AN INTERACTIVE QUALITATIVE ANALYSIS OF
EDUCATIONAL PSYCHOLOGY STUDENTS’ SELF-EFFICACY BELIEFS IN CAREER COUNSELLING

DANIEL PETRUS GERHARDUS LODEWYCKX

2005
AN INTERACTIVE QUALITATIVE ANALYSIS OF EDUCATIONAL PSYCHOLOGY STUDENTS’ SELF-EFFICACY BELIEFS IN CAREER COUNSELLING

by

DANIEL PETRUS GERHARDUS LODEWYCKX

Presented in partial fulfilment of the requirements for the degree

MAGISTER OF EDUCATION
(EDUCATIONAL PSYCHOLOGY)

in the

Department of Educational Psychology

of the

University of Pretoria
Faculty of Education

SUPERVISOR
Dr. S.E. Bester

CO-SUPERVISOR
Dr. S. Human-Vogel

PRETORIA
2005
ACKNOWLEDGEMENTS

First to the Lord Jesus Christ who, through the power of the Holy Spirit, has been a source of inspiration and encouragement, and to

Dr. Suzanne Bester for her exceptional guidance, support and inspiration;

Dr. Salome Human-Vogel as co-supervisor;

Prof. Irma Elloff, head of the Department Educational Psychology for encouragement and support;

Staff of the academic information centre;

The participants for their time and co-operation;

Cathy Beisheim for typing;

Toy, my wife and sons Stiaan and Jarius for their unfailing support;

My family, friends and colleagues who, in the last months provided invaluable support;

Brent Record for excellent language editing; and

Adrie van Dyk for technical editing.

---oOo---
I, DANIEL PETRUS GERHARDUS LODEWYCKX (Student number 94988693) declare that:

“An interactive qualitative analysis of educational psychology students' self-efficacy beliefs in career counselling"

is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

___________________ ______ _____________
Signature Date

---oOo---
STATEMENT OF LANGUAGE EDITING
This study focuses on educational psychology students’ self-efficacy beliefs in career counselling. The research was conducted in the Department of Educational Psychology of the University of Pretoria. An Interactive Qualitative Analysis (IQA) as described by Northcutt and McCoy (2004) was done. The constituency comprised seven students who have provided career counselling to at least one client.

The IQA approach to research postulate that the ideal in qualitative research is to create a process that invite participants to produce data while minimizing the effect of the research process on the content. With the IQA approach the participants in the research have a remarkable degree of freedom and are empowered to generate and analyze their own data with minimal external influence. The role of the researcher in this process is to facilitate the process and to teach participants the process while guiding them to generate and analyze their own data. The central assumption in IQA, namely that the people closest to the phenomenon are in the best position to report about the phenomenon was confirmed by the researcher.

The main findings of the study indicate that self-efficacy develops through formal and personal development. The identification of possible areas of growth and how this is communicated by the supervisor is fundamental for both formal and personal development processes of students. A positive cooperative developmental approach during feedback sessions is conducive to the growth of the career counsellor. The importance of experiential learning and modelling as a means to develop self-efficacy was confirmed by the research participants. The reduction of anxiety with the increase of self-efficacy was reported as a very important benefit of increased self-efficacy.

KEYWORDS

Affinities  Positive psychology
Career counselling  Self-efficacy
Social cognitive theory  Interactive qualitative analysis
Constituency  Systems theory
Systems Influence Diagram  Social constructivism
TABLE OF CONTENTS

CHAPTER 1
ORIENTATION

1.1 INTRODUCTION 1

1.2 THE RESEARCH QUESTION 2
  1.2.1 DEFINITION OF THE TOPIC 2
  1.2.2 CONTRIBUTION OF THE STUDY 4
  1.2.3 RESEARCH QUESTIONS 4
    1.2.3.1 Primary research question 4
    1.2.3.2 Sub-questions 5

1.3 PURPOSE OF THE STUDY 5

1.4 CONCEPTUALISATION 5
  1.4.1 INTERACTIVE QUALITATIVE ANALYSIS 5
  1.4.2 SYSTEMS THEORY 7
  1.4.3 AFFINITIES 7
  1.4.4 CONSTITUENCIES 7
  1.4.5 SYSTEMS INFLUENCE DIAGRAM (SID) 8
  1.4.6 INTERRELATIONSHIP DIAGRAM (IRD) 8

1.5 RESEARCH PARADIGM 8

1.6 RESEARCH METHODOLOGY AND STRATEGY 9
  1.6.1 RESEARCH DESIGN 9
  1.6.2 CONSTITUENCY 10
  1.6.3 ROLE OF THE RESEARCHER 10
  1.6.4 PROCESS OF RESEARCH, ANALYSIS AND INTERPRETATION 11
  1.6.5 LIMITATIONS OF THE STUDY 12

1.7 ETHICAL CONSIDERATIONS 13

1.8 PROGRAM OF STUDY 14
CHAPTER 2
SELF-EFFICACY

2.1 INTRODUCTION 15

2.2 DEFINING SELF-EFFICACY 16

2.3 SELF-EFFICACY AND OUTCOME EXPECTATIONS 18

2.4 SOURCES OF INFORMATION THAT SHAPE SELF-EFFICACY EXPECTATIONS 20
  2.4.1 INTRODUCTION 20
  2.4.1 ENACTIVE MASTERY 21
  2.4.2 VICARIOUS EXPERIENCE 22
  2.4.3 VERBAL PERSUASION 22
  2.4.4 EMOTIONAL AROUSAL 23

2.5 PSYCHOLOGICAL PROCESSES AND SELF-EFFICACY BELIEFS 23
  2.5.1 INTRODUCTION 23
  2.5.2 COGNITIVE PROCESSES 24
  2.5.3 MOTIVATIONAL PROCESSES 25
  2.5.4 AFFECTIVE PROCESSES 26
  2.5.5 SELECTION PROCESSES 27

2.6 SELF-EFFICACY BELIEFS AND ACADEMIC ACHIEVEMENT 27

2.7 MEASURING SELF-EFFICACY 28

2.8 CONCLUSION 29
CHAPTER 3
CAREER COUNSELLING

3.1 INTRODUCTION 31

3.2 OVERVIEW OF SELF-EFFICACY AND TRAINING 31

3.3 EXPLORING THE CONSTRUCTS OF SELF-EFFICACY BELIEFS IN RELATION TO THE TRAINING OF CAREER COUNSELLORS 33

3.3.1 USE OF PERFORMANCE ACCOMPLISHMENTS IN TRAINING/ENACTIVE MASTERY 33

3.3.2 USE OF MODELLING IN TRAINING/VICARIOUS EXPERIENCE 33

3.3.3 USE OF VERBAL PERSUASION IN TRAINING 34

3.3.4 INFLUENCE OF PHYSIOLOGICAL STATES AND REACTIONS/EMOTIONAL AROUSAL ON TRAINING 34

3.3.5 INFLUENCE OF SELF-EFFICACY OUTCOME EXPECTATIONS ON CHOOSING TO PRACTICE CAREER COUNSELLING 34

3.3.6 TYPE AND AMOUNT OF TRAINING 35

3.4 TRAINING IN CAREER COUNSELLING 36

3.4.1 INTRODUCTION 36

3.4.2 THEORETICAL TRAINING 36

3.4.3 PRACTICAL TRAINING 37

3.4.4 ANALYSIS OF THE APPROACH TO DEVELOPMENT OF SELF-EFFICACY 38

3.5 CONCLUSION 39
CHAPTER 5
RESULTS, FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

5.2 SYNOPSIS OF FINDINGS AND LITERATURE CONTROL
5.2.1 PRIMARY FINDINGS
  5.2.1.1 Counsellor’s attitude
  5.2.1.2 Influence of potential areas of growth
  5.2.1.3 Influence of supervision
  5.2.1.4 Influence of traits of an effective counsellor
  5.2.1.5 Influence of preparation
  5.2.1.6 Influence of contextualisation
  5.2.1.7 Influence of effective communication skills
  5.2.1.8 Influence of authenticity

5.2.2 LITERATURE REVIEW

5.3 SUMMARY OF CONCLUSIONS
5.3.1 ASSUMPTIONS
5.3.2 CONCLUSIONS

5.4 RECOMMENDATIONS
5.4.1 IQA RESEARCH METHOD
5.4.2 TRAINING
5.4.3 FURTHER RESEARCH

5.5 LIMITATIONS AND STRENGTHS OF THE STUDY

5.6 CLOSURE

---oo---

LIST OF REFERENCES

LIST OF ADDITIONAL REFERENCES NOT CONTAINED IN TEXT

---oo---

ANNEXURES

---ooooo---
| FIGURE 2.1  | Triadic reciprocity (Pajares 2002:1) | 16 |
| FIGURE 2.2  | Diagrammatic representation of the difference between efficacy expectations and outcome expectations (Bandura 1977:79) | 18 |
| FIGURE 2.3  | Combined adjusted graphic depiction of Bandura (1977:80) and model of self-efficacy expectations (Betz 2005:2) | 19 |
| FIGURE 4.1  | Cumulative percentage | 56 |
| FIGURE 4.2  | Maximum variance: Frequency | 59 |
| FIGURE 4.3  | Power analysis | 59 |
| FIGURE 4.4  | Counsellor’s attitude | 62 |
| FIGURE 4.5  | Potential areas of growth | 64 |
| FIGURE 4.6  | Supervision | 65 |
| FIGURE 4.7  | Traits of effective counsellor | 67 |
| FIGURE 4.8  | Preparation | 69 |
| FIGURE 4.9  | Contextualisation | 71 |
| FIGURE 4.10 | Effective communication skills | 72 |
| FIGURE 4.11 | Authenticity | 74 |
| FIGURE 4.12 | Cluttered SID | 76 |
| FIGURE 4.13 | Uncluttered SID | 77 |
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>TABLE 4.1</td>
<td>Warm-up exercise</td>
<td>44</td>
</tr>
<tr>
<td>TABLE 4.2</td>
<td>Participants’ experience of career counselling and supervision</td>
<td>45</td>
</tr>
<tr>
<td>TABLE 4.3</td>
<td>Authenticity</td>
<td>48</td>
</tr>
<tr>
<td>TABLE 4.4</td>
<td>Contextualisation</td>
<td>49</td>
</tr>
<tr>
<td>TABLE 4.5</td>
<td>Effective communication skills</td>
<td>49</td>
</tr>
<tr>
<td>TABLE 4.6</td>
<td>Potential areas of growth</td>
<td>50</td>
</tr>
<tr>
<td>TABLE 4.7</td>
<td>Preparation</td>
<td>50</td>
</tr>
<tr>
<td>TABLE 4.8</td>
<td>Supervision</td>
<td>51</td>
</tr>
<tr>
<td>TABLE 4.9</td>
<td>Traits of effective career counsellor</td>
<td>52</td>
</tr>
<tr>
<td>TABLE 4.10</td>
<td>Counsellor’s attitude</td>
<td>52</td>
</tr>
<tr>
<td>TABLE 4.11</td>
<td>Frequency in affinity pair order</td>
<td>53</td>
</tr>
<tr>
<td>TABLE 4.12</td>
<td>Cumulative percentage (frequency) affinity pair relationship</td>
<td>55</td>
</tr>
<tr>
<td>TABLE 4.13</td>
<td>Affinities in descending order of frequency with Pareto and power analysis</td>
<td>56</td>
</tr>
<tr>
<td>Table 4.14</td>
<td>Added calculations</td>
<td>58</td>
</tr>
<tr>
<td>Table 4.15</td>
<td>Tabular IRD</td>
<td>60</td>
</tr>
<tr>
<td>Table 4.16</td>
<td>Tabular IRD - Sorted in descending order of $\Delta$</td>
<td>60</td>
</tr>
<tr>
<td>TABLE 4.17</td>
<td>TENTATIVE SID ASSIGNMENTS</td>
<td>61</td>
</tr>
<tr>
<td>TABLE 5.1</td>
<td>Literature review</td>
<td>88</td>
</tr>
</tbody>
</table>

---oooOooo---
1.1 INTRODUCTION AND RATIONALE

The purpose of this study is to explore career counselling students' self-efficacy beliefs based on an Interactive Qualitative Analysis (IQA). The IQA approach implies a qualitative data-gathering and analysis process that depends heavily on group process to generate and capture socially constructed views of participants' experiences regarding a specific phenomenon (Northcutt & McCoy 2004:43). The phenomenon to be researched in this study is thus career-counselling students' self-efficacy beliefs.

An awareness of the importance of self-efficacy beliefs in relation to career counselling students’ performance as counsellors exists (O’Brien & Heppner 1996:368; Perrone, Perrone, Chan & Thomas 2000:12-225; O’Brien, Heppner, Flores & Bikos 1997:21). Some research findings indicate that self-efficacy is the most salient variable in the training of career counsellors and even conclude that advanced training which focuses on the four determinants of self-efficacy beliefs identified by Bandura (1977b:191-215) namely (a) enactive mastery, (b) vicarious experience, (c) verbal persuasion, and (d) emotional arousal, increase self-efficacy beliefs and subsequently alter outcome expectations. This in turn leads to students experiencing positive self-satisfaction (O’Brien & Heppner 1996:368). O’Brien and Heppner (1996:368) furthermore indicate that facilitators of student training should focus their attention on (amongst others) self-efficacy beliefs since it has a profound effect on students’ levels of motivation, interest and commitment.

Self-efficacy beliefs are intensely personal perceptions individuals hold regarding their perceived abilities to perform in certain situations. Bandura and Jourdan (1991:941-951) believe that self-efficacy beliefs are so powerful that they overshadow skills, which can result in highly competent individuals doubting themselves. Training programmes should thus focus on imparting skills while at the same time attending to self-efficacy beliefs. To understand the self-efficacy beliefs masters students in educational psychology hold about their perceived ability to deliver career counselling requires that the aforementioned individuals themselves explore their experiences in this regard. They should be allowed as a group to “create their own quilt of meaning with regard to their self-efficacy beliefs as career counsellors and to similarly construct individual quilts of meaning”. (Northcutt &
McCoy 2004:43) The researcher should facilitate this process and eventually “the two levels of meaning are used by the investigator as the foundation for interpretation” (Northcutt & McCoy 2004:43).

The participants in this study will be given the opportunity to explore their own perceptions of their self-efficacy beliefs within the training context they find themselves in. This process of exploring their perceptions could raise their own awareness of their development as career counsellors. It could possibly assist them with identifying strengths they have developed thus far in their training and to similarly identify areas of growth they still need to attend to in their training. This process could also have therapeutic value because the students will be allowed to explore their perceptions in a supportive environment amongst peers. The research findings could furthermore contribute to the training of students in career counselling and specifically inform training of masters students in educational psychology at the University of Pretoria where this research was conducted.

1.2 RESEARCH PROBLEM

1.2.1 DEFINITION OF THE TOPIC

It would be safe to assume that it is the quest of researchers all over the world and across all fields of study to produce and often to contest knowledge of phenomena in their world by interacting and engaging in the world around them and describing these interactions in ways that they believe are true, valid and accurate. Terre Blanche and Durrheim (2002:1) point out that different researchers using different approaches to research can generate multiple accounts of one specific event. They (Terre Blanche & Durrheim 2002:3) contemplate how this is possible and conclude that the background knowledge against which researchers make their observations tells them what exists, how to understand it and how to study it.

Reflecting on the aforementioned it is the researcher’s concern that the person/s performing the research on any given topic exercises an immense power over the research process. It is further the opinion of the researcher that complete objectivity between the researcher and the “researched” is difficult if not impossible to achieve. Northcutt and McCoy (2004:16) believe that the observer and observed are interdependent and state the following with regard to qualitative research strategies:

Many qualitative studies, while espousing a desire to capture the meaning of phenomenon from the subject's point of view, nevertheless rely on methods of
data collection and analysis that are essentially positivist, that is, the very terms imply a separation between the subject of the research and the researcher.

Northcutt and McCoy (2004:44) further point out that researchers often leave their “tracks” and erode the process of research. The ideal would be to create a process that will invite participants to produce data while minimizing the process on the content. They suggest a shift in research approach. This approach, known as the IQA approach, postulate that participants should have a significant degree of freedom in the process and that participants themselves should perform the first steps of analysis by organizing their discourse into categories of meaning called affinities¹. They should then take the analysis further by articulating their own perceived relationships of influence among the affinities. “The researcher’s role then moves from designer to facilitator, teaching the group members the IQA process and guiding them to generate and analyse their own data with minimal external influence” (Northcutt & McCoy 2004:44).

Counselling provides a unique opportunity for individuals to explore and express their ideas and feelings with regard to problems or challenges they are faced with in a non-evaluative, non-threatening environment. To become successful and effective counsellors, students in counselling need to develop a strong sense of “self-as-counsellor” (Marshall 2000:2). They have to develop both competence and confidence in counselling and in delivering counselling services. According to Marshall (2000:2) competence is addressed through training courses, practice, performance feedback, supervision, self-reflection, discussion, reading and other knowledge and skill-oriented activities. The development of confidence is far more complex and individuals’ sense of “self-as-counsellor” differs vastly. Students’ confidence in their ability to succeed often comes after a period of self-doubt accompanied by a sense of “not knowing”. It furthermore comes at different stages for different individuals, some during their period of study, while others experience the feeling that they can “do it” during their practice.

It is important to stress that self-efficacy beliefs are concerned with individuals’ perceived capabilities to produce results and to attain designated types of performance. Although these perceptions are situated within individuals the process of establishing perceptions as pointed out by Pajares (2002:2) takes place within a specific context. In addition to this Northcutt and McCoy (2004:27) hold the belief that “humans construct their reality in social settings”.

To account for the afore mentioned it is the researcher’s opinion that it will be necessary to explore career counselling students’ self-efficacy beliefs within a group context (masters

¹ Refer to par. 1.4.3 for an explanation of this term.
students in educational psychology) in the training environment (University of Pretoria) where said self-efficacy beliefs are constructed. Bandura’s social cognitive theory, which forms the theoretical basis from which self-efficacy beliefs emerged, states that:

… individuals posses a self system that enables them to exercise a measure of control over their thoughts, feelings, motivation and actions. This self system provides reference mechanisms and a set of solutions for perceiving, regulating and evaluating behaviour, which results from the interplay between the system and environmental sources of influence. As such, it serves a self-regulatory function by providing individuals with the capability to influence their own cognitive processes and actions and thus alter their environment.

The IQA approach furthermore uses the concept of a “systems representation of the way individuals or groups understand a phenomenon” (Northcutt & McCoy 2004:xxii). The focus in this study will be on social systems which Northcutt and McCoy (2004:40) defines as “systems in which human interpretation of meaning is involved.”

1.2.2 CONTRIBUTION OF THE STUDY

Given the nature of the IQA approach and the fact that it can be regarded as a new approach to qualitative research, it is the opinion of the researcher that a study of this nature can produce interesting findings, which can be infused into the training of students in career counselling. The researcher is furthermore of the opinion that the process of IQA could be of therapeutic value to the group members and provide them with valuable knowledge on their professional development.

1.2.3 RESEARCH QUESTIONS

This study will investigate career counselling students’ self-efficacy beliefs. The primary research question would thus be:

1.2.3.1 Primary research question

What are career counselling students’ self-efficacy beliefs?

---

2 Refer to par. 1.4.2 for an explanation of systems theory.
1.2.3.2 Sub-questions

In an attempt to understand the implications of the primary research question the researcher formulated the following sub-questions based on the researchers own perception of the phenomenon. The sub-questions are formulated purely to assist the researcher with the exploration of the phenomenon in his literature review. The inductive nature of this study requires that the researcher does not formulate meanings prior to the research but that the participants themselves induce categories of meaning (Northcutt & McCoy 2004:4, 16).

- What counsellor competencies do educational psychology students regard as important?
- How do educational psychology students perceive their abilities to perform career counselling?
- How do educational psychology students come to believe in their ability to perform career counselling?
- How does supervision influence educational psychology students’ self-efficacy beliefs in career counselling?

1.3 PURPOSE OF THE STUDY

The purpose of this proposed study is to facilitate the research process in which students in educational psychology can explore their self-efficacy beliefs as career counsellors in order to deepen our understanding of how they perceive their self-efficacy beliefs as career counsellors.

1.4 CONCEPTUALISATION

1.4.1 INTERACTIVE QUALITATIVE ANALYSIS

In the introduction and definition of the problem, the researcher has pointed out that this qualitative research study will be conducted using an IQA approach. The researcher furthermore indicated that this is a relatively new approach to research, which places an emphasis on the active participation of research participants in the research process and a conscious effort of empowering participants to engage in the process of research. The role of the researcher thus becomes that of a facilitator.

---

3 Refer to par. 1.6.3 for a description of the role of the researcher in an IQA approach.
Ideally the process of research, according to an IQA approach (Northcutt & McCoy 2004:45) would be as follows:

(1) The first phase is the research design phase. During this phase a research problem that interest the researcher is articulated. The research problem serves as a tool in identifying the research participants (constituency) who will have an interest in the problem. During this stage several research questions are formulated which “are implied by the research problem” (Northcutt & McCoy 2004:44).

(2) A focus group consisting of the research participants identify the affinities, or as Northcutt and McCoy (2004:44) describes it “quilt pieces” of the system, which according to the research participants, represent the phenomenon as they experience it.

(3) The focus group identifies the relationships among each of the affinities (Northcutt & McCoy 2004:44) and use a set of rules “stemming from IQA systems theory” to draw a mind map (SID) of how the group experiences their reality.

(4) The affinities that were identified by the group are used to “develop protocols for individual interviews which are invaluable to further explore the meanings of the affinities and their systemic relationships” (Northcutt & McCoy 2004:44).

(5) According to Northcutt and McCoy (2004:45), “The final report allows the researcher to describe the affinities and their relationships, to make comparisons among systems and individuals, and to make inferences (predictions) based on the properties of the system(s).”

Northcutt and McCoy (2004:18) state the following with regard to ‘good research’:

*The element of one’s belief system (relation of knowledge to power, relation of the observer to the observed, and the object of research of the ‘thing’ to be investigated form the ontological base. Upon this base rests our epistemological values, or preferences for ways of knowing …*
1.4.2 SYSTEMS THEORY

According to Northcutt and McCoy (2004:27) systems have two components: elements and relationships among elements. The elements may be as disparate as physical objects, mathematical constructs or, for purpose of this approach to qualitative research, categories of meaning. Northcutt and McCoy (2004:40) state that just like physical systems are composed of elements and relationships, so are social systems. The elements of social systems are characterized only by their diversity and may be psychological or unique to an individual (for example emotional states); they may represent organizational or institutional features (the way a graduate course is structured), or they may represent interactions between the individual and some social structure such as an organisation (student/faculty).

Systems theory as it is understood in this study according to Northcutt and McCoy (2004:xxii) refers to: “the construction, interpretation, and comparison of mind-maps (systems representations of the way individuals or groups understand a phenomenon)”.

1.4.3 AFFINITIES

Affinities represent the categories of meaning of a system or systems that represent the group's experience of a phenomenon (Northcutt & McCoy 2004:44). In this study the affinities will relate to the participants’ perceptions of their self-efficacy beliefs as career counsellors. These affinities will only emerge once the focus group has met and engaged with the phenomenon.

1.4.4 CONSTITUENCIES

In the context of IQA, a constituency is defined as “a group of people who have a shared understanding of a phenomenon” (Northcutt & McCoy 2004:44). Constituencies are identified based on how close they are phenomenologically speaking to the research problem/phenomenon. In the selection of constituencies two questions are asked, namely 1) how close is the constituency to the problem? and 2) how much power does this constituency have over the phenomenon?

The constituency for purposes of this research is educational psychology students who are in the process of being trained to become career counsellors.

---

4 Refer to Chapter 4 for further information on affinities.
1.4.5 SYSTEMS INFLUENCE DIAGRAM (SID)

The SID in IQA is “a visual representation of an entire system of influences and outcomes and is created by representing the information present in the IRD as a system of affinities and relationships among them” (Northcutt & McCoy 2004:174).

1.4.6 INTERRELATIONSHIP DIAGRAM (IRD)

The IRD is constructed during a process in which the participants investigate the affinities by developing propositions of cause and effect from their own data. This is called theoretical coding and creates an extended reality for the group through discussion (Northcutt & McCoy 2004:170).

1.5 RESEARCH PARADIGM

Northcutt & McCoy (2004:8) state the following with regards to a research paradigm:

… the components of a paradigm are beliefs and values, this system suggests that our personal understanding – beliefs – of what is real influences our preference – values – for ways of knowing; this, in turn, determines our judgement of what differentiates good research from bad or, more generally, what differentiates true claims from false claims.

The authors (2004:9) further belief that our personal ideological system determines what we believe to be relevant, useful and liberating.

During this study, the research will use a social constructivist paradigm. Social constructivism regard culture and context as important when understanding what occurs in a society (Baumie 2005:1). The premises that underlie social constructivist theory are: (Baumie 2005:1):

- **Reality**: reality is constructed through activity. Reality can however not be discovered but only comes into existence during social invention. Members of a group co-construct what they regard as ‘real’.
- **Knowledge**: knowledge is produced by human beings within a specific social and cultural setting. “Individuals create meaning through their interactions with each other and with the environment they live in” (Baumie 2005:81).

---

5 Refer to Chapter 4, par. 4.2 and 4.5, for more information on the SID.
6 Refer to Chapter 4, par. 4.4.
Learning: Learning is regarded as a social process and meaningful learning takes place when individuals interact with one another. Baumie (2005:1) states that learning “does not take place only within an individual, nor is it a passive development of behaviours that are shaped by external forces.”

In this study this would refer to the social construction of students’ self-efficacy beliefs as career counsellors. The experiences of the participants as individuals within a social group will be generated and analysed. Social constructivism furthermore, forms the bases on which the social cognitive theory of Bandura (1997:2) which relates to self-efficacy beliefs, is formulated.

1.6 RESEARCH METHODOLOGY AND STRATEGY

1.6.1 RESEARCH DESIGN

The IQA research method is a qualitative data-gathering and analysis process that depends heavily on group process to capture a socially constructed view of the respondent’s reality (Northcutt & McCoy 2004:299). The paradigm, which inform this study, is social constructivism. The ideological dimensions, which describe IQA, are the following (Northcutt & McCoy 2004:16).

- Knowledge and power are power issues in research; that power influences which knowledge is determined to be relevant and irrelevant, important and unimportant. The conception of constituencies (this refers to the group that is closest to the phenomenon under investigation) is a very important part of the research design phase. According to Northcutt and McCoy (2004:16) one of two criteria for selection of a constituency is the degree of power that the constituency has over the phenomenon to be investigated. Power over the phenomenon is determined by the knowledge members of a constituency has relating to the phenomenon. IQA further uses distance from the phenomenon as second criteria for the selection of the constituency. IQA assumes that those who are closest to the phenomenon are those who have the most knowledge about it and knowledge in this context equals power.
- IQA presumes that the observer and the observed are dependent – or more accurately interdependent. IQA is based on the assumption that data collection and analysis cannot be separated from one another and should be regarded as interdependent.
• The object of IQA research is the phenomenon (reality in consciousness rather than reality itself). The use of group processes as data-collection device presumes that the researcher can gain useful insights into a socially constructed reality, as reported by members of the group. Follow-up interviews are used to elaborate and contrast individual meanings to that of the group.

• Both deduction and induction are necessary to the investigation of meaning. Members of the constituency are first asked to induce categories of meaning, then a process follows in which they define and refine these, and then they finally investigate deductively the relationships of influence among the categories.

• IQA is pro-decontextualisation – decontextualised descriptions are useful and possible as long as they are “… backed up by highly contextualised ones and as long as the process by which text was decontextualised is public, accessible and accountable” (Northcutt & McCoy 2004:16).

• Theory in IQA is a theory in perception or the mental model (mind map) of a group or individual with respect to a phenomenon, rather than imposed by previous findings or by researchers’ theorising.

• IQA contend that although traditional concepts of validity and reliability are still useful the operational definition of internal and external validity in IQA is: “Internal validity is the extent to which a System Influence Diagram (mind map) is consistent with the individual hypothesis comprising it, while external validity is the extent to which mind maps constructed by independent samples of the same constituency on the same phenomenon are similar” (Northcutt & McCoy 2004:17).

1.6.2 CONSTITUENCY

The constituency will consist of educational psychology students in the masters programme at the University of Pretoria who are currently busy with the module in career orientation and who have already performed at least one career counselling assessment. All students in this group have been approached to participate in the study.

1.6.3 ROLE OF THE RESEARCHER

*The qualitative researcher needs to be aware of the fact that his acquiring a specific role is not a static decision and that the type of role may change as the situation changes* (Schurink 1989:260).
The role of the researcher in IQA is that of a facilitator. Northcutt and McCoy (2004:44) define the responsibilities of the researcher irrespective the paradigm they follow as threefold:

- “To interpret.
- To ensure that the ground of interpretation provides as much epistemological traction as possible.
- To tread softly on that ground.”

The first responsibility of the IQA researcher is to create a process that will invite group members to produce the most “data” while minimizing the influence of the process on the content. The researcher’s role then moves from designer to facilitator, teaching the group members the process and guiding them to generate and analyse their own data with minimal external influence.

1.6.4 PROCESS OF RESEARCH, ANALYSIS AND INTERPRETATION

The IQA process in this study can briefly be described as follows:

- The group/constituency was invited to attend a focus group discussion on the research topic namely: “Students in educational psychology’s self-efficacy beliefs as career counsellors.” The focus group discussion takes on a general tone during which the members of the constituency are briefed with regard to the ethical issues and they complete an informed consent form.
- The focus group discussion is preceded by a statement of the problem as indicated in paragraph 1.2.3.1. The group is primed for the focus group by using guided imagery as technique. They are requested to visualize the last time they performed career counselling with a client and are guided to focus on aspects relating to self-efficacy.
- The next phase is the generating of data phase. During this phase members of the constituency are asked to quietly reflect on the thoughts they experienced during the guided imagery exercise, and are requested to record their thoughts with markers on note cards distributed to them. Participants are requested to do a “brain dump” and not to edit or censor their thoughts or feelings.
- The next phase is when the members of the group have to sort the data individually generated into categories of meaning. This process is initiated by an activity during which the facilitator tapes all the cards to the wall in a columnar.

7 Compare Chapter 4, Table 4.1, for a description of the guided imagery exercise.
display, in no particular order, so that the entire group can read them. The facilitator leads the discussion of what is written on every card and encourages the group to come to a shared meaning of each of the thoughts and emotions. At the end of this clarification stage the group are asked to silently arrange the cards into groups based under the heading or system of categorisation that occurs to them. This is a silent process and the role of the facilitator would be to remind members of the group not to discuss what they are doing. This phase is called the sorting-of-data-into-categories-of-meaning phase (Inductive Coding) (Northcutt & McCoy 2004:xii).

- The clarification of meaning and axial coding phase follows. Each group of cards (an affinity) that were sorted in the previous phase are now examined by the constituency and sorted into groups (affinities) and the group discusses why these particular cards were placed together.

- The process then proceeds to an analysis and interpretation of the data generated. This discussion leads to (1) a common understanding of the underlying meaning represented by the group of cards and (2) a name for the affinity, determined by consensus. Groups are defined and redefined and cards can be moved from one group to another. At the end of this phase the affinities, each with sub-affinities, are given a name that has a common meaning to the group.

- During the following phase the relationships among the affinities are identified. This activity is performed individually. The facilitator provides a protocol to guide and record analysis. An Interrelationship Diagram\(^8\) records the nature and directionality of each possible relationship.

- A group Systems Influence Diagram/Mind map\(^9\) (SID), a picture of the system that underlies the group's analysis, is created.

- Due to the limited nature of this dissertation, the researcher did not proceed to the individual interview phase as described in par. 1.41.

1.6.5 LIMITATIONS OF THE STUDY

This is a dissertation of limited scope, which does not allow an in-depth submersion with the phenomenon under research. This seriously restricts the richness of the research and could render relatively superficial research results. The IQA approach to research is new, which may cause feelings of uncertainty due to a lack of experience in the researcher that could result in a negative outcome on the research findings.

\(^8\) Compare Chapter 4, Table 4.15 and 4.16.
\(^9\) Compare Chapter 4, par. 4.5.1, for group SID.
1.7 ETHICAL CONSIDERATIONS

*Ethics is a set of moral principals which is suggested by an individual or group, is subsequently widely accepted and which offers rules and behavioural expectations about the most correct conduct towards experimental subjects and respondents, employers, sponsors, other researchers, assistants and students* (Strydom 1998:24).

In this study cognisance will be given to the following ethical principles common to research involving human respondents:

- The principle of voluntary participation in the research, implying that the respondents may withdraw from the research at any time they wish to do so.
- The principle of informed consent, meaning that the constituencies will at all times be fully informed about the research process and purposes, and are afforded the opportunity to give consent to their participation in the research.
- The principle of safety in participation, that constituencies will not be placed at risk of any harm of any kind. The researcher will support the participants throughout the research process.
- The principle of privacy, meaning that the confidentiality and anonymity of constituencies will be protected at all times.
- The principle of trust, which implies that constituencies will not be exposed to any acts of deception or betrayal in the research process or its published outcomes.

The participants might benefit from their participation in the following ways:

- By participating in the research they might gain valuable knowledge about research in general and specifically the IQA approach. This knowledge could benefit them when they have to embark on their own research projects for their dissertations.
- The participants could possibly gain knowledge about their own self-efficacy beliefs thus sensitising them to possible areas of growth in their training.
- The findings of this research could generate valuable information, which could be integrated into the training programme, thus contributing to better practice for the training of future psychologists.
1.8 PROGRAM OF STUDY

CHAPTER 1: ORIENTATION

This chapter is an introduction to the research. It provides the reader with a general framework within which the research is contextualised. The problem statement, purpose of the study, clarification of key concepts and methodology of the research study are introduced.

CHAPTER 2: SELF-EFFICACY

Chapter 2 provides a literature review on self-efficacy. A definition of self-efficacy and overview of Bandura’s theory on self-efficacy is described. Self-efficacy in relation to counsellor training is discussed and cognisance is taken of assessment practices when determining self-efficacy beliefs.

CHAPTER 3: CAREER COUNSELLING

Chapter 3 introduces the reader to definitions on career counselling. A broad overview of career counselling theories is offered with special emphasis in Social Cognitive Career Theory (SCCT) since this is the theory that informs this research. The chapter concludes with a description of how self-efficacy beliefs are acknowledged and incorporated into the training programme of the constituency who participated in the research.

CHAPTER 4: RESULTS

This chapter is the results chapter and provides the reader with the facts to be used in later discussion and interpretation. This chapter only presents the facts and provides an audit trail for later arguments.

CHAPTER 5: FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

The primary findings and implications of this study are described in Chapter 5. This chapter provides a forum for the researcher to analyse and interpret the data as well as draw conclusions based on the data.
2.1 INTRODUCTION

One of the most important and simple components of success, namely, believing that you can accomplish what you set out to accomplish describes in essence what self-efficacy beliefs are. Although the term self-efficacy is of recent origin (Bandura 1977:191-215), interest in beliefs about personal control and “the will” has a long history in philosophy and psychology. Since Albert Bandura’s first publication (1977:191-215) on self-efficacy the term is omnipresent in psychology and related fields. Bandura not only formalised the notion of perceived competence as self-efficacy, but offered a theory of how it develops and how it influences human behaviour. According to Maddux (2002:277) Bandura offered a “construct that had intuitive and common sense appeal, yet he defined this common sense notion clearly and embedded it in a comprehensive theory”.

Bandura (1986:10) embedded the construct of self-efficacy within a social cognitive theory of human behaviour and cognitive development within a socio-structural network of influences. Bandura (1986:10) advanced a view of human functioning that accords a central role to cognitive, vicarious, self-regulatory, and self-reflective processes in human adaptation and change. People are viewed as self-organizing, pro-active, self-reflecting and self-regulating rather than as reactive organisms shaped and driven by environmental forces or driven by concealed inner impulses. From this theoretical perspective, human functioning is viewed as the product of a dynamic interplay of personal, behavioural and environmental influences. According to Pajares (2005:1) this is the foundation of Bandura’s conception of reciprocal determination, the view that (a) personal factors in the form of cognition, affect, and biological events, (b) behaviour, and (c) environmental influences create interactions that result in triadic reciprcallity (illustrated in Figure 2.1). Bandura altered the label of his theory from social learning to social “cognitive”, both to distance it from prevalent social learning theories of the day and to emphasize that cognition plays a critical role in people’s capability to construct reality, self-regulate, encode information, and perform behaviours.
More recently, Bandura (1997:2) situated the study of self-efficacy within a theory of personal and collective agency that operates together with other socio-cognitive factors in regulating human wellbeing\(^{10}\) and attainment and address the major facets of personal agency such as the nature and structure of self-efficacy beliefs, their origins and effects, the processes through which such self-beliefs operate, and the modes by which they can be created and strengthened.

This chapter will focus on how self-efficacy beliefs are accomplished and which strategies can be utilized to enhance self-efficacy beliefs in the training of career counselling students. It is also necessary to explore existing approaches/research findings on measuring self-efficacy beliefs since these findings will illustrate the need to explore self-efficacy beliefs from an IQA perspective.

### 2.2 Defining Self-Efficacy

Self-efficacy, defined as “beliefs in one’s capabilities to organize and execute the courses of action required to produce given attainments” (Bandura 1977:3), leads to initiation of behaviours, amount of effort expended, persistence despite obstacles, and eventual success. Bandura (1977:3) also indicates that self-efficacy beliefs influence resilience to

---

\(^{10}\) Refer to par. 2.2 for a description of positive psychology, which relates to mental well-being.
adversity, the presence of helpful or hindering cognitions, and the degree to which depression and stress occur when difficult situations are encountered.

In the context of positive psychology\(^\text{11}\), self-efficacy can be described as a cognitive-focused approach (Snyder & Lopez 2002:xii). The scientist who adopts the positive psychological approach strives to inspire people to develop a more wholesome focus on the positive aspects of life (Snyder & Lopez 2002:1). Self-efficacy is one of the strengths among other positive virtues such as love, hope, gratitude, forgiveness, joy, future-mindedness, humility, courage, noble purpose, creativity, personal control, optimism and problem solving that are studied and enhanced by the followers of this approach.

Perceived self-efficacy is concerned not with the number of skills you have, but with what you believe you can do with what you have, under a variety of circumstances. Efficacy beliefs operate as a key factor in a generative system of human competence. Hence different people with similar skills or the same person under different circumstances may perform poorly, adequately, or extraordinarily depending on fluctuations in their beliefs of personal efficacy. Skill can easily be overruled by self-doubts, so that even highly talented individuals make poor use of their capabilities under circumstances that undermine their beliefs in themselves (Bandura & Jourdan 1991:941-951). By the same token, a resilient sense of efficacy enables individuals to do extraordinary things by productive use of their skills in the face of overwhelming obstacles. According to Bandura (1992:3-38) perceived self-efficacy is an important contributor to performance accomplishments, whatever the underlying skills might be (Bandura 1992:3-38).

Bandura (1997:11) differentiates between self-efficacy and self-esteem with the following statement “Perceived self-efficacy is concerned with judgements of personal capability, whereas self-esteem is concerned with judgements of personal worth.” The logic of this distinction is that individuals need not consider themselves capable of all things to maintain a sense of self-worth. Bandura (1997:11) claims that the two concepts are entirely different. However, it could be that they are indeed related, to the extent that self-esteem is linked to one’s judgement of capabilities, within those domains where one feels expected, by one’s self or by others, to be capable.

According to Bandura (2005:1) self-efficacy differs from self-concept in various ways as reflected below:

\(^{11}\) Positive psychology indicates a movement in the field of psychology away from the exclusive attention to pathology towards building strength and fulfilment of individuals in a thriving community. Seligman (2002:3) describes the aim of positive psychology “to catalyze a change in psychology from a preoccupation only with repairing the worst things in life to also building the best qualities in life”.

— 17 —
For the purpose of this study self-efficacy will define masters students in educational psychology’s individual perceptions of their capabilities to be successful career counsellors.

2.3 SELF-EFFICACY AND OUTCOME EXPECTATIONS

Most human behaviour is learned observationally through modelling: from observing others one forms an idea of how new behaviours are performed, and on later occasions this coded information serves as a guide for action (Bandura 1977(a):79). Outcome expectancy as a construct of self-efficacy is in the opinion of the researcher, an important factor in the facilitation of student training since it has direct implications for the supervision process.

According to Bandura (1977(a):79) outcome expectancy is defined as a person’s estimate that a given behaviour will lead to certain outcomes. An efficacy expectation is the conviction that one can successfully execute the behaviour required to produce outcomes. Outcome and efficacy expectations are differentiated in the sense that individuals can come to believe that a particular course of action will produce certain outcomes, but question whether they can perform these actions (Bandura 1977:79).

The strength of people’s convictions in their own effectiveness determines whether they will even try to cope with difficult situations. People fear and avoid threatening situations that they believe themselves unable to handle, whereas they behave affirmatively when they...
judge themselves capable of handling successfully situations that would otherwise intimidate them.

Perceived self-efficacy not only reduces anticipatory fears and inhibitions but, through expectations of eventual success, it affects coping efforts once they are initiated. Efficacy expectations determine how much effort people will expend, and how long they will persist in the face of obstacles and aversive experiences. The stronger individual's efficacy or mastery expectations are, the more active the efforts they will put forth (Bandura 1977:80).

Depicted in Figure 2.3, self-efficacy expectations are postulated by Bandura (1977:80) to have at least three behavioural consequences, shown on the right side of the figure. The behavioural consequences of perceived self-efficacy are (a) approach versus avoidance behaviour, (b) quality of performance of behaviours in the target domain, and (c) persistence in the face of obstacles or disconfirming experiences. Thus, low self-efficacy expectations regarding a behaviour or behavioural domain are postulated to lead to avoidance of those behaviours, poorer performance of those behaviours, and a tendency to “give up” when faced with discouragement or failure.

**FIGURE 2.3:** COMBINED ADJUSTED GRAPHIC DEPICTION OF BANDURA (1977:80) AND MODEL OF SELF-EFFICACY EXPECTATIONS (BETZ 2005:2)
Avoidance or approach behaviour is profound in their impact on self-efficacy expectations. Avoidance behaviour due to previous failures has negative consequences in the sense that persons avoiding something prevent themselves to have a chance to learn or master an activity. The impact of self-efficacy is essential for long-term focus on one’s goals. A person with a strong efficacy belief will persist in the face of obstacles, occasional failures, and dissuading messages from the environment, for example incidents of gender or race-based discrimination or harassment (Betz 2005:2).

The effects of self-efficacy expectations on performance can refer to such situations as performance in the tests necessary to complete a course or the requirements of a job-training program. For example, low efficacy expectations may be accompanied by negative self-talk or anxiety responses, which interfere with focus on the task in hand and thus impair performance. The postulated causes of self-efficacy are important for these provide the basis for increasing and strengthening efficacy expectations.

The left side of Figure 2.3 shows these causes, which are the four sources of background or experiential information postulated to explain the initial development of expectations of efficacy. These sources of efficacy information are not only important in its initial development but can also be used to guide the design of interventions capable of building or strengthening perceived self-efficacy. The sources of information are (a) performance accomplishments, that is, experiences of successfully performing the behaviours in question; (b) vicarious learning or modelling; (c) lower levels of emotional arousal, that is, less anxiety in connection with the behaviour; and (d) social persuasion, for example, encouragement and support from others (Betz 2005:2).

Students in career counselling should be afforded the opportunity to observe experienced career counsellors in a counselling context. By observing aforementioned counsellors they will be able to distinguish between different course of action to be taken during the counselling process and the outcomes it produces. This modelled behaviour can enhance career counselling student(s) self-efficacy beliefs to the extent that they too belief they can accomplish successful and desirable outcomes in counselling.

2.4 SOURCES OF INFORMATION THAT SHAPE SELF-EFFICACY EXPECTATIONS

2.4.1 INTRODUCTION

In social learning analysis, expectations of self-efficacy are based on four sources of information, namely enactive mastery (performance accomplishments), vicarious
experience, verbal persuasion, and emotional (physiological) arousal (Bandura 1982:122). These sources of information alter an individual’s coping behaviour by strengthening feelings of competency (Bandura 1982:122). The more dependable the experiential source, the greater the potential change in self-efficacy (Bandura 1977:191).

### 2.4.2 Enactive Mastery

Bandura (1982:123) defines the first source of information, namely, enactive mastery, as repeated performance accomplishments based on actual mastery experiences. Task mastery occurs when gradual performance accomplishments increase and develop the skills, abilities and exposure needed for task performance (Gist 1987:472). Successful task performance increases mastery expectations, whereas the impact of failure reduces them (Bandura 1977b:26).

Gist (1987:473) contends that although enactive mastery strongly influences self-efficacy, not all individuals will expose themselves to opportunities of enactive mastery, because of fear of a lack of ability. The effectiveness of performance attainments as an informational source is reduced amongst such individuals.

Bandura (1977b:85) postulates that performance accomplishments provide the most dependable source of efficacy expectations because they are based on one’s own personal experiences. Successes raise mastery expectations; repeated failures lower them. After strong efficacy expectations are developed through repeated success, the negative impact of occasional failures is likely to be reduced. Indeed occasional failures that are later overcome by determined effort can strengthen self-motivated persistence through experience that even the most difficult of obstacles can be mastered by sustained effort. The effects of failure on personal efficacy therefore partly depend upon the timing and the total pattern of experiences in which they occur. Once established, efficacy expectancies tend to generalise to related situations.

In the opinion of the researcher enactive mastery can be addressed in training of career counselling students by affording them regular opportunities to be exposed to counselling situations. This potentially powerful source of enhancing self-efficacy could be managed by the facilitators of student learning so that inexperienced counsellors are reactive receive intense more supervision in the early phase of their training.
2.4.3 VICARIOUS EXPERIENCE

The second source of information, namely, vicarious experience, can provide a beneficial informational source (Bandura 1977a:198), although vicarious sources have been shown to be less dependable than individuals’ own performance experiences (Brief & Aldag 1981:77). Modelling is more successful when individuals modelling behaviour overcome difficult tasks with determined effort rather than when they demonstrate easily accomplished non-threatening tasks (Bandura, Adams, Hardy & Howells 1980:40; Kazdin 1974:327). Furthermore, a similarity between the model and the observer in terms of age, ability and personal characteristics predict more favourable learning outcomes (Bandura 1977a:195).

According to (Bandura 1977b:89) many expectations are derived from vicarious experience. Seeing others perform threatening activities without adverse consequences can create expectations in observers that they too will eventually succeed if they intensify and persist in their efforts. They persuade themselves that if others can do it, they should be able to achieve at least some improvements in performance. Similarity to the model in regard to other characteristics can increase the effectiveness of symbolic modelling. If people of widely differing characteristics can succeed, then observers have a reasonable basis for increasing their own sense of self-efficacy.

Training students in professional courses such as counselling should be structured in such a manner that students are exposed on a regular basis to counselling sessions which are performed by their supervisors.

2.4.4 VERBAL PERSUASION

Verbal persuasion, the third source of information, is aimed at convincing individuals of their capability of performing a task (Bandura 1982:125). The effect of verbal persuasion is largely dependent on the perceived credibility, trustworthiness, expertise, prestige and expressed assuredness of the persuader (Bandura 1982:125). Therefore, it is contended that leaders who are perceived as credible, trustworthy, loyal and encouraging would have a greater impact on the self-efficacy of their subordinates than those lacking such qualities.

In attempts to influence human behaviour, verbal persuasion is widely used because of its ease availability. People are led, through persuasive suggestion, into believing they can cope successfully with what has overwhelmed them in the past. Efficacy expectations induced in this manner are however likely to be weak and short-lived (Brief & Aldag
In the face of distressing threats and a long history of failure in coping with them, whatever success expectations are induced by suggestion will be rapidly extinguished by disconfirming experiences. Results of several lines of research attest to the weakness of verbal persuasion that creates expectations without providing an authentic experiential base for them (Bandura 1977b:82; Brief & Aldag 1981:78).

The importance of verbal feedback from a supervisor to a student is evident from the preceding discussion. It is the opinion of the researcher that such feedback should ideally be seen as feedback specifically relating to the enhancement of student’s self-efficacy beliefs and should relate to what the student did “right”.

2.4.5 EMOTIONAL AROUSAL

The fourth informational source is an individual’s physiological or emotional state (Gist 1987:475). High emotional arousal (e.g., while presenting a speech to a group), usually debilitates performance and results in the individual feeling extremely vulnerable to failure (Bandura 1977b:82). Therefore, individuals are more likely to expect success when they are not confronted with adverse arousal or stress-producing situations. Emotional arousal can influence efficacy expectations in threatening situations. People rely partly upon their state of physiological arousal in judging their anxiety and vulnerability to stress. Because high arousal usually debilitates performance, individuals are more likely to expect success when they are not beset by aversive arousal than when they are tense, shaking, and viscerally agitated. Fear reactions generate further fear.

Greater emphasis should thus be placed on the emotional stability of students in career counselling since this has a cyclical influence on how competent they perceive themselves and their ability to perform.

2.5 PSYCHOLOGICAL PROCESSES AND SELF-EFFICACY BELIEFS

2.5.1 INTRODUCTION

Bandura (1997:162) held that there are many pathways through life -- people vary substantially in how successful they manage their lives. The beliefs they hold about their capabilities to produce results by their actions are an influential personal resource as they negotiate their lives through the life cycle. Rooted within Bandura’s social cognitive perspective is the understanding that individuals possess certain capabilities that define what it is to be human. Primary among these are the capabilities to symbolise, plan
alternative strategies (fore-thought), learn through vicarious experience, self-regulate, and self-reflect. These capabilities provide human beings with the cognitive means by which they are influential in determining their own destiny (Pajares 2005:3). Much research has been conducted on the four major psychological processes through which self-beliefs of efficacy affect human functioning. An understanding of how psychological processes influence self-efficacy beliefs will provide a useful theoretical framework in which students’ development in training could be understood.

2.5.2 COGNITIVE PROCESSES

Humans possess an extraordinary capacity to symbolize. For Bandura (Pajares 2005:3) symbols are the vehicle of thought, and it is by symbolizing their experiences that they can provide their lives with structure, meaning and continuity. Symbolizing enables people to store the information required to guide future behaviours. Observed behaviour can be modelled through this process.

Individuals solve cognitive problems and engage in self-directedness and forethought through the use of symbols. It is because of the capability to plan alternative strategies that one can anticipate consequences of an action without actually engaging in it. People with a high sense of efficacy visualize success scenarios that provide positive guides and support for performance. Those who doubt their efficacy visualize failure scenarios and they dwell on many things that can go wrong (Bandura 1994:3). It is difficult to achieve much while fighting self-doubt. A major function of thought is to enable people to predict events and to develop ways to control those that affect their lives. The stronger the perceived self-efficacy, the higher the goal challenges people set for themselves and the firmer is their commitment to them (Bandura 1994:3). It requires a strong sense of efficacy to remain task-oriented in the face of pressing situational demands, failures and setbacks that have significant repercussions. Those who maintain a resilient sense of efficacy set themselves challenging goals and use good analytic thinking which pays off in performance accomplishments (Bandura 1994:3).

People learn not only from their own experience but also by observing the behaviours of others. This vicarious learning permits individuals to learn a novel behaviour without undergoing the trial and error process of performing it. The observation is symbolically coded and used as a guide for future action. Observed behaviours can be reproduced only if they are retained in memory, a process made possible by the human capability to symbolise. Observational learning governs the process of attention, retention, production and motivation (Pajares 2005:3).
According to Bandura (1986:21), the capability that is most distinctly human is that of self-reflection, hence it is a prominent feature of social cognitive theory. People make sense of their experiences, explore their own cognitions and self-beliefs, engage in self-evaluation, and alter their thinking and behaviour accordingly, through self-reflection (Pajares 2005:3).

2.5.3 MOTIVATIONAL PROCESSES

Individuals have self-regulatory mechanisms that provide the potential for self directed changes in behaviour. This sub-function includes evaluations of one’s own self (their self-concept, self-esteem, values) and tangible self-motivators that act as personal incentives to behave in self-directed ways (Pajares 2002:3). Self-efficacy beliefs provide the foundation of human motivation, wellbeing, and personal accomplishment. The reason for this is if people do not believe that their actions can produce the outcomes they desire, they have little incentive to act or to persevere in the face of difficulties. Bandura’s (1997:2) key contentions as regards the role of self-efficacy beliefs in human functioning are that “people’s level of motivation, effective states and actions are based more on what they believe than what is objectively true.” In light of these facts it is important to ensure high levels of motivation is maintained amongst counselling students from the onset of counsellor training, whether it be by means of vicarious learning or by positive verbal encouragement thus enhancing their self-efficacy beliefs.

There are three different forms of cognitive motivators around which different theories have been built. They include causal attributions, outcome expectancies, and cognised goals. The corresponding theories are attributional theory, expectancy-value theory and goal theory. Self-efficacy beliefs operate in each of these types of cognitive motivation.

In attribution theory self-efficacy influences causal attributions. People who regard themselves as highly efficacious attribute their failures to insufficient effort, those who regard themselves as inefficacious attribute their failures to low ability (Bandura 1994:3). Expectancy-value theory postulates that motivation is regulated by the expectation that a given course of behaviour will produce certain outcomes and the value of those outcomes. People act on their beliefs about what they can do, as well as on their beliefs about the likely outcomes of performance. The motivating influence of outcome expectancies is thus partly governed by self-beliefs of efficacy (Bandura 1994:4).

Goal theory accentuates the capacity to exercise self-influence by goal challenges and evaluative reaction to one’s own attainments as a major cognitive mechanism of motivation. Explicit, challenging goals enhance and sustain motivation (Bandura 1994:4). Three types
of self-influences govern motivation based on goals or personal standard. They include self-satisfying and self-dissatisfying reactions to one’s performance, perceived self-efficacy for goal attainment, and readjustment of personal goals based on one’s progress. Self-efficacy beliefs contribute to motivation in several ways. They determine the goals people set for themselves; how much effort they expend; how long they persevere in the face of difficulties; and their resilience to failures. When faced with obstacles and failures people who harbour self-doubts about their capabilities slacken their efforts or give up quickly. Those who have a strong belief in their capabilities exert greater effort when they fail to master the challenge. Strong perseverance contributes to performance accomplishments (Bandura 1994:4).

2.5.4 AFFECTIVE PROCESSES

According to Bandura (1994:4) people’s beliefs in their coping capabilities affect how much stress and depression they experience in threatening or difficult situations. Perceived self-efficacy, to exercise control over stressors, plays a central role in anxiety arousal. People who believe they can exercise control over threats do not conjure up disturbing thought patterns. But those who believe they cannot manage threats experience high anxiety arousal. They dwell on their coping deficiencies. They view many aspects of their environment as fraught with danger. They magnify the severity of possible threats and worry about things that rarely happen. Through such inefficacious thinking they distress themselves and impair their level of functioning. Perceived coping self-efficacy regulates avoidance behaviour as well as anxiety arousal. The stronger the sense of self-efficacy the bolder people are in taking on taxing and threatening activities (Bandura 1994:4).

Anxiety arousal is affected not only by perceived coping efficacy but also by perceived efficacy to control disturbing thoughts. It is not the sheer frequency of disturbing thoughts but the perceived inability to turn them off that is the major thought of distress. Both perceived coping self-efficacy and thought control efficacy operate jointly to reduce anxiety and avoidant behaviour (Bandura 1994:4).

A low sense of efficacy to exercise control produces depression as well as anxiety. It does so in several ways. One route to depression is through unfulfilled aspirations. People who impose on themselves standards of self-worth they judge they cannot attain drive themselves to bouts of depression. A second efficacy route to depression is through low sense of social efficacy. People who judge themselves to be socially efficacious seek out and cultivate social relationships that provide models on how to manage difficult situations. Perceived social inefficacy to develop satisfying and supportive relationships increases
vulnerability to depression through social isolation. Dejecting ruminative thought cognitively generates much human depression. A low sense of efficacy to exercise control over ruminative thought also contributes to the occurrence, duration and recurrence of depressive episodes (Bandura 1994:5).

2.5.5 SELECTION PROCESSES

Self-efficacy beliefs can enhance human accomplishment and well being in countless ways. Efficacy-activated processes enable people to create beneficial environments and to exercise some control over those they encounter day in and day out. People are partly the product of their environment. Therefore, beliefs of personal efficacy can shape the course lives take by influencing the types of activities and environments people choose. The choices people make cultivate different competencies, interests and social networks that determine life courses. Any factor that influences choice behaviour can profoundly affect the direction of personal development. This is because the social influences operating in selected environments continue to promote certain competencies, values, and interests long after the efficacy decisional determinant has rendered its inaugurating effect (Bandura 1994:6).

Efficacy activated processes, which include cognitive, motivational, affective and selection processes are fundamental human capabilities influencing human functioning. It would appear that the psychological process described in this section develops differently for each individual resulting in an array of self-efficacy beliefs among individual form the same context.

2.6 SELF-EFFICACY BELIEFS AND ACADEMIC ACHIEVEMENT

It stands to reason that a link between self-efficacy beliefs and the academic achievement of students exists based on the previous discussions in this chapter. This research relates to the self-efficacy beliefs of students in career counselling and it would thus be necessary to explore the effect self-efficacy beliefs have on their academic achievement because the research is situated in an academic context.

A meta-analysis of studies published between 1977 and 1988 indicated that efficacy beliefs were positively related to academic achievement (Multon, Brown & Lent 1991:30). Researchers have demonstrated that, when self-efficacy beliefs correspond to the academic outcome with which they are compared, prediction is enhanced and the relationship between self-efficacy and academic performances are positive and strong.
Researchers also traced the relationships among self-efficacy perceptions, academic self-regulatory processes such as goal setting, self-monitoring, self-evaluation, and strategy use (Zimmerman & Bandura 1994:845). Self-efficacious students appear to embrace more challenging goals, engage in more effective self-regulatory strategies at differing levels of ability. Self-efficacy also appears to enhance students’ memory performance by enhancing persistence (Lent, Brown & Larkin 1984:356). To this effect a study of college students who pursued science and engineering courses illustrated that high self-efficacy influenced their academic persistence necessary to maintain high academic achievement (Lent et al. 1984:356).

Self-efficacy is also related to self-regulated learning variables and the use of learning strategies. Students who believe they are capable of performing tasks use more cognitive and meta-cognitive strategies and persist longer at tasks than those who do not. Academic self-efficacy influences cognitive strategy use and self-regulation through use of meta-cognitive strategies (Pajares & Schunk 2001:8).

According to Schunk (1987:149) self-efficacy increases when students are provided with frequent and immediate feedback while working on academic tasks and when students are taught to attribute this feedback to their own effort, they work harder, experience stronger motivation, and report greater efficacy for further learning. It is important to take into account that students' self-efficacy beliefs are critical to the success of academic strategies and instructional interventions. Students’ self-efficacy beliefs are responsive to changes in instructional experience and play a causal role in students’ development and use of academic competencies (Pajares & Schunk 2001:9).

Bandura (1986:417) argued that educational practices should be gauged not only by the skills and knowledge they impart for present use but also by what they do to students’ beliefs about their capabilities, which affects how they approach the future. Students who develop a strong sense of self-efficacy are well equipped to educate themselves when they have to rely on their own initiative.

### 2.7 MEASURING SELF-EFFICACY

In Chapter 1 the researcher indicated that self-efficacy beliefs are intensely personal experiences that are constructed in a specific social context. It is thus important to take note of this when exploring self-efficacy beliefs. It is the opinion of the researcher that previous studies which aimed at researching self-efficacy beliefs (and often to “measure” it) should be explored so that it can be positioned with regard to this proposed study.
Bandura (1997:6) has cautioned researchers attempting to predict academic outcomes from students’ self-efficacy beliefs stating that to increase accuracy of prediction “self-efficacy beliefs should be measured in terms of particularized judgements of capability that may vary across realms of activity, different levels of task demands within a given activity domain, and under different situational circumstances.” Additionally, efficacy beliefs should be assessed at the optimal level of specificity that corresponds to the critical task being assessed and the domain of functioning being analysed (Bandura 1997:6).

The most general self-efficacy assessments consist of an omnibus-type instruments that attempts to measure a general sense of efficacy or “confidence”. Bandura (1997:42) argued that such general measures create problems of predictive relevance and are obscure about just what is being assessed. In general, self-efficacy instruments provide global scores that decontextualise the self-efficacy/behaviour correspondence and transform self-efficacy into a generalized personality trait rather than the context-specific judgement Bandura originally suggested it to be (Pajares 2005:8). Various researchers have assessed general academic self-perceptions of competence (Multon, Brown & Lent 1991:30-38). The problem with such assessments is that students must make judgements about their academic capabilities without a clear activity or task in mind. Domain-specific assessments, such as asking students to provide their confidence to learn mathematics or writing, are more explanatory and predictive than omnibus measures and preferable to general academic judgements, but they are inferior to task-specific judgements because the sub-domains can differ markedly in the skills required.

It is envisaged that the IQA method used in this research will enable the researcher to empower the research participants in this study to explore and analyse their self-efficacy beliefs, as they perceive it. It is further expected that it will determine the perceptions of the participants on factors relating to supervision and how these factors influence their self-efficacy beliefs in career counselling. This process will hopefully render research findings that will reflect the opinion of the individuals closest to the phenomenon. The advantage of this method compared to the use of a career-counselling self-efficacy scale lies in the fact that the participants themselves decide which variables contribute to their self-efficacy beliefs and will account for individual experiences, which are difficult to determine when using a standardized questionnaire.

2.8 CONCLUSION

It is clear that perceived self-efficacy plays a major role in human behaviour and the principles of self-efficacy theory can be used very fruitfully in counselling and training of
career counsellors. If students in career counselling can observe their lecturers and peers performing some of the counselling techniques which they were taught theoretically, their self-efficacy beliefs could improve, resulting in an improved performance which could enable them to act with more confidence when they meet career-counselling clients for assessments or interviews. The application of the self-efficacy theory in the training of career counsellors will be included in Chapter 3.

---oOo---
3.1 INTRODUCTION

Career counselling can be regarded as a process of collaboration in which the client is encouraged to develop the skills and knowledge needed to choose a career goal and develop a career plan. Sharf (2002:16) states that the two most common goals of career counselling are the selection of an occupation and the adjustment to an occupation. Typically, career counselling is viewed as a rather simple process that involves helping individuals obtain self-knowledge and career knowledge in an attempt to make so-called ‘good’ career decisions. Although simplistic approaches to career counselling may be sufficient for some individuals, other clients bring very complex career-related issues to the counselling situation, and the assistance they need requires the career counsellor to be highly skilled in both personal and career counselling (Maree 2002:9). Students in career counselling and counselling in general are expected to undergo a rigorous theoretical and practical training programme to equip them with the skills required to make them competent career counsellors. They need to develop both competence and confidence.

In this chapter the researcher will attempt to explore the constructs of self-efficacy as discussed in the previous chapter in relation to the training of students in career counselling. The researcher will also provide an overview of the core module for training of career counselling students at the University of Pretoria which provides the participants to this study with a framework/context in which their self-efficacy beliefs are regarded. The purpose of the exploration of the study programme at the University of Pretoria is not to make an in-depth analysis or to comment on the effectiveness thereof. The guidelines as stated in the study guides, which provides the structure for the course will be explored with a view to understand how self-efficacy beliefs are addressed (implicit or explicit) and how this relates to the research participants’ experiences.

3.2 OVERVIEW OF SELF-EFFICACY AND TRAINING

There is little question that counsellor self-efficacy is potentially an important variable in counsellor training, the reason being the effect that self-efficacy has on the confidence and expectancy-of-success achievement of people in training (Soresi 2004:195). Counsellor training programs are invested in having their trainees perform efficaciously, to persist when
difficult stages of counselling emerge, to expend effort so as to be effective with a complex array of clients, and to perform at high levels of competence with their clients (Soresi, Nota & Lent 2004:195-199). Perrone et al. (2000:213) stress that it is important to learn about self-efficacy because counsellor’s perceptions regarding their ability to perform an activity will influence their interest in that activity. The following research findings in the context of counsellor training inform this study:

- Counsellors’ self-efficacy belief regarding their general counselling skills are related to their performance, anxiety, and satisfaction with counselling (Soresi 2004:195).
- Beginning practicum experiences, such as role-plays, modelling, and positive feedback, appear to promote self-efficacy perceptions, at least at earlier stages of training (Soresi 2004:195).
- Graduate students in counselling showed an increase in their career counselling self-efficacy beliefs after they had completed a course in career counselling (Soresi 2004:195).
- Students’ self-efficacy increased over the course of a career counselling practicum (Soresi 2004:195).
- Students’ career counselling self-efficacy beliefs are strongly related to positive and practice-based experiences with career counselling.
- Students’ self-efficacy ratings varied according to the type and amount of training they received (Soresi 2004:199).
- Modelling of successful career counselling strategies can contribute to robust efficacy beliefs. Trainees who are exposed to interesting client case presentations that result in positive outcomes might develop heightened efficacy-beliefs (O’Brien & Heppner 1996:368).
- Outcome expectations could be enhanced when respected individuals (e.g. faculty and career counselling professional) demonstrate the rewards received from successfully working with career clients (e.g., appreciation from clients, respect from colleagues, financial payment from clients, and self-satisfaction from participating in a process that results in increased insight and constructive change in clients’ lives (O’Brien & Heppner 1996:387).
3.3 EXPLORING THE CONSTRUCTS OF SELF-EFFICACY BELIEFS IN RELATION TO THE TRAINING OF CAREER COUNSELLORS\textsuperscript{12}

In Chapter 2 the researcher identified several constructs that shape self-efficacy beliefs. These sources of information alter an individual’s coping behaviour by strengthening feelings of competency (Bandura 1982:122). These sources will now be explored in terms of the training of students in career counselling.

3.3.1 USE OF PERFORMANCE ACCOMPLISHMENT IN TRAINING/ENACTIVE MASTERY

Performance accomplishments in career counselling have a positive impact on developing self-efficacy and interest (Heppner, O’Brien, Hinkelman & Flores 1996:105-125). With a sample of 290 counselling graduate students, Heppner and her colleagues (1996) found that the most positive influences on attitudes about career counselling involved working with career clients. In their qualitative comments, trainees indicated that they found the experience of integrating emotional-social and career concerns in the practice of career counselling exciting, challenging, and interesting. Perhaps positive experiences with career counselling can alter negative outcome expectations and lead trainees to experience the positive self-satisfaction inherent in providing vocational career counselling services. Beginning with practicum experiences, such as role-plays, modelling, and positive feedback, appears to promote self-efficacy perceptions, at least at earlier stages of training (Larson & Daniels in Soresi et al. 2004:195).

3.3.2 USE OF MODELLING IN TRAINING/VICARIOUS EXPERIENCE

According to O’Brien and Heppner (1996:368) modelling of successful career counselling strategies can also contribute to developing robust efficacy beliefs. Trainees who are exposed to interesting client case presentations that result in positive outcomes might develop heightened efficacy beliefs. Furthermore, outcome expectations could be enhanced when respected individuals (e.g., faculty and career counselling professionals) demonstrate the rewards received from successfully working with career clients (e.g. appreciation from clients, respect from colleagues, financial payment from clients and self-satisfaction from participating in a process that results in increased insight and constructive change in clients’ lives).

\textsuperscript{12} This discussion will initially be in general terms and will be discussed specifically in relation to the training at the University of Pretoria towards the end of this chapter.
3.3.3 USE OF VERBAL PERSUASION IN TRAINING

Verbal persuasion can also be potent if lecturers are excited about and interested in career counselling. Counselling trainees reported that their top two categories of negative experiences with career counselling included boring, ineffective courses in this area as well as lecturers who made disparaging remarks about career psychology (Heppner et al. 1996:105-125). Conversely, Heppner et al. (1996) found that students reported that well-taught courses that emphasize active learning and a holistic approach to career counselling were the second most important experience in developing positive attitudes toward career counselling (actual experience in counselling clients being the first). Positive outcome expectations regarding practicing career counselling could be developed if lecturers would point out the physical, social, and self-evaluative rewards that result from skilled career counselling. Furthermore, lecturers should acknowledge the power of self-evaluative outcomes, which are plentiful when working with motivated career clients.

3.3.4 INFLUENCE OF PHYSIOLOGICAL STATES AND REACTIONS/EMOTIONAL AROUSAL ON TRAINING

O’Brien et al. (1996:105-125) believe that the final component thought to influence efficacy beliefs (i.e. physiological states and reactions) might be addressed through advanced training, providing career counselling to clients, and supportive supervision. The negative anxiety associated with low self-efficacy could be lessened if students felt well trained in career counselling, had successful sessions with career clients, and received feedback about their work in a supportive, yet challenging manner. Reducing negative affect around career counselling could only enhance the development of positive outcome expectations. Counsellor’s self-efficacy beliefs regarding their general counselling skills are related to their performance, anxiety, and satisfaction with counselling (Soresi et al. 2004:195).

3.3.5 INFLUENCE OF SELF-EFFICACY OUTCOME EXPECTATIONS ON CHOOSING TO PRACTICE CAREER COUNSELLING

One of the tenets of the Social Cognitive Career Theory (Lent, Brown & Hackett 1994:79-125) involves the choice or enactment of behaviours. According to this theory, self-efficacy, outcome expectations, and interest contribute to selecting goals and to subsequent actions based on those goals. Counsellor self-efficacy has been shown to contribute to the initiation of counselling behaviours as well as level of persistence and performance (Larson, Suzuki, Gillespie, Ptenza, Bechtel & Toulouse 1992:105). Heppner et al. (1996:105-125) however found that counselling trainees rated their confidence in and their ability to practice
career counselling as lower than their confidence in and ability to engage in emotional-social counselling. Thus Heppner et al. (1996:105-125) expect that counselling trainees may feel inefficacious as career counsellors, express low interest in the field, and elect to spend only a small percentage of their time (if any) engaged in career counselling.

Setting goals and working to achieve them remain crucial mechanisms to exercise human agency in behaviour. Thus, in addition to focusing on self-efficacy and positive outcome expectations, assisting counsellors-in-training to develop goals for participation and skill development in career counselling may also increase their involvement in career counselling (O’Brien & Heppner 1996:367). Outcome expectations could be enhanced when respected individuals (e.g. faculty and career counselling professionals) demonstrate the rewards received from successfully working with career clients (e.g., appreciation from clients, respect from colleagues, financial payment from clients, and self-satisfaction from participating in a process that results in increased insight and constructive change in client’s lives (O’Brien et al. 1996:387).

3.3.6 Type and Amount of Training

Students’ self-efficacy ratings varied according to the amount of prior training they received in terms of perceived ability to understand vocational problems, to provide counselling aimed at educational success. According to Soresi et al. (2004:199) theory intensive training in social cognitive and social learning approaches to career development, as compared with a broad survey of several different career theories, may enhance self-efficacy regarding understanding career problems and providing educational counselling service.

It would appear from this description of previous research findings that self-efficacy beliefs are shaped by diverse critical incidents that take place in the course of training. An awareness of the relation between incidents in counsellor training and the effect thereof on student’s self-efficacy beliefs could enhance training programmes and possibly deliver counsellors with positive self-efficacy beliefs. The issue of self-efficacy as it is approached in the training of career counsellors at the University of Pretoria will now be discussed.
3.4 TRAINING IN CAREER COUNSELLING IN THE RESEARCH UNDER DISCUSSION

3.4.1 INTRODUCTION

Registration as a professional psychologist is possible only after certain criteria have been met. For the purpose of this study professional psychologists are referred to as career counsellors. The Health Professions Council of South Africa (HPCSA) set dual requirements namely academic (Master’s degree) and internship (HPCSA 2005). The training of career counsellors is a complex and highly skilled endeavour. Facilitators have to plan and execute training models that will extend theory in career counselling beyond the level of understanding to a level that will influence trainees to be interested, involved, and skilled in providing career counselling.

The participants in this study are all enrolled in the masters degree course in educational psychology in 2005 at the University of Pretoria. The masters degree course comprises several core modules (modules that are compulsory for all masters’ students in educational psychology at the University of Pretoria). One of the core modules in which students receive instruction is Career Orientation Pedagogics (COP)\textsuperscript{13} on the theory and practice of training to become career counsellors. The content of the aforementioned core module will now be reviewed since it will provide the content of training which relates to the development of the competence and confidence of the participants to this study. The information relating to COP as described in this chapter was obtained from the study guides\textsuperscript{14}, which are offered to the master’s students by their lecturers.

3.4.2 THEORETICAL TRAINING

The theoretical training of the masters students in the core module COP contain the following themes (Ebersöhn 2005:1-22; Maree 2005:1-27):

- Main epistemological approaches to career counselling with a strong focus on applicability of career theories in the South African context.
- Modes of inquiry, research designs and data collection techniques in the career-counselling context.
- Postmodern approaches to career counselling.

\textsuperscript{13} Acronym used to describe the Career Orientation Pedagogic core module referred to in this study.
\textsuperscript{14} The Head of Department, Educational Psychology, University of Pretoria, granted the researcher permission to access this information. Due to the confidential nature of the information contained in the study guides (this being the intellectual property of University of Pretoria), only excerpts of the relevant information will be provided.
• Socio-economic issues that inform career orientation.
• The hidden agenda of career orientation / career counselling as personal counselling.
• Report writing – traditional and postmodern.
• Ethical aspects relating to the professional conduct of the educational psychologist as career counsellor.

The mode of instruction includes formal lectures, assignments, portfolios, writing and discussing of journal articles. Students are encouraged to interact with the study content by reading all assignments with comprehension, to think it over, understand it, be able to put it into their own words and apply it to their own living and working environment (Maree 2005:4). The meta-theory, theoretical assumptions and methodological assumption (paradigmatic assumptions) that inform observation, interpretation and hypothesising within COP are based on interpretivism. The internal realities of all participants are acknowledged as subjective experiences and students should take cognisance of observer inter-subjectivity when interacting with knowledge. The methodological assumptions on which this course is structured state that interpretivism colours student’s action with a triad of interactionalism, interpretivism, as well as qualitative and/or quantitative methodology (Ebersöhn 2005:8).

3.4.3 PRACTICAL TRAINING

The practical training of students in the COP course is concluded in accordance with the requirements as set out by the Health Professions Council of South Africa (HPCSA), a statutory body which governs the health professions in terms of the Health Professions Act 1974 (Act No 56 of 1974). Students are required to complete four career-counselling assessments (including one buddy assessment\(^ {\text{15}} \)) under the supervision of lecturers who are registered senior psychologists. The supervision entails consultation with the supervisor prior to a consultation with a client to discuss possible approaches to be followed during the assessment, co-interviewing and observation of assessment by the supervisor and discussion of case studies with the supervisor.

Outcomes students have to demonstrate during each assessment include:

\(^ {\text{15}} \) A buddy assessment takes place when two students alternatively take the role of counsellor or client in an assessment session.
• Ability to act professionally at all times and with all staff responsible for practicum training (includes the following skills: self- and time-management; communication; conflict management; stress management).
• Ability to select, implement, mark and interpret psychometric media.
• Ability to interact professionally (includes interviewing skills) with clients (children, parents, as well as other significant people).
• Ability to present an assessment professionally to the supervisor.
• Ability to integrate conclusions and insights during assessments with theoretical knowledge.
• Ability to find and utilise career knowledge in terms of recommendations.
• Ability to identify therapeutic moments, as well as plan and implement therapy sessions.

Candidates may not proceed with a next assessment if a previous assessment has not been finalised in a satisfactory manner. Certain cases are discussed during group sessions – these are viewed as learning opportunities for all. Although the information obtained from the study guides are limited, the researcher was none the less able to derive the necessary information with regards to the development of the students in relation to their self-efficacy beliefs.

3.4.4 ANALYSIS OF THE APPROACH TO DEVELOPMENT OF SELF-EFFICACY

No indication in the study guides of an explicit approach to enhance self-efficacy could be found, however it is clear that students’ self-efficacy beliefs improve during their training because of the implicit application of certain training methods. The enactive mastery, modelling and vicarious learning principles are applied throughout the practical training of career counsellors in this course. The theoretical training is also very important to empower the students with the required knowledge.

The use of performance accomplishment in training at the University of Pretoria play a major role in the development of self-efficacy in career counselling. This exercise empowers the students with knowledge and self-efficacy beliefs by means of enactive learning. Assessment done with real clients done throughout the training contribute to the development of career counselling self-efficacy by means of enactive learning.

The use of modelling to develop self-efficacy is applied extensively and successfully at the University of Pretoria. The supervisor act as a model for the students in the execution of the intake interview and feedback interviews. Students’ self-efficacy is enhanced by
observing the model executing certain skills which are essential in career counselling. This is an important contributor to the development of self-efficacy.

Vicarious learning also play an important role in the enhancement of self-efficacy in students. Vicarious learning is effective because students observe their peers who are of the same training as themselves. This observation has the effect that students develop self-efficacy because they develop the confidence to be able to do it themselves if others can do it. All the assessments, interviews and therapy sessions are video recorded. Students have opportunities to see the video recordings of their peers when some of the recorded sessions are discussed. This is also a vicarious learning experience which enhances the self-efficacy beliefs of the students.

The self-efficacy of the students is also enhanced by verbal persuasion during supervision when supervisors work from an asset-based approach to guide the students and mediate their growth. Supervisors guide the students in their preparation to reduce anxiety. Students’ self-efficacy beliefs rise when they experience less anxiety. Reduction of fear is important because fear reactions, generate more fear psychological processes and hamper self-efficacy beliefs.

The use of reflection during training after every session with a client and during supervision also contributes to the development of self-efficacy.

3.5 CONCLUSION

A review of the core module in career counselling which the participants to this study have to complete as part of their training to become career counsellors also provided insight.

This chapter provided an overview of self-efficacy and training. The constructs of self-efficacy beliefs as discussed in Chapter 2 was integrated with the training of students in career counselling. This chapter concludes with an overview of the core module that informs the training of the research participants. The information obtained from the study guides of the core module in career counselling is then compared with the research findings relating to enhancement of self-efficacy beliefs and counsellor training.
CHAPTER 4
RESULTS

4.1 INTRODUCTION

In this chapter the researcher will first give an overview of the methodology of the IQA\textsuperscript{16} research process as outlined by Northcutt and McCoy (2004:298-314).

The purpose of an IQA study is to allow a group to create its own interpretation of a phenomenon followed by individual interpretation. The two levels of meaning are used together as foundation for interpretation by the researcher (Northcutt & McCoy 2004:43). An IQA study prompts participants to describe a phenomenon the way they see it, to explore their opinion concerning possible causes and what the results are.

The purpose of this chapter is to provide the data that was generated and analysed by the participants in this study, which will be used in later discussions. According to the IQA approach the researcher must refrain from doing any interpretation at this stage. By refraining from making any interpretations the researcher adds credibility to the data and provide an audit trail for later arguments (Northcutt & McCoy 2004:300).

In this chapter the researcher will describe how the system elements of the group reality are determined. Once these elements, which are called affinities, have been determined, the process of determining the relationships between system elements (affinities) will be described. The overall placement of the affinities will be presented in a system influence diagram. These relationships will be illustrated visually in the form of a Systems Influence Diagramme\textsuperscript{17} (SID).

4.2 OVERVIEW OF IQA RESEARCH FLOW

“IQA research flow has four distinct phases: research design, focus group, interview and report” (Northcutt & McCoy 2004:44). The research participants in an IQA study are identified after the research problem has been clearly articulated. Based on the research problem participants who are regarded as being the closest to the phenomenon are then

\textsuperscript{16} Compare Chapter 1, par. 1.6
\textsuperscript{17} The SID will be discussed in Chapter 4, par. 4.2.
identified. The participants in an IQA process are referred to as a constituency and form the focus group that will generate and analyse data relating to the phenomenon. The focus group is responsible for identifying the elements of the phenomenon, which are called affinities. Once the affinities are clearly defined, the group members are asked to analyse the nature of relationships between each of the affinities and record their responses in an Affinity Relationship Table. A Detailed Affinity Relationship Table is included in Appendix 1.

The next step is to build the group Interrelationship Diagram (IRD), which is used to produce the group mind map since it contains all the required information. The research participants investigate the affinities by developing propositions of cause and effect from their own data. This activity is called theoretical coding and creates an extended reality for the group through discussion. Theoretical coding of the affinities results in an Interrelations Diagram (IRD) which displays all the relationships among the affinities (Northcutt & McCoy 2004:48).

The System Influence Diagram (SID), which is also called a mind map, represents the entire system of influences and outcomes visually. The SID is roughly analogous to a path diagram but is distinguished from traditional path diagrams because recursion or feedback loops are allowed. The SID is grounded in the specific experiences and logic of the participants (Northcutt & McCoy 2004:48). More detail will be provided when the cluttered and clean SID is created.

The IQA approach to qualitative research makes use of the Pareto Principle because it is regarded as “a powerful technique for achieving and documenting the degree of consensus in a focus group” (Northcutt & McCoy 2004:156). The authors (2004:156) describe the essential utility of the Pareto Principle as follows:

A minority of the relationships in any system will account for a majority of the variation within the system. Depending on the variation of theoretical coding used, it is quite likely that there will be some disagreement among either individuals or subgroups about the nature of a given relationship. IQA uses the Pareto rule of thumb operationally to achieve consensus and analytically to create a statistical group composite.

The Pareto Protocol with the minimum variance and maximum variance is described in par. 4.3.2 of this chapter.
The results are presented in a logical, structured way. Affinities are identified and well documented by the constituency (focus group). The process that produced these systems aids the writing process. The report of this research will name and describe the elements of the system and will also explain the relationships among them (system dynamics).

The last step in the IQA research approach is to exercise the system by casting scenarios. A system or a model, like a mind map or SID, is created and exercised. Exercising the model can be done in three basic ways according to (Northcutt & McCoy 2004:51):

- The model may be utilised to predict the ultimate state of outcome affinities in the light of known states of its antecedent affinities.
- The opposite may be done, which is to ask what antecedents might lead to a particular state of outcomes.
- The effect of extra systemic influences or those forces not named or accounted for in the system might be questioned.

Northcutt and McCoy (2004:51) state the following with regard to IQA methodology:

*IQA methodology allows for a representation of both individual and group realities, comparisons of which allow the researcher to ask the two great interpretive questions: What is …? And What if …?*

4.2.1 IDENTIFYING CONSTITUENCY

This is not a comparative study. The constituency will comprise only one group of masters students in educational psychology who have consulted with at least one career client and are willing to be participants in the research. A constituency is selected from a group of people that are closest to the phenomenon.

4.2.2 RESEARCH QUESTIONS

What are educational psychology students' self-efficacy beliefs as career counsellors?

4.2.3 SUB-QUESTIONS

- What counsellor competencies do educational psychology students regard as important?

---

18 Refer to Chapter 1, par. 1.2.3.
• How do educational psychology students perceive their abilities to perform career counselling?
• How do educational psychology students come to believe in their ability to perform career counselling?
• How does supervision influence educational psychology students’ self-efficacy beliefs in career counselling?

4.2.4 DEMOGRAPHIC DATA

The participants’ data were as follows:

6 white females
1 black female
1 white male

Their ages varied between 23 years and 45 with the majority younger than 30. The one black female participant did not complete the detailed affinity relationship table.

4.2.5 IDENTIFYING AFFINITIES

According to the primary research problem stated earlier in this chapter and in Chapter 1, this group of student were identified as research participants based on their position I relation to the phenomenon. All the participants are career-counselling students who have worked with career counselling clients and thus would be able to relate to the research question. Eight masters educational psychology students of the University of Pretoria participated in the study. The focus group was informed about the nature of the research and how this related to them.

4.2.6 FOCUS GROUP SESSIONS

The focus group sessions were scheduled at a time that was convenient for all participants and took place at a venue at the University of Pretoria.

The participants were primed for the focus group sessions with the use of a guided imagery exercise. During this exercise participants were asked to close their eyes and relax by taking deep breaths and putting aside thoughts about the day. They were asked to reflect their experiences during their last contact with a career client and the supervision they received. What thoughts and emotions were involved? What memories did they have?
What were their impressions of their interaction with the client and supervisor? They were then given issue statements.

- How do you feel about yourself as career counsellor?
- Tell me what you think an effective counsellor is?
- Tell me how supervision influences how you feel about yourself as a counsellor?

Table 4.1 describes the warm-up exercise used by the facilitator:

<table>
<thead>
<tr>
<th>TABLE 4.1: WARM-UP EXERCISE</th>
</tr>
</thead>
<tbody>
<tr>
<td>In a few minutes, I am going to ask you to explore your experiences when working with career clients.</td>
</tr>
<tr>
<td>▪ To begin, try to get as comfortable as you can</td>
</tr>
<tr>
<td>▪ Close your eyes</td>
</tr>
<tr>
<td>▪ Putting aside your thoughts of the day, take a deep, cleansing breath</td>
</tr>
<tr>
<td>▪ Now imagine yourself in the last session you had with a career client.</td>
</tr>
<tr>
<td>o Meeting the clients</td>
</tr>
<tr>
<td>o Interview with client and parents</td>
</tr>
<tr>
<td>o Selection of media</td>
</tr>
<tr>
<td>o Doing the assessment, implementing media</td>
</tr>
<tr>
<td>o Working with the client</td>
</tr>
<tr>
<td>o Interpreting the media</td>
</tr>
<tr>
<td>o Supervision by the supervisor</td>
</tr>
<tr>
<td>o Feedback interview</td>
</tr>
<tr>
<td>▪ See yourself engaging in the activities of assessment and feedback (long pause)</td>
</tr>
<tr>
<td>▪ Allow yourself to become aware of your environment with all of your senses</td>
</tr>
<tr>
<td>▪ Focus on what it feels like to be totally absorbed in the career counselling and supervision. Be there in your mind (long pause)</td>
</tr>
<tr>
<td>▪ Now share your experiences about the following</td>
</tr>
<tr>
<td>o How do you feel about yourself as career counsellor?</td>
</tr>
<tr>
<td>o Tell me what you think an effective counsellor is?</td>
</tr>
<tr>
<td>o Tell me how supervision influences how you feel about yourself as counsellor?</td>
</tr>
<tr>
<td>▪ Write these thoughts down on cards</td>
</tr>
<tr>
<td>▪ Write one thought per card</td>
</tr>
</tbody>
</table>

The guided imagery process continued for about five minutes during which the participants were asked to reflect on their experiences during their last session with a career client. The facilitator assured the group that they were allowed to brainstorm their experiences without fear of being censored. The group was asked to think of words, phrases, mental pictures, or memories of their experiences as career counsellors. The group members were provided with flash cards on which they could write the thoughts, emotions and memories they experienced during the guided imagery exercise. According to IQA guidelines (Northcutt & McCoy 2004:xii) the participants were requested to write one experience per card and they were assured that they did not have to be concerned with what the rest of the group wrote down. They were furthermore assured that their responses were confidential and that the identity of the author of each card would remain anonymous.
The cards shown in Table 4.2, which are arranged in alphabetical order, were produced during two sessions.

**Table 4.2: Participants’ Experience of Career Counselling and Supervision**

| Able to collaborate with the client. Not to take responsibility for the career decision | Warmth |
| Accepting | Unconditional acceptance of clients |
| After being with the supervisor, I sometimes feel “incompetent” | Have inviting attitude |
| A good listener | Understanding |
| Allow client to lead | Someone with love |
| An effective counsellor has to be open-minded | Empathy |
| Because it feels like someone’s future is in my hands | Energised |
| Become aware of new skills through supervision | Energetic/Enthusiastic |
| Believe in yourself | Excited |
| Be up to date with latest career fields and possible careers | Excited at prospect of guiding people on their future journey |
| Be well prepared each time you see and assess | Experience |
| Be with and stay with clients | Fear of the unknown |
| Be yourself | Feel more in control |
| Brings unique style that makes client enthusiastic about the process | Felt supported |
| Career orientation is like a journey | Flexible |
| Cautious | Foundation |
| Concern that style won’t suit supervisor – adapt | For now, I still prefer to be with a supervisor when doing the intake and feedback interviews. It makes me feel more competent |
| Confidential | Good communicator |
| Creative | Good listening skills |
| Comfortable | Guides you |
| Dedicated | Have not gained enough knowledge and experience yet. I feel I need to explore more |
| Depends on who is the supervisor. Feel more at ease if the supervisor has the same approach as myself | Have to see opportunities for me to get important information |
| Do good research. Effective counsellor should have feelings of: | Plan |
| - I am able to probe into the relevant areas | Positive |
| - I am sometimes unsure which careers I should recommend | Relates well to people of all ages |
| - I can say that I am not yet there. I still have to learn more but I really feel I reach or touch the clients’ inner feelings | Relationships I build with clients make me feel good |
| - I can say that I learn more of the counselling skills when the supervisor is present | Relatively confident but I feel that I’m carrying a lot of responsibility |
| | Researcher |
| | Resources and assets |
| | Results in self-confidence It allows for growth |
| | Rustig |
| | Secure in oneself – Self-confident |
| | Self-assured |
During the next stage as described in Northcutt and McCoy (2004:110) the participants were asked to read the cards silently. After the group completed the activity, the facilitator read each card aloud. The group was asked if each card made sense. If any member required clarity with regard to a given card the group assisted in explaining the meaning of that particular card. In this group the author usually did not hesitate to come forward to clarify the meaning of the cards she/he wrote (although they were informed several times that they could remain anonymous).

| - I feel I have to think faster to stay with the client and have the next question ready | - Someone who can stay with his client |
| - I feel I need more guidelines of feedback and interviewing | - Supervision |
| - I feel inexperienced with my communication skills | - Feelings of anxiety |
| • Informed and up to date | • Organised |
| • Initially anxious —> after first case feel more competent. It relates to personality | • Passion and interest |
| • Insight | • People skills |
| • Interest in people and world of work | • Need feedback |
| • Intuition | • Doubt in myself and own abilities |
| • It allows me to explore and be more free in my approach | • Supervisor takes the lead |
| • It encourages me to use more dynamic approaches | • It serves as a guideline and provides necessary and useful evaluation of my skills from another perspective |
| • It helped me realise the importance of using my gut feeling | • Supervision —> security |
| • It helps to motivate me! Helps to focus me and offers insight | • Takes all the role-players into consideration (tries to get a broad picture of the client) |
| • I think with supervision a lot of issues are clarified | • Try to be relaxed because it will influence your way of thinking |
| • It’s reassuring | • Understanding |
| • Keeps the clients needs at the centre of counselling | • Use your discretion |
| • Knowledge about careers and theories | • Utilize silent periods |
| • Like a journey | • What are the boundaries of confidentiality? Who is the client? Who must receive feedback? |
| • Locus of control | • With supervision, it helps because where you missed the point, the supervisor will give clarity! You need to have a theoretical grounding regarding career development |
| • Motivated to try my best | • You need to have relevant knowledge of career information |
| • Need more advice and interaction with colleagues to talk things over and share experiences | |
| • Need more experience | |
| • OK, but need more experience, especially with the feedback session | |
| • Optimistic | |
The group clarified the meanings of the cards. According to Northcutt and McCoy (2004:110) the group (again silently) have to move the cards into columns. The cards in the columns were to have a similar theme. If anyone disagreed with where a card had been moved, they were to feel free to move it to another column. This went on for several minutes until the group felt that each card was in place. Members could also write another card if they felt the card belonged to two groups. After the cards were placed and meanings were clarified, the group was given an opportunity to write out any new cards that might have come to mind after reading what the others wrote.

The facilitator asked the group to give the columns names. A new card reflecting the name was placed above each column. All the columns were named in this manner. Two of the columns were combined under one category. The original columns became sub-affinities of the new affinities. Each card was then re-examined to see if it did not fit in one of the newly named columns. If categories seemed to be overly complex, the group was instructed to see if subcategories were necessary. Each column was then re-arranged to reflect the subcategories. Each subcategory was also given a name. The affinity production exercise was now completed.

Later that day the researcher typed up the cards and affinities. Seeing that the participants were not available to contribute to the write-up, the facilitator had to complete it.

4.2.7 Composite affinity descriptions (affinity write-up)

The constituency generated more than eighty-five responses in the form of a word, phrase or sentence based on their perceptions of their self-efficacy as career counsellors. The information on these cards was used to identify themes (referred to as affinities in the IQA approach – Northcutt & McCoy 2004:114).

The group produced the following affinities:

1. Authenticity (being yourself).
2. Contextualisation (creating context).
   - Foundation.
   - Extension of foundation.
   - Growth and development.
   - Teamwork.
3. Effective communication skills.
4. Potential areas of growth.


- Areas where growth is needed.
- Ways to create growth.

5. Preparation.
7. Traits of an effective career counsellor.
8. Counsellors’ attitude.

The facilitator at this stage required the participants to produce an affinity write-up. The affinity write-up accounts for all the cards generated in each affinity and any discussion that occurred during the focus group session. In the last instance the facilitator compiled one large affinity write-up from all the responses developed by the participants (Northcutt & McCoy 2004:114).

(1) Authenticity
This affinity represents how the group felt about the authenticity of the counsellor. They expect the counsellor to be comfortable with herself with a lot of insight and motivated to try her best, and show it in a confident way while counselling.

**TABLE 4.3: AUTHENTICITY**

- Be yourself
- Calm
- Comfortable
- Insight
- Motivated to try your best
- Secure in yourself
- Self-confident

(2) Contextualisation
This affinity represents the contextualisation (creating of context) to deal with clients’ problem holistically. Consideration of all factors is important, *inter alia* the collaborative relationships with the client, and all role-players. The counsellor’s knowledge of theories, careers and developments as well as her skills are important. The counsellor must be a researcher who is able to identify resources and assets. The counsellor must familiarise herself with the history and experiences of her client. Sharing the client’s experience will enable the counsellor to understand her client in context.
TABLE 4.4: CONTEXTUALISATION

<table>
<thead>
<tr>
<th>Foundation</th>
<th>Extension of foundation</th>
<th>Growth and development</th>
<th>Teamwork</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Need knowledge on careers</td>
<td>• Be informed and up to date</td>
<td>• Career counselling is a journey</td>
<td>• Collaboration with client</td>
</tr>
<tr>
<td>• Need theoretical grounding</td>
<td>• Researcher</td>
<td>• Experience</td>
<td>• Consider all role-players</td>
</tr>
<tr>
<td>• Skilled</td>
<td>• Resources and assets</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(3) Effective communication skills
This affinity stresses the importance of good communication skills, which should enable the counsellor to hear what the client says and also what is not said. Probing skills and the ability to communicate a non-judgemental understanding should be used. The counsellor is required to “stand in the client’s shoes”. The counsellor must be relaxed and know how to utilize silences to show empathy. The counsellor should “stay with the client” and at the same time allow the client to lead. Good listening skills and the use of discretion are regarded as important counsellor skills.

TABLE 4.5: EFFECTIVE COMMUNICATION SKILLS

- Able to probe
- Allow client to lead
- Be relaxed
- Empathy
- Good listening skills
- People skills
- Stay with client
- Understanding and accepting
- Use discretion. up to date
- Utilising silences

(4) Potential areas of growth
This affinity represents the overall feeling of responsibility towards the client. A lack of experience on the counsellor’s side, anxious feelings to take responsibility and the
knowledge of one’s shortcomings are problem areas that hamper student in counselling. The locus of control for student counsellors is “to do things right”. They express a need for experience on how to work with adults. Reflection and knowledge of shortcomings are necessary to help a counsellor focus. Initial anxiety and the knowledge that someone’s future is in your hands will force you to be well prepared. Reflection and interaction with clients as well as experience will enhance growth.

**TABLE 4.6: POTENTIAL AREAS OF GROWTH**

<table>
<thead>
<tr>
<th>Areas where growth is needed:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Fear of unknown</td>
</tr>
<tr>
<td>• Inexperience</td>
</tr>
<tr>
<td>• Inexperience with communication skills</td>
</tr>
<tr>
<td>• Initially anxious</td>
</tr>
<tr>
<td>Limits of confidentiality (to whom must feedback be given?)</td>
</tr>
<tr>
<td>• Locus of control</td>
</tr>
<tr>
<td>• Must think faster to stay with client</td>
</tr>
<tr>
<td>• Responsibility</td>
</tr>
<tr>
<td>• Someone’s future is in my hands</td>
</tr>
<tr>
<td>• Uncertain about recommendation of careers</td>
</tr>
<tr>
<td>• Up to date with career information</td>
</tr>
<tr>
<td><strong>Ways to create growth</strong></td>
</tr>
<tr>
<td>• Need advice and interaction with colleagues</td>
</tr>
<tr>
<td>• Need experience.</td>
</tr>
<tr>
<td>• Need experience with feedback interview</td>
</tr>
<tr>
<td>• Need guidance with intake interview</td>
</tr>
</tbody>
</table>

(5) Preparation

This affinity represents the responsibility of the counsellor to take nothing for granted but to plan for every session and activity e.g. intake interview, media, assessment, feedback, client’s homework, therapy. Being organised is regarded as important. This entails proper planning and preparation for each session.

**TABLE 4.7: PREPARATION**

- Plan
- Well prepared for each session
(6) Supervision
This affinity represents all the aspects of supervision. The counsellor feels safer to explore and develop confidence when under supervision. Sometimes the counsellor adapts to the supervisor but feels better if she has the same style as the supervisor. Supervision is experienced as supportive but can also cause anxiety. Supervision entails all the planning sessions as well as reflection of activities with the supervisor. Supervision can lead to feelings of incompetence when feedback is not done with enough clarification and understanding. Supervision must allow for growth but should also provide space for doubting one's own competence. Evaluation, encouragement, guidelines and feedback is important and must be done in such a way that supervision is experienced as a reassuring safety net which contributes to security and reduction of feelings of anxiety.

**TABLE 4.8: SUPERVISION**

<table>
<thead>
<tr>
<th>Allows for growth</th>
<th>Leads</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clarification</td>
<td>Learn counselling skills in</td>
</tr>
<tr>
<td>Doubt own skills</td>
<td>presence of supervisor</td>
</tr>
<tr>
<td>Encourage to believe in yourself</td>
<td>Makes me feel incompetent</td>
</tr>
<tr>
<td>Encourage dynamic approaches</td>
<td>Need for feedback</td>
</tr>
<tr>
<td>Evaluation</td>
<td>Reassuring</td>
</tr>
<tr>
<td>Feel in control</td>
<td>Safety net</td>
</tr>
<tr>
<td>Feelings of anxiety</td>
<td>Security</td>
</tr>
<tr>
<td>Good feedback interview</td>
<td>Style of supervisor: adapt</td>
</tr>
<tr>
<td>Good intake interview</td>
<td>Supervisor style: more at ease</td>
</tr>
<tr>
<td>Guide student</td>
<td>when supervisor has same style</td>
</tr>
<tr>
<td>Guidelines</td>
<td>as oneself depends on supervisor</td>
</tr>
<tr>
<td>Journey</td>
<td>Support</td>
</tr>
</tbody>
</table>

(7) Traits of effective career counsellor
This affinity entails the person of the counsellor and how he presents himself in the counselling situation. A counsellor should be a warm, sensitive person that can stay with the client, open- minded, flexible and creative with a non-judgemental interest in people and the world of work. The counsellor must place clients first and communicate unconditional acceptance by showing interest in her client with an inviting attitude.
TABLE 4.9:  TRAITS OF EFFECTIVE CAREER COUNSELLOR

- Cautious
- Clients needs are central
- Creative
- Dedicate
- Flexible
- Interest in people
- Interest in world of work
- Intuition
- Inviting attitude
- Open-minded
- Stay with client.
- Unconditional acceptance
- Warm

(8) Counsellor’s attitude

This affinity represents the general attitude of a good counsellor. This person is an optimistic person who radiates positive energy and passion with a cautious unique style. Counsellor should be positive and radiate energy. An energised, enthusiastic, excited approach is important when consulting with clients. The career counsellor must be able to relate well to clients of all ages because they have to deal with a diverse group (parents and children).

TABLE 4.10:  COUNSELLOR’S ATTITUDE

- Cautious
- Energetic
- Energised
- Enthusiastic
- Excited
- Optimistic
- Passion and interest
- Positive
- Relate well to all people of all ages
- Unique style
4.3 GROUP REALITY: SYSTEM ELEMENTS

4.3.1 DETAILED AFFINITY RELATIONSHIP TABLE (ART)

The purpose of the ART is to leave an audit trail – “a record of the reasoning and examples taken from the experience of the participants” (Northcutt & McCoy 2004:152). These examples are valuable later to ground the interpretation of the experiences of the participants. Analysing relationships among affinities are preferably done by means of hypothetical construction (Northcutt & McCoy 2004:150).

The Affinity Relationship Table (ART) (Annexure 1) is used to record the participant’s opinion (Northcutt & McCoy 2004:152). Each focus group member is asked to determine the nature of the relationship between all possible pairs of affinities on Annexure 1 (included as Appendix 1). Participants are asked to write a statement that reflects their experiences and that supports the cause-and-effect relationships for the affinity pair.

Each participant worked independently in completing the IRD (Annexure 1), tailored to the particular number of affinities produced by the group. The researcher was available as a resource, making group-generated details of the affinities available to individuals as they worked their way through the affinity pairs.

4.3.2 GROUP COMPOSITE

“The Pareto Protocol is a statistical method to develop a group composite” (Northcutt & McCoy 2004:156). According to the IQA approach the Pareto Principle is used (Northcutt & McCoy 2004:157). An exact count of each relationship code is required to perform the Pareto Composite. Each relationship frequency is determined and recorded on a spreadsheet (Microsoft Excel is used) by tallying all of the relationships from the ARTS. The total number of votes for each relationship was calculated (Northcutt & McCoy 2004:157) and printed in an Affinity Table (Frequency Table 4.11.).

**TABLE 4.11: FREQUENCY IN AFFINITY PAIR ORDER**

<table>
<thead>
<tr>
<th>Affinity pair relationship</th>
<th>Frequency</th>
<th>Affinity pair relationship</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 → 2</td>
<td>3</td>
<td>1 ← 2</td>
<td>4</td>
</tr>
<tr>
<td>1 ← 2</td>
<td>6</td>
<td>1 → 3</td>
<td>6</td>
</tr>
<tr>
<td>1 ← 3</td>
<td>1</td>
<td>Sub total</td>
<td>97</td>
</tr>
<tr>
<td>3 ← 5</td>
<td>6</td>
<td>3 → 6</td>
<td>4</td>
</tr>
<tr>
<td>3 ← 6</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affinity pair relationship</td>
<td>Frequency</td>
<td>Affinity pair relationship</td>
<td>Frequency</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-----------</td>
<td>-----------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>1 → 4</td>
<td>2</td>
<td>3 → 7</td>
<td>4</td>
</tr>
<tr>
<td>1 ← 4</td>
<td>4</td>
<td>3 ← 7</td>
<td>3</td>
</tr>
<tr>
<td>1 → 5</td>
<td>2</td>
<td>3 → 8</td>
<td>1</td>
</tr>
<tr>
<td>1 ← 5</td>
<td>5</td>
<td>3 ← 8</td>
<td>5</td>
</tr>
<tr>
<td>1 → 6</td>
<td>2</td>
<td>4 → 5</td>
<td>3</td>
</tr>
<tr>
<td>1 ← 6</td>
<td>5</td>
<td>4 ← 5</td>
<td>4</td>
</tr>
<tr>
<td>1 → 7</td>
<td>3</td>
<td>4 ← 6</td>
<td>0</td>
</tr>
<tr>
<td>1 ← 7</td>
<td>4</td>
<td>4 ← 6</td>
<td>7</td>
</tr>
<tr>
<td>1 → 8</td>
<td>4</td>
<td>4 ← 7</td>
<td>4</td>
</tr>
<tr>
<td>1 ← 8</td>
<td>3</td>
<td>4 ← 7</td>
<td>2</td>
</tr>
<tr>
<td>2 → 3</td>
<td>4</td>
<td>4 ← 8</td>
<td>4</td>
</tr>
<tr>
<td>2 ← 3</td>
<td>3</td>
<td>4 ← 8</td>
<td>3</td>
</tr>
<tr>
<td>2 → 4</td>
<td>1</td>
<td>5 → 6</td>
<td>2</td>
</tr>
<tr>
<td>2 ← 4</td>
<td>6</td>
<td>5 ← 6</td>
<td>5</td>
</tr>
<tr>
<td>2 → 5</td>
<td>4</td>
<td>5 ← 7</td>
<td>2</td>
</tr>
<tr>
<td>2 ← 5</td>
<td>3</td>
<td>5 ← 7</td>
<td>5</td>
</tr>
<tr>
<td>2 → 6</td>
<td>3</td>
<td>5 ← 8</td>
<td>3</td>
</tr>
<tr>
<td>2 ← 6</td>
<td>4</td>
<td>5 ← 8</td>
<td>3</td>
</tr>
<tr>
<td>2 → 7</td>
<td>2</td>
<td>6 → 7</td>
<td>3</td>
</tr>
<tr>
<td>2 ← 7</td>
<td>5</td>
<td>6 ← 7</td>
<td>3</td>
</tr>
<tr>
<td>2 → 8</td>
<td>1</td>
<td>6 ← 8</td>
<td>3</td>
</tr>
<tr>
<td>2 ← 8</td>
<td>5</td>
<td>6 ← 8</td>
<td>4</td>
</tr>
<tr>
<td>3 → 4</td>
<td>3</td>
<td>7 → 8</td>
<td>3</td>
</tr>
<tr>
<td>3 ← 4</td>
<td>4</td>
<td>7 ← 8</td>
<td>3</td>
</tr>
<tr>
<td>3 → 5</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Sub total                   | 97        | Total                       | 189       |

Cumulative percentages were then calculated for each relationship as presented in Table 4.12 and Figure 4.1. Thus a Pareto Chart was constructed. The cumulative frequencies are used for two purposes, namely:

- The optimal number of relationships to comprise the composite system is determined. For the sake of comprehensiveness and richness the researcher’s goal was to use the fewest number of relationships that represent the greatest amount of variation. In this process the relationships that attract a very low percentage of votes are generally excluded from the group composite.
- Relationships that attract votes in either direction are ambiguous and the Pareto Chart helps to resolve these relationships (Northcutt & McCoy 2004:157).

**TABLE 4.12: CUMULATIVE PERCENTAGE (FREQUENCY) AFFINITY PAIR RELATIONSHIP**

<table>
<thead>
<tr>
<th>Affinity pair relationship</th>
<th>Cumulative Per cent (frequency)</th>
<th>Affinity pair relationship</th>
<th>Cumulative Per cent (frequency)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3.703703704</td>
<td>29</td>
<td>67.72486772</td>
</tr>
<tr>
<td>2</td>
<td>6.878306878</td>
<td>30</td>
<td>69.31216931</td>
</tr>
<tr>
<td>3</td>
<td>10.05291005</td>
<td>31</td>
<td>70.8994709</td>
</tr>
<tr>
<td>4</td>
<td>13.22751323</td>
<td>32</td>
<td>72.48677249</td>
</tr>
<tr>
<td>5</td>
<td>15.87301587</td>
<td>33</td>
<td>74.07407407</td>
</tr>
<tr>
<td>6</td>
<td>18.51851852</td>
<td>34</td>
<td>75.66137566</td>
</tr>
<tr>
<td>7</td>
<td>21.16402116</td>
<td>35</td>
<td>77.24867725</td>
</tr>
<tr>
<td>8</td>
<td>23.80952381</td>
<td>36</td>
<td>78.83597884</td>
</tr>
<tr>
<td>9</td>
<td>26.45502646</td>
<td>37</td>
<td>80.42328042</td>
</tr>
<tr>
<td>10</td>
<td>29.1005291</td>
<td>38</td>
<td>82.01058201</td>
</tr>
<tr>
<td>11</td>
<td>31.74603175</td>
<td>39</td>
<td>83.5978836</td>
</tr>
<tr>
<td>12</td>
<td>33.86243386</td>
<td>40</td>
<td>85.18518519</td>
</tr>
<tr>
<td>13</td>
<td>35.97883598</td>
<td>41</td>
<td>86.77248677</td>
</tr>
<tr>
<td>14</td>
<td>38.0952381</td>
<td>42</td>
<td>88.35978836</td>
</tr>
<tr>
<td>15</td>
<td>40.21164021</td>
<td>43</td>
<td>89.94708995</td>
</tr>
<tr>
<td>16</td>
<td>42.32804233</td>
<td>44</td>
<td>91.00529101</td>
</tr>
<tr>
<td>17</td>
<td>44.44444444</td>
<td>45</td>
<td>92.06349206</td>
</tr>
<tr>
<td>18</td>
<td>46.56084656</td>
<td>46</td>
<td>93.12169312</td>
</tr>
<tr>
<td>19</td>
<td>48.67724868</td>
<td>47</td>
<td>94.17989418</td>
</tr>
<tr>
<td>20</td>
<td>50.79365079</td>
<td>48</td>
<td>95.23809524</td>
</tr>
<tr>
<td>21</td>
<td>52.91005291</td>
<td>49</td>
<td>96.2962963</td>
</tr>
<tr>
<td>22</td>
<td>55.02645503</td>
<td>50</td>
<td>97.35449735</td>
</tr>
<tr>
<td>23</td>
<td>57.14285714</td>
<td>51</td>
<td>97.88359788</td>
</tr>
<tr>
<td>24</td>
<td>59.25925926</td>
<td>52</td>
<td>98.41269841</td>
</tr>
<tr>
<td>25</td>
<td>61.37566138</td>
<td>53</td>
<td>98.94179894</td>
</tr>
<tr>
<td>26</td>
<td>62.96296296</td>
<td>54</td>
<td>99.47089947</td>
</tr>
<tr>
<td>27</td>
<td>64.55026455</td>
<td>55</td>
<td>100</td>
</tr>
<tr>
<td>28</td>
<td>66.13756614</td>
<td>56</td>
<td>100</td>
</tr>
</tbody>
</table>
The relationships were sorted next in descending order of frequency and the cumulative frequencies and percentages were calculated in terms of both the total number of relationships (56) as well as the total number of votes.

**Figure 4.1:** Cumulative Percentage

Table 4.13 contains the same frequencies as Table 4.12, but they have been sorted in descending order of frequency.

**Table 4.13:** Affinities in descending order of frequency with Pareto and Power Analysis

<table>
<thead>
<tr>
<th>Affinity pair relationship</th>
<th>Frequency Sorted (descending)</th>
<th>Cumulative Frequency</th>
<th>Cumulative Per cent (relation)</th>
<th>Cumulative Per cent (frequency)</th>
<th>Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4 ← 6</td>
<td>7</td>
<td>1.7857143</td>
<td>3.7037037</td>
<td>1.917989</td>
</tr>
<tr>
<td>2</td>
<td>1 → 3</td>
<td>6</td>
<td>3.5714286</td>
<td>6.8783069</td>
<td>3.306878</td>
</tr>
<tr>
<td>3</td>
<td>2 ← 4</td>
<td>6</td>
<td>5.3571429</td>
<td>10.05291</td>
<td>4.695767</td>
</tr>
<tr>
<td>4</td>
<td>3 ← 5</td>
<td>6</td>
<td>7.1428571</td>
<td>13.227513</td>
<td>6.084656</td>
</tr>
<tr>
<td>5</td>
<td>1 ← 5</td>
<td>5</td>
<td>8.9285714</td>
<td>15.873016</td>
<td>6.944444</td>
</tr>
<tr>
<td>6</td>
<td>1 ← 6</td>
<td>5</td>
<td>10.714286</td>
<td>18.518519</td>
<td>7.804233</td>
</tr>
<tr>
<td>7</td>
<td>2 ← 7</td>
<td>5</td>
<td>12.5</td>
<td>21.164021</td>
<td>8.664021</td>
</tr>
<tr>
<td>8</td>
<td>2 ← 8</td>
<td>5</td>
<td>14.285714</td>
<td>23.809524</td>
<td>9.52381</td>
</tr>
<tr>
<td>9</td>
<td>3 ← 8</td>
<td>5</td>
<td>16.071429</td>
<td>26.455026</td>
<td>10.3836</td>
</tr>
<tr>
<td>10</td>
<td>5 ← 6</td>
<td>5</td>
<td>17.857143</td>
<td>29.100529</td>
<td>11.24339</td>
</tr>
<tr>
<td>11</td>
<td>5 ← 7</td>
<td>5</td>
<td>19.642857</td>
<td>31.746032</td>
<td>12.10317</td>
</tr>
<tr>
<td>12</td>
<td>1 ← 4</td>
<td>4</td>
<td>21.428571</td>
<td>33.862434</td>
<td>12.43386</td>
</tr>
<tr>
<td>13</td>
<td>1 ← 7</td>
<td>4</td>
<td>23.214286</td>
<td>35.978836</td>
<td>12.76455</td>
</tr>
<tr>
<td>Affinity pair relationship</td>
<td>Frequency Sorted (descending)</td>
<td>Cumulative Frequency</td>
<td>Cumulative Per cent (relation)</td>
<td>Cumulative Per cent (frequency)</td>
<td>Power</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-------------------------------</td>
<td>----------------------</td>
<td>-------------------------------</td>
<td>---------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>14 1 ← 8</td>
<td>4</td>
<td>72</td>
<td>25</td>
<td>38.095238</td>
<td>13.09524</td>
</tr>
<tr>
<td>15 2 ← 3</td>
<td>4</td>
<td>76</td>
<td>40.21164</td>
<td>55.46260</td>
<td>14.32593</td>
</tr>
<tr>
<td>16 2 ← 5</td>
<td>4</td>
<td>80</td>
<td>28.571429</td>
<td>42.328042</td>
<td>13.75661</td>
</tr>
<tr>
<td>17 2 ← 6</td>
<td>4</td>
<td>84</td>
<td>30.357143</td>
<td>44.444444</td>
<td>14.0873</td>
</tr>
<tr>
<td>18 3 ← 4</td>
<td>4</td>
<td>88</td>
<td>32.142857</td>
<td>46.560847</td>
<td>14.41799</td>
</tr>
<tr>
<td>19 3 ← 6</td>
<td>4</td>
<td>92</td>
<td>33.928571</td>
<td>48.677249</td>
<td>14.74868</td>
</tr>
<tr>
<td>20 3 ← 7</td>
<td>4</td>
<td>96</td>
<td>35.714286</td>
<td>50.793651</td>
<td>15.07937</td>
</tr>
<tr>
<td>21 4 ← 5</td>
<td>4</td>
<td>100</td>
<td>37.5</td>
<td>52.910053</td>
<td>15.41005</td>
</tr>
<tr>
<td>22 4 ← 7</td>
<td>4</td>
<td>104</td>
<td>39.285714</td>
<td>55.026455</td>
<td>15.74074</td>
</tr>
<tr>
<td>23 4 ← 8</td>
<td>4</td>
<td>108</td>
<td>41.071429</td>
<td>57.142857</td>
<td>16.07143</td>
</tr>
<tr>
<td>24 6 ← 8</td>
<td>4</td>
<td>112</td>
<td>42.857143</td>
<td>59.259259</td>
<td>16.40212</td>
</tr>
<tr>
<td>25 1 ← 2</td>
<td>4</td>
<td>116</td>
<td>44.642857</td>
<td>61.375661</td>
<td>16.7328</td>
</tr>
<tr>
<td>26 1 ← 2</td>
<td>3</td>
<td>119</td>
<td>46.428571</td>
<td>62.962963</td>
<td>16.53439</td>
</tr>
<tr>
<td>27 1 ← 7</td>
<td>3</td>
<td>122</td>
<td>48.214286</td>
<td>64.550265</td>
<td>16.33598</td>
</tr>
<tr>
<td>28 1 ← 8</td>
<td>3</td>
<td>125</td>
<td>50</td>
<td>66.137566</td>
<td>16.13757</td>
</tr>
<tr>
<td>29 2 ← 3</td>
<td>3</td>
<td>128</td>
<td>51.785714</td>
<td>67.724868</td>
<td>15.93915</td>
</tr>
<tr>
<td>30 2 ← 5</td>
<td>3</td>
<td>131</td>
<td>53.571429</td>
<td>69.312169</td>
<td>15.74074</td>
</tr>
<tr>
<td>31 2 ← 6</td>
<td>3</td>
<td>134</td>
<td>55.357143</td>
<td>70.899471</td>
<td>15.54233</td>
</tr>
<tr>
<td>32 3 ← 4</td>
<td>3</td>
<td>137</td>
<td>57.142857</td>
<td>72.486772</td>
<td>15.34392</td>
</tr>
<tr>
<td>33 3 ← 6</td>
<td>3</td>
<td>140</td>
<td>58.928571</td>
<td>74.074074</td>
<td>15.1455</td>
</tr>
<tr>
<td>34 3 ← 7</td>
<td>3</td>
<td>143</td>
<td>60.714286</td>
<td>75.661376</td>
<td>14.94709</td>
</tr>
<tr>
<td>35 4 ← 5</td>
<td>3</td>
<td>146</td>
<td>62.5</td>
<td>77.248677</td>
<td>14.74868</td>
</tr>
<tr>
<td>36 4 ← 8</td>
<td>3</td>
<td>149</td>
<td>64.285714</td>
<td>78.835979</td>
<td>14.55026</td>
</tr>
<tr>
<td>37 5 ← 8</td>
<td>3</td>
<td>152</td>
<td>66.071429</td>
<td>80.42328</td>
<td>14.35185</td>
</tr>
<tr>
<td>38 5 ← 8</td>
<td>3</td>
<td>155</td>
<td>67.857143</td>
<td>82.010582</td>
<td>14.15344</td>
</tr>
<tr>
<td>39 6 ← 7</td>
<td>3</td>
<td>158</td>
<td>69.642857</td>
<td>83.597884</td>
<td>13.95503</td>
</tr>
<tr>
<td>40 6 ← 7</td>
<td>3</td>
<td>161</td>
<td>71.428571</td>
<td>85.185185</td>
<td>13.75661</td>
</tr>
<tr>
<td>41 6 ← 8</td>
<td>3</td>
<td>164</td>
<td>73.214286</td>
<td>86.772487</td>
<td>13.5582</td>
</tr>
<tr>
<td>42 7 ← 8</td>
<td>3</td>
<td>167</td>
<td>75</td>
<td>88.359798</td>
<td>13.35979</td>
</tr>
<tr>
<td>43 7 ← 8</td>
<td>3</td>
<td>170</td>
<td>76.785714</td>
<td>89.94709</td>
<td>13.16138</td>
</tr>
<tr>
<td>44 1 ← 4</td>
<td>2</td>
<td>172</td>
<td>78.571429</td>
<td>91.005291</td>
<td>12.43386</td>
</tr>
<tr>
<td>45 1 ← 5</td>
<td>2</td>
<td>174</td>
<td>80.357143</td>
<td>92.063492</td>
<td>11.70635</td>
</tr>
<tr>
<td>46 1 ← 6</td>
<td>2</td>
<td>176</td>
<td>82.142857</td>
<td>93.121693</td>
<td>10.97884</td>
</tr>
<tr>
<td>47 2 ← 7</td>
<td>2</td>
<td>178</td>
<td>83.928571</td>
<td>94.179894</td>
<td>10.25132</td>
</tr>
<tr>
<td>48 4 ← 7</td>
<td>2</td>
<td>180</td>
<td>85.714286</td>
<td>95.238095</td>
<td>9.52381</td>
</tr>
<tr>
<td>49 5 ← 6</td>
<td>2</td>
<td>182</td>
<td>87.5</td>
<td>96.296296</td>
<td>8.796296</td>
</tr>
<tr>
<td>50 5 ← 7</td>
<td>2</td>
<td>184</td>
<td>89.285714</td>
<td>97.354497</td>
<td>8.068783</td>
</tr>
<tr>
<td>51 1 ← 3</td>
<td>1</td>
<td>185</td>
<td>91.071429</td>
<td>98.835987</td>
<td>6.812169</td>
</tr>
<tr>
<td>52 2 ← 4</td>
<td>1</td>
<td>186</td>
<td>92.857143</td>
<td>98.412698</td>
<td>5.555556</td>
</tr>
<tr>
<td>53 2 ← 8</td>
<td>1</td>
<td>187</td>
<td>94.642857</td>
<td>98.941799</td>
<td>4.298942</td>
</tr>
</tbody>
</table>

--- 57 ---
In Table 4.14 the four additional calculations have been added:

**TABLE 4.14: ADDED CALCULATIONS**

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Cumulative frequency:</td>
<td>The running total or cumulative frequency is entered in this column. The frequency of votes cast for an affinity pair is added to the previous.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Cumulative per cent (relation):</td>
<td>Each one of the 56 relationships represents 1/56 or approximately 1.78% of the total possible number. The column represents a cumulative percentage based on the number of total possible relationships. This cumulative percentage is one of the two factors in the power index.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Cumulative percent (frequency):</td>
<td>The percentage of votes cast for an affinity pair is added to the previous total to comprise the cumulative percentage. The number of votes cast (189) is used to calculate the cumulative percentage.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Power:</td>
<td>The difference between the cumulative percent (frequency) and the cumulative percent relation gives you the Power as an index of the degree of optimisation of the system (Northcutt &amp; McCoy 2004:160).</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **The Min/Max Criterion**

  The last two columns of the Pareto Table are crucially important in deciding which relationships should be included in the group IRD. The question is one of where to set a cut-off point because the relationships are displayed in decreasing order of frequency. It has to be decided which relationships will be excluded from the IRD. According to Northcutt and McCoy (2004:160) relationships such as number 56, Table 4.13 should be excluded because it attracted only one vote.

- **Accounting for Maximum Variance**

  The researcher found that relatively few of the possible 56 relationships account for most of the variance; for example, the first 11 relationships (20% of the total) accounted for 32% of the variation and the first 25 (45% of the total) accounted for 61% of the variation.

- **Maximum Variance: Frequency**

  Figure 4.2 illustrates the variance accounted for by each succeeding relationship.
Minimizing the number of Affinities: Power

The following figure (Figure 4.3) contains the power analysis for the system:

Power reaches a maximum at 25 relationships, which accounts for 61% of the variation in this system; therefore 25 relationships would be a defensible choice for inclusion in the group IRD because it is an optimal number in the sense of the MinMax Criterion.
4.4 CREATING AN IRD

Creating an Interrelationship Diagram (IRD) is the first step in a general process called rationalizing the system (Northcutt & McCoy 2004:170). A matrix containing all the perceived relationships in the system issued to summarize the output of the Pareto Protocol is continued in an IRD. The arrows displayed in the IRD show whether each affinity in a pair is a perceived cause or an effect, or if there is no relationship between the affinities in the pair. Arrows are placed into the tables to indicate the direction of the relationship in the IRD. An arrow pointing from A to B (A —> B) is an indication that A is the influencing affinity (cause) and that B is the influenced affinity (effect). Below are the Composite IRD (Table 4.15) and IRD sorted in order of delta (Table 4.16):

**TABLE 4.15: TABULAR IRD**

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>Out</th>
<th>In</th>
<th>Δ</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>←</td>
<td>←</td>
<td>←</td>
<td>←</td>
<td>←</td>
<td>←</td>
<td>←</td>
<td>←</td>
<td>1</td>
<td>6</td>
<td>-5</td>
</tr>
<tr>
<td>2</td>
<td>↑</td>
<td>↑</td>
<td>←</td>
<td>↑</td>
<td>←</td>
<td>←</td>
<td>←</td>
<td>←</td>
<td>3</td>
<td>4</td>
<td>-1</td>
</tr>
<tr>
<td>3</td>
<td>←</td>
<td>←</td>
<td>←</td>
<td>↑</td>
<td>↑</td>
<td>↑</td>
<td>↑</td>
<td>↑</td>
<td>2</td>
<td>5</td>
<td>-3</td>
</tr>
<tr>
<td>4</td>
<td>↑</td>
<td>↑</td>
<td>↑</td>
<td>←</td>
<td>←</td>
<td>←</td>
<td>↑</td>
<td>↑</td>
<td>5</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>↑</td>
<td>←</td>
<td>↑</td>
<td>←</td>
<td>←</td>
<td>←</td>
<td>←</td>
<td>←</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>↑</td>
<td>↑</td>
<td>←</td>
<td>↑</td>
<td>←</td>
<td>←</td>
<td>←</td>
<td>←</td>
<td>4</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>↑</td>
<td>↑</td>
<td>←</td>
<td>←</td>
<td>↑</td>
<td>←</td>
<td>←</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>↑</td>
<td>↑</td>
<td>↑</td>
<td>←</td>
<td>←</td>
<td>↑</td>
<td>←</td>
<td>←</td>
<td>1</td>
<td>6</td>
<td>-5</td>
</tr>
</tbody>
</table>

**TABLE 4.16: TABULAR IRD – SORTED IN DESCENDING ORDER OF Δ**

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>Out</th>
<th>In</th>
<th>Δ</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>↑</td>
<td>↑</td>
<td>↑</td>
<td>←</td>
<td>↑</td>
<td>←</td>
<td>←</td>
<td>←</td>
<td>4</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>↑</td>
<td>↑</td>
<td>↑</td>
<td>←</td>
<td>←</td>
<td>←</td>
<td>↑</td>
<td>↑</td>
<td>5</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>↑</td>
<td>↑</td>
<td>←</td>
<td>↑</td>
<td>←</td>
<td>←</td>
<td>←</td>
<td>←</td>
<td>4</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>↑</td>
<td>↑</td>
<td>←</td>
<td>←</td>
<td>↑</td>
<td>←</td>
<td>←</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>↑</td>
<td>←</td>
<td>↑</td>
<td>←</td>
<td>←</td>
<td>←</td>
<td>←</td>
<td>←</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>↑</td>
<td>←</td>
<td>↑</td>
<td>←</td>
<td>←</td>
<td>←</td>
<td>←</td>
<td>←</td>
<td>3</td>
<td>4</td>
<td>-1</td>
</tr>
<tr>
<td>3</td>
<td>←</td>
<td>←</td>
<td>←</td>
<td>←</td>
<td>←</td>
<td>←</td>
<td>←</td>
<td>←</td>
<td>2</td>
<td>5</td>
<td>-3</td>
</tr>
<tr>
<td>1</td>
<td>←</td>
<td>↑</td>
<td>←</td>
<td>←</td>
<td>←</td>
<td>←</td>
<td>←</td>
<td>←</td>
<td>1</td>
<td>6</td>
<td>-5</td>
</tr>
</tbody>
</table>

The relative position of an affinity within the system is determined by the value of delta. Affinities with a positive delta are relative drivers or causes; those with negative deltas are relative effects or outcomes. The Tentative SID Assignments Table (Table 4.17) represents the initial placement of affinities for the SID.
### TABLE 4.17: TENTATIVE SID ASSIGNMENTS

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Primary driver</td>
</tr>
<tr>
<td>4</td>
<td>Secondary driver</td>
</tr>
<tr>
<td>6</td>
<td>Secondary driver</td>
</tr>
<tr>
<td>7</td>
<td>Secondary driver</td>
</tr>
<tr>
<td>5</td>
<td>Pivot/circulator</td>
</tr>
<tr>
<td>2</td>
<td>Secondary outcome</td>
</tr>
<tr>
<td>3</td>
<td>Secondary outcome</td>
</tr>
<tr>
<td>1</td>
<td>Primary outcome</td>
</tr>
</tbody>
</table>

### 4.5 FOCUS GROUP SYSTEMS INFLUENCE DIAGRAM (SID)

The visual representation of the entire system of influences and outcomes is called the System Influence Diagram (SID). Northcutt and McCoy (2004:170) state that: “The SID is a visual representation of an entire system of influences and outcomes and is created by representing the information present in the IRD as a system of affinities and relationships among them.” The Inspiration software program is used for the presentation. All the affinities are arranged according to the tentative SID assignment chart. The affinities are first placed out in rough order of topological zones – primary drivers to the left of the screen, and primary outcomes to the right. Secondary drivers and secondary outcomes are then placed between the primaries. Each affinity is placed in an oval. Then the researcher draws connections with arrows, between each affinity in the direction of the relationship as presented in the IRD (Northcutt & McCoy 2004:176).

#### 4.5.1 COUNSELLOR’S ATTITUDE

Counsellor’s attitude (8) drives the system (see Figure 4.4 below). A counsellor’s attitude has a direct impact on all the elements of the system.
These were the students’ actual responses on the counsellor’s attitude in relation to the elements of the system:

(1) **Authenticity**
“A counsellor’s passion leads to self-confidence, insight in himself and so forth”. “Your attitude influences your authenticity”. “If you are positive/flexible you will come across as comfortable”. “You will act confidently and calmly if you are optimistic, energised and excited about your work”.

(2) **Contextualisation**
“The attitude of counsellor determines the context”. “If you are enthusiastic you will try to learn as much as you can”. “Your energy determines your eagerness to utilize and mobilise the extent of contextualisation”. “An effective counsellor wants to know everything about his client”. “If you are passionate you will know your client (contextualisation)”.

(3) **Effective communication skills**
“A positive attitude reflects positive communication skills”. “If you are interested in and enjoy your job you’ll be interested to hear your client”. “Your attitude guides your communication style”. “Your attitude toward the client will determine how you will communicate with the client”. “Attitude influences communication skills”.

---

**FIGURE 4.4: COUNSELLOR’S ATTITUDE**

![Diagram showing the relationship between counsellor’s attitude, potential areas of growth, contextualisation, traits of an effective counsellor, supervision, and preparation.](image-url)
(4) Potential areas of growth
“Your attitude determines how willing you would be to grow”. "Your attitude determines your evaluation and experience of areas of growth". “The counsellor’s attitude determines the counsellor’s openness for growth”.

(5) Preparation
“If your attitude is right, you will not mind preparing thoroughly”. “A good attitude reflects being organised”. “Attitude will influence your planning”. “If you are passionate you will plan more effectively”.

(6) Supervision
“Your attitude will have an influence on your experience of supervision”. “Supervision determines or contributes to establishing attitude”. “A good attitude will be strengthened despite supervision”. “Attitude influences the way you approach supervision”. “Optimism will result in more experience”.

(7) Traits of effective counsellor
“Your attitude impacts on your characteristics and perspective of a counsellor”. “Your attitude (life approach) will influence your traits”. “If you are enthusiastic and positive about your work you'll be more effective in what you do”.

4.5.2 POTENTIAL AREAS OF GROWTH

Potential areas of growth influence many of the elements of the system (see Figure 4.5 below).
These were the students’ actual responses on potential areas of growth in relation to the elements of the system:

(8) **Counsellor’s attitude**
“Inexperienced may influence attitude negatively”. “By addressing potential areas of growth, attitude will also be addressed”. “Utilizing the opportunities to grow and develop can positively affect the counsellor’s attitude”. “If you overcome and catch up growth areas you become more positive and motivated”.

(6) **Supervision**
According to the participants areas of growth do not influence supervision.

(7) **Traits of effective counsellor**
“If you work on your growth areas you know you will become more specialized in your traits”. “The more you grow the more effective a counsellor you will become”. “If you are able to recognize your areas of growth you will become an effective counsellor (growth)”. “Utilising the opportunities to grow and develop can make you an effective counsellor”.

(5) **Preparation**
“Your areas of growth determine what you still need to prepare for”. “If you are prepared you may gain more experience”. “Potential areas of growth can be addressed effectively by preparation”.

---

**FIGURE 4.5: POTENTIAL AREAS OF GROWTH**

![Diagram of Potential Areas of Growth]

1. **Authenticity**
2. **Contextualisation**
3. **Effective communication skills**
4. **Potential areas of growth**
5. **Preparation**
6. **Supervision**
7. **Traits of an effective counsellor**
8. **Counsellor’s attitude**
(2) Contextualisation
"More knowledge would make you eager to implement it in practice and this will motivate you".

(3) Effective communication skills
“Potential areas of growth can be addressed by effective communication skills”. “Inexperience and anxiety may influence communication skills”. “The more you grow the better your communication skills will be”. “If you are inexperienced and anxious, it might adversely effect how you communicate”.

(1) Authenticity
“Experience in counselling will make you more confident and calm”. “Working on your area of growth ensures that you eventually become more comfortable and secure”. “Growth will allow for greater authenticity”. “If you work constantly on your personal areas of growth, you will become more authentic”.

4.5.3 Supervision

Supervision influences many of the elements of the system (see Figure 4.6 below).

**Figure 4.6: Supervision**

These were the students' actual responses on Supervision in relation to the elements of the system:
(4) Potential areas of growth

“Supervision makes you aware of the areas you still need to grow in”. “The way in which you are supervised will determine whether you grow as a counsellor or remain anxious”. “Supervision allows for growth”. “Supervision leads to potential areas of growth”. “Supervision has the potential to help you grow and develop”. “Your supervisor will make you aware of potential areas of growth”. “You grow through supervision”.

(8) Counsellor’s attitude

“Positive feedback creates positive attitude”. “Supervision can positively influence your attitude to your work”. “Supervision has to give you more growth and depth”.

(7) Traits of effective counsellor

“Supervision leads to growth of specific traits”. “Supervision can make you more effective as a counsellor”. “With supervision you become aware of your and others’ traits for effective counsellors”.

(5) Preparation

“I see supervision as part of the preparation process and encouragement for the future”. “Your supervisor influences your ability to plan and prepare”. “Supervision guides the counsellor to prepare”. “Supervision leads to preparation but you must also be prepared when you go to supervision”. “Implementing what your supervisor has suggested can prepare you better”.

(2) Contextualisation

“Exposure to how contextualisation develops”. “The supervision determines the counsellor’s attitude and willingness to counsel”. “Supervision leads to learning”. “Supervision has the potential to empower you by giving you more knowledge, it is also an opportunity for growth and development”.

(3) Effective communication skills

“Supervision serves as guideline/example of a demonstration of communication skills”. “Supervision allows for growth and development of communication skills”. “Your supervisor will make you aware of your particular areas of growth”.

(1) Authenticity

“The type of supervision and approach will determine whether you can be yourself”. “During supervision you’ll get guidance and it will make you feel more secure and give confirmation”. “Supervision serves as a guideline to become more secure in yourself – you
are on the right track”. “The approach of the supervisor will be a decisive factor to the authenticity of the counsellor”. “Supervision can result in feelings of authenticity”.

4.5.4 TRAITS OF AN EFFECTIVE COUNSELLOR

The traits of an effective counsellor directly influence many of the elements of the system (see Figure 4.7 below).

**FIGURE 4.7: TRAITS OF EFFECTIVE COUNSELLOR**

These were the students’ actual responses on Traits of an Effective Counsellor in relation to the elements of the system:

(8) **Counsellor’s attitude**
“Traits impact on a counsellor’s attitude”. “If you experience growth in your effectiveness as counsellor you would have more drive”. “An effective counsellor has a positive attitude”.

(4) **Potential areas of growth**
“A flexible person will adjust”. “Traits allow for growth”.

(6) **Supervision**
“Good traits are reinforced despite supervision”. “Supervision may influence traits”. “Traits influence the way you approach supervision”. “Supervision is an example/model you follow”.

— 67 —
(5) Preparation
“An effective counsellor prepares thoroughly”. “Preparation should form part of an effective counsellor’s skills”. “Creativity, the ability may influence the degree to which you plan”. “A trait of an effective counsellor is to be aware of one’s areas of growth”.

(2) Contextualizing
“Traits influence how you interact with your environment”. “The way the counsellor manages himself determines the context”. “An effective counsellor is interested in his client’s context”. “An effective counsellor is always willing to learn more and gain experience”. “Staying with the client will enable you to collaborate”. “Your interest will motivate you to get more knowledge”.

(3) Effective communication skills
“All the good qualities lead to good communication skills”. “Traits may influence your communication skills”. “An effective counsellor will focus on listening and communication skills”.

(1) Authenticity
“The traits you know you have as counsellor would affect your behaviour and self-confidence”. “The traits of an effective counsellor create his authenticity. If you have the traits, it will be easier to be authentic”. “Staying with your client and letting them lead will help you to be calm in your approach”.

4.5.5 Preparation
Preparation is the pivot of the system. Preparation directly influences many of the elements of the system (see Figure 4.8 below).
These were the students’ actual responses on Preparation in relation to the elements of the system:

(8) Counsellor attitude
“Utilising opportunities to grow can positively influence the counsellor’s attitude. If you’re better prepared you will have more drive”. “If you prepare/plan – your attitude improves. You know where you want to go”.

(4) Potential areas of growth
“A responsible counsellor represents responsibility towards client”. “If you are prepared then you will feel in control and will not be so anxious”. “During your preparation you become aware of new things and potential areas of growth”. “You grow through effective preparation”.

(6) Supervision
“The better you prepare, the less traumatic will the visit to the supervisor be”. “If you are prepared, supervision may be more of a positive experience”.

(7) Traits of effective counsellor
“A counsellor who uses every opportunity to grow will become a more effective counsellor”. “Through preparation you would become more effective in your traits and aware of possible growth areas”.

— 69 —
(2) **Contextualisation**
“To prepare you must do research, learn and gain experience”. “Preparation will allow for greater contextualisation”. “A counsellor must be organised to deal with a problem holistically”.

(3) **Effective communication skills**
“You have to plan before you respond, for example, where you are going with your client if you use empathy”. “The better you are prepared, the more you can concentrate on your client and listen and communicate effectively”. “For preparation you must have good communication skills that will enable you to learn more from other people”. “In your preparation you will; think and include effective communication skills and think about the skill you use”. “If you are prepared, you will be relaxed and can then communicate better”. “If you are prepared, you will be more effective in your communication”.

(1) **Authenticity**
“The more prepared you are the easier it will be for you to be authentic”. “If you are prepared then you will not have to focus on trivial issues and can be yourself”. “If you are well prepared, you will be more relaxed and calm and could be more authentic”. “By being prepared you will be more at ease to be yourself during a session”. “If you are well-prepared you are more secure and comfortable”.

4.5.6 **CONTEXTUALISATION**

Contextualisation directly influences many of the elements of the system (see Figure 4.9 below).
These were the students' actual responses on Contextualisation in relation to the elements of the system:

(8) **Counsellor’s attitude**
“More knowledge one would be eager to implement it in practice and motivate you”.

(4) **Potential areas of growth**
“If you have a well-grounded knowledge base you will become more aware of potential areas of growth in yourself”.

(6) **Supervision**
“You must have the theoretical knowledge before you meet your supervisor”. “Your knowledge would influence your understanding of things your supervisor shares and the implications thereof”. “Co-creating and context have an influence on supervision (makes it more positive)”.

(7) **Traits of effective counsellor**
“Your knowledge and context would influence your application in practice and the tools you use as an effective counsellor”. “Determines your style and effectiveness of communication skills”.

---

**FIGURE 4.9: CONTEXTUALISATION**

(5) Preparation
“You cannot plan before you have contextualized”. “A foundation, which will enable you to plan is important”. “The more knowledgeable you are, the more you will anticipate what planning is needed”. “Your knowledge would influence your preparation of your cases”.

(3) Effective communication skills
“Knowledge leads to better and more effective contextualisation thorough communication”. “If you have more knowledge of communication skills, it would be easier to implement it in practice and use it”. “Good research about a case instils good communication skills and ensures a holistic approach”. “If the contextualisation is in place, the counsellor can focus on communication skills”.

(1) Authenticity
“If you have knowledge you feel more comfortable and secure in yourself”. “If you have grounded base knowledge – you would be more authentic”. “Create a context in which you are comfortable – get an approach that suits your personality”. “Your knowledge will influence your confidence”.

4.5.7 EFFECTIVE COMMUNICATION SKILLS
Effective communication skills directly influence some of the elements of the system (see Figure 4.10 below).

**Figure 4.10: Effective Communication Skills**
These were the students’ actual responses on Effective Communication Skills in relation to the elements of the system:

(1) **Counsellor’s attitude**
“If you use effective communication skills, it makes you feel more secure and motivated”.

(4) **Potential areas of growth**
“Communication skills close the gap between inexperience and responsibility”. “Effective communication skills can curb anxious feelings and lead to better counselling”. “You will become more aware of potential areas of growth if you become familiar with implementation of all communication skills – it would open growth areas”.

(6) **Supervision**
“The message must be understood before learning can take place”. “Effective communication leads to positive experiences during supervision”. “If you can communicate well you will be able to “hear” what your supervisor is saying or not saying”. “The student also communicates with supervisor”.

(7) **Traits of effective counsellor**
“Are you able to apply traits in your communication style (Does it come across effectively?)”. “If you communicate well then you can be an effective counsellor”. “Effective communication skills are part of being an effective counsellor”. “A counsellor who can communicate well will be a more effective and successful counsellor”.

(5) **Preparation**
“A counsellor must plan thoroughly to be effective”.

(2) **Contextualisation**
“Communication skills act as a tool to building the context”. “If you communicate well then you will work well in a team”. “Your good listening skills will enable you to broaden your knowledge base by “hearing” what others say”. “Effective communication makes collaboration easier”.

(1) **Authenticity**
“If you have effective communication skills you will be more relaxed to be yourself”.

4.5.8 Authenticity

Authenticity is a primary outcome but also directly influences many of the elements of the system (see Figure 4.11 below).

**Figure 4.11: Authenticity**

These were the students’ actual responses on Authenticity in relation to the elements of the system:

(8) **Counsellor’s attitude**
“If you are secure in yourself, it will be reflected in your attitude (congruency)”. “The ways the counsellor sees himself determine his attitude towards his clients and the therapeutic process”. “If you can be yourself, you will reflect a better attitude, more positive”. “If you become more authentic you will be more self-confident, motivated with drive”.

(4) **Potential areas of growth**
“The way the counsellor conducts himself/herself will direct the client’s behaviour”. “How the counsellor experiences himself/herself will determine how he will handle the growth process”.

(6) **Supervision**
“Being calm and confident does not mean you think you know it all”. “It suggests you will be comfortable”. “How a person sees himself will influence the experience of supervision”.
(7) Traits of effective counsellor
“I believe at this level many of the traits of a good counsellor come naturally”. “Whether you can be yourself will determine whether you will be a good counsellor”. “The way a counsellor sees himself/herself will determine how they present themselves”. “You adapt the skills according to what you are comfortable with”.

(5) Preparation
“If the counsellor has self-confidence and feels good, he will want to prepare”. “A counsellor that is at ease will take responsibility for the planning of a session”.

(2) Contextualisation
“The way the counsellor see himself/herself will determine how he contextualize”. “A counsellor who knows himself/herself and who is comfortable with that will be able to be a team member”. “Authenticity influences the context/creativity”. “A positive attitude leads to creativity “.

(3) Effective communication
“If you are authentic and comfortable it will make it easier for effective communication”. “By being yourself, you will be able to communicate better”. “Self-assurance, insight, etc. enhances communication skills”. “Calm, comfortable counsellors will be able to listen more intently and focus on the client not themselves. If you are calm and comfortable it is likely to reflect in your skills (insight, motivate)”. “The way the counsellor sees himself/herself will influence how he/she communicates”.

4.6 THE CLUTTERED SID

The first version of the SID contains each link present in the IRD and is referred to as cluttered. The system is saturated with links. The cluttered SID contains all of the links identified by participants in the protocol leading to the IRD. The following discussion will build the cluttered SID link by link and represents a composite description of the theoretical codes based on the direct quotes of the research participants in this study (Northcutt & McCoy 2004:176).

The cluttered SID is illustrated in the following Figure 4.12:
4.7 **UNCLUTTERED SID**

Comprehensiveness and richness as well as parsimony are objectives of the SID. The system is saturated with links, which create a problem that it can be very difficult to interpret. A supplementary or secondary SID called the Uncluttered SID is a way to reconcile the richness – parsimony dialectic. Redundant links are those between two affinities in which, even if removed, a path from the driver to the outcome can be achieved through an intermediary affinity. Redundant links can be regarded as the paths of least resistance (Northcutt & McCoy 2004:176). The protocol for removing the redundant links can be seen in Annexure 3, Figures A-1 to A-20.

The uncluttered SID is illustrated in Figure 4.13. Below is the Composite Interview Uncluttered SID that will be used throughout the study.
A tour through the system

The career counselling experience is driven by the attitude of the counsellor and supervisor will influence the supervision preparation and potential areas of growth. These four elements form a feedback loop. Growth influences counsellor’s traits, counsellor traits influence contextualisation, contextualisation influences authenticity, authenticity influences communication skills, and communication influences supervision. Again, these seven elements form a feedback loop upon which each element affects the others. The outcome of the system is authenticity.

Feedback loops and zooming

The following feedback loops in the system was identified: attitude, supervision, preparation and growth. Since the SID suggests that these four affinities operate together and interact with each other, there may indeed be a name for such an interaction. A review of the axial codes and descriptions together with the placement of the loop in the overall system, suggest that we have defined the components of a subsystem called *formal development*. An additional look at the system suggests another subsystem. Supervision, preparation, growth, counsellors’ traits, contextualisation, authenticity and communication skills operate together and interact with each other. A review of the axial codes and descriptions, together with the placement of the loop in the overall system, suggests that we have defined the components of a subsystem called *personal development*. Therefore these new “super affinities” can replace the feedback loop via simple substitution in a view that is zoomed out – as if viewed from farther away – one level:
The career counselling supervision experience intermediate view

The new system is identical to the first, except that the eight affinities comprised of each of the feedback loops have been collapsed or zoomed out into a more general term, formal development and personal development. Zooming out can continue as long as there are feedback loops or sequences of affinities and relationships that have some underlying semantic dimension.

4.8 SUMMARY

This chapter gave a description of the data generate and analysed by the research participants. The affinities identified by the participants were presented and recorded in an Affinity Relationship Table (ART). A description of the Interrelationship Diagram (IRD) that illustrated the relationship between the affinities was provided. Finally a Systems Influence Diagram (SID), which is a visual representation of the entire system of influences and outcomes, was created. The following concluding chapter discusses the results and the findings in light of the relevant literature.
5.1 INTRODUCTION

This chapter provides a discussion summarising the result of the study based on the literature review conducted at the onset of the study as well as literature reviewed as part of the recursive nature of this research approach. This chapter will focus on the participant’s experiences with regard to their self-efficacy beliefs and these experiences will be used to provide guidelines in general with regard to the enhancement of self-efficacy beliefs of students in training. The recommendations in this chapter does not specifically relate to the University of Pretoria where the research was conducted. The limitations and strengths of this study will then be discussed and recommendations with regard to future research will be suggested.

5.2 SYNOPSIS OF FINDINGS AND LITERATURE CONTROL

5.2.1 PRIMARY FINDINGS

The problem statement on which this study is based is the investigation into what the self-efficacy beliefs of students in career counselling are. The problem statement is summarised in Chapter 1 in terms of the following critical questions, to focus the study and provide structure:

- What are educational psychology students’ self-efficacy beliefs as career counsellors?
- What counsellor competencies do educational psychology students regard as important?
- How do educational psychology students perceive their abilities to perform career counselling?
- How do educational psychology students come to believe in their ability to perform career counselling?
- How does supervision influence educational psychology students’ self-efficacy beliefs in career counselling?
The findings of the study in the presence of the above-mentioned critical questions can be summarised as follows:

5.2.1.1 Counsellor's attitude

Attitude is the primary driver in the system because of the position on the interrelations diagram. Only one participant indicated that attitude was influenced by potential areas of growth. The fact that this affinity was pointed out as the driver of the system is no surprise. In the description of the affinity one could intuitively sense the generating power from comments such as energetic, enthusiastic, excited, optimistic, passion and interest. This affinity has to do with energy but is not an uncontrolled energy. The allocation of the characteristics of cautiousness and the counsellor's attitude to relate well to all people of all ages reflects a responsible non-biased attitude towards their clients in career counselling.

The participants' opinions about this affinity were quite homogenous. By studying the comments of the participants it can be deducted that a counsellor's attitude is a driving force for both the formal and informal development process that will lead to higher self-efficacy beliefs. The two processes occur simultaneously and complement each other. The dynamics of the two processes as described by the participants are given in the paragraphs below.

(a) Formal development

Formal development comprises the feedback loop of the counsellor's attitude, supervision, preparation and potential areas of growth. The participants are spot-on to nominate counsellor attitude as the driver of the system because of the huge impact it will have on the other affinities and process as a whole.

Supervision being a secondary driver of the system is a crucial factor in the development of self-efficacious career counsellors and was also reflected in the comments of a participant's example “Your attitude will have an influence on your experience of supervision”. I also detected a reciprocality in the relationship between the counsellor's attitude and supervision as reflected in the following comment of a participant: “Supervision determines/contributes to your attitude.” I regard the relationship between the supervisor and the student as a vital prerequisite for the development of self-efficacy and these two people must both take the responsibility to make the supervision a positive developmental experience.
Preparation is directly influenced by the attitude of the supervision process. Supervision is the pivot or circulator of the system. Everything revolves around planning. Some of the comments of the participants included the following: “If your attitude is right, you will not mind to prepare thoroughly. A good attitude reflects being organised. If you are passionate you will plan more effectively.” A student with the right positive attitude will be well prepared to be an active participant and open to learn. In this process the supervisor will be able to identify strengths and weaknesses in the student and recommendations on the improvement of certain areas of growth can be made.

Potential areas of growth are also a secondary driver of the system which will influence both the formal and personal development of the counsellor and are closely linked to the attitude of the counsellor. The participants wrote the following comments: “Your attitude determines how willing you will be to grow. Your attitude determines the counsellor’s openness for growth”. The deduction I make is that the counsellor’s attitude will create a resistance against or acceptance of recommendations for growth and development. Once again reciprocality between supervision style and preparedness to work on a potential area of growth were detected. If the supervisor and the student have an asset-based approach, cooperative relationship the development of growth areas will have an impact on the attitude of the student counsellor. In this process the attitude can improve after every feedback supervision session. The counterpart of these statements is also true. If the supervisor and student do not relate to one another and does not develop a good working relationship their attitude and the growth of the student will suffer. The paragraph below stresses the personal development with reference to the impact of the counsellor’s attitude on the process.

(b) Personal development

Personal development comprises the feedback loop of supervision, preparation, growth, traits of effective counsellors, contextualisation, authenticity and communication skills. There is an overlap of affinities that also form part of the formal development. Counsellors’ attitude, supervision, preparation and potential areas of growth also play a vital role in the personal development of the career counsellor. Traits of effective counsellors, effective communication skills and contextualisation are secondary outcomes of the system. Authenticity is the primary outcome.

The participants reflected the following about the impact of a counsellor’s attitude on these affinities:
“Your attitude impacts on your characteristics and perspective of a counsellor. If you are enthusiastic and positive about your work, you will be more effective in what you do”. My interpretation of these statements is that student career counsellors with a positive attitude will set themselves goals to develop the traits of an effective counsellor. They will be sensitised through supervision to know their strengths and weaknesses and possible areas of growth. They will plan strategies to develop these traits. It is also important that supervisors model these traits, because it is an important way of enhancing self-efficacy.

The relationship between the counsellor’s attitude and contextualisation was reflected in the following statements: “The attitude of the counsellor determines the context. Your energy determines your eagerness to utilise and mobilise the extent of contextualisation. An effective counsellor wants to know everything about his client”. I am convinced that a counsellor with a positive attitude will try to understand and accept his clients unconditionally within their context. Such a counsellor will also be willing to mobilise assets in the context of the client. The contrary is also possible. If the counsellor doesn’t consider the context of the client it may lead to prejudice or incorrect conclusions during assessment and futile therapeutic interventions.

The relationship between the counsellor’s attitude and effective communication skills was reflected in the following statements: “A positive attitude reflects positive communication skills. If you are interested and enjoy your job you will be interested to hear your client”. A good attitude will enable the counsellor to communicate an unconditional acceptance of the client by radiating warmth, empathy and congruence. It is also important that the supervisor models these communication skills during supervision so that the students can learn through modelling and vicarious learning to improve their self-efficacy beliefs to communicate effectively in career counselling. The contrary, a lack of effective communication skills on the part of the supervisor, can be detrimental to the supervisory process e.g. misunderstanding by the student or negative attitudes between the supervisor and the student counsellor.

Authenticity is the primary outcome of the system and is of utmost importance for the development of self-efficacy in career counselling. The influence of attitude on authenticity was reflected in the following statements of students: “A counsellor’s passion leads to self-confidence and insight in himself. If you are positive/flexible, you will come across as comfortable. You will act confidently and calmly if you are optimistic, energised and excited about your work”. The researcher is of the opinion that the most important spin-off from being authentic is the reduction of anxiety which will make the counsellor calm, knowing that what is done is done correctly, with a sincere attitude. Such authenticity will also flow
over to the client as being authentic, with the feeling of being accepted and having a partner with a cooperative asset-based approach. The contrary is also true because a person who is not authentic has an extremely high anxiety level and psychological arousal that hampers the counselling process. It will also lead to defensive behaviours which are not good for the counselling process and could result in low self-efficacy beliefs.

5.2.1.2 Influence of potential areas of growth

- Potential areas of growth are a secondary driver of the system and influence many of the elements of the system but have no influence on supervision.
- The counsellor’s attitude will be influenced by potential areas of growth. Utilising the opportunities to grow and develop can positively affect the counsellor’s attitude.
- Traits of an effective counsellor will emerge from development of potential growth areas.
- If potential areas of growth are identified, the preparation can be focussed and the whole system will benefit from it. Preparation is the pivot or circulator of both the formal and personal development of the career counsellor. If the career counsellor fails to plan, it will be detrimental to the whole system and the self-efficacy beliefs of the counsellor.
- Contextualisation does not have a influence on potential areas of growth according to the participants, although I think the context of the counsellor might actually be a potential area of growth.
- Potential areas of growth as a driver influence the development of effective communication skills of the career counsellor as well as self-efficacy beliefs.
- Development of effective counselling skills for an anxious and inexperienced career counsellor can be enhanced if it is correctly identified. Low self-efficacy beliefs will lead to ineffective communication skills and vice versa.
- Potential areas of growth will have an influence on authenticity because if a career counsellor develops confidence through experience he will develop a belief of self-efficacy, the “I-can-do-it factor” and thus be authentic.

5.2.1.3 Influence of supervision

- Supervision is a secondary driver of the system and influences many of the elements of the system.
- The career counselling student becomes aware of his potential areas of growth through supervision and feedback. Hence the way in which supervision is
managed will have an influence on the development of the student to a self-efficacious counsellor or contribute to anxiousness of the student.

- The counsellor’s attitude will be influenced by supervision. Feedback is crucial in this regard and positive feedback will enhance a positive attitude in the student.
- Supervision leads to growth of specific traits and effectiveness as counsellor. It is important that the supervisor also model the traits of an effective counsellor.
- Preparation is influenced by supervision and *vice versa*. The student must be thoroughly prepared for the supervision session and must not expect to be spoon-fed. The better a student is prepared the more benefit will be gained from supervision. Supervision leads to better preparation which will improve career counselling with clients and the enhancement of self-efficacy beliefs.
- Contextualisation can be influenced by supervision when students are exposed to the supervisor guiding them on how it is done. A number of participants did not give a relevant explanation for the relationship they indicated.
- Effective communication skills can be influenced by supervision when good communication skills are modelled by the supervisor. The contrary can also happen when a supervisor does not practice what he preaches. The supervisor should indicate to the student which communication skills are lacking and give feedback about the communication skills which are good.
- A positive approach can enhance self-efficacy beliefs. Supervision can result in feelings of authenticity which is an outcome of the process and directly linked to positive self-efficacy beliefs. Supervision must serve as a guide for the student to become more secure and reinforce the feeling of being on the right track. Creativity and uniqueness of the student must be accepted and encouraged by the supervisor if it fits in with the theory and practice of good career counselling.

5.2.1.4 Influence of traits of an effective counsellor

- Traits of an effective counsellor are a secondary driver in the system and influence many elements of the system. An effective counsellor has a positive attitude and radiates vitality and energy.
- Potential areas of growth are influenced by the traits of an effective counsellor. When potential growth areas are identified a flexible person will adjust and grow to develop more traits of an effective counsellor.
- The traits of an effective counsellor will influence the way the student approaches supervision.
• Preparation should form part of an effective counsellor’s skills. Proper planning can address the areas where a student lacks the traits of an effective counsellor. Preparation will also enhance the self-efficacy beliefs of the student.

• The counsellor that possesses many of the traits of an effective counsellor will definitely be more interested in his client’s context, to meet him where he is and to stay with the client.

• A counsellor who possesses many of the traits of a good counsellor will have good communication skills because they are essential for effective career counselling.

• The possession of the traits of a good counsellor leads to authenticity. It is easier for a counsellor to be authentic when he knows he has the traits of an effective career counsellor.

5.2.1.5 Influence of preparation

• Preparation is the pivot or circulator of the system. The process of formal development as well as the personal development process revolves around preparation. Many of the elements of the system are influenced by preparation.

• A counsellor’s attitude is influenced by preparation. A well-prepared counsellor has more energy and knows where he is going.

• Potential areas of growth can be addressed by good preparation. A well-prepared counsellor will feel more in control and will not be so anxious.

• Preparation will enhance the quality of supervision as well as a cooperative working relationship. A student can develop more traits of an effective counsellor by preparing to address possible growth areas. Well-planned supervision will also influence this development.

• Contextualisation will improve through preparation. A well-prepared counsellor will plan to get all relevant information about a client to render the best service.

• Effective communication skills are affected by good preparation. If a counsellor is well prepared he will be more relaxed and use effective communication skills. Preparation will lead to the self-efficacy belief that the student can communicate effectively and debilitating feelings of anxiety will disappear.

• The career counsellor’s authenticity will be affected by good preparation. If a career counsellor is well prepared he will not have to focus on trivial issues and can be himself. Being authentic will allow the career counsellor to relax and focus on his task knowing that he can do it.
5.2.1.6 Influence of contextualisation

- Contextualisation is a secondary outcome of the system and influences many of the elements of the system although many of the participants struggled to describe proper links.
- The counsellor’s attitude will influence his eagerness to contextualize when working with clients. Contextualisation was not linked to potential area of growth by the participants. Contextualisation makes supervision more positive if it is explored cooperatively.
- Traits of effective counsellors on contextualisation were not properly indicated by the participants.
- Preparation is directly linked to contextualisation because the career counsellor must contextualize before he can plan. However, he must also plan how to contextualize.
- Contextualisation will have an influence on communication skills. If the contextualisation is done properly the career counsellor can focus on effective communication skills. The converse is also true because effective communication skills are required for proper contextualisation. A number of participants could not formulate this relationship.
- Contextualisation influences authenticity. If the career counsellor has grounded basic knowledge he will be comfortable with an approach that suits his personality and he will be authentic with a positive self-efficacy belief.

5.2.1.7 Influence of effective communication skills

- Effective communication skills are a secondary outcome of the system. Most of the participants did not indicate a link between the counsellor’s attitude and effective communication skills. One participant indicated that the use of effective communication skills contributes to the motivation of the counsellor and that he will feel more secure.
- Effective communication by the student and the counsellor is of vital importance for supervision. Effective communication leads to a positive experience during supervision.
- Potential areas of growth would be opened by effective communication skills. The anxious feeling can be curbed by effective communication skills which will lead to better counselling.
- Effective communication skills should be one of the traits of an effective counsellor.
• The participants did not indicate the influence of effective communication skills on preparation.
• Effective communication acts as a tool to build the context. Knowledge base can be improved through good listening skills and collaboration will be easier due to effective communication.
• Effective communication skills will help the career counsellor to be more relaxed to be authentic.

5.2.1.8 Influence of authenticity

• Authenticity is the primary outcome of the system but also directly influences many of the elements of the system.
• The attitude of a career counsellor is directly influenced by the authenticity of the career counsellor. An authentic career counsellor will reflect a better attitude towards his clients and the therapeutic process. An authentic counsellor will be more confident with more motivation and energy. The converse is also true. If the career counsellor is not an authentic person he will focus more on his own insecurities than on the needs of his clients. His attitude will not be conducive to good counselling.
• An authentic career counsellor will be content and honest with himself to identify the areas where growth is needed and plan to improve in those areas. A person who is not authentic is not so open for honest recommendation or self-evaluation.
• The supervision will be influenced by authenticity. Being calm and confident need not be associated with an arrogant attitude of knowing it all.
• Authenticity is one of the traits of an effective counsellor. Whether a person can be himself determines whether he can be a good counsellor and to adapt the skills according to what he is comfortable with.
• An authentic counsellor will take responsibility to plan for a session.
• The way the counsellor see himself will determine how he contextualizes. An authentic counsellor will be a team member.
• Authenticity influences effective communication. Communication is not limited to the sending of messages but also receiving messages by means of good listening skills. Calm, comfortable counsellors will be able to listen more intently – focus on the client and not themselves.
5.2.2 LITERATURE REVIEW

The core aspects as it appeared in the research in relation to the relevant literature are indicated in Table 5.1 below:

<table>
<thead>
<tr>
<th>Core aspect</th>
<th>Research</th>
<th>Literature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-efficacy is domain specific and developed in a specific context</td>
<td>The constituency identified contextualisation as one of the affinities that influence the system/ Considering all factors is important <em>inter alia</em> the collaborative relationships with the client in his context and all role-players.</td>
<td>Stead and Watson (1998:98) recognises the important influence of the environment on career development. They encourage research on the influence of gender, ethnicity and social-economic status on career related self-efficacy and outcome expectations in the South African context.</td>
</tr>
<tr>
<td>Determinants of developing self-efficacy beliefs</td>
<td>• The training of career counsellors makes use of experiential learning because students work with clients after initially practicing on “buddies”. • Vicarious learning opportunities are created when students observe their “buddies” and supervisors. • A positive developmental approach by the supervisor can be a social persuasion opportunity. • The constituency reported that an authentic career counselling student will be less anxious and more self-efficacious.</td>
<td>Bandura (Niles <em>et al.</em> 2002:71; Snyder <em>et al.</em> 2002:280) identified four determinants of developing robust efficacy beliefs: • Personal performance accomplishment is most influential. Success results in strong domain-specific self-efficacy. • Vicarious learning-modelling. • Social persuasion. What others say what they believe we cannot do. • Physiological states and reactions.</td>
</tr>
<tr>
<td>Supervision</td>
<td>The constituency reported about the influence of the supervisor/student relationship and how a positive developmental approach can build the self-efficacy beliefs</td>
<td>Students’ career counselling self-efficacy beliefs are strongly related to positive training and practice-based experiences with career counselling (Heppner, O’Brien, Hinkel &amp; Flores in Soresi <em>et al.</em> 2004:195)</td>
</tr>
</tbody>
</table>

Additional literature review prompted by the research outcomes:

- Research indicated a positive relationship between supervision and counselling (Friedlander & Snyder 1983:342; Larson *et al.* 1992:105). For example, trainees who had received supervision showed stronger perceptions of counselling self-efficacy than did those who had not received supervision.
- Stoltenberg, McNeill and Delworth (1998) proposed that entry-level trainees experience high levels of performance anxiety because of lack of counselling skills, lack of self-efficacy in their ability to perform counselling tasks appropriately and their concern about negative evaluation by clients or/and supervisors. Supervisors’ support coupled with trainees’ high motivation facilitates the learning
experience, which in turn, helps reduce their discomfort and increases their awareness of the client’s as well as their own desire to function autonomously.

5.3 SUMMARY OF CONCLUSIONS

5.3.1 ASSUMPTIONS

- Students involved in this study have equal technical skills.
- Students perceive career-counselling self-efficacy based on their current and previous experience.
- Students have the ability to effectively communicate their perceptions of a self-efficacious career counsellor.
- The results of this study have the potential to improve the quality of supervision and training of career counsellors.

5.3.2 CONCLUSIONS

The following conclusions can be made on grounds of the problem statement, purpose of the research, literature review and the findings of the research:

- The researcher confirmed the assumption of IQA that individuals closest to the phenomena are in the best position to report about the phenomenon. The participants had very clear ideas of the dynamics of the system and had no problem in describing the affinities and indicating their relationships.
- The interaction between the student in career counselling and the supervisor is very important for the development of career counselling self-efficacy beliefs of the student. A positive cooperative developmental approach during feedback sessions is conducive to the growth of the career counsellor.
- The system consists of two processes that contribute to the holistic development of the student. These two processes are a formal development process and a personal development process.
- The attitude of the counsellor is the driver in both processes and preparation is the circulator that links the two processes. Authenticity is the outcome that resembles self-efficacy.
- The importance of experiential learning and modelling as a means to develop self-efficacy was confirmed by the reports of the students.
The reduction of anxiety with the increase of self-efficacy was reported as a very important benefit of increased self-efficacy. The students reported that an authentic person can focus on the work knowing what they do is right.

The identification of possible areas of growth and the way in which it is communicated is fundamental for both the formal and personal development. This process will lead to better preparation for the whole system.

By analysing the language and discourse of students in educational psychology we have made the first small step in defining their career counselling self-efficacy beliefs. The initial focus group began the journey with cards containing random thoughts regarding their experience of career counselling and supervision. This group then categorized these thoughts into eight categories that are called affinities in IQA language. The participants indicated their perceptions on the relationship between affinities on a Detailed Affinity Relationship Table. These relationships were further compartmentalised into a system influence diagrams called an SID. The SID is an IQA replication of a mental model based on student language discussed in Chapter 4.

The IQA system identified by this study suggests that the ultimate outcome of the career counselling training experience is a career counsellor who is content with himself and knows he can be successful.

5.4 RECOMMENDATIONS

5.4.1 IQA RESEARCH METHOD

On a practical note:

- It is difficult to get fifteen people together for three sessions of one and a half hours each. It could be helpful if the research could be done where the constituency are together like scheduled lectures.
- The researcher should supply the participants with pens of the same colour. This will help to protect the anonymity of the participants.
- It might be better if the research is done later during the year when students have consulted with more career clients.
- The Detailed Affinity Relationship Table could be printed on an A3 paper. This will give the participants more space to write their comments about the relationship between affinities.
- The facilitator must ensure that participants understand how they must report on the “if-then” hypothesis because it is difficult to monitor this while they are writing.
Individual interviews could be a good way of enhancing the credibility of the research if time constraints are not a problem.

5.4.2 **TRAINING**

- The Department of Educational Psychology could include the enhancement of positive self-efficacy as an explicit goal in their study guide.
- More attention must be given to explicit methods of supervision that can enhance the development of career counselling self-efficacy.
- A module on self-efficacy can be included in the generic course for training of educators.
- The value of self-efficacy as a measure of control and the influence on academic performance should be emphasised.

5.4.3 **FURTHER RESEARCH**

- Comparative studies which focus on the self-efficacy beliefs at the beginning of the year and at the end of the year.
- Comparative studies between individual students of different performance levels.
- Comparative studies between perceptions of supervisors and students.
- A Qualitative research study can be done using the Career Counselling Self-Efficacy Scale (CCSES) in addition to an IQA approach and the findings/ students’ experiences in this regard can be compared.

5.5 **LIMITATIONS AND STRENGTHS OF THE STUDY**

- Participants sometimes contradicted themselves when they described the relationships between affinities or did not clearly indicate the “if-then” relationship. It is not possible for the facilitator to detect this during the session when the recordings are done.
- It is important that participants all write with the same colour pen. If one person writes with another colour it will not be possible to maintain the anonymity of that person.
- The three 1½-hour sessions to identify affinities and their relationships are quite long.
- A smaller number of participants also contributed to the fact that the 20/80 Pareto principle did not materialise. A group of 12 or more participants are recommended.
The research was conducted at a stage where the participants only started their practical work with career clients. If they had more experience they might have had other opinions about the process.

There may be factors affecting students’ career counselling self-efficacy beliefs that were not identified in this study.

5.6 CLOSURE

The purpose of this research was to use the IQA research method to explore the career counselling self-efficacy beliefs of the educational psychology students in the Department of Educational Psychology of the University of Pretoria. A literature review reveals that a number of researchers have explored the field of career counselling self-efficacy. There are no indications in the literature of the use of the IQA method for this purpose. This type of research has not been done at the University of Pretoria before. This study has limited scope for generalisation but it can be of value to the Department of Educational Psychology. This study can also be the point of departure of further studies.
List of References


---oOo---


HPCSA, see Health Professions Council of South Africa.


ANNEXURE 2
ANNEXURE 4