 4 and 5 provide evidence that it is expected of the contemporary administrative professionals and executive officers to demonstrate more right brain thinking style preferences.

In conclusion, the results in Table 7-2, Table 7-3, Table 7-4 and Table 7-5 provide evidence that the majority of the contemporary administrative professionals who participated in the case study do not prefer to apply right brain thinking style preferences to provide the executive officer with efficient administrative support. Interviews held with the executive officers will be the following part of triangulation and will be examined in paragraph 7.6.

Based on the current job profile of the administrative professional at the Tshwane University of Technology, the generic thinking style preference profile compiled by Solutionsfinding (refer to Figure 7-2) will now be discussed.

7.5 Generic thinking style preference profile of an administrative professional

Solutionsfinding used the current job profile of an administrative professional at the Tshwane University of Technology to compile a generic thinking style preference profile. The NBI® job diagnostic tool identifies the strengths of the skills needed, based on the job profile in every quadrant, to be an administrative professional.

It is evident that the current job profile of the Tshwane University of Technology's administrative professionals as presented in Figure 7-2 does not reflect the thinking style requirements of contemporary administrative professionals in the new world of work, as discussed in Chapter 4.

Figure 7-2 indicates that the average score for R1 is 65, R2 is 70, L2 is 85 and L1 is 80. By calculating these scores as a percentage and combine it into left and right brain thinking style preferences, the percentages are as follows:

- Right brain thinking style preference is 45%
- Left brain thinking style preference is 55%

Although there does not seem to be a huge difference between the two hemispheres, there is a contradiction between the generic thinking style preference profile of an administrative professional based on the current job profile and the ideal thinking style preference profile as identified in the literature review.

The ideal thinking style preference profile as identified in Chapter 4, Figure 4-2 was also in line with the requirements of the executive officers, as stated during the structured interviews with them.

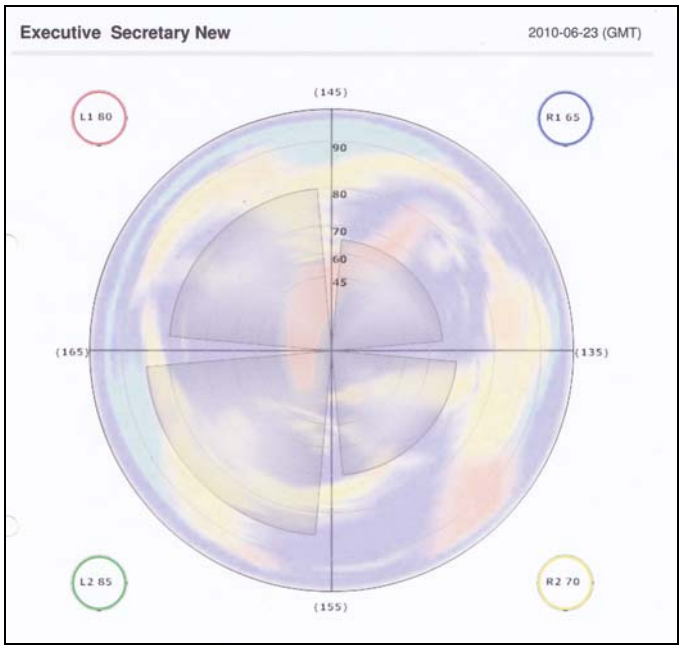

Figure 7-2

Generic thinking style preference profile of an administrative professional

7.6 Structured interviews with executive officers

Table 7-6

Results of the structured interviews held with executive officers

Variable		RESULTS OF THE ROLES AND RESPONSIBILITIES					
		Unimportant	Slightly Important	Important	Very Important	Critical Important	Thinking Preference Quadrant
V1	**Planning function** Initiate goals and objectives for each of the office functions and services	1	2	2	7	9	L1
V2	Do research to keep abreast of new developments in the field (internal and external) to propose possible changes with regard to existing functions and services to maintain a state-of-the-art in relation to her work	0	2	5	9	5	L1 / R1

Variable		RESULTS OF THE ROLES AND RESPONSIBILITIES					
		Unimportant	Slightly Important	Important	Very Important	Critical Important	Thinking Preference Quadrant
V3	Identifying and designing new administrative operating systems according to the need for implementing new administrative functions and services	0	0	6	6	9	L1 R1 L2 R2
V4	Introducing procedures to assist with the attainment of goals and objectives	0	1	6	9	5	L1 R1 L2 R2
V5	Determining means of implementing desired changes	0	2	6	7	6	L1 R1 L2
V6	Defining space and equipment needs	0	3	6	6	6	L1 R1
V7	**Organising function** Establishing the most effective means of organising resources (human, financial, physical and information) to achieve goals and objectives	1	1	4	6	8	L1 L2
V8	Seeking and communicating the most effective way for employees to perform specific tasks.	2	1	7	6	5	L1 L2 R2
V9	Adopting efficient work methods and procedures	1	0	4	8	8	L1 L2
V10	Ensuring the maximum utilisation of the organisation's office equipment	0	1	4	6	10	L1
V11	Developing and coordinating administrative processes for maximising organisational and individual productivity	0	1	7	4	9	L1 R1 L2
V12	Anticipating effective methods and techniques when implementing changes	0	2	9	7	3	L1 R1 L2
V13	Specifying effective procedures for evaluating equipment that is being considered for acquisition	0	1	9	8	3	L1 L2

Variable		RESULTS OF THE ROLES AND RESPONSIBILITIES					
		Unimportant	Slightly Important	Important	Very Important	Critical Important	Thinking Preference Quadrant
V14	**Staffing function** Assisting with and anticipating the selection procedures, including placement and orientation of employees	3	5	4	7	2	R1 L2 R2
V15	Categorising growth opportunities and experiences for employees	3	4	3	5	5	R1
V16	Facilitating appropriate training experiences - coaching new staff and/or assistants in administrative work	2	1	5	10	3	R2 R1/R2/ L2/L1
V17	Establishing rapport with all team members to facilitate a positive team spirit	0	1	3	10	7	R2
V18	Ensuring a realistic job description for the administrative professional	0	2	7	8	4	L1
V19	**Controlling function** Developing efficient procedures for controlling the quantity and quality of work processed in areas for which the administrative professional is responsible	0	1	5	11	3	L1 L2
V20	Ensuring continuity of work flow across all administrative functions	0	4	8	7	2	R1/R2 L2/L1
V21	Utilisation of efficient procedures in determining the status of unfinished work	0	0	5	7	9	L1 L2
V22	Maintaining the department's budget	0	2	6	9	4	L2
V23	Ensuring that the methods and procedures are cost-effective	1	0	1	6	13	L1 L2
V24	Motivating employees to be cost-conscious	1	1	5	7	7	L1
V25	Suggesting effective assessment procedures for use in suggesting why actual results (for example quantity output, degree of accuracy, customer's survey) fail to conform to anticipated results	0	4	3	9	5	L1 R1 L2 R2

Variable		RESULTS OF THE ROLES AND RESPONSIBILITIES					
		Unimportant	Slightly Important	Important	Very Important	Critical Important	Thinking Preference Quadrant
V26	Seeking procedures for dealing with employees who fail to comply with organisation's rules and policies	2	4	5	6	4	L2 / R2
V27	Implementing strategies for taking corrective action when and where necessary	0	4	3	9	5	L1 / R1

Administrative professionals have several important roles and responsibilities within the four basic management functions of planning, organising, staffing and controlling (as discussed in paragraph 4.5.1 of Chapter 4). With this fact and future expectations of the administrative professional in mind, the executive officers have prioritised these roles and responsibilities in terms of their importance for success. Table 7-6 shows these results of the interviews conducted with the executive officers. The results provide evidence that the executive officers require administrative professionals to be able to also apply right brain thinking style preferences to provide them with efficient administrative support. The results of the roles and responsibilities shown in Table 7-6 are calculated as a percentage in terms of the thinking style preference profile that is illustrated in Figure 7-3.

Administrative professionals should possess several important abilities and attributes to be able to fulfil their potential and position themselves favourably in their career. The executive officers have prioritised these abilities and attributes in terms of their importance. Table 7-7 show these results of the interviews conducted with the executive officers. The analysis of the results concentrated only on those abilities and attributes that were classified as "essential" (5) by the executive officers being interviewed.

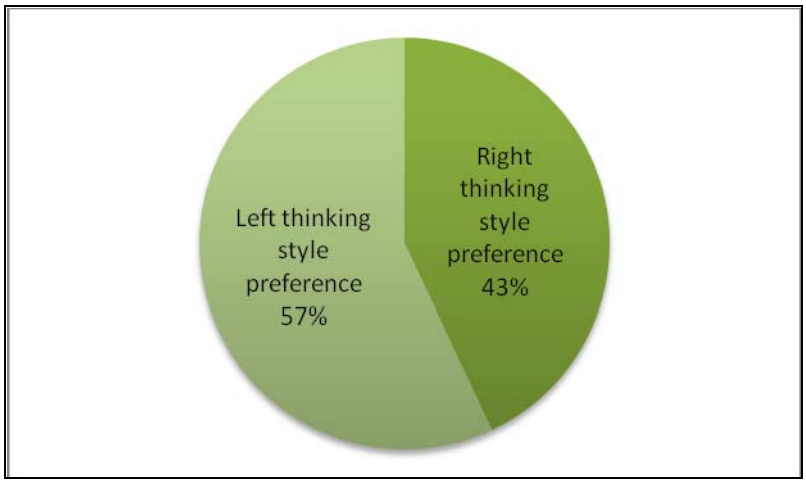

Figure 7-3

Average classification of the roles and responsibilities

Table 7-7

Results of the abilities and attributes

RESULTS						ABILITIES AND ATTRIBUTES DESCRIPTION	THINKING PREFERENCE QUADRANT
Variable	Not Applicable	Optional	Adequate	Appropriate	Essential		
	1	2	3	4	5		
V32	0	2	3	6	10	Analytical	R1 L2 L1
V33	1	1	2	10	7	Collaboration	R2
V34	0	1	7	5	8	Conceptual skills	R1 L1
V35	1	0	4	10	6	Connective	R1 R2 L1
V36	0	1	4	9	7	Continuous education	R1 L2 L1
V37	0	1	4	6	10	Creative	R1 R2 L2 L1
V38	1	0	3	3	14	Human skills	R1 R2 L1
V39	1	2	7	6	5	Intuition	R1 R2 L2 L1
V40	1	0	4	5	11	Negotiation	R2
V41	0	2	3	8	8	Technical aptitude	R1 R2 L1
V42	1	0	2	8	10	Technical skills	R1 L1

These abilities and attributes were calculated as a percentage in terms of the thinking style preference profile. These percentages were grouped in terms of left and right brain thinking style preferences and are shown in Figure 7-4.

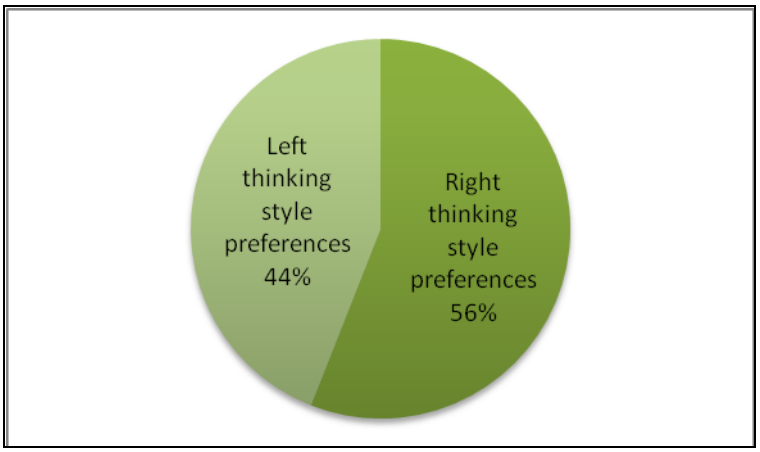

Figure 7-4

Classification of the abilities and attributes of the administrative professional

Although the NBI® does not measure competence or skill, but preference, as indicated in Chapter 2, the following statement was made by Herrmann (1996:25): "Dominance leads to the development of preferences, which in turn establish our interests, lead to our development of competencies, ..."

7.7 Summary of the results

An attempt was made in this chapter to present the results by means of triangulation of the qualitative and quantitative data that was gathered. The researcher applied the mixed-method approach by means of triangulation to collect and analyse the data, integrate the findings and draw inferences pertaining to the qualitative and quantitative research approaches to strengthen the results.

The researcher used triangulation to compare the data that was gathered from the literature study and the case study. The latter was cross-validated with the data obtained from the structured interviews conducted with the executive officers. As such, there is a possibility that triangulation was applied successfully. The results that emerged are as follows:

- The results of the study indicates that administrative professionals should become whole brain thinkers applying both left and right brain thinking in the new world of work.

  However, the majority of the participants in the study still prefer predominantly left brain thinking and will need to develop more right brain thinking for success in the new world of work (as discussed in Chapter 3).

- A "generic" thinking style preference profile was compiled from the job profile of an administrative professional at the Tshwane University of Technology (Figure 7-2 illustrates). This profile was compared with the "ideal" thinking style preference profile that was compiled from the literature study of the contemporary administrative professional's roles and responsibilities (Figure 4-2 illustrated). Both of these thinking style preference profiles demonstrated the importance of complementing left brain thinking with right brain thinking to effectively support the executive officer.

7.7.1 Summary of four-quadrant and eight-dimensional assessment

The diagnostic tool, NBI® that assessed the thinking style preference profiles of the 24 administrative professionals who participated in the case study (quantitative research approach), provided the following results:

That the majority of the participants demonstrated either a **very strong** or **strong** left brain thinking style preferences (shown in Table 7-3) in the four-quadrant profile assessment. As opposed to this, the literature study in Chapter 4 points out that the new world of work requires that the administrative professionals should counter-balance left brain thinking style preferences with right brain thinking style preferences. Therefore, they need to be able to demonstrate flexibility in their thinking styles, applying both left and right brain thinking as required by the demands on the situation. This would enable the administrative professional to attain success with her new role and responsibilities within the four basic management functions of planning, organising, staffing and controlling.

The results show that when the participants are given a choice within the left brain distinct quadrants, they prefer a preference to be **preservers** instead of **organisers** and to be **realist** instead of applying analytical thinking style preferences.

7.7.2 Summary of structured interviews

The results of the interviews conducted with the executive officers can be summarised as follows:

The roles and responsibilities considered by the executive officers as **important** to **critically important** are categorised in the right brain thinking style preference profile. This implies that the executive officers require administrative professionals to demonstrate more right brain thinking style preferences than seems to be the case currently.

The essential abilities and attributes that administrative professionals should possess were prioritised by the executive officers and are categorised within the right brain thinking style preferences. These results emphasise the importance of the contemporary administrative professional applying right brain thinking style preferences to complement the left brain thinking style preference profile.

7.7.3 Conclusion from the results

The results that emerged from the quantitative survey of this study were interpreted and correlated with the qualitative study to demonstrate not only the importance of the supportive role towards the executive officer, but also the effect of the contemporary administrative professional's thinking style preference profile on optimal effectiveness in the new world of work environment. The discussions above showed that it is imperative for administrative professionals to apply right brain thinking style preferences to complement the left brain thinking style preferences.

The final conclusions and recommendations of this study will be discussed in Chapter 8.

In addition, the potential contributions of the study as well as the challenges and limitations of the study will be described. Finally, recommendations for training, practice and future research will be provided.

CHAPTER 8

8. CONCLUSIONS AND RECOMMENDATIONS

8.1 Conclusions

As a conclusion to this study, this chapter presents an overview of the previous chapters and revisits the research questions. The researcher subsequently discusses the challenges she was faced with during the study, the limitations of the study and its potential contributions. The researcher concludes the chapter with recommendations for practice, for training and for future research.

8.1.1 Overview of the previous chapters

Chapter 1 provided an introduction and overview of the planned research project. Qualitative and quantitative research questions were formulated. The researcher presented the problem statement by means of a question:

"Is the thinking style preference profile of the contemporary administrative professional appropriate for optimal effectiveness in the new world of work environment, in the context of a university of technology (UoT)?"

The researcher briefly introduced the research design and methodology applied in this study. A summary of the research paradigm, design, data collection and data analysis was given. Reference was made to the credibility, transferability, reliability and validity of the research project. Certain concepts were clarified, as were the ethical considerations adhered to in this study.

Chapter 2 attempted to orientate the reader with regard to the understanding of the theory on brain dominance and the concept of thinking style preferences. The concepts with regard to the diagnostic tool, namely the NBI® and the interpretation of the four-quadrant and eight-dimension thinking style preference profiles were explained. For clarity purposes, the activities associated with these thinking style preferences were listed.

The administration of the NBI® formed the quantitative research part of this study aiming to establish the current thinking style preference profile of the administrative professionals who formed part of the study.

Chapter 3 provided the historical background of the development of the administrative professional's profession in an attempt to provide a clear understanding of the increasingly complex and specialised work environment of the contemporary administrative professional. The researcher outlined the historical tasks such as performing stenographic duties, transcribing letters dictated by the executive officer, typing and skills such as accuracy, attention to detail, planning and punctuality, which were prominent in the role of the administrative professional, or secretary, as she was known then. The shift in the thinking style preferences and the processing of information from a historically predominantly left brain thinking style preference profile to a more right brain thinking style preference profile based on her new role and responsibilities were explored. These historical influences with regard to the development of the administrative professional's profession were discussed with the intent to determine the ideal thinking style preference profile of the contemporary administrative professional.

Chapter 4 examined the aspects of the changing role of the administrative professional in the new world of work. The literature study revealed that improvements relating to the Information Era have brought about changes that influenced and shaped the administrative professional's roles, responsibilities, attributes and skills. The latter were linked to the four thinking style preferences located in the different hemispheres of the brain. The impact of this changing work environment and role expectations on the thinking style preferences of the administrative professional was discussed. Following the literature study, the researcher compared the thinking style preferences of the administrative professionals in this case study with the literature review. Solutionsfinding used the findings of the literature review and the outcome of the structured interviews held with executive officers to compile a ideal profile of an administrative professional.

Based on the literature review in this chapter on the expanded roles and responsibilities of the contemporary administrative professional, the new skills, attributes and abilities required as well as the structured interviews with the Tshwane University of Technology's executive officers, an ideal thinking style preference profile for the contemporary administrative professional was compiled.

This ideal thinking style preference profile was compared with the thinking style preference profiles of the participants in the case study conducted with the administrative professionals of the Tshwane University of Technology.

Chapter 5 demonstrated the future leadership challenges which have resulted in a need to re-invent the position of the executive officer (also referred to as chief executive officer (CEO), academic administrators and managers). These changes affecting the way managers plan, organise, lead and control were examined by means of Robbins and Coulter's model (2009:27-28). The attributes of the executive officer to effectively address these challenges were identified, with specific reference to thinking processes, and found to be predominately right brain thinking style preferences. The chapter concluded with a comparison of the thinking style preference profile of an administrative professional and an executive officer.

Chapter 6 offered an in-depth discussion and explanation of the research process. The researcher described the selected paradigmatic approach, research design and research methodology with regard to the qualitative and quantitative research approaches employed in this study. The role of the researcher was reflected upon, as were the ethical considerations adhered to in this study.

In an attempt to address the research questions, a quantitative and qualitative research approach was utilised, secured in the post-positivist/interpretivist paradigms. The ontology in terms of constructivism (qualitative research approach) is multiple realities, for example, the researcher provided quotes to illustrate different perspectives by means of a literature study. The thinking style preference profiles of the administrative professionals were assessed by means of the NBI®.

As epistemology in terms of constructivism is, for example, closeness, the researcher visited participants at their sites to collect data. The researcher conducted structured interviews with executive officers. The constructivist-interpretive paradigm was adopted as a paradigm for this study.

Chapter 7 commenced with an overview of the research process. The researcher demonstrated how the mixed-method approach by means of triangulation was applied. To strengthen the results, the findings of the data that was collected and analysed were integrated and inferences were drawn pertaining to the qualitative and quantitative research approaches. The data that was gathered from the literature study and the case study was cross-validated with the data obtained from the structured interviews conducted with the executive officers. The researcher provided integrated results, highlighted correlations and explained contradictions that emerged from the NBI® data of the administrative professionals who participated in the case study with the data gathered and summarised from the literature study in various tables.

8.1.2 Final conclusions

The final conclusions are presented by referring to the problem statement and research aims and objectives that guided this study.

8.1.2.1 *Revisiting the formulated problem statement*

Is the thinking style preference profile of the contemporary administrative professional appropriate for optimal effectiveness in the new world of work environment, in the context of a university of technology (UoT)?

The findings of this study revealed that the participants should demonstrate whole brain thinking style preferences. An effective supportive role requires applying left and right brain thinking style preferences.

8.1.2.2 *Revisiting the formulated research questions*

By revisiting the research questions, this section reports on the extent to which these questions were answered by the research findings.

- Qualitative research questions

  What were the skills needed in the early 1900s (prior to the new world of work) by the administrative professional to do her work? What was the thinking style preference profile associated with these skills?

  Historically, tasks such as performing stenographic duties, transcribing letters dictated by the executive officer, typing and skills such as accuracy, attention to detail, planning and punctuality, were prominent in the role of the administrative professional or secretary, as she was known then. These are mostly tasks and skills associated with the left brain thinking style preference profile.

  What is the preferred thinking style preference profile of contemporary administrative professionals needed for optimal effectiveness in the new world of work environment, in the context of a university of technology?

  Based on the literature review that explained on the roles and responsibilities of the contemporary administrative professional and the new skills, attributes and abilities, the preferred thinking style preference profile of the contemporary administrative professional can be categorised as whole brain thinking with more emphasis on right brain thinking style preferences.

  What are the skills of an executive officer in the higher education context? What is the thinking style preference profile associated with the skills of an executive officer in the new world of work?

  The management skills associated with an executive officer in the higher education context are decision-making skills, interpersonal skills and technical skills. The different skills of the executive officer are allocated to diverse thinking preference quadrants and can therefore be categorised as whole brain thinking.

What is a thinking style preference profile, and how is it applicable to this study?

Quoted from Herrmann (1996:12-13): "The thinking style preference profiles serve as an organising principle of how the brain works: four thinking styles metaphorically representing the two halves of the cerebral cortex (Sperry) and two halves of the limbic system (MacLean)." L1 and R1 in the cerebral mode represent the cognitive modes associated with the cortex and L2 and R2 represent the more visceral, emotional modes associated with the limbic system.

The thinking style preference profiles aimed to:

Determine whether the thinking style preference profile of the administrative professional at a higher education institution, namely the Tshwane University of Technology, is appropriate to enable her to fulfil her duties in the new world of work effectively.

- Quantitative research questions

What is the thinking style preference profile of the administrative professional at the Tshwane University of Technology in terms of the four-quadrant profiles?

The majority (62,51%) of the participants have either a **very strong** or a **strong left** brain thinking style preference profile (L1 and L2) which shows that they are comfortable in a work environment commonly associated with left brain thinking style preferences. They are comfortable with tasks that require precision, accuracy and analysis based on factual information. They also feel secure when working with technical data, and enjoy step-by-step planning and implementation of procedures attending to detail;

The majority of the participants have either a **low** (45,8%) or **below low** (8,3) preference (54,1%) for **R2** thinking styles. It is unlikely that the participants will enjoy interaction with others as they prefer working on their own or most likely in a small team.

Their preference for R1 thinking is also relatively **low** which implies that activities such as searching for alternatives, integrating new ideas, taking risks and being involved in strategy are all activities that they will tend to avoid or neglect.

What is the thinking style preference profile of the administrative professional at the Tshwane University of Technology in terms of the 8-Dimension Model?

The results in terms of the 8-Dimension Model show that when the participants are given a choice within the left brain distinct quadrants, they prefer to be **preservers** instead of **organisers** and to be **realist** instead of applying analytical thinking **(analyst).**

What thinking style preference profile do the executive officers at the Tshwane University of Technology prefer that the administrative professional should demonstrate in order to fulfil an effective support function?

The results provide evidence that the executive officers require administrative professionals to apply right brain thinking style preferences to provide them with efficient administrative support.

What is the generic thinking style preference profile of the administrative professionals at the Tshwane University of Technology in terms of her current job profiles?

The average score for R1 is 65, R2 is 70, L2 is 85 and L1 is 80. When calculating these scores as a percentage and combining it in left and right brain thinking style preferences, the percentage is as follows:

- Right brain thinking style preference is 45%
- Left brain thinking style preference is 55%

Although there does not seem to be a huge difference between the two hemispheres, there is a contradiction between the generic thinking style preference profile of an administrative professional based on the current job profile and the ideal thinking style preference profile as identified in the literature review.

8.2 Challenges and limitations of the study

When identifying the participants in the case study, the researcher attempted to obtain an updated contact list of permanent staff members employed at the Tshwane University of Technology. As such a list did not exist, the researcher had to spend valuable time in compiling the required list.

Despite the fact that this study was conducted at a higher education institution where research outcomes are promoted, the researcher experienced a lack of cooperation both from the administrative professionals and the executive officers with regard to the completion of research assessment and questionnaires. Reminders had to be sent regularly. Collecting data was therefore very time consuming. The researcher had to motivate the participants with regular intervals to reserve time to complete the relevant assessments.

The range of the study is limited, as only one institution was involved. Due to the high costs involved in the administration and scoring of the measure used in this study, it was decided, *inter alia*, to limit the current research to one institution only.

Only administrative professionals at the Tshwane University of Technology formed part of this study, and, as such, the results cannot be generalised to include the general population of administrative professionals. The influence of the administrative professional's immediate executive officer on her effectiveness was not investigated. The administrative professionals who participated in this study could not be considered as a random sample and generalisations could not be made. The reasons why some administrative professionals decided not to participate remains unknown. In terms of their NBI® scores, non-participants may very well differ from those who did participate.

8.3 Potential contributions of this study

The researcher experienced that administrative professionals have very little knowledge and awareness of the thinking style preference profiles. The researcher could make a positive contribution to making contemporary administrative professionals aware of the need to transform from the role of carrying out instructions to one of a dynamic, creative information manager through a strong emphasis on the right brain thinking style preferences. This transformation from being predominantly left brain thinkers to becoming whole brain thinkers incorporating right brain thinking would enable administrative professionals to fulfil their role more effectively and to provide optimal support to the executive officer.

8.4 Recommendations

Based on the findings of this study, the researcher now presents her recommendations for practice, training and future research.

8.4.1 Recommendations for practice

The findings obtained from this study may provide insight to all employers (organisations in the industry as well as higher education institutions) with regard to the recruitment and selection of administrative professionals, bearing in mind their thinking style preference profile. The thinking style preference profile of the applicant should be compared with the ideal thinking style preference profile as identified in Chapter 4 to select the best possible candidate.

It is recommended that the current job profile of the administrative professional at the Tshwane University of Technology should be adapted to the ideal thinking style preference profile.

8.4.2 Recommendations for training

It is recommended that higher education institutions should be made aware of the value of applying the knowledge provided by thinking style preference profiles. Staff development practitioners should be trained to execute and interpret these thinking style preference profiles.

Training and development interventions aimed at developing right brain thinking in both administrative professionals and executive officers should be developed and implemented.

8.4.3 Recommendations for future research

This study was limited to a case study; therefore it is recommended that the study should be elaborated on at other higher education institutions.

Further studies are required to develop the administrative professionals at higher education institutions into more right thinkers. Additional research is needed to investigate ways in which administrative professionals can develop their right brain thinking to complement their existing left brain thinking preferences for optimal performance.

Supplementary studies could be done to explore possible differences in thinking style preference profiles between administrative professionals at higher education institutions and those in the private sector.

8.5 Final conclusions

This chapter provided an overview of the salient aspects of this study and it revisited the primary and secondary research foci, which were determined by both qualitative and quantitative data collection and analysis. The results of this study indicate that the current preferred thinking styles of administrative professionals might be inadequate for performing effectively in the new world of work.

The results indicate the necessity for administrative professionals to develop from a predominantly left brain thinking preference to become whole brain thinkers, incorporating right bring thinking in executing their role effectively.

The contemporary administrative professional will continue to need left brain thinking skills to function effectively. However, based on the above finding, such thinking will need to be augmented with right brain thinking in order for her to function effectively in the new world of work.

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ADDITIONAL INFORMATION

APPENDIX A: INFORMATION LEAFLET AND INFORMED CONSENT LETTER

Ref: 2009/03/002

FACULTY OF MANAGEMENT SCIENCES

DEPARTMENT OF OFFICE MANAGEMENT
AND TECHNOLOGY

INFORMATION LEAFLET AND INFORMED CONSENT

PROJECT TITLE:

THINKING STYLE PREFERENCE PROFILE OF THE CONTEMPORARY ADMINISTRATIVE PROFESSIONAL

Primary investigator: Ms AJ Venter, B Tech: Office Management and Technology, N Dip: Public Relations Management

Study leader: Dr HH Herbst, PhD, Department of Human Resource Development (HRD), Tshwane University of Technology, Pretoria

Co-study leader: Mr JSF Marcus, M Tech: Business Administration, Department of Office Management and Technology, Tshwane University of Technology, Pretoria

Dear Research participant,

You are invited to participate in a research study that forms part of my formal M Tech-studies. This information leaflet will help you to decide if you would like to participate.

Before you agree to take part, you should fully understand what is involved. You should not agree to take part unless you are completely satisfied with all aspects of the study.

WHAT IS THE STUDY ALL ABOUT?

This study aims to investigate whether the Administrative Professional (also referred to as Secretary, Administrative Assistant, Office Coordinator, Office Manager, or Personal Assistant) is changing her/his thinking processes to adapt to the working style of the new world of work to enable her to support a more dynamic manager guided by globalisation and a futuristic approach.

The purpose of this study is to assess the dominant thinking style preference of the contemporary Administrative Professional at a Higher Education Institution, and the applicability and impact thereof on her natural preference to perform certain tasks and master certain skills effectively.

WHAT WILL YOU BE REQUIRED TO DO IN THE STUDY?

If you decide to take part in the study, you will be required to do the following:

1. To sign this informed consent form.

2. To complete The Kobus Neethling Brain Profile Assessment. The NBI®, an Internet based assessment programme designed to determine your thinking preferences. The NBI® consists of 30 questions. The programme is not a test and there are no right or wrong answers and no good or bad profile. Each subject scores a total of 300 points. The NBI® measures the preferences an individual may have for performing certain tasks or mastering certain skills – it does not measure the participant's abilities or skills.

3. You will complete the questionnaire in your office. It should not take more than 30 minutes to complete it.

4. There will be no cost involved for you.

ARE THERE ANY CONDITIONS THAT MAY EXCLUDE YOU FROM THE STUDY?

None.

WHAT ARE THE RISKS INVOLVED IN THIS STUDY? OR CAN ANY OF THE STUDY PROCEDURES RESULT IN PERSONAL DISCOMFORT OR INCONVENIENCE?

None.

WHAT ARE THE POTENTIAL BENEFITS THAT MAY COME FROM THE STUDY?

The benefits of participating in this study are:

- To make the contemporary administrative professional aware of the need to transform from a role of executing instructions to one of a dynamic, creative information manager.
- You will gain personal information on how content you are in a certain career, you act towards other people, you do business, you communicate, and you solve problems and make decisions.
- You will have the right to obtain feedback on your individual results of the NBI.

WILL YOU RECEIVE ANY FINANCIAL COMPENSATION OR INCENTIVE FOR PARTICIPATING IN THE STUDY?

Please note that you will not be paid to participate in the study.

WHAT ARE YOUR RIGHTS AS A PARTICIPANT IN THIS STUDY?

Your participation in this study is entirely voluntary. You have the right to withdraw at any stage without any penalty or future disadvantage whatsoever. You don't even have to provide the reason/s for your decision.

HOW WILL CONFIDENTIALITY AND ANONYMITY BE ENSURED IN THE STUDY?

All the data that you provide during the study will be handled confidentially. This means that access to your data will be strictly limited to the researcher, the supervisors of the study, the designated examiners (appointed by Tshwane University of Technology). Also, your data and personal information will be kept and stored in a confidential format which will only be accessible to the researcher.

Confidentiality of the data and research results will be maintained - in other words your identity will only be known to the researcher. All identifying data on transcriptions and final report documents will be removed. Thus, your identity will not be revealed during or after the study, even when the study is published or used in any format.

That the results of the study will not be published or used in any way that it may have a detrimental work impact. All data will be summarized and no individual data will be published.

IS THE RESEARCHER QUALIFIED TO CARRY OUT THE STUDY?

Trained representatives at Solutionsfinding (Solutionsfinding (Pty) Ltd – a company duly formed and registered in South Africa, form part of the Kobus Neethling group of companies, which is the sole provider of the Kobus Neethling products and instruments (NBI)) – will analyse these profiles.

HAS THE STUDY RECEIVED ETHICAL APPROVAL?

Yes. The Faculty Research and Innovation Committee and the Research Ethics Committee of the Tshwane University of Technology have approved the formal study proposal.

WHO CAN YOU CONTACT FOR ADDITIONAL INFORMATION REGARDING THE STUDY?

The primary investigator, Ms Annette Venter, can be contacted during office hours at Tel (012) 382-5708. The study leader, Dr Tessie Herbst, can be contacted during office hours at Tel (012) 382-5901. Should you have any questions regarding the ethical aspects of the study, you can contact the chairperson of the TUT Research Ethics Committee, Dr Braam Hoffmann, during office hours at Tel (012) 382-6259.

DECLARATION: CONFLICT OF INTEREST

None.

A FINAL WORD

Your co-operation and participation in the study will be greatly appreciated. Please sign the underneath informed consent if you agree to partake in the study. In such a case, you will receive a copy of the signed informed consent from the researcher.

CONSENT

I hereby confirm that I have been adequately informed by the researcher about the nature, conduct, benefits and risks of the study. I have also received, read and understood the above written information. I understand that my participation is voluntary and that I may, at any stage, without prejudice, withdraw my consent and participation in the study. I had sufficient opportunity to ask questions and of my own free will declare myself prepared to participate in the study.

Research participant's name: _____ (Please print)

Research participant's signature: _____

Date: _____

Researcher's name: _____ (Please print)

Researcher's signature: _____

Date: _____

APPENDIX B: INSTRUCTIONS FOR COMPLETING THE NEETHLING BRAIN PROFILE INSTRUMENT

Please complete the assessment before 20 August 2009 so that your reports can be processed in time for the feedback session. It will take 20 minutes of your time.

Go to the following webpage: http://www.nbi.soluntionsfinding.com.

Your username is: chaA693

Your password is: P4a07

You will find that there are 30 questions; each consists of a statement and four reactions to it. You should choose the alternative that describes you best and clock on it, then you should click on your second choice and then your third. You will find that the second question will appear.

After completing the first 30 questions, an additional 15 questions will appear. Please complete that as well.

After completion of the first 30 as well as the additional 15 questions, please clock the "submit" button. If you have any queries please contact Dr Tessie Herbst at (012) 382-5901.

APPENDIX C: QUESTIONNAIRE TO EXECUTIVE OFFICERS

QUESTIONNAIRE

THINKING STYLE PREFERENCE PROFILE OF THE CONTEMPORARY ADMINISTRATIVE PROFESSIONAL

This is a qualitative survey to investigate how executive managers perceive their roles and challenges in order to determine the traits and competencies of the administrative professional to be able to effectively support the executive officer.

1. TARGET RESPONDENCE

The target respondents are the executive managers of the participants in the case study at the Tshwane University of Technology.

2. OBJECTIVE

To obtain information that will enable the researcher to compile an ideal thinking style preference profile of an administrative professional and compare that with the current thinking style preference profiles of administrative professionals at the Tshwane University of Technology.

3. THE EXECUTIVE OFFICER

Title, name and surname: _____

Official post/title/position: _____

Taking changes in the higher education into consideration, for example, size and shape of institutions, autonomy and accountability, need to compete, need to perform, time utilisation, globalisation enforcing increased complexities and pressure pursue by stakeholders, describe your current role and 5 biggest challenges you are faced with:

Current Role:

_____

_____

_____

Five biggest challenges you are faced with:

1. _____

2. _____

3. _____

4. _____

5. _____

4. THE ADMINISTRATIVE PROFESSIONAL

Executive officers need support from their administrative professionals' to achieve the goals of the organisation. The expectations in terms of quality, timeliness of output, knowledge about the new concepts, tools and time management are indeed very high. The development of new information technologies and tools demand periodical refreshing knowledge of their acquaintance and skills from administrative professionals. Executive officers are overloaded by information and official duties so they need skilful administrative professionals to systematise information and perform an important new role as change agents.

Administrative professionals have several important roles and responsibilities within the four basic management functions of planning, organising, staffing and controlling. With this reflection and future expectations of the administrative professional in mind, prioritise the following roles and responsibilities in terms of their importance for success according to the following scale:

Scale:

1 – Unimportant

2 – Slightly important

3 – Important

4 – Very Important

5 – Critical Important

4.1 Role and responsibility of the administrative professional:

A.	**Planning function**								
	Planning can be described as the process in which objectives are determined and the plans are devised to reach these objectives.								
•	Initiate goals and objectives for each of the office functions and services. *For example, layout, environment, telecommunications, word processing, automation, electronic data processing, records management, forms design, reprographics, mail services and control.*	1	2	3	4	5	V1		
•	Do research to keep abreast of new developments in the field (internal and external) to be able to propose possible changes with regard to existing functions and services to maintain a state-of-the-art in relation to her work. *For example, identify opportunities and threats – macro-environment of other UoT's on websites, newspapers.*	1	2	3	4	5	V2		

•	Identifying and designing new administrative operating systems according to the need for implementing new administrative functions and services. *For example, assessing the need for office systems (telecommunications, electronic data processing).*	1	2	3	4	5	V3		
•	Introducing procedures to assist with the attainment of goals and objectives. *For example, design a flow chart for planning process. Co-ordinating the use of resources, arranging meetings and planning of office space.*	1	2	3	4	5	V4		
•	Determining means of implementing desired changes. *For example, identify training needs how to use technology, especially on the latest information processing hardware and software.*	1	2	3	4	5	V5		
•	Defining space and equipment needs. *For example, proxemics (structure territory and space) have an impact on the way people communicate. Layout design requires consideration of the interrelationships between the components: equipment, flow of work, employees – desk space, file, space, storage space, work area lighting*.	1	2	3	4	5	V6		

B.	**Organising function**								
	Organising involves developing a staff system that facilitates the accomplishment of established plans.								
•	Establishing the most effective means of organising resources (human, financial, physical and information) to achieve goals and objectives. *For example, clarity on objectives, aims, policy, prescriptions, plans and resources that the executive officer may need and use, should be created to communicate information to other organisational functions (marketing, personnel and finance).*	1	2	3	4	5	V7		
•	Seeking and communicating the most effective way for employees to perform specific tasks. *For example, keep employees informed about new policies, procedures, rules, benefits, and developments in the organisation by oral or written channels (websites, e-mail).*	1	2	3	4	5	V8		
•	Adopting efficient work methods and procedures. *For example, set short and/or long term objectives with specific quantity or time elements, e-mail, voice mail, fax machines.*	1	2	3	4	5	V9		

•	Ensuring the maximum utilisation of the organisation's office equipment. *For example, records management, filing – hard-copy, image processing, CD's, external drives, digitisers (create original drawings or trace and reproduce), optical recognition devices, image scanners.*	1	2	3	4	5	V10	
•	Developing and coordinating administrative processes for maximising organisational and individual productivity. *For example, making changes on the basis of perceived needs – determine the measurement objective, quantity, quality. Identify areas/activities in need of improved productivity (new automated equipment). Improvement techniques – job design, flexitime, job sharing, employee participation, communication, team building.*	1	2	3	4	5	V11	
•	Anticipating effective methods and techniques when implementing changes. *For example, respond to both internal and external forces that result in the need for change. Plan with team members and implement.*	1	2	3	4	5	V12	
•	Specifying effective procedures for evaluating equipment that is being considered for acquisition. *For example, database to indicate purchase date of assets; data base of services - air conditioners, equipment; leasing contracts; inventory data base*.	1	2	3	4	5	V13	

C.	**Staffing function**							
	Familiarity with the various elements of employee development is becoming more important as the administrative professional is assuming greater responsibility for certain specialised areas of the development process, although overall responsibility is with the human resource department							
•	Assisting with and anticipating the selection procedures, including placement and orientation of employees. *For example, hiring decisions influence the ability of organisation to achieve its goals positively or negatively.*	1	2	3	4	5	V14	
•	Categorising growth opportunities and experiences for employees. *For example, arranging employee orientation, the process of training counselling, appointments for appraisals (employee performance analysis), and motivational workshops.*	1	2	3	4	5	V15	

•	Facilitating appropriate training experiences – coaching new staff and/or assistants in administrative work. *For example, effective selection process and bearing the budget available in mind. Having manuals ready to explain how work is done, employees may need to be trained on new office equipment before they are able to use the equipment effectively*.	1	2	3	4	5	V16	
•	Establishing rapport with all team members to facilitate a positive team spirit	1	2	3	4	5	V17	
•	Ensuring a realistic job description for the administrative professional. *For example, identify duties, responsibilities and requirements.*	1	2	3	4	5	V18	

D.	**Controlling function**							
	The controlling function involves comparing actual results with anticipated results. Internal dimensions - organisational policies and procedures. External dimensions - rules and regulations of government, ethical and moral considerations							
•	Developing efficient procedures for controlling the quantity and quality of work processed in areas for which the administrative professional is responsible. *For example: Technological progress means that standards must be meticulously developed and instituted if administrative professionals want to continue grow with organisation.*	1	2	3	4	5	V19	
•	Ensuring continuity of work flow across all administrative functions. *For example, vertically (between superiors and subordinates) or horizontally (between employees of the same responsibility level). Follow the movement of the major source documents through the department.*	1	2	3	4	5	V20	
•	Utilisation of efficient procedures in determining the status of unfinished work. *For example, draft a work measurement program to assess employees output.*	1	2	3	4	5	V21	
•	Maintaining the department's budget. *For example, quality control and records management, debtors and creditors*	1	2	3	4	5	V22	

•	Ensuring that the methods and procedures are cost-effective. *For example, records management - control the development and adoption of new forms. Develop efficient methods of entering data on documents. Determine length of time records should be stored before they are destroyed. Including price lists, quotations, invoices and sales reports.*	1	2	3	4	5	V23	
•	Motivating employees to be cost-conscious. *For example, control is a continuous and repetitive process and should take place at lowest possible costs. Keep historical data of equipment and stock.*	1	2	3	4	5	V24	
•	Suggesting effective assessment procedures for use in suggesting why actual results (for example, quantity output, degree of accuracy, customer's survey) fail to conform to anticipated results. *For example, measuring output of administrative staff is difficult as much of the work is mental and hence intangible in nature. Identifying and defining circumstances or underlying factors that created the problem/situation (interpersonal problems between individuals, poor management).*	1	2	3	4	5	V25	
•	Seeking procedures for dealing with employees who fail to comply with organisation's rules and policies. *For example, collect information that can help with the decision process, determining and communicating realistic standards and methods against which performance is measured. Corrective action can mean deviations of original standards.*	1	2	3	4	5	V26	
•	Implementing strategies for taking corrective action when and where necessary. *For example, process to report problem areas (weaknesses, customer complaints, ill management).*	1	2	3	4	5	V27	

4.1.1 Please rank in order the following roles and responsibilities according to their importance:
(from 1 most important to 4 least important)

•	Planning function	1	2	3	4	V28	
•	Organising function	1	2	3	4	V29	
•	Staffing function	1	2	3	4	V30	
•	Controlling function	1	2	3	4	V31	

Prioritise the following abilities and attributes in terms of their importance for success according to the following scale:

Scale:

1 – Not applicable

2 – Optional

3 – Adequate

4 - Appropriate

5 – Essential

4.2 Abilities and attributes of the administrative professional

A.	**Analysis:**	1	2	3	4	5	V32	
•	*Example:* Includes critical thinking and involves evaluating information and making recommendations based on an understanding of the company's strategic objectives;							

B.	**Creative thinking**	1	2	3	4	5	V33	
•	*Example*: Developing innovative solutions to problems and challenges;							

C.	**Connective thinking**	1	2	3	4	5	V34	
•	*Example:* Enables administrative professionals to perceive the links among people, data and ideas and then use these ties to work effectively.							

D.	**Collaboration:**	1	2	3	4	5	V35	
•	*Example:* To be able to quickly establish a rapport and facilitate team building with co-workers on and off site.							

E.	**Technical aptitude:**	1	2	3	4	5	V36	
•	*Example:* This skill involves a willingness to adopt new technology, and research the best technological solutions for an organisation.							

F.	**Intuition:**	1	2	3	4	5	V37	
•	*Example:* The administrative professional with well-tuned intuition will proactively identify the best ways to provide support based on the goals and processes of the business, as well as the needs and work styles of colleagues.							

G.	**Continuous education:**	1	2	3	4	5	V38	
•	*Example:* The administrative professional of the future must actively seek information sources and utilise multiple modes of learning, from traditional classroom seminars to online programmes.							

H.	**Negotiation:**	1	2	3	4	5	V39	
•	*Example:* This skill involves using tact, diplomacy, empathy and business savvy to engage in productive discussions with vendors and employees that result in positive outcomes.							

I.	**Technical skills:**	1	2	3	4	5	V40	
•	*Example:* It is required of the administrative professional to be able to utilise the continuous increasing amount of new technology that is currently available or that will be available in the future to its maximum potential.							

J.	**Conceptual skills:**	1	2	3	4	5	V41	
•	*Example:* The administrative professional that has conceptual skills at her disposal will be able to analyse a wide variety of situations, both technical and nontechnical, as a prelude to solving problems.							

K.	**Human skills:**	1	2	3	4	5	V42	
•	*Example:* Human skills enable the administrative professional to work through and with others, including subordinates, peers, and superiors.							

4.2.1 Please rank in order the following abilities and attributes according to their importance (from 1 most important to 11 least important):

•	Analytical skills	1	2	3	4	5	6	7	8	9	10	11	V43
•	Creative Thinking	1	2	3	4	5	6	7	8	9	10	11	V44
•	Connective Thinking	1	2	3	4	5	6	7	8	9	10	11	V45
•	Collaboration	1	2	3	4	5	6	7	8	9	10	11	V46
•	Technical Aptitude	1	2	3	4	5	6	7	8	9	10	11	V47
•	Intuition	1	2	3	4	5	6	7	8	9	10	11	V48
•	Continuous Education	1	2	3	4	5	6	7	8	9	10	11	V49
•	Negotiation	1	2	3	4	5	6	7	8	9	10	11	V50
•	Technical Skills	1	2	3	4	5	6	7	8	9	10	11	V51
•	Conceptual Skills	1	2	3	4	5	6	7	8	9	10	11	V52
•	Human Skills	1	2	3	4	5	6	7	8	9	10	11	V53

4.3 The administrative professional as the supportive role to the executive:

According to your knowledge, what are the most significant characteristics, skills, abilities and attributes of the ideal administrative professional to support the Executive Officer in the most effective manner?
