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Identification of mental models of managers with reference to success criteria for brokers

by

San-Marié Aucamp

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Abstract

Identification of mental models of managers with reference to success criteria for brokers

By: San-Marié Aucamp
Leader: Prof. J.S. Uys
Department: Psychology
Degree: MA (Research Psychology)

The business environment of today is characterised by great risks for organisations as well as for individuals. New principles and ways of working that differ significantly from what was done even as little as a decade ago are required. To keep to traditional stances in the corporate environment may mean that existing competitive advantages may not be enough anymore to ensure success. This also applies to the financial services sector where there is currently a clear shift from a product focus to a client focus.

In the light of changes taking place in the financial services sector, it is also necessary to think differently about the mediators (brokers) delivering related services since the delivery channels have also changed due to technological development. Competitive advantages lie in a client and market focus rather than a product focus, and a process focus rather than a functional focus. The client's voice must be heard and it is possible that a successful person in this focus is different from a successful person in the old focus.

For the sake of quality in service delivery and alignment in the same direction, it is necessary for management to have a shared mental model when looking at staff decisions concerning brokers. They must also be aware of their own thoughts about staff within the changing focus and they must realise the impact this can have on their decisions.

The main objective of this study is to determine whether the managers under investigation have a shared mental model in terms of success criteria for brokers.

In order to do this, it is necessary to first investigate the concepts mental model and shared mental model and the impact they may have in an organisational environment. The Repertory Grid technique was used for data collection. As a result of the wide variety of Repertory Grid techniques, together with the various ways of application, it is essential to be familiar with the techniques and modes of application in order to choose the most suitable technique and application method for a specific study. Kelly's Personal Construct theory contains the assumptions underlying this technique and it is important for a researcher to be aware of these regardless of whether this is the theory s/he will be using since the underlying assumptions will definitely have an influence on the interpretation of the results.

The data was presented as a qualitative description of each manager's mental model in terms of the successful broker as well as a short description of the person's construction system regarding success in their business environment. Conclusions were made from a synthesis of the results regarding the extent to which there could be referred to a shared mental model and its possible impact on decisions and efficiency in the work and business environment.

The results confirmed that the objectives of this research project were met. It emerged that this management team does not effectively share a mental model and that this may impact negatively on their business decisions. Recommendations were made regarding the change or establishment of a client-focused mental model. Suggestions for future research regarding broker efficiency were also made.

Keywords: Mental models, shared mental models, Repertory Grid, Personal Construct Theory, management decision-making, team mental models

Samevatting

Identifisering van kognitiewe verwysingsraamwerke van bestuurders met verwysing na sukseskriteria vir makelaars

Deur: San-Marié Aucamp
Studieleier: Prof. J.S. Uys
Departement: Sielkunde
Graad: MA (Navorsingsielkunde)

Die huidige besigheidsomgewing word gekenmerk deur groot risiko's vir beide organisasies én individue. Nuwe uitgangspunte en werkwyses, wat betekenisvol verskil van wat so onlangs as 'n dekade gelede gegeld het, word vereis. Om in die korporatiewe omgewing by tradisionele uitgangspunte te hou, kan meebring dat bestaande mededingende voorspronge nie meer voldoende kan wees om toekomstige sukses te verseker nie. Dieselfde geld ook vir die finansiële dienstebedryf waar daar tans 'n duidelike fokusverskuiwing is vanaf 'n produkgesentreerdheid na 'n kliëntgeoriënteerdheid.

In die lig van veranderinge wat in die finansiële dienstesektor plaasvind, is dit nodig om anders te dink oor die rol van tussengangers (makelaars) wat finansiële dienste lewer**,** aangesien die afleweringsmeganismes ook deur tegnologiese ontwikkeling verander het. Mededingende voorspronge setel in 'n kliënt- en markfokus eerder as in 'n produkfokus, en in 'n prosesgesentreerde fokus eerder as in 'n funksionele fokus. Die kliënt se stem moet gehoor word. Dit is daarom moontlik dat 'n suksesvolle diensverskaffer binne hierdie nuwe fokus, anders mag lyk as 'n suksesvolle persoon in die tradisionele benadering.

Ter wille van kwaliteit in dienslewering en eensgerigtheid, is dit vir bestuur nodig om 'n gedeelde kognitiewe verwysingsraamwerk te hê wanneer besluite oor makelaars geneem moet word. Bestuurders moet ook bewus wees van hulle eie aannames en oortuigings oor personeel in die veranderende fokus en moet ook besef watter impak dit op besluite kan hê.

Die primêre doelwit van hierdie studie was om vas te stel of die bestuurders in hierdie ondersoek oor ‘n gedeelde kognitiewe verwysingsraamwerk ten opsigte van die sukseskriteria vir makelaars beskik het. Om dit te kon doen, was dit eerstens nodig om die konsepte, kognitiewe verwysingsraamwerk en gedeelde kognitiewe verwysingsraamwerk en die impak wat dit in die organisasiekonteks kan hê, op grond van beskikbare literatuur te bespreek. Die ‘Repertory Grid’ is gebruik om die data in te samel. Die ‘Repertory Grid’ is op Kelly se Persoonlike Konstruk-teorie gebaseer. Veskillende variasies en toepassingsmoontlikhede van die tegniek en die verwerking van die data en die interpretering van die resultate is ook volledig bespreek.

Die data is aangebied as ‘n kwalitatiewe beskrywing van elke bestuurder se kognitiewe verwysingsraamwerk, en ook as ’n kort beskrywing van die persoon se konstruksiesisteem ten opsigte van sukses in sy/haar besigheidsomgewing. Uit ‘n sintese van die resultate is afleidings gemaak oor die mate waarin verwys kan word na ‘n gedeelde verwysingsraamwerk en die moontlike impak daarvan op besluite en effektiwiteit in die werk- en besigheidsomgewing.

Die resultate het bevestig dat die doelwitte van hierdie navorsingsprojek bereik is. Dit is uitgewys dat hierdie bestuurders nie ‘n kognitiewe verwysingsraamwerk deel nie en dat dit die effektiwiteit van besluite negatief kan beïnvloed. Aanbevelings is aan die hand gedoen oor die verandering of vestiging van ‘n kliëntgerigte verwysingsraamwerk. Voorstelle is ook gemaak oor verdere navorsing oor makelaarseffektiwiteit.

Sleutelwoorde: Kognitiewe verwysingsraamwerke, gedeelde kognitiewe verwysingsraamwerke, Repertory Grid, Persoonlike Konstruk-teorie, bestuursbesluitneming.

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Chapter 1 Introduction

1.1 Background

The business environment of today is characterised by great risks for organisations as well as individuals. South Africa is leaving behind years of isolation in economic and other fields. Increasingly more international players are entering the field. To survive in this changing business environment, different business principles and ways of working are required. Even significantly different from the way things were done as little as a decade ago.

Maintaining traditional views in the corporate environment may have the consequence that competitive advantages that may exist may not be enough to ensure success anymore. This also relates to the evolution in the financial services sector. Much more competition, in the form of international players, have entered the arena. Then there is also new legislation with the objective of protecting the client that necessitates new ways of working and new points of departure. In this industry there is currently a clear move away from a product focus towards a client focus. A move that is very much driven by the new legislation. It can with justification be asked whether the legislation is a by-product of the change in focus or vice versa.

These matters have far-reaching implications for management teams in the financial services industry. They have to deal with more competitors presenting a broader variety of products, the implementation of new legislation and everything that that involves. Then they also need to make a mind shift from being product focused to being client focused. Not an easy task that awaits them. It is relatively easy to pay lip service to a new vision, but to truly embrace it with one's action as well, is a different matter.

Not only do the members of the management teams need to change their personal visions regarding their business environment, but they also need to have a shared

vision in order to survive and succeed in the changing business environment. They have to be aware of their own thoughts on how the successful employee will look like within the changing focus and realise what impact this can have on their decisions. It is very likely that the employee that will be successful in the new dispensation will need characteristics different from that needed to be successful in the old dispensation.

Before an exposition of the study is given, a bit more content will be added to the context after which the research question and research objectives will be discussed.

1.1.1 The new legislation

The financial services industry has fallen under the spotlight as a web of legislation is being worked on by the Financial Services Board (FSB). The first is the Financial Advisers Bill, which was greeted with delight by consumer organisations, but with almost universal scepticism by groups representing various categories of financial advisers. The main aim of the draft Financial Advisers Bill is to protect the investor, an issue nobody can argue about. The issue that prompted the bill is the various scams that investors have been subjected to over the years.

The Financial Advisers Bill cannot shake the principle that any investment, by its very nature, contains risk, but it can stamp out the practice of unscrupulous advisers giving inappropriate advice simply to sell a particular product. The public has the right to expect proper, unbiased advice – something that hasn't always been true of the investment environment until now and has contributed to staining the industry's reputation.

Problems start occurring when flavour of the month products are promoted by brokers at specific times. The broker fails to give suitable advice when he focuses on one product only, without looking at the client's overall financial picture. Unfortunately it must be accepted that most clients do not

even realise that they have been wronged (Van der Kooy, 1999). To counter this, there is currently a tendency amongst financial institutions not to let their advisers fully work on a commission basis or to sell products directly to the client without a financial mediator.

Unfortunately, there is also a downside to the draft Financial Advisers Bill. The Bill, especially from an administrative point of view, will be very costly to implement. Designed to regulate the behaviour of financial advisers, the Bill may instead herald the demise of the small, independent life broker and stifle the growth of the emerging class of independent black life brokers. The legislation has largely been imported from the UK model, where the experience has been one of ending up with more consumer-friendly professional life brokers, but far fewer of them.

This may in turn have a negative effect on the availability of independent advice to consumers, as brokers and agents tied to product houses are most likely to survive the transformation. Compliance with the legislation will result in huge expenses and administrative costs for companies as well as independent advisers and brokers and can shrink the industry considerably in the long run ("*Die Wetsontwerp*," 1999). This implies that the management teams of companies in this industry will have to come up with ways to deal with the extra costs and deliver a better quality service with possibly fewer people.

There are five key areas in the draft bill that will ensure that the client's interests are protected ("Bill to put," 1999):

- The first is to propose minimum entry requirements for financial advisors. People with criminal records of serious crimes such as fraud or theft will be barred from entering the financial services industry. Financial advisors will be required to possess particular skills. They must provide the most suitable advice based on consumer needs, operate under a code of ethics and provide increased disclosure.
- The second issue is of client choice. The parties to a transaction must agree on the conditions and reasons for the particular transaction. Currently

the client receives the contract after the transaction has been concluded, and it is difficult to determine whether consensus has been reached. The buyer must be in a position to choose whether s/he wants to deal with a specific adviser, do business with a specific institution, and purchase the specific product. Extensive training and education of financial advisers and consumers alike are required to ensure that consumers are able to make more informed decisions.

- Thirdly, the advice given to a buyer by the financial adviser will eventually be confirmed by the client's signature. This will confirm that the client purchased a product based on appropriate advice. This is a twin-edged sword in the sense that the adviser will no longer be liable if the decision to purchase a product is based on adequate information.
- The fourth issue is of record keeping. Proper records will need to be kept of all transactions with the client to prove that the adviser followed the processes prescribed by the bill.
- The fifth issue is a complaints procedure. At present, complaints against advisors or financial institutions are often handled in a haphazard manner. The bill proposes the implementation of a new complaints process. Institutions will need to keep a record of all complaints that will, together with their results, need to be reported to the FSB by the adviser or the financial institution.

From this it is clear that there is a definite shift of focus from the product to the client. To gain a better understanding of the client focus, it is necessary to first look at the product focus, before discussing the client focus.

1.1.2 Shift from product focus to client focus

In the past, service delivery in the financial services industry was characterised by a focus on the products and services the industry had to offer. The products or services for individuals or groups was based on shared characteristics and/or needs like for example risk coverage (death, disability,

retirement) through life insurance; financing (overdrafts, personal loans, etc); home loans and general banking services like cheque and savings accounts.

This focus is also characterised by the continuous improvement, upgrading and expansion of existing products or services, as well as the development of new products and services. The products and services tend to be sophisticated – requiring a lot of legal and financial insight and knowledge. A marketing or sales approach is the primary way of gaining access to existing and potential clients or client groups and convincing them to buy the products.

Within this focus the broker has a specific role as delivery system for specific products in the bank environment. Some characteristics of this role involve the selection of products, and clients or markets that link directly to a specific marketing or sales approach; product marketing that is supported in various ways by advertising and publicising, direct and mail marketing, competitions and financial incentives and performance management, acknowledgement and reward based on product marketing and sales. The broker gets commission based on sales and not on, for example, client satisfaction.

Various factors, especially since the early eighties, have contributed to a new business focus and dispensation that has also gained acceptance in the financial services industry. A changing and less supportive corporate environment that has resulted from the demands of world class competition and business survival, obliges the individual to accept responsibility for his or her own financial planning to a much greater extent than in the past. Increasing uncertainty, complexity and unpredictability at all levels of society entails that future perspectives and long term planning changes to a present perspective. Long term financial planning is replaced with scenario and contingency planning on a continual basis.

Personal empowerment with regard to financial management has become a critical life skill. The extent of self-management that is required from the client in changing circumstances brings with that a greater insistence from the client on more transparency, having a greater say and co-decision-making in all

facets of financial planning and management. In general, the client of today is more skilled, better trained and more informed than at any other time in mankind's existence thanks to the media, the computer and intensive publicity and marketing attempts. The result is a more sophisticated and informed client that has to reconcile a number of options and choices from the market place with personal circumstances and endeavours.

The client and client needs are currently the determining factor in service provision. Competitive advantages are locked up in a client and market alignment rather than a product alignment and a process focus rather than a functional focus. The client's voice will have to be heard in all facets of service delivery as well as the compilation of products and services.

Within a client focus, current and developing needs in the market segments and the client groups serviced, determine the characteristics and scope of the products and services required. Competitive advantages lie not only in identifying the needs in the market place before competitors but also in connecting with the distinctive client specifications before the competitors do. There is a continual effort to identify alternatives that better provide for existing needs.

The distinctive needs and characteristics of specific market segments determine the choice of client centred delivery mechanisms. There is also transparency and/or say by the client in the compilation or development of the product or service and how it fits in with the real needs of the client.

For the broker, performance recognition and reward is based on measures of service quality, client inclusion and client retention and on practice building. The broker's role will vary from expert inputs on the interpretation of client needs and requirements and the translation thereof into possibilities and options in the market place to more sophisticated financial planning and portfolio management. The relationship will be characterised by continual advice, feedback, input and decision-making by the client.

Within the client focus, three aspects can be distinguished within the broader framework of market segmentation, namely client status, products or services and delivery mechanisms. Client status can range from a low level salaried client to a client that is financially self sufficient in all respects. Products or services can range from standardised and pre-packaged to a high-level expertise service. Delivery mechanisms are developed on grounds of cost considerations and affordability and can range from over the counter services in the bank to personal service by a banker/relationship manager who is supported by a multi-disciplinary team.

The effectiveness of a client-driven approach will be determined greatly by the balance maintained between these three aspects of service delivery. The potential income that can be generated from a business transaction or relationship, whether immediately or in course of time, has to be justified by the type of product and the cost of delivery.

1.2 Research Problem

As mentioned earlier in this chapter, these changes have major implications for management teams in the financial services industry. Management teams are faced with the challenge to maintain or improve their position in the market in a vastly changing environment. Not only as individuals, but also as a team, they need to change their views from being product oriented to being client focused. They are facing a situation where they have to get new systems in place in order to comply with new legislation. They need to work in different ways to succeed. They all must have a new vision of success – individually as well as shared. The sooner they align themselves with the changing circumstances, the quicker they can get to competitive advantages in the new dispensation.

In the light of these changes that are taking place, it is also necessary to think differently about mediators (brokers) that deliver financial services. The person who is successful in this focus may have characteristics that are different from those of the person who was successful in the product focus. In the old

dispensation, earning commission on sales, for example, was a big motivating factor for most brokers. If someone was good at selling, s/he could earn a lot of money and was regarded as very successful. In the new dispensation the focus is completely on the client. There are even some institutions that are moving away from the commission scheme (Schoombee, 1997). The question can be asked whether a person that was motivated by commission will still be successful, or even stay in the industry, if s/he is not earning commission anymore.

Although people who are successful in the new dispensation may look different from one another, they will also share certain characteristics like being client centred in their approach to their work. The management team needs to ensure that the brokers employed by them reflect people who will be successful in the new dispensation. In order to be successful at this the management team needs to function as a unit, and to do this they need to share a vision on what form success and a successful broker in the new dispensation will assume. Vision is in general the result of the effective sharing of mental models (Espejo, Schuhmann, Schwaninger & Bilello, 1996).

Vision is not enforceable – that is why the effectiveness thereof is primarily dependent on how many people in the business understand it, accept it and interpret it in their own individual terms. What should be done if a vision, and therefore mental models, are not effectively shared? The answer seems to be quite obvious – the mental models should be shared more effectively. This may even mean that changes in some of the individual mental models may have to take place.

This is all easier said than done. Mental models, and therefore vision as well, do not change overnight. Many people are not aware of their mental models (Argyris, 1980), and can thus not make any changes to them if needed. In order to make adjustments to mental models, they need to be brought to awareness first. Once they are aware of their mental models, managers can decide whether adjustments are required and then attempt to do so.

From the above, the following research question can be formulated:

1.3 Research Question

Does the management team under investigation have an effectively shared mental model on the characteristics of the successful broker in the new dispensation?

In order to determine the answer to this question, two questions must be answered first: What do the individual mental models of the management team on the characteristics of the successful broker look like and how do they compare with the requirements for the new dispensation? Once these questions are answered, it can be determined if, and to what extent, the team has a shared mental model on the characteristics of the successful broker in the new dispensation.

1.4 Research Objectives

To answer the research question, the following objectives are set for this study:

- To determine what the individual mental models on the characteristics of the successful broker look like for each of the management team members.
- To determine whether a shared mental model exists and to what extent.
- To investigate how the mental models tie up with the picture of the successful broker in the new dispensation.
- To formulate recommendations regarding the facilitation of change in the mental models in order to align them with the new client focus if needed.

1.5 Exposition of study

To fulfil the above research objectives, the study is exposed in two main parts, namely a literature study and an empirical investigation.

1.5.1 Literature Study

The literate study consists of two chapters (chapters 2 & 3) and is divided as follows:

- **Chapter 2**: The purpose of this chapter is to explore the concept of a mental model and its role and importance in organisations – both individually and in a team context. Mental models do not only determine how people make sense of the world, but also how they take action. Although people do not always act congruently to the theories they espouse (what they say), they always act congruently with their theories-in-use (mental models) (Senge, 1990).

  That is why it is important to extract the mental models of the managers and not just ask their opinions on what the characteristics of a successful broker in the new dispensation are. In a situation like this where there is a lot of pressure to conform to a new focus, the respondent will most likely give the response that he feels is the right one or expected of him in an interview situation. This will be the espoused theory that will say nothing about the way he will act in this new situation. That is why the theory-in-use (the mental model) is needed.

- **Chapter 3**: This chapter discusses the methodology for uncovering the mental models. The Repertory Grid technique was used to uncover the mental models and it is discussed why this technique is ideal for the uncovering of mental models. The Repertory Grid is a technique that was developed by the psychologist George Kelly (1955) to uncover the personal constructs of his patients.

  George Kelly is also the father of the Personal Construct Theory. Though the Repertory Grid has initially been developed for use in a therapeutical context, it is today applied in a variety of contexts not necessarily using the Personal Construct Theory as a point of departure. The fundamentals of the Personal Construct Theory remain implicit in the Grid though and as such

need to be taken into consideration when using the Grid or interpreting Grid data.

1.5.2 Empirical Investigation

- **Chapter 4**: In this chapter an exposition of the research design and research methodology that was followed is given. The selection of participants, method of investigation and the analysis of results are discussed. This is followed by the presentation of the results.

- **Chapter 5**: In this chapter the results are discussed and conclusions and recommendations are made from the results. Suggestions for future research are also made.

Chapter 2 Mental models

2.1 Introduction

When a person is in a management position, s/he is expected to make decisions or be involved in the making of decisions that lead to successful outcomes that fulfil the goals and objectives of the organisation as efficiently as possible and that are in line with its vision. This sounds very simple in theory, but one thing that all managers know, is that many of the best ideas are never implemented in practice. Now the question is why. The manager can easily be blamed when the decision has been made on an individual level, but many decisions are made at a group level and the same thing happens here. So the question is once again why, if people know that there is a better way, do they stick to old, mediocre or even ineffective ways of doing things, even if everybody sees that this will ultimately lead to disaster?

There is a growing belief that this phenomenon stems from mental models (Senge, 1990). More specifically, new insights are not implemented in practice because they are in conflict with deeply held internal images of how the world works, images that limit people to familiar ways of thinking and doing. In the rest of the chapter mental models will be explored further by firstly looking at what mental models are and how they work. Then by looking at them at an individual and group level as well as their influence on decision making.

2.2 Mental models

2.2.1 Definition

In literature many definitions and many terms can be found to describe the concept of a mental model. Other terms that are used (Kotze, 1995) include schemata, operating premises, underlying assumptions, mental road maps, frames and construction systems. Now, a few definitions to illuminate the concept of a mental model will be looked at.

According to Espejo et al. (1996) mental models represent an individual's implicit and explicit understanding of the world, that is their world vision. They control the individual's search for data and information and determine how this would be used. This suggests that mental models cannot be classified as right or wrong but should rather be thought of as useful or not useful. Prejudice can for example be thought of as a simple, but not very useful mental model.

Ballé (1994) defines mental models as deep-rooted, often unconscious, sets of assumptions on how the world is working. They affect a person's perceptions and evaluations of the situations s/he encounters.

According to Hinsz (1995) a mental model is an individual's mental representation and beliefs about a system, and the individual's interaction with the system, with particular focus on how the individual's interactions with the system lead to outcomes of interest. This definition indicates that there are four elements that are central to the definition of a mental model:

- the individual,
- the system,
- the interactions between the individual and the system and,
- the outcomes of the individual's interactions with the system.

Mental models are important because people's beliefs and expectations regarding systems and their interactions with those systems influence their actions with regard to those systems profoundly.

Dixon (1997) defines mental models as generalisations derived from previous experience. They are reflected in the interpretation of current experience and through that interpretation they influence the choice of actions.

According to Doyle & Frod (1998) a mental model is the mental image of the world around them that people carry in their heads. They do not have cities or governments in their heads, they have selected concepts and relationships that they use to represent the real system. A mental model of a dynamic system is a relatively enduring and accessible but limited internal conceptual representation of an external system whose structure maintains the perceived

structure of that system. Mental models do not only include knowledge, but also detailed information on how the knowledge is organised and interconnected.

Johnson-Laird (in Doyle & Frod, 1998) defines a mental model as a representation of a body of knowledge – either long-term or short-term that meets the following conditions:

- Its structure corresponds with the structure of the situation that it represents.
- It can consist of elements corresponding only to perceptible (capable of being perceived by the senses) entities, in which case it may be realised as an image, perceptual or imaginary.
- Unlike other proposed forms of representation it does not contain variables. In place of a variable a model employs tokens (symbols that are fixed rather than capable of assuming alternate values or states).

According to Senge (1993) mental models are constructions, internal images that people continually use to interpret the world and make sense of it.

Kelly (1955) describes a construction system (mental model) as a set of concepts that people develop individually and use to classify the objects and the events in the world around them, to interpret them, to make predictions on the basis of their interpretations and then test whether their predictions are correct.

These definitions all focus on different aspects of the concept of a mental model but they all contain two basic elements. First they all hold that a mental model is an image or a representation of reality and secondly that it helps a person to deal with the world and all the information they are constantly bombarded with. The second element gives a glimpse of why people need mental models and that will be explored a bit further now.

2.2.2 The function of mental models

This raises the question why people need mental models. The answer to this is rather simple. Structures like mental models enable individuals to sift information to prevent information overload and unbearable levels of uncertainty and thereby assist with interpreting processes (Klimoski & Mohammed, 1994). Mental models serve as filters through which people see the world and they only let information through that correspond with their mental models. Information that does not correspond is not let through readily. This means that people only observe part of the world and that part contains exclusively information that proves that their observations are right (Kotze, 1995). The usage of mental models tend to follow the principle of the least mental effort. When the mind is confronted with complexity it tends to fall back on information processing short cuts like stereotypes, thinking by way of analogy or metaphor and the use of practical methods to reduce the mental effort (Ballé, 1994).

In short, mental models help people to prevent information overload and to save time. They set up templates for similar events so that people do not need to do all the sifting every time they encounter a certain situation. This implies that they are to a certain extent able to predict what is going to happen in a certain situation. They can take short cuts at a cognitive level due to the interconnectedness and ordered nature of the mental model. A contextual clue that suggests that a current situation shows similarities with already existing schemata for related situations entail that processing need not to start from the beginning. When new information becomes available a person tries to fit it into the pattern according to which information from the past with reference to the same situation has been interpreted. Processing has already been done and stored in a figurative form previously, that is not according to exact memory, but according to a transformation that makes the information meaningful in a relationship with which it is already familiar (Kotze, 1995).

Many of a person's hypotheses about his/her world will be about the other people his/her world consists of. S/he will be concerned with the notion of what keeps other people going to an extent that is sufficient for him/her to manage his/her interactions with him/her to his/her satisfaction (Eden, Jones & Sims, 1983). Different people interpret situations in different ways because they bring their own specific cognitive frame of personal beliefs, attitudes, hypotheses, prejudices, expectations, personal values and objectives in a situation with which they can make sense of the situation. This means they give attention to certain things, ignore others and view some as to have a specific meaning to them in future. This leads to action or non-action to avoid unwanted consequences and to move towards or maintain a certain state of affairs that is a reflection of personal values and objectives.

These cognitive structures can, on the negative side, cause individuals to ignore contradictory information and can inhibit creative problem solving. In spite of the cardinal influence that mental models have on every aspect of human behaviour, people are often unaware of the extent to which it influences their perceptions (Kotze, 1995). Because these structures are the bases upon which one relates knowledge, attributes meaning and fashions understanding, they are central to the sensemaking process and much of this is related to group cognition (Klimoski & Mohammed, 1994).

People's minds work so fast that they literally confuse what they directly observe with the images formed in their minds based on what they observe. They jump from data to abstractions literally within the blink of an eye and then treat these abstractions as if they were data. That is why mental models are so difficult to observe – for people that is what it is, not their interpretations of what is (Senge, 1993). They are not descriptions of reality, since there is no one reality that can be depicted (Espejo et al., 1994). They are not even common denominators of reality. They are bridges that connect people's intransferable personal complexity. They enable people to relate to one another and co-ordinate their actions.

2.2.3 Mental models and our actions

People's mental models do not only determine how they make sense of the world, but also how they take action. Human behaviour in any situation represents that solution that is the most consistent with people's values. People associate behaviour strategies with their prevailing values. Mental models are so powerful in influencing what people do, partly because they influence what is seen. People also make decisions based on what they see and how they make sense of the world and in particular how they see and make sense of the specific situation in which they must make decisions.

Mental models help managers to search for information, select what is relevant and decide whether an advantage has been reached. Management decision making is largely seen as subjective and dependent on mental models that pertain to the specific decision making situation (Day & Nedungadi, 1994). The decision-making can thus largely be shaped by the characteristics of the schemata being used. While the mental models that managers adopt are partial versions of reality, they represent as coping mechanisms reasonable adjustments of the circumstances they find themselves in. Managers will learn the most about those aspects of the environment that previous experience has taught them they cannot afford to overlook. These routines are strengthened when they lead to successful outcomes.

This relates back to the question asked at the beginning of this chapter. Why, if people know that there is a better way, do they stick to old, mediocre or even ineffective ways of doing things, even if everybody sees that this will ultimately lead to disaster? Can't they see their mental models are not working effectively, and why don't they just adapt their mental models? This brings forward the concept of espoused theories (what people say) and theories-in-use (their mental models) (Argyris, 1980).

Few people are aware of the fact that the theories they use for action are not the theories they explicitly espouse. Even fewer people are aware of the theories that they use. This leads to the question that if people have theories-in-use that are the source of design and implementation of their actions, and they tend to be unaware of the theories that they use, how can they control their behaviour effectively? If people are unaware of their mental models, the mental models are not examined and because they are not examined, they remain unchanged. Then as the world changes, the gap between the mental model and reality grows larger and that leads to actions that are increasingly counterproductive. That is why it is important for a manager to become aware of his or her mental models. They can't be examined and changed if s/he is not aware of them.

There is another reason why mental models are important. Although people do not always behave congruently with their espoused theories (what they say), they do behave congruently with their theories-in-use (their mental models) (Argyris in Senge, 1990). This distinction is very important for the understanding of mental models. People accept things very often at face value about how people tell them they view a situation. As a rule it is safer to perceive how they act in situations to complete our comprehension of their mental models (Ballé, 1994).

The distinction between espoused theories and theories-in-use is not the distinction between beliefs, attitudes and actions. The theory-in-use is the theory that informs the action, not the action itself. There can be a wide variety of actions, but very little variance in the theories-in-use (Argyris, 1980). This means that in order to make effective decisions the manager must not only be aware of his or her own mental models but also of the mental models of the other role players. Organisations are the products of the thoughts and actions of the members of the organisations (Kotze, 1995).

2.2.4 Shared mental models

When looking at an organisation, it can be viewed from different perspectives or levels, namely individual, group or interpersonal and organisational level (Gibson, Ivancevich & Donelly, Jr: 1991). Mental models at an individual level have already been looked at and the interconnectedness of mental models have been noted. The question that naturally evolves from this, is whether there exists something like a group mental model. When a number of individuals get together and form a group, they all bring in their individual characteristics that together form the characteristics of the group that is more than just the sum of the individual characteristics. The characteristics of the group also change when the members change. Is this perhaps the same with mental models? That there can exist a group mental model, consisting of the individual mental models, but that is more than just the sum of the individual mental models? This brings forward the concept of shared mental models.

Although the interaction between every individual and the external world is to a certain extent unique, it is not completely independent of the relations that every other individual maintains with the same world (Kotze, 1995). By means of social interaction, a certain degree of shared understanding between individuals is being produced and reproduced. Shared mental models enable individuals in an organisation to develop a common orientation towards events. Social interactions, especially communication are the primary ways in which shared interpretations of reality are created, transferred and maintained. By means of the process of communication these concepts obtain a similar meaning for two or more individuals and lead to shared meaning.

Shared mental models are an emergent characteristic of organisational communication. They form a map of culturally acceptable communications and actions in the organisation that shows possible ways to get or to prevent change. This is not a case of that the same model needs to be in everybody's minds. What is needed is that people communicate in a way that models are produced. In course of time, more complex personal models will develop. To

share a model does not mean transfer from one person to another, but the development of a dialogue that allows for a better co-ordination between individuals. The problem is thus to design communication in an organisation that would probably generate adequate shared models of co-ordinated actions. Vision is in general the result of an effective sharing of mental models (Espejo et al., 1996). Vision cannot be forced on people.

The shared mental models of an organisation determine what an organisation will consider, how it will react and what it will remember. The intangible and generally invisible assets of an organisation are in the individual mental models that contribute as a whole to the shared mental models. Without these mental models and various sophisticated interfaces that develop in course of time between individual workers, an organisation is not capable of learning. It is the shared mental models that make the rest of the organisational mental models, that is the data, useful in the first place (Espejo et al., 1996).

When looking at mental models on a group level, it is found that the two types of theory also exist within an organisation (Dixon, 1997). Espoused theories that the organisation can articulate and distribute and theories-in-use that the members of the organisation cannot articulate readily but can be deduced from the actions that the individuals within the organisation take. Both theories-in-use and espoused theories are held collectively by the members of the organisation, but theories-in-use are held tacitly rather than consciously which make them unavailable for examination and challenge.

Shared mental models are often regarded as functional (e.g. facilitates co-ordination, fosters efficiency, promotes predictability), but they also have a dark side. In cases where a specific group of people, for example management, have a set of shared assumptions, the group tend to cling to the assumptions. Most organisations are based on a small number of ideas, a complete set of standard procedures and a few mental models that are used repeatedly. This often leads to the organisation becoming closed and to a reducing ability to adapt. Mental models that are entrenched in an organisation can prevent new learning and inhibit constructive change. Inapplicable mental

models are one of the primary factors that cause organisational dysfunction and even threaten the existence of some organisations (Dent & Goldberg, 1999).

Groupthink refers to the phenomenon where shared mental models block the efficiency of a group (Dixon, 1997). This can result in people or groups developing espoused theories that prevent them from understanding and handling their problems. Change implies new ways of thinking and doing and that is why new patterns of cognitive processing are often necessary (Kotze, 1995). Over reliance on shared information, with all the group members that process knowledge in the same way, can result in the group under-utilising the resources of the team. The knowledge and expectations of the team can overlap up to a point where shared mental models become a liability and the potential for individual contributions are lost.

To summarise, it can be said that shared mental models form an integral part of any organisation. They play an important role in the communication and overall functioning of the organisation. Shared mental models can make or break an organisation because they determine the direction the organisation will be going. If the shared mental models in the organisation are not in line with the goals and objectives of the organisation, the organisation can be heading in a direction not intended by management and they may not even be consciously aware of that. This is why it is important to identify the shared mental models in an organisation. They cannot be challenged unless they are identified and brought to awareness. Once they are brought to awareness, they can be changed if necessary. Too much sharing can be as harmful as too little sharing because both can inhibit the growth of the organisation. For shared mental models to be effective, there must be the right amount of overlap or sharing.

2.3 Mental models and decision-making

Behind every strategy there is a mental model. People can fight like cats and dogs about strategy, but without a way to get to the assumptions behind the strategy, the argument is basically senseless because they have no way to get a deeper, shared insight. The mental models that really matter in an organisation are the shared mental models, the implicit assumptions that this is the way that the world is. Individual learning is fundamentally irrelevant in organisations because almost all the important decisions are made in groups (Senge, 1993). Even decisions made by individuals in organisations, are influenced by shared mental models. Without a simplified mental model, the mere volume of incomplete or insufficient data about market tendencies and conditions will overwhelm the limited capacity of managers to extract meaning and make decisions (Day & Nedungadi, 1994).

Decision-making forms an integral part of any manager's average day at work. In an organisation it is not only managers that make decisions, but also those who report to them. Even if it is just to decide how and to what extent they will implement the decisions made by their managers. Decisions in an organisation are influenced by the decision-maker's own mental models as well as the mental models shared in the organisation. Members of an organisation do not process all information clues anew before a decision is made on how to act. They frequently depend on personal and consensual clues to understand and react on organisational situations without much information processing. (Kotze, 1995). They obtain their mental models through interaction with the system and this gives the system user predictive and explanatory power (Rowe & Cooke, 1997). A person uses a mental model of a system to anticipate what needs to be done to the system before physically interacting with it.

The way individuals think is a critical cause of organisational inefficiency. Individual actors that are involved in difficult or status threatening conversations neglect to communicate relevant information clearly and to learn from one another. In these conversations individuals' theories-in-use lead them to act in ways that generate outcomes that are exactly the opposite of what they hope to achieve with

interpersonal interactions. These theories-in-use systematically exclude learning about ways to escape these counterproductive effects and thereby contribute to organisational systems that reinforce anti-learning interpersonal dynamics (Edmondson & Moingeon, 1998).

In organisations, the theory-in-use that can almost universally be observed, is one where individuals, groups and organisations protect themselves in an intelligent way from the solution of their problems by building defensive routines (Espejo et al., 1996). Values that steer the course of action lead to a situation where errors are ignored and problems do not get discussed. This goes back to why the best solutions are seldom implemented in practice. People in an organisation see only what they want to see – they are basically blind for the other facts of the situation, even if it seems quite obvious. They need to be made aware of the way they look at the world. This is not as simple as it sounds, because people do not only see what they want to see, they also do not see things that will make them vulnerable or make them look bad. What they see is designed to protect them. Even if somebody makes them aware of the other facts, they will probably still not act on it, because they have not bought into it. For them to buy into another way of doing, their mental models need to change.

Negative results of mental models in organisations include that people are being stereotyped, their actions and achievements can be evaluated inaccurately and unconscious prejudice with regard to personal characteristics like race, age and gender can happen, since it gets classified automatically. A further implication of mental models is the fact that people's decision making is influenced by what they believe to be true. Their view on what is true, influences the way conclusions are formulated as well as the evaluation of these conclusions (Kotze, 1995). To change their views, their mental models have to change first. To change their mental models, people must first become aware of it, because most of the time mental models are unconscious. People are mostly not aware of the way they look at the world, even if they may sometimes think that they are. They may not even be aware of the fact that they look at the world differently from the way they think they are looking at it.

Healthy organisations will be those that can systemise ways to bring people together to develop the best possible mental models with which any given situation can be faced (Senge, 1990). Two values that can help to manage mental models are openness and merit. Merit involves that decisions are made on grounds of the best interest of the company. This is not always as easy as it sounds because people can think they are making the best decision, but their mental models may in fact be preventing them from doing so and seeing that they are not doing so. Decision-making processes can be transformed if people became more able to bring the different ways they look at the world to the surface and discuss it productively. When people think about a conflict situation and do not only recall what was said, but also what they thought but did not say, it becomes immediately clear how each has contributed to conflict by their own thoughts. This may be a good way for managers to become constantly aware of and stay in touch with their mental models. The generalisations that people make about others determine what they say and how they act, but these generalisations are never communicated.

The impact of a manager's concept of mental models is far reaching. Most see for the first time that all they have are assumptions – not truths. There are certain skills that can help managers to be aware of their mental models. This includes recognising the jumps from observations to generalisations, to articulate what is normally not said, to balance enquiry and defence (the skills for honest investigation) and to face up to distinctions between espoused theories and theories in use (Senge, 1990). Being aware of mental models can help a manager to make better decisions in the sense that it can help him or her to look at the situation more broadly and take facts into consideration that might not have been the case previously. They become more receptive to changes in the business environment and more responsive with respect to those changes. Long-term success depends on the process through which the management team changes their shared mental models of their organisation, their market and their competition.

The management of mental models requires the same critical tasks. Firstly the key assumptions regarding important business issues must be brought to the surface.

These models, if unexamined, limit an organisation's range of actions to what is comfortable and familiar. Secondly, interpersonal learning skills must be developed. These tasks are inextricably part of one another and the one cannot be successful in a business without the other. The manager must not only be able to identify his or her own mental models, but also the ones that prevail in the organisation. It is one thing to identify and change one's own mental models, but it will not have much effect unless the organisation's mental models are also identified and managed.

Shared mental models do not only dictate which decisions will be made, but also how the decisions will be implemented. Collective belief structures affect the speed, flexibility and implementation of a decision as well as the facilitation of problem definition, generating of alternatives, evaluation and choice (Klimoski & Mohammed, 1994). An inclusive, balanced group mental structure would increase the quality of group decisions whereas a biased group structure would decrease the quality of decisions. The development of shared meanings gives form and coherence to the experience of group members, which facilitates co-ordinated action.

2.4 Shared mental models in teams

Managers usually function as part of a team. This can be as part of a management team or part of a team that the manager must lead. The nature of these teams can also differ. The members of the team can work independently to meet their objectives or it can be necessary for them to work interdependently. Whether the members are independent or interdependent affects the role that shared mental models will play in the functioning of the team. Another factor that influences the state and development of a shared mental model, is the state and development of the group. One can differentiate between experts and beginners with respect to the type of mental model a person uses (Russ-Eft, Preskill & Sleezer, 1997). Before taking a closer look at team mental models, one should first look at why team mental models are important for managers.

In the area of strategic decision making, team mental models most likely have their greatest impact. Not on the decision phase, but on the implementation phase (Klimoski & Mohammed, 1994). Decisions can be made in the absence of a team mental model and in spite of interpretation differences between individuals. Teams with well-developed mental models may be able to implement decisions faster and with fewer problems than teams who do not have shared mental models. In the absence of shared understanding, team members are in effect forced to negotiate reality. The time really needed to spend on the task gets diverted and used as team members attempt to surface their mutual perceptions, assumptions, options and preferences. This increases the likelihood of false beginnings and that individuals with critical information may not be heard. Inferior or inefficient strategies may be followed and in light of the inevitable conflict that would arise, it can be predicted that collective effort would be lower and interpersonal relationships might be damaged.

Members of a newly formed group can start with an abstract, diffuse or general model and then the specificity of the model can increase with experience. Newly formed groups can start with the sharing of cognitive tasks and then develop to a state where sharing consists of overlapping information with some knowledge held in common by all the members. Shared mental models do not imply identical mental models, but rather that team members have compatible models that lead to common expectations (Klimoski & Mohammed, 1994). Phenomenologically shared mental models imply that there must be some level of awareness by and among group members regarding how they interpret tasks, situations and events. A statistical similarity is not enough.

New groups typically go through a forming phase where there is a period when team members spend energy to elicit from and share with others how they would like to work. Sometimes these efforts to reach consensus may lead to conflict and then later a point is reached where the unrest is resolved. By mutual adjustment team members usually at least reach some form of understanding of the nature of the team, its task and rules. A change in group membership can also have an effect on the shared mental model. In stable teams one can expect a very wide spread, complex, but team-specific model. In teams with a high turnover of

members the models may be more delimited and more parsimonious (Klimoski & Mohammed, 1994). Due to the new members these models can be more generic and maybe more functional. Members of a group where there is cohesion, are more likely to take part in conversations more actively and be engaged in self-disclosure or collaborative narration. This increased communication can facilitate the development of team mental models.

The nature and complexity of a mental model depends on the situation where the mental model will be used. In routine situations models will be fairly direct and concrete. In situations that are not routine, the models will tend to be more complex and bedded in a hierarchical system. Task characteristics and the importance of the task, as well as experience with the group can also be instrumental in affecting the forming of mental models. Individuals who have internalised the group's goals as their own, may develop more complex mental models than individuals with lower levels of dedication (Klimoski & Mohammed, 1994). Personality characteristics like a high need for integration and cognitive complexity may also influence the elaborateness of an individual's mental model. This means that personal issues as well as task characteristics must be taken into consideration when issues surrounding the form and function of team mental models are addressed.

Shared mental models supply team members with a general idea of who is responsible for which task and what the information requirements are. It also allows them to anticipate one another's needs so that they can work in synchronisation. Team effectiveness seems to be heightened when one or more team member supplies information before they are requested to do so. This seems to be especially advantageous in situations characterised by an increasing workload. Where teams have to complete subtasks that are interdependent, a shared mental model leads to improved performance (Stout, Cannon-Bowers, Salas & Milanovich, 1999). Where the tasks can be completed independently, shared mental models did not improve the performance of the team.

Working relationships between team members improve when mental models are shared between them. Teams whose members understand and respect one

another's internal frames of reference seem to be able to predict and explain one another's beliefs and actions more accurately, as well as to develop expectations concerning other team members (Klimoski & Mohammed, 1994). Even when the cognitive properties of individuals stay constant, groups can exhibit different cognitive properties, depending on how communication is organised within a group over time.

For optimal functioning, team members must be familiar with the knowledge, skills, abilities, preferences and other task relevant characteristics of their team-mates. The construct of shared mental models refers to the organised knowledge shared by team members. Mental models supply a source of people's expectations. In a team set-up a person's expectations about the behaviour of his or her team-mates will vary as a function of the individuals the team consist of. Based on these expectations a team member can adjust his behaviour so that it is consequent with how s/he thinks the other team members will perform. This means that a team member's mental model of the team's tasks and activities can determine individual behaviour and team effectiveness. Mental models can thus be seen to have motivational implications for a team (Swezey, Meltzer & Salas, 1994).

Teams that were involved in higher quality planning were able to form a greater shared mental model of every member's information needs, to send information to one another in advance before explicit requests during periods with a high workload and to make fewer mistakes during these times (Stout et al., 1999). High quality planning increases the shared mental model of team members so much so that they are able to form shared expectations and explanations of one another's information requirements. This means a manager can increase the sharing of mental models by involving his or her team in high quality planning and by keeping them part of the process the whole time. The team and the manager must share the same picture in order to increase efficiency, but there must still be room for individual views.

Group members must simultaneously agree and disagree in order to maintain a balance between unity and diversity. Optimal group situation awareness is achieved when enough overlap occurs to maintain group co-ordination while

allowing enough division to maximise coverage of the environment. This means shared mental models that overlap completely can be regarded as dysfunctional with regard to team performance (Klimoski & Mohammed, 1994). For optimal efficiency through sharing mental models, the overlap must have right balance. Not too much, but also not too little.

If a manager works with a team that functions interdependently, it is crucial that s/he encourages the development of an effective team mental model. By doing this the efficiency of the team can be maximised. If the group that the manager forms part of works more independently, shared mental models are still important, because they dictate the direction the organisation is heading towards. It is up to the manager to make sure that the organisation is steered in a direction that will best answer to the goals and objectives of the organisation.

2.5 Conclusion

Mental models play a crucial role in any organisation. They determine where the organisation will be going and this may not be where the management intended. This is why it is important for managers who need to make decisions in organisations and thereby steer the organisation in a specific direction to be aware of the mental models in the organisation. Firstly, the manager needs to be aware of his or her own mental models, because that dictates the decisions that will be made. Then the manager needs to be aware of the mental models of the organisation and the people working for it in order to be able to steer the organisation. The mental models of the organisation and of the people working for it determine how and if decisions that were taken, will be implemented.

In order for an organisation to be effective, mental models need to be shared. Shared does not mean total overlap. A total overlap of mental models can cause the organisation to be ineffective because it does not allow for varying perspectives and growth because everybody thinks the same. Too little overlap is not healthy either because it makes it very difficult for the members of the organisation to communicate effectively. They do not share the same vision for the

organisation and everybody has his or her own idea on where the organisation should go and how it should get there, resulting in the organisation going nowhere.

This means that a person can become a better manager by being able to identify and manage the mental models in the organisation in order to take decisions, and get them implemented, that will steer the organisation in the direction of fulfilling its objectives and goals in the most efficient way.

Chapter 3 The Repertory Grid technique

3.1 Introduction

For the uncovering of mental models a data collection technique is needed that can extract these underlying, mostly unconscious assumptions, with minimal influencing by the interviewer. The Repertory Grid is such a technique – also very versatile in the sense that the results can be interpreted using quantitative as well as qualitative methods of data analysis. The method used will be determined by the research question the researcher is trying to answer. For the purpose of the study, a qualitative approach is deemed as the most suitable. Before the Repertory Grid technique and its underlying theoretical assumptions are discussed, the study will be placed in the context of a qualitative approach.

3.2 The Qualitative Research Approach

3.2.1 Description of qualitative research

Qualitative research can be defined as an interpretative multimethod approach to the study of people in their natural surroundings (Highlen & Finley, 1996). Empirical data derived from case studies, interviews, observations and historical, interactional and visual text are examined systematically. Researchers strive to understand or interpret self-ascribed meanings of routine or problematic moments in people's lives. With the exception of the positivist paradigm, qualitative research emphasises:

- Processes and meanings that are not rigorously measured in terms of quantity and intensity
- The socially constructed nature of reality

- The relationship between the researcher and the researched
- Situational constraints that influence inquiry

Qualitative research can be said to have a number of defining characteristics which include a focus on interpretation rather than quantification; an emphasis on subjectivity rather than objectivity; flexibility in the process of conducting research; an orientation towards process rather than outcome; a concern with context – regarding behaviour and situation as inextricably linked in forming experience, and finally, an explicit recognition of the research process on the research situation (Cassell & Symon, 1994).

Qualitative methods are specifically oriented towards exploration, discovery and inductive logic. The researcher tries to make sense of the situation without existing expectations in respect of the phenomenon or situation studied (Kotze, 1995). Inductive analysis starts with specific observation and builds up to general patterns. The strategy of inductive design is to allow the dimensions to originate from the data itself, without predetermining what will be the most important dimensions. The qualitative researcher tries to understand the multiple interrelated relationships between the dimensions that originate from the data without making any assumptions or specific hypotheses about the linear or related relationships between narrowly defined variables.

The very essence of a mental model is that it consists of a reality that is in nature socially constructed and helps the owner of the mental model to ascribe meaning to the world around him or her. This means that in order to understand a person's mental model the researcher needs to understand the person's life world. This is best done from a qualitative perspective, since numbers and figures can't capture the essence of experience.

3.2.2 Qualitative research paradigms

When choosing a research method and a method of analysis, the researcher has to keep in mind that questions of method and data analysis are secondary to questions of paradigm, or the basic belief system or worldview that guides the researcher, not only in choices of method, but in ontologically and epistemologically fundamental ways. Basically five different paradigms can be distinguished (Highlen & Finley, 1996):

- *Positivist paradigm*

  The purpose of this paradigm is explanation that leads to prediction and control. Qualitative research from a positivist perspective assumes the existence of an objective reality that is both verifiable and quantifiable. The positivist perspective utilises internal validity, external validity, reliability and objectivity to evaluate qualitative research.

- *Postpositivist paradigm*

  This paradigm shares the same purpose of the positivist paradigm: explanation that leads to prediction and control. Postpositivist researchers strive to address some of the criticisms levied at the positivist paradigm. Objective reality is assumed to exist; it can however be approximated. Multiple methods are used, although discovery and theory verification are emphasised. Although researchers seek an objective stance, they acknowledge that interactions between investigators and participants affect the data.

- *Interpretative/Constructivist paradigm*

  The main purpose of this paradigm is understanding the participant's world. Reality is constructed through human interaction and is seen as relative (i.e. there is no single, external, objective truth). Therefore multiple realities exist, and the interactions between the investigator and participants create the findings as the investigation unfolds. This process is reflexive; information gathered from participants is fed back to them for verification of

its accuracy. Methods are used that allow the investigator to record participant observations accurately and to uncover the meanings that participants ascribe to their life experiences.

- *Critical paradigm*

  The purpose of the critical paradigm is emancipation and transformation – to enable participants to gain knowledge and power necessary to be in control of their lives. Critical research is multivocal, collaborative, and grounded in the lived experience of participants. It is organised by an interpretative theory such as feminism, neo-Marxism, or participatory inquiry. Although most qualitative researchers acknowledge that there is no value-free inquiry, critical paradigm investigators openly bring their values and theoretical perspectives to the research process.

- *Poststructural paradigm*

  A major purpose of the poststructural paradigm is deconstruction: that is, to destabilise and challenge any given interpretation of socially constructed reality as complete knowledge. The poststructuralist perspective challenges the claim of any text to possess external validity. Values and politics, rather than methodological validity, assume prominence in the evaluation of research.

This study is approached from an interpretative/constructivist paradigm. This is the only paradigm that allows an understanding of the respondent's world and where the concept of a mental model fits in since a socially constructed reality is implicit in the concept. This is also the paradigm where the underlying assumptions of the Repertory Grid technique fits in best.

Once researchers select a paradigm that is consistent with their worldview and the empirical questions they wish to address, they select a suitable strategy for operationalising their inquiry. Qualitative strategies are the practices researchers employ in data collection and analysis. A strategy may be used within more than one paradigm, although many are associated with a particular paradigm.

Strategies in psychological qualitative research are case studies, ethnography, ethnomethodology, phenomenology, heuristics, hermeneutics, constructivism, grounded theory, ecological, symbolic interactionism, systems, action inquiry, clinical inquiry and orientational (Highlen & Finley, 1996). Often strategies are based on the context of interest, for example, case studies focus on the individual unit, phenomenology focuses on the essence and structure of participants' experience, constructivism focuses on the reconstruction of realities that participants construct.

The strategies that will be used for this study are in a way dictated by the theoretical assumptions underlying the Repertory Grid technique, which are constructive alternativism, pragmatism and phenomenology (Meyer, 1997).

3.2.3 Objectivity and subjectivity in qualitative research

Critics of qualitative research view the process as too subjective, mainly because of the central role that the researcher plays in the whole process. The researcher is the instrument of both data collection and data interpretation and as a result of qualitative techniques, there is much more interaction between the researcher and the respondent with the researcher moving much closer to the situation (Kotze, 1995).

Qualitative research however, in seeking to describe and understand how people make sense of their world, does not require researchers to strive for 'objectivity' and to distance themselves from research participants (King, 1994). To do so would make good qualitative research impossible, as the researcher's sensitivity to 'subjective' aspects of his or her relationship with the respondent is an essential part of the research process.

This does not mean that in analysing qualitative interview data, the issue of possible researcher bias can be ignored or that the researcher is not capable of scientific conduct during the data gathering process (Kotze, 1995). It is just

as important as in a structured quantitative interview that the findings are not simply the product of the researcher's prejudices and prior expectations.

This can be guarded against in two ways (King, 1994). First researchers should explicitly recognise their presuppositions and in the analysis of the data make a conscious effort to set these aside. They should allow themselves to be surprised by the findings. Second, at the stage of coding for themes or categories, inter-rater comparisons can be used. Co-researchers can code 'blind' (that is independently, without consultation) and afterwards explore the reasons for any disagreements. Similarly, independent raters not associated with the study may be used.

3.2.4 Reliability and validity in qualitative research

Researchers have to be careful not to carry over the connotations that validity and reliability have within quantitative research, as it is, to qualitative research. In terms of qualitative research, internal validity refers to the extent to which scientific observations and measurements are authentic representations of some reality; external validity refers to the degree to which such representations can be compared legitimately across groups. Internal reliability is the degree to which other researchers, if given a set of pre-generated constructs, will relate it to the data in the same way as the original researcher. External reliability has to do with whether independent researchers will discover the same phenomena or constructs in the same or similar situations (Kotze, 1995).

Thus in qualitative research, the concern is for validity of interpretations – whether a researcher's conclusion that X is the main theme to emerge from an interview is valid (King, 1994).

According to Mason (1996) research is valid, if it means that the researcher is observing, identifying, or 'measuring' what s/he says s/he is. The researcher therefore needs to work out how well a particular method and data source

might illuminate his/her concepts, whatever they are. Generalisability involves the extent to which the researcher can make some form of wider claim on the basis of the research and analysis, rather than simply stating that the analysis is entirely idiosyncratic and particular. Reliability involves the accuracy of the research methods and techniques.

The following aspects influence the internal validity of qualitative research (Kotze, 1995): ageing, observer effects, twisting of results bedded in selection of participants and observers/interviewers, mortality and falsely postulated relationships between observed phenomena.

In the case of internal reliability, the question can be asked if various researchers, within a specific study, agree with respect to the findings. Strategies (Kotze, 1995) to reduce threats to internal reliability include:

- Verbatim recording of discussions, concrete and precise descriptions, recording of observations and other raw data.
- The presence of various researchers
- Confirmation of findings of other researchers that did research in similar situations
- The use of mechanical equipment during data collection.

External reliability can be increased by recognition and handling of aspects concerning five issues, namely, the status position of the researcher, choice of informants, social situations and conditions, analytical constructs and methods of data collection and analysis (Kotze, 1995).

3.3 The Repertory Grid technique

The Repertory Grid is a qualitative technique that is often compared with structured interviewing (Kotze, 1995). This type of interview is appropriate when the nature and extent of the participant's opinions on the research topic are not known beforehand and cannot be quantified easily. Both structured interviewing and the Repertory Grid have strengths and weaknesses, but the relative efficiency

of the Repertory Grid is one commonly reported advantage (Gammack & Stephens, 1994). This is important in organisations where people's time is limited and it is important for the researcher to be perceived as professional in obtaining relevant information.

The fact that structure is not imposed as in a questionnaire, but represents the respondent's own construction, makes it more ecologically valid, and can in practice reduce resistance to inquiry. It also enables the researcher to interview the participant in detail, get substantial information and to write a mental map of how the respondent sees the world with the minimum of observer bias (Stewart, Stewart & Fonda, 1981). Many studies describe the qualitative use of the Repertory Grid as a technique to supplement or replace the interview, stressing its comparative efficiency and flexibility, and its greater potential for objective validity and reproducibility (Gammack & Stephens, 1994). It also has the added advantage of providing more systematic and quantifiable data (Brook, 1992). The Repertory Grid technique does not even suggest the questions, let alone the answers (Smith, 1978).

The Repertory Grid technique was devised by the psychologist, George Kelly, as a method of tapping into the way an individual perceives or constructs his or her personal and social world. It aims to identify the personally meaningful distinctions with which a view of the world is constructed (Gammack & Stephens, 1994). Kelly was concerned to find a method which was phenomenological, ideographic and yet quantitative: phenomenological in that it would attempt to capture the participant's own perceptions and constructs, ideographic in that those individual responses would not be lost in a statistical averaging exercise (Smith, 1995b).

The following characteristics of the Repertory Grid can be distinguished (Kotze, 1995):

- The central objective is to uncover construction patterns of a person and not to link these patterns to certain predetermined normative data.
- There is no fixed content. Because this is a technique, not a test, the selection of the form and content will relate to every specific problem that is investigated. The value of the Repertory Grid, by not prescribing content, is that it sets a

structure wherein the investigation can take place on the participant's own terms, whereas a pure quantitative analysis of numbers cannot address the sense-making process of well-informed participants.

- Relationships between constructs for every individual can be exposed in terms of the construing of elements, or by comparing constructs directly with one another.
- If desired, statistical tests of significance can be applied to the comparisons.

The Repertory Grid is very versatile in the sense that it can be applied to both individuals and groups. Grids can be analysed individually as in a case study or be aggregated to study problems of theoretical interest (Brook, 1992). Since it has originally been developed in the clinical context of Kelly's Personal Construct Theory, the question arises to what extent the Repertory Grid technique can be used sensibly in other domains' outside Kelly's theory. Its continued and widespread application (Cruise & Sewell, 2000) is testimony to its general utility, and researchers' use of quantitative analysis techniques and variant forms of construct elicitation suggests that the method is robust against violation of its theoretical assumptions (Gammack & Stephens, 1994). One reason for this is that much inquiry and formulation of knowledge is founded on identifying theoretical distinctions and classifications, and these are intrinsically delivered by the Repertory Grid technique. The product of research must be understood by reference to the individuals in the social world it concerns.

The Repertory Grid has been found to be an extremely valuable tool by clinicians and researchers from a range of theoretical persuasions (Winter, 1992), and there can be no argument but that it can be used independently of the Personal Construct Theory. Because something can be done, it does not carry with it the implication that this is how it should be done (Fransella & Bannister, 1977).

Psychologists often behave as if all that is needed for effective research or applied work, is a single idea and an instrument (Fransella & Bannister, 1977). They ignore the fact that behind any single idea, there are a whole series of assumptions and underlying any instrument yet a further series of assumptions. The assumptions underlying the instrument may well contradict the assumptions

implicit in the idea. Thus grid methodology is frequently brought into play, quite without relation to its parent theory. Yet psychologists who use the grid thoughtfully, will find themselves assuming the truth of many of the assumptions of Personal Construct Theory, even when they are ignorant of the theory as such.

This implies that no matter from which angle one approaches the Repertory Grid, the assumptions of the Personal Construct Theory will always be implicit. These assumptions will not only be implicit when applying the grid, but to some extent also in the interpretation of the results. For this reason it is worthwhile not only to look at the assumptions underlying the Personal Construct Theory, but also how it can be applied to grid data.

3.3.1 The Personal Construct Theory

Kelly (1955) describes humans as scientists whose existence consists essentially of trying to predict and control events in their environment. This occurs by means of a set of concepts that each person develops individually. Kelly calls this a construction system and says individuals use it to classify the objects and events in the world around them, to interpret them, to make predictions on the basis of their interpretations, and then to test whether the predictions are correct. Individuals consciously pursue the goal of predicting the events of their lives.

People do not go through life without goal or direction, but are constantly and actively engaged in improving the cognitive system they use to make their predictions (Meyer, 1997). They understand themselves and their environment in terms of the ways they anticipate events (Solas, 1991). These processes are revealed through their personal constructs that act as transparent templates through which they view their world.

3.3.1.1 Basic points of departure of the Personal Construct Theory

The basic points of departure of the Personal Construct Theory are constructive alternativism, pragmatism and phenomenology (Kotze, 1995). Constructive alternativism indicates the principle that there is not only one correct representation of the world, but that the world can be construed in alternative ways.

Pragmatism states that the value of a theory should not be judged by the question whether it complies with reality, but by asking what the practical usefulness thereof is. The implication of this point of departure is that the individual's striving towards prediction and control is aimed at the development of an effective construction system that is working in his or her situation. Individuals will also change their construction systems if they are not working properly.

According to the phenomenological point of departure, the real appearance of the world is of lesser importance than a person's representation and experience thereof, since individuals' representations of their world are their reality.

3.3.1.2 The assumptive structure of the Personal Construct Theory

Kelly presented his Personal Construct Theory in the form of a fundamental postulate with a sequence of supplementary corollaries (Kelly, 1955). A summary of the assumptive structure of the Personal Construct Theory and a short discussion of each follows below:

a. *Fundamental Postulate:* a person's processes are psychologically channelised by the ways in which he anticipates events.

   A postulate is a basic assumption that is accepted and on which the rest of the theory is built. Kelly (1955) selected every word carefully, and it is

therefore necessary to understand it before continuing. With '*person'* Kelly indicates that he is referring to the individual person as a whole and not to any part or processes of the person. With *'processes'* Kelly indicates that the person is not an object that is temporarily in a moving state, but is himself a form of motion. *'Psychologically'* indicates that Kelly is working within a framework of psychology, and that the theory was not developed to explain phenomena in any other disciplines than psychology.

With *'channelised'* Kelly wanted to indicate that a person's behaviour takes place in a flexible and frequently modified network of paths, and not in a vacuum. This network is structured and it both facilitates and restricts a person's range of action. *'Ways'* indicate that the channels are established as means to ends. They are the outcomes of an individual's own deliberate choices. With *'he'* Kelly emphasises the way the individual person chooses to operate, rather than the ideal or perfect way.

'Anticipates' indicates that man, as the scientist that he is, seeks to predict events. Anticipation is both the push and pull of the psychology of personal constructs. With *'events'* Kelly wanted to indicate that man ultimately seeks to anticipate real events. Man wants the future reality to be better represented.

b. *Construction Corollary:* a person anticipates events by construing their replications.

For Kelly, the essence of personality is the cognitive system which the individual uses to predict and control events (Meyer, 1997). He calls this a construction system rather than a construct system, thereby emphasising that it is a working and changing system which is of the individual's own making, and not something which actually exists in objective reality in some final unchanging form. This places the process of construing, rather than the system as such, in the foreground.

The construction system comprises a very large number of constructs, each which has different formal and functional properties and all of which are connected in a variety of ways. The properties of the construction system and of the individual constructs are what determine a person's behaviour, differences and similarities between people and interpersonal behaviour.

c. *Individuality Corollary:* persons differ from each other in their constructions of events.

There are many ways of construing the world and one is not necessarily more valid than another (Solas, 1991). This is because they see/perceive different things in what may be regarded as the same situation by a third person, and more importantly because they construe the things differently by explaining its occurrence and what matters about it through the use of different construction systems (Eden, 1988).

d. *Organisation Corollary:* each person characteristically evolves, for his convenience in anticipating events, a construction system embracing ordinal relationships between constructs.

The constructs in an individual's construction system are hierarchically arranged, which means that the system comprises superordinate and subordinate constructs. A superordinate construct is comprehensive in that it incorporates other constructs as elements (Gammack & Stephens, 1994). One way of picturing the construction system is as a series of interlocking ladders (Stewart et al., 1981), getting smaller in number and stronger in influence/strength as one reaches the top.

Additional to the hierarchical arrangement of constructs, there also exists concentric relationships between constructs (Meyer, 1997). Concentric relationships refer to the distinction between central and peripheral constructs. Central or core constructs are important for the

individual's maintenance of himself or herself as a person, while peripheral constructs have only marginal implications for self-maintenance. It follows that core constructs cannot be changed readily, because any change in them would necessitate change throughout the construction system. The distinction between central and peripheral constructs is especially relevant for the parts of the construction system concerned with the person's self-perception and his or her views about relationships with other people.

e. *Dichotomy Corollary:* a person's construction system is composed of a finite number of dichotomous constructs.

   Kelly believes that constructs develop as a consequence of the individual's perception of similarities and differences between events, and that on the basis of this abstraction, the person formulates bipolar constructs which s/he uses to predict future events. He is of the opinion that similarities and differences can lead to construct formation only when there are at least three events to refer to, two of which will be interpreted as similar to each other in terms of a specific property, and one as different.

f. *Choice Corollary:* a person chooses for himself that alternative in a dichotomised construct through which he anticipates the greater possibility for extension and definition of his system.

   People make choices or behave in accordance with how they anticipate that others will respond. The person will tend to make the choice in favour of the alternative that seems to provide the best basis for the anticipation of events.

g. *Range Corollary:* a construct is convenient for the anticipation of a finite range of events only.

Regardless of the nature of a person's constructs, s/he will at any given moment have only a finite number of constructs at his or her disposal, each of which will be relevant to a more or less limited range of phenomena. This implies (Meyer, 1997) that there will always be certain things in the world which individuals are unable to predict because they do not fall within the scope of their construction systems, or have no relevance to it.

With regard to range, one can distinguish between comprehensive and incidental constructs. A comprehensive construct has a broad range or context, which means that it is applicable to a broad set of elements, whereas an incidental construct only has a limited range.

h. *Experience Corollary:* a person's construction system varies as he successively construes the replications of events.

Construction systems change over time to assimilate new information. The construction system is predisposed to interpret new information as familiar information, but there will always be a time when the amount or significance of new information requires a change in the construction system (Stewart et al., 1981).

It is also an underlying goal of construing to improve the construction system in order to make more accurate predictions in the long run (Meyer, 1997). This can take place in two ways, the system can namely be expanded so that it can predict more events, or it may be defined more accurately so that events already incorporated in it can be predicted more and more accurately. Individuals may also scrap parts of their constructions systems or omit certain elements from the context of their constructs.

i. *Modulation Corollary:* the variation in a person's construction system is limited by the permeability of the constructs within whose ranges of convenience the variant lies.

Personal constructs can only be changed within subsystems of constructs and subsystems can only be changed within more comprehensive systems (Kelly, 1955). Even changes that a person attempts within himself must be construed by him. A person does not learn certain things merely from the nature of the stimuli which play upon him; he learns only what his framework is designed to permit him to see in the stimuli.

j. *Fragmentation Corollary:* a person may successively employ a variety of construction subsystems which are inferentially incompatible with each other.

Individuals' construction systems are constantly changing as they confront new events and aspects of the world, therefore some parts of the construction system may develop differently from other parts, and people will thus develop different construct subsystems for different contexts of their lives (Meyer, 1997). These subsystems may be partly consistent with one another, but may differ in other respects and even include inconsistencies. As a rule, people strive to develop a single, comprehensive system that contains no inconsistencies or irreconcilable discrepancies, but this ideal is never entirely realised. Validation represents the degree of compatibility (subjectively construed) between one's predictions and the outcomes that one observes (Brook, 1992).

k. *Commonality Corollary:* to the extent that one person employs a construction of experience which is similar to that employed by another, his psychological processes are similar to those of the other person.

If one can understand someone's construction system, one cannot only understand his history, but also make predictions about how likely he is

to behave in a given situation because one knows something about what that situation is likely to mean to him. The degree of agreement between the construction systems of two people is a measure of the extent to which they are alike each other, and the extent to which they are likely to understand each other without effort (Stewart et al., 1981).

l. *Sociality Corollary:* to the extent that one person construes the construction processes of another, he may play a role in a social process involving the other person.

The degree to which one person can understand or mimic the construction system of another is a measure of the extent to which he understands that other person – in other words a measure of the degree to which they can negotiate sensibly, be friends, predict what the other would do, etc. Interpersonal interaction occurs in terms of each person's understanding of the other (Solas, 1991). People need not have identical or even similar construction systems in order to interact though.

This also implies that effective interaction between members of a problem solving team depends on the extent to which they can each understand how the other interprets the situation. In attempting to create a consensus and commitment to action in a team, members of the team will need to develop a common way of construing future events (Eden, 1988).

3.3.1.3 Ways constructs can be used

Constructs can be used in different ways (Meyer, 1997) and these are important to look at in order to obtain a better understanding of a person's construction system and the way s/he construes things.

- *Permeable versus impermeable use of constructs*

  A construct is used in a permeable way or has permeable boundaries when new elements are readily brought within its parameters. It can be inferred that an impermeable construct has only one impermeable pole. Permeability is concerned with the classification of elements or events.

- *Tight versus loose use of constructs*

  Kelly developed several general diagnostic constructs for describing construction systems. He coined the terms 'tight' and 'loose' (Smith, 2000) to describe the extent to which constructs imply each other within a system. That is, given where an individual rates an element on one construct, to what extent does that predict where s/he will place the same element on other constructs? Kelly stated that a loose construction system leads to varying predictions, and conversely, a tight construction system leads to unvarying predictions. So, for example, in a very tight system an element perceived as 'honest' might also be perceived as 'generous', 'kind', 'intelligent' and so on. A looser system might allow the possibility that honest people can be unkind or mean.

  Kelly pointed out (Fransella & Bannister, 1977) that in some contexts the person who can deal with social relationships in a relatively differentiated way may be more successful. The essence of Kelly's argument is that we loosen and then tighten and then loosen our thinking in a cyclic manner. Our aim is first of all to gain perspective and then become concrete enough to define our themes operationally and so regain a new perspective.

  The tight use of constructs is associated with consistent and even rigid attitudes, while using them loosely can be associated with flexibility and pliancy, but sometimes also with inconsistency and confusion. It has been found (Winter, 1992) that a tightly organised construction system, or a tightening of the system over the course of an intervention, is predictive of a poor response to group intervention. This may lead the person who construes tightly to be particularly threaten by, and therefore

resistant to group interventions. A symptom-focused intervention may be less threatening for such an individual.

- *Constructs can be used in a pre-emptive or propositional way*

  A construct is used in a pre-emptive way when certain other constructs can consequently not be used. This means that pre-emptive construing inhibits alternative ways of construing. When a person uses a construct pre-emptively, s/he obliges himself or herself to choose one of its two alternatives and to act accordingly, without allowing himself or herself to consider other alternatives.

  Propositional use of constructs allows people to construe the elements encompassed by their constructions in various ways, pending additional information. When people construe events in such a way that their final conclusion depends on the circumstances, rather than on a conclusion that they have already reached at a superordinate level, they are using constructs in a propositional way.

- *Constructs can be used in a constellatory or propositional way*

  A construct is used in a constellatory manner when it determines a certain construction of its elements, or, in other words, when subordinate constructs are strongly associated with superordinate constructs. Propositional construing is the opposite of constellatory construing, as it is for pre-emptive construing.

Cognitive complexity (Fransella & Bannister, 1977) is defined as the capacity to construe social behaviour in a multi-dimensional way. A more complex person has available a more differentiated system of dimensions for perceiving others' behaviour than does a less cognitively complex individual. The more loosely knit the constructs, the more complex the person's construction system.

Personal Construct Theory should not be viewed as a panacea or an intervention in isolation. It is an effective catalyst towards the purposeful use

of strategies which might otherwise have been applied without sufficient consideration towards inter-personal constructs (Ashley, 1991).

3.3.2 Application of the Repertory Grid technique

As mentioned earlier, Kelly developed the Repertory Grid technique as a way by which people's construction systems can be uncovered and enables the interviewer to obtain a mental map of how the participant views the world. The objects of people's thoughts are referred to as elements and can be equated to towns and cities that need to be placed on a map (Kotze, 1995). The researcher must first decide on the domain that s/he wants to chart, and then elicit a number of objects or events that the participant must think about within the specific domain. The constructs are the qualities that people use to think about the elements.

The Grid is not so much a test as a methodology involving highly flexible techniques and variable applications. What all applications have in common, is their seeking to understand how people impose meaning in their worlds (Solas, 1991). The Grid can be used for various purposes, but only one purpose at a time can prevail. Some constructs will be the same, no matter what the qualifying question. Some constructs may appear to be irrelevant to the stated purpose, but the respondent cannot concentrate on the researcher's purpose until s/he has cleared that particular construct out of the way. All methods of assessment attempt to reveal the patterns of relationship between the entities in the grid: in particular the inter-relationship of constructs, of elements and of constructs to elements.

To select the right mode for a Grid and to plan the analysis accordingly, one has to ask oneself the following questions (Stewart et al., 1981) beforehand:

- What does one want to achieve with this interview?
- Who does the data belong to?
- What resources are available for analysis?

- What form of analysis does one want to use?
- Is speed of analysis important?
- Will the Grid be interpreted as a co-operative effort, or alone?

The application of the Repertory Grid basically consists of two stages, namely the development of elements and the development of constructs. Usually a specific form of the Grid is also applied in order to reveal the patterns of relationships between the entities in the Grid.

3.3.2.1 The elicitation of elements

The choice of elements determines the nature of the discussion that will take place between the researcher and the respondent, because it defines the domain wherein the interview will take place.

There are three points to remember when choosing elements (Stewart et al., 1981):

- The more specific and precise, the better. Elements should be as precise as possible. An imprecise element, struck against another imprecise element or two to produce a construct will not produce much clarity of contrast and therefore will not produce good clear constructs.
- A rough scatter over the element area is acceptable. One does not have to strive for elements that are somehow 'evenly' distributed over the available territory.
- When one is interested in the border between one kind of element and another, then one has to include some elements from the other side of the border as well.

There are also certain criteria that the selected elements must adhere to (Stewart et al., 1981):

- Elements must be discreet. Elements most often used are people, objects, events and activities – in other words, nouns and verbs. Nouns should be specific – specific people, specific objects. Abstract nouns such as 'my ideal subordinate' or 'leadership' should be avoided. Verbs, that is events and activities, should be pinned down as closely as possible in space and time, the type of event one can take a short film clip of. Loose descriptions that cannot be pinned down so clearly, such as 'negotiating' or 'thinking' should be avoided. The sophistication of the conversation increases with the progress of the Grid – one wants to select elements that are a level or so below the level of sophistication that one wants the final conversation about. Also do not use features of elements as elements.
- Elements must be homogeneous. Do not mix classes of elements; do not mix people with things; or things with activities.
- Elements should not be subsets of other elements. The smaller element will contain so many features similar to the larger element that they will be difficult to compare and contrast during the construct elicitation process.
- Elements should not be evaluative. It is easy, particularly with events and activities, to allow element description to contain an evaluative flavour.
- Elements must be in the range of convenience of the constructs to be used and elements must be representative of the pool from which they are drawn (Fransella & Bannister, 1977).

There are three strategies according to which elements can be developed (Kotze, 1995):

- The interviewer can provide the elements. The disadvantage is that the interviewer may supply elements that the respondent is not familiar with and thus reduce the value of the interview. It is just not possible to do a Grid interview on a topic one is ignorant about. The respondent may also feel a lower level of commitment to the interview since s/he did not generate the elements him/herself.

- The respondent can generate a list of elements spontaneously once the interviewer has explained broadly to him or her what class of elements is wanted. The disadvantage of this strategy is that the respondent's responses will have a definite bias with regard to those elements s/he personally values little. If, for example, the elements represent decisions, decisions with which the respondent has not agreed may not be stated.
- By laying down certain guidelines for elements, questions can be used to which the answers will be the elements. This strategy avoids the favour and familiarity bias inherent in the free-response method, while at the same time ensures that there is a good degree of ownership of the elements on the respondent's part. The price for this strategy is mainly time.

3.3.2.2 The elicitation of constructs

Constructs represent the dimensions that the respondent uses when thinking about the elements. During construct elicitation, bipolar distinctions are made and thus constructs are elicited. There are many ways in which constructs can be elicited, each with their own advantages and disadvantages, for example dyadic elicitation (Caputi & Reddy, 1999), the triadic opposite method (Hagans, Neimeyer & Goodholm, 2000) and Kelly's triadic difference method.

Personal constructs are elicitation method-dependent (Caputi & Reddy, 1999). If researchers are going to use a particular method of construct elicitation, they need to be aware that the nature and types of constructs are influenced by the method. Consequently the structural properties of the construction systems represented in grids are elicitation method-dependent. For example, if a researcher wishes to use dyadic elicitation because it is simpler, s/he may be eliciting less cognitively complex constructs, for which the implicit poles represent comparisons, rather than contrast.

The dyadic elicitation approach has an individual consider only two elements. The person is asked to consider whether the two elements are alike in some particular way, or different in some way. If the two elements are perceived to be similar, the contrasting pole is determined by considering remaining members of the element set, identifying an element that is different from the original pair, and describing the difference. It is assumed that the dyadic task is simpler than triadic (difference) elicitation (Caputi & Reddy, 1999). Grids using dyadic elicitation tend to yield lower ordination scores, more functionally independent constructs, and lower levels of cognitive complexity than grids employing triadic elicitation (Caputi & Keynes, 2001). With the dyadic method, there has also been a greater balance of positive and negative constructs in beginning constructions. Within the dyadic elicitation approach, one can distinguish between the dyadic difference and the dyadic opposite methods (Hagans et al., 2000).

Positive constructs seem to represent highly desirable qualities of the self and others that are readily brought to mind. The themes of sociability, consideration of others, affiliation, and competence represented by these constructs also have an abstract quality. In contrast the negative constructs seem to represent more concrete themes of self and others as lacking in positive attributes such as lacking in motivation, social skills and tolerance (Caputi & Reddy, 1999).

In the triadic opposite method (Hagans et al., 2000), respondents are presented with three elements and asked to identify a way in which any two of the three are alike. Following the identification of this similarity, participants are then asked to identify the opposite of the likeness. The likeness and opposite are recorded on the grid as the construct dimension.

Kelly's triadic difference method involves generating bipolar constructs by comparing and contrasting a triad of elements. A person is asked to consider in which way two elements are similar to each other yet different from the third member of the triad. A word or phrase may be used to represent this similarity. This word or phrase forms one pole of the

construct. The person is then asked to generate a contrast pole by stating in what way the third member of the triad is different (Caputi & Reddy, 1999).

The opposite method elicits fewer 'bent' constructs (i.e. non-antonyms), thereby enhancing construct bipolarity. Bent constructs are elicited when participants shift to a separate construct dimension in order to formulate a contrast pole (Hagans et al., 2000). Two considerations are important with regard to the triadic opposite method. First, the instruction to produce an 'opposite', at least on the face of it, would seem to invite extreme, or more highly polarised constructs. The second consideration is that it expressly permits the possibility that the third element in the sort is not applicable to the construct. The critical point is that this method allows all the elements in each of the construct sorts to be rated along the same construct pole or the third element to fall outside the range of convenience of the construct all together.

Levels of differentiation are directly related to the way in which elements are placed along the constructs. Put simply, any method that demands the distribution of ratings across both poles of the construct dimension, by definition increases levels of differentiation. Alternatively, any method that permits all elements to be assigned to a single pole of a construct will reduce levels of differentiation (Hagans et al., 2000).

The triadic difference method of elicitation seems to produce constructs that are less functionally independent, more meaningful in that they are better able to discriminate among elements (Caputi & Reddy, 1999). This method generally elicits construct sets that are more cognitively complex. In order to interpret and explain these findings it is useful to revisit the basic elicitation task inherent in the two methods. An important difference exists between dyadic and triadic elicitation tasks. Triadic difference elicitation asks the respondent to describe how two elements are similar and yet different from a third element. That is to say, the respondent is forced to compare and contrast at the same time, in the context of the triad. On the other hand, the

dyadic elicitation task requires the respondent to consider how two elements are alike or how they are different. The process of contrast may be implicit in the dyadic elicitation task, but the respondent is not required to consider the contrast in the context of the triad. This difference of contrast and comparison in each elicitation method appears to affect the kind and nature of constructs that are generated by the respective approaches.

One general danger of the method of triads, especially for minor constructs, is that the construct elicited is too strongly determined by the particular triad. Although the ratings for the elements in the triad may be accurate with respect to the specific construct, a respondent may not know enough about the other elements to rate them accurately, or even to say if the construct is particularly relevant. Methodologically, this may be determined by a preponderance of mid-point values, and it is in this case advisable to use the grid conversationally as a focal point for qualitative investigation, rather as a simple quantitative product (Gammack & Stephens, 1994).

No method is immune from distortion by the ways in which and the purposes for which, it is used. Whatever Kelly's original intentions may have been, there are clearly ways in which the grid can be used so that, while its formal properties are retained, its essential quality is lost. Thus if a grid is used not to attain any kind of understanding of the other person's construing but simply to derive indices in terms of which the person can be manipulated, then its nature changes (Fransella & Bannister, 1977).

Kelly states six assumptions that underlie his original Role Construct Repertory Test, but which are equally applicable to subsequent grid modifications and to construct elicitation in general (Fransella & Bannister, 1977):

- The constructs elicited should be permeable. This means that the person is able to apply the constructs elicited to people and interpersonal situations other than the three elements from which the construct has been elicited.
- Pre-existing constructs should be elicited. While the person may, on occasion, develop a new construct during the process of elicitation, it is

assumed that this does not happen often and that there is some lingering degree of permanence in constructs.

- The verbal labels attached to the constructs should be communicable. That is, the interviewer has some reasonably accurate idea as to what the respondent is getting at. It is often necessary for the interviewer to test out the accuracy of her understanding by conversing with the respondent.
- The constructs elicited should represent the respondent's understanding, right or wrong, of the way other people look at things. The respondent's measure of understanding of other people may actually be inadequate or preposterous; but, if it is the basis of a real social interaction with them, it is indeed related to his role construction system.
- The respondents should not dissociate themselves entirely from the elements or constructs elicited. They must be able to see themselves somewhere along the construct dimensions.
- The constructs elicited should be explicitly bipolar. By stating what a person or thing is, one is also stating that which s/he or it is not.

A construct is written in bipolar form and is not necessarily composed of a phrase and its semantic opposite; it is a contrast, but not a simple dictionary opposite. This is important to bear in mind when interviewing, because some respondent may guess that only dictionary opposites are acceptable. The interviewer should strive to get both ends of the construct equally clear, and this usually means avoiding attaching a simple negative to the opposite pole. The interviewer should try to get a construct that consists of pairs of descriptors in their own right, rather than one descriptor and its negation (Stewart et al., 1981).

The process of construct elicitation continues until the respondent cannot think of any new construct with regard to each group. After all the constructs are exhausted for a group, the process moves to a new group until all the elements are covered in different combinations. The process of construct elicitation is stopped when constructs start to repeat or if the respondent cannot supply any more constructs.

It is recommended to encourage people to provide as many different constructs as possible, but maybe the person is saying something when he repeats constructs (Fransella & Bannister, 1977). He does so because they are important to him. This was tested in an experiment in which some people were allowed to repeat constructs. The constructs were then rated by their owners in terms of importance and it was found that repeated constructs were rated more highly. What we have here is another measure of superordinancy.

A good Grid interviewer needs to know what to do in an interview to expose as much of this construction system as is necessary for the purpose of the interview. This happens through a process known as laddering (Stewart et al., 1981). Taking the respondent through a sequence of why' questions gradually elicits more constructs, each of great importance and personal relevance to the respondent, until a construct is reached that cannot be taken further. Coming down the ladder, the 'how' question is used. This kind of question is used when a construct is so big or global as not to be useful unless it can be broken up into its component constructs.

The interviewer has to know how to use laddering questions to get some depth and perspective into the interview, to get from the general to the specific and back again, and to accomplish changes in focal strength similar to those used when asking qualifying questions. There is however a danger in using the 'why' questions when you get close to core constructs. The interviewer should be careful to reveal core constructs for several reasons (Stewart et al., 1981) and must keep in mind that most of the industrial and organisational uses of the Grid do not require core constructs to be investigated.

Not all constructs elicited are useful in a particular grid format, for example excessively permeable constructs, situational constructs, excessively impermeable constructs, superficial constructs, vague constructs, constructs which are a direct product of the role title or element. There are ways of dealing with such constructs, but it must always be kept in mind that what may seem superficial or vague to the researcher, may be neither superficial nor vague to the respondent. An easy relationship and a free-flow of discussion between

interviewer and respondent are the best basis for construct elicitation (Fransella & Bannister, 1977).

Constructs can be categorised (Stewart et al., 1981) as propositional, sensory or evaluative. A propositional construct is one that describes easily observable properties of the elements, like for example black-white, 'in the office'-'out of the office'. Sensory constructs describe how the person feels or perceives the elements, like for example wet-dry or hard-soft. Evaluative constructs describe how the person evaluates the elements for example liked-disliked; high priority-low priority. This categorisation is helpful to bear in mind when eliciting a Grid, as the purpose of the Grid usually determines the kind of constructs it would be most useful to elicit, as well as the balance between them.

3.3.2.3 The choice of a Grid form

Construct elicitation technique allows one to invite the respondent to tell one the constructs s/he uses about a particular part of his or her world, but it doesn't tell how the construction system actually works. The full Grid procedure not only allows one to exhibit the constructs themselves, but in detail how they are used.

The final step in the procedure is for the subject to sort, generally by rating or ranking, all of the elements in terms of all of the constructs (Winter, 1992). Five major grid forms (Solas, 1991) can be distinguished:

- The dichotomous form
- The split-half form
- The implications form
- The rank-order form
- The rating form

Kelly's original method incorporates the dichotomous form of the grid. This, and the split-half form that has been developed from it, requires the

respondent to ascribe elements to either end of a construct dimension by a tick or a cross. The difference is that in the latter, respondents are forced to place half the elements at either end. While the split-half form has solved the confounding problem of lopsidedness (that is, all elements located on either one or the other end of a construct), it forces respondents to make a seemingly artificial choice about where to locate elements along construct dimensions.

Ranking and rating grids are both relatively recent innovations (Solas, 1991). In these forms, each construct is used as a scale along which each element is ranked or rated. Whereas in the former, respondents rank-order elements from the construct pole of each dimension, elements in the latter are rated from 'most' to 'least' like either pole of the construct. Ranking tends to be more tedious than rating elements on constructs, particularly when large numbers of elements and constructs are involved, and there is a tendency to concentrate on the construct end of each dimension. When using the rating form, both ends of the construct dimension are considered. The implications grid differs from the other forms in having no elements as such apart from the one implicit element – the self.

Differences between grid forms have stemmed from the varying constraints the different forms have imposed on the respondents and the way respondents have perceived the different scales used, and that they are likely to affect the clinical interpretation of grid data as a result. Respondents find the split-half and rank-order forms most difficult to complete as a result of these two factors. The most popular grid is the rating form; this is less cumbersome than alternatives and allows for finer discrimination to be made regarding the location of elements along construct dimensions (Solas, 1991).

By applying a grid form, one gets closer to the functional meaning of the elements and constructs – one understands how they are actually used by the respondent. A Grid interview supplies two main kinds of information: it allows one to see how each element rates/ranks on each construct, so that

one can compare elements if necessary; and it allows one to see how each construct is used and to compare constructs if necessary (Stewart et al., 1981).

3.3.2.4 Ways to analyse Grid data

When analysing Grid data, it can be done in one of, or a combination of, a number of ways that can broadly be categorised as quantitative or qualitative. The five principle methods of analysis (Stewart et al., 1981) are frequency counts, content analysis, visual focusing, cluster analysis and principal components analysis. The first two methods are concerned with analysing the contents of the Grid while the remaining three also analyse the inter-relationships. The first two methods can also be described as qualitative approaches and the last three as quantitative approaches. The mode of analysis will depend on the purpose of the Grid. Since this study is of a qualitative nature, the qualitative approaches to data analysis will be discussed in more detail. The quantitative approaches will be sufficed with a few general remarks.

With frequency counts, the number of times that particular elements or particular constructs are mentioned is counted. Although this method can be applied to individual Grids, it is most often used when a group of people have been interviewed and the researcher is looking for common trends.

The number of times a particular element has been mentioned in response to an eliciting question is a useful insight in itself and may help when comparing different groups of people. Frequency counts of constructs are more difficult, because it is not often that the same constructs are produced by several people. One can, however, select a fairly common construct or group of constructs and make a pattern to see how they are used (Stewart et al., 1981). Frequency counts work best when the elements or constructs being counted are discrete and well defined, and have a consistent public meaning.

For the qualitative analysis of individual grids a technique called content analysis is usually used. Content analysis is a common type of category generation that involves the finding of patterns in the data and then placing each pattern into a category (Highlen & Finley, 1996).

The focus in the analysis of qualitative data comes from the research questions that have been generated at the beginning of the investigation (Kotze, 1995). In qualitative research, theory is used to focus the investigation and it provides boundaries for comparison in the facilitation of the development of the theoretical or conceptual results.

The analysis of the data is a non-linear simultaneous process of bringing order, structure, and meaning to the data in the search for general statements about relationships among categories of data (Highlen & Finley, 1996). It occurs at every point in the research process: while planning the investigation, during data collection, and after data collection as themes and interpretations are refined. Meaning is central and the aim is to try to understand the content and complexity of those meanings rather than take some measures of frequency (Smith, 1995a).

Kvale (1996) identifies five main approaches for organising or analysing interview data, namely meaning condensation, meaning categorisation, narrative structuring, meaning interpretation and generating meaning through ad hoc methods. An ad hoc method means that no standard method has been used for analysing the whole of the interview material. Instead there has been a free interplay of techniques during the analysis.

The first step in analysing the data consists of identifying categories, recurrent themes and finding patterns in the data. A theme (Boyatzis, 1998) is a pattern found in the information that at the minimum describes and organises possible observations or at the maximum interprets aspects of the phenomenon. A theme may be identified at the manifest level (directly observable in the information) or at the latent level (underlying the phenomenon).

The principles of the way of data analysis that Giorgi (Polkinghorne, 1989) suggests for qualitative interviews can also be used for analysing grids. First the researcher reads through the protocol to get a sense of the whole. Then the researcher reads through the protocol again and divides the transcript into units that seem to express a self-contained meaning from a psychological perspective. Then the researcher tries to state as simply as possible, in his or her own language, the meaning that dominates the natural unit.

The next step is to interrogate each meaning unit and its theme in terms of the specific topic of the study. Once the meaning units are transformed into psychological language, the researcher works to synthesise and tie them together into a descriptive statement of essential, non-redundant psychological meanings. At this stage the different meaning units are categorised. Those meaning units that come up most frequently, are regarded as more important to the respondent and are mentioned first in the descriptive statement and more time must be spent on them as well.

As themes and patterns emerge, they must be challenged by searching for disconfirmatory data and supporting data that are incorporated into larger constructs. Attention to disconfirmatory data is necessary to avoid making simplistic interpretations that gloss over the complexity of themes and settings, to allow readers to make their own interpretations of the data, and to maximise the study's trustworthiness (Highlen & Finley, 1996). Analysis is an iterative process. One needs to read through the data many times and each reading is likely to throw up new insights.

The transformed meaning units are related to each other and to the sense of the whole protocol (Polkinghorne, 1989). After this a description at the general level from the protocol is developed. After all these steps have been followed for each protocol, the researcher synthesises all the general descriptions of the protocols in a final general description to yield a description of, in this case, a shared mental model.

When doing a quantitative analysis of a Repertory Grid, certain aspects must be kept in mind (Gammack & Stephens, 1994):

- Although the Grid is numeric, it can be misleading to assume that it has conventional metric properties. Scale mid-point values, for instance, may represent several different significations – for this reason the researcher should ascertain which interpretation is appropriate.
- Equivalence and dimensionality: quantitative techniques assume that all instances of a number in the grid can be treated as equivalent. If a construct is not particularly relevant to an element, then a value given to that element will have less force than a value given to a highly relevant item. The problem with reducing the mathematical dimensionality is that it can lose important semantic information.
- It is further assumed that the original triad constitutes both extremes of the construct (reflected in the assignment of extreme values of the scale), then there is no guarantee that other elements in the set will not require still more extreme values to be assigned. Rating elements on a range implies mathematically that the construct embodies a dimension with at least ordinal properties. This may be misleading, as a construct is essentially a semantic device, with no a priori requirement to conform to the limitations of metric space.

Any quantitative analysis must be referenced against a qualitative appreciation of the data's meaning, and the technique is compromised if merely applied as a cookbook recipe for obtaining a data matrix, which is then subject to disembodied analysis. Users of the Repertory Grid technique who disregard its original constructivist intention and uncritically apply quantitative analyses may be making unjustifiable assumptions. Although quantitative analyses of the Grid data may provide useful insights into domain relationships, it is recommended that instead the matrix be used primarily as a conversation focus for complementary qualitative analysis involving in-depth interviews; exploration of definitions; relating elicited constructs to events and work practices, and more specifically identifying their range and foci of convenience. Such analysis should also

aim to elaborate the semantic and organisational properties of the elicited grid with respect to the purpose of the inquiry (Gammack & Stephens, 1994).

3.3.2.5 Reliability and validity of the Repertory Grid

As a result of the wide variety of Repertory Grid techniques, together with the various ways of application, it is not possible to talk about reliability and validity of Repertory Grids in general (Kotze, 1995). The Repertory Grid should be viewed as a specific format that is used for the data and will give an indication of whether there is a pattern of meaning in the data. Reliability and validity apply to the indices and methods of analysis elicited through application of the grid and not to the technique as a measurement format (Hutchinson, 1998).

When psychologists talk about the reliability of a measure, they often seem to hover between various definitions of the term. Sometimes they seem to be talking very generally of the capacity of a measure to assess a characteristic 'reliably', whether or not the 'amount' of the characteristic is changing in the subject. At other times they seem to mean by reliability, the tendency of a test to produce the same result for the same subject at different times (Fransella & Bannister, 1977). Since much of life is about change, the second definition stated as a requirement of a measure becomes fatuous when it is universally applied. The overall aim is surely not to produce stable measures – stability or instability exist in what is measured, not in the measure. Our concern is to assess predictable stability and predictable change.

With regard to reliability, the idea of a static mind is self-contradictory (Kotze, 1995). The grid shouldn't be looked at for repeating the same results, but when it shows change, rather try to determine what the change indicates. Given the multiplicity of form, content and analysis of extant grids, it is clearly nonsense (Fransella & Bannister, 1977) to talk of *the* reliability of

the grid. It is even less sensible than talking of *the* reliability of *the* questionnaire. We would be bound to ask of any question about *the* reliability of questionnaires, *what* questionnaires in *what* area administered to *what* kind of subjects under *what* kind of conditions and analysed in *what* kind of manner.

Since the Repertory Grid does not have any specific content, there can only be talked about validity in the sense that it can be questioned whether it effectively exposes the patterns and relationships in certain types of data. The grid is essentially a format for data and while it is reasonable to question the validity of a particular grid format constructed to try and yield particular information, it is not sensible to dispute the validity of the grid as such (Fransella & Bannister, 1977).

The second aspect concerning validity is that the Repertory Grid can take on many forms and thus there cannot be referred to the Repertory Grid as an entity. If it is found that a specific grid does not have any predictive value and did not produce the required information, there must be looked for shortcomings in the specific format, rather than making general remarks regarding the validity (Kotze, 1995).

Kelly was very prepared, in terms of a construct theory approach to equate validity with usefulness and to see understanding as the most useful of enterprises. The usefulness of a test or measure is clearly a difficult thing to assess. Investigations (Fransella & Bannister, 1977) suggest that the virtue of the grid (its validity) does not simply rest in its capacity to discriminate between one diagnostically defined group and another, or between before and after treatment groups and so forth. More significantly, it distinguishes between groups in such a way as to test hypotheses concerning psychological process. Validity ultimately refers to the way in which a mode of understanding enables us to take effective action. The ‘us’ who takes action may well be the respondent of the grid rather than the interviewer.

Chapter 4 Methodology and results

4.1 Introduction

In this chapter the research design will be discussed and the results will be presented. Since the objectives of a study determine the research design, it is necessary to revisit them at this stage.

4.2 The objectives of the study

The following objectives were set for this study:

- To determine what the mental model of each member of the management team looks like on the successful broker.
- To determine whether a shared mental model exists and to what extent.
- To investigate how the mental models tie up with the picture of the successful broker in the new dispensation.
- To formulate recommendations regarding the facilitation of change in the mental models in order to align them with the new client focus if needed.

4.3 Research Design

In order to meet these objectives, a technique must be used that will uncover the mental models of the individuals involved. From Chapter 2, it is clear that although there are various definitions of mental models, these definitions share certain basic characteristics, namely that they all maintain that a mental model is an image or a representation of reality that helps a person deal with the world and the information s/he is constantly bombarded with. Dealing with an individual's representation of reality indicates a socially constructed nature of reality. This suggests that a qualitative approach should be followed. From Chapter 3, the indication is that an interpretative or constructivist paradigm should be adhered to.

4.3.1 Selection of participants

Within a qualitative approach, participants are not selected as a result of their demographic reflection of the general population, but as representatives of the same experiences or knowledge (Kotze, 1995). The logic and power behind the deliberate selection of respondents is that the participant group must have a wealth of information, so that the research topic can be studied in depth. A good informant is one who has the experience and knowledge that the researcher requires, has the ability to reflect and is willing to participate in the study. Regarding the size of the group, there are no fixed rules in qualitative research. It depends on what the researcher wants to know, the objective of the inquiry, what will be useful, what would be regarded as credible and what needs to be done with the available resources.

Since one of the objectives of this study is to investigate the existence of a shared mental model amongst the members of a management team, all the individual members of the management team must be selected. The management team that has been selected for participation in this study is part of a large bank group and is responsible for delivering financial services through brokers. All eight members of the team have been interviewed and all had the necessary background and experience to supply the information required. All have willingly participated in the study and have indicated that the results were important to them in terms of a successful way forward. The respondents have all been male, Afrikaans-speaking and middle-aged or approaching their middle-ages.

4.3.2 Collection of data

The Repertory Grid is a technique developed by Kelly (1955) to uncover construction systems, or as referred to in this study, mental models. This technique has been discussed comprehensively in Chapter 3, and the focus of this chapter will, therefore, be on the specific application for this study.

Since the Repertory Grid is often compared with structured interviewing (Kotze, 1995), many of the same principles apply. Semi-structured interviewing generally takes a considerable amount of time, and can become intense and involved, depending on the particular topic. It is therefore sensible to try and ensure that the interview can proceed without interruption as far as possible, and usually it is better to conduct the interview with the respondent on his or her own.

The setting and location of the interview can also make a difference. People usually feel more at ease in a setting they are familiar with (Smith, 1995a). It is sensible to concentrate at the beginning of the interview on putting the respondent at ease, to enable him or her to feel comfortable talking to the interviewer before any of the substantive areas of the schedule are introduced.

The same principles were applied during data collection for this study. First, an appointment was made with the respondent and a certain amount of time was booked for the interview in order to ensure that interruptions be kept to a minimum and that it could take place in private with the respondent. The interviewing took place at a venue selected by the respondent, like his office, in order for him to feel as comfortable as possible. At the beginning of the interview, an effort was made to first create rapport with the respondent, before proceeding with the application of the Grid.

4.3.2.1 Elicitation of elements

Elements were elicited by laying down guidelines and asking certain questions to which the answers would be the elements (Kotze, 1995). This was done to ensure a good degree of ownership, which was important, since all the respondents were very busy people and used to making the decisions wherever they were. They needed to feel that what they worked with was their decision and that they had an important contribution to make in this process.

A set of five blank numbered cards were put before the respondent and he was asked the following questions:

- Please think of the names of three people that you regard to be successful as brokers, and write their names on the first three cards.
- Then think of two people that you regard not to be successful as brokers, and write their names on the last two cards.

The answers to these two questions represented the elements that were used to elicit the constructs about success with regard to brokers from the respondents. The elements elicited were very precise and specific and complied with the criteria for selected elements as discussed in Chapter 3, namely being discreet, homogeneous, not being subsets of other elements, not being evaluative and being within the range of convenience of the constructs being used.

4.3.2.2 Elicitation of constructs

Constructs where elicited by using the triadic difference method as originally described by Kelly (1955). This method was selected because the constructs produced are better able to discriminate between the elements (Caputi & Reddy, 1999), which was important, since the elements were quite similar. Another reason for selecting this method, was because it yields constructs that are more cognitively complex.

Three elements at a time were presented to the respondent, and he then had to indicate how two of these elements were similar to one another and different to the third. This attempted to facilitate the respondent in drawing on his own categorising scheme. Kelly suggested that the constructs resulting from this exercise would provide clues as to how the person sees himself and the world in which he lives (Smith, 1995b). The similarity between the two elements forms the construct pole while the difference forms the contrast pole.

The data gathered was recorded on a recording sheet (see Appendix). The numbers of the cards between which the similarity exists, were underlined to indicate which element pair formed the construct pole. The similarity was recorded on the left-hand side of the sheet and the difference on the right-hand side. The session continued by comparing different combinations of the element cards until a satisfactory number of constructs had been elicited. The combinations were presented to each respondent in the same order and were as follows:

a. 123
b. 345
c. 124
d. 235
e. 145
f. 134
g. 245
h. 135
i. 234
j. 125

These combinations represent all possible combinations of the five element cards. According to Kotze (1995) seven constructs are sufficient and any additional constructs make little difference to the distribution of elements. Since the interviewer does not play any role in the representation of the nature of the constructs, the constructs are a very personal reflection of how the respondent views the world and individual differences in style and personality soon emerge.

The way one records Grid interview data, is another great advantage of this technique. The record is extremely full and it is possible to reconstruct all the substantive points that occurred in the interview by looking at the record. Another advantage (Stewart et al., 1981) of this full, but structured recording system is that several Grid interviewers can work on a problem and each researcher can easily understand his/her colleagues' interview

records, making long meetings where they explain, reconstruct and undoubtedly distort what went on in their various interviews unnecessary.

After construct elicitation, the Grid procedure was completed by applying Kelly's dichotomous form. The respondent was asked to ascribe each element that was not used in the elicitation of a particular construct to either end of a construct dimension by a tick or a cross. A tick indicating that it belonged to the construct pole and a cross indicating that it belonged to the contrast pole. After completing the Grid in this way, the Grid was ready for analysis.

4.3.2.3 Data analysis

In terms of the analysis and interpretation of the results, there are certain underlying assumptions that need to be kept in mind. One of the assumptions is that the researcher is interested in learning something about the respondent's psychological world. Meaning is central and the objective is to try and understand the content and complexity of those meanings. This involves the researcher engaging in an interpretative relationship with the transcript. While one is attempting to capture and do justice to the meanings of the respondent, to learn about his or her mental and social world, those meanings are not transparently available and must be obtained through a sustained engagement with the text and a process of interpretation (Smith, 1995a).

This was done by means of content analysis. The researcher first read through each of the individual protocols to get a sense of the whole. Then by reading through each one again, dividing them into meaning units and interrogating these meaning units, themes were identified. These themes were then synthesised into a description of the characteristics of a successful broker for each of the respondents.

Frequency counts were used to determine the relative importance of each of the themes for each individual and to uncover patterns in the data. The underlying assumption here is that the respondent is trying to say something when he repeats a construct – he does so because it is important to him (Fransella & Bannister, 1979). Based on this, it is further assumed that the more the construct is repeated, the more important it is to the respondent.

For the description of the shared mental model, the frequency that a theme occurred with across respondents was taken as an indication of the extent to which this theme was shared between respondents. Only themes that were shared by four or more respondents were included in the shared mental model. These themes were then discussed for each respondent to give an indication of the relative importance of the theme for the group and the extent to which it is shared.

4.3.2.4 Reliability and validity

In terms of qualitative research, reliability involves the accuracy of the research methods and techniques (Mason, 1996). Since it was the objective of this research to uncover mental models, and since the Repertory Grid was designed to do just that, the methods and techniques used can be regarded as reliable. The results produced by this technique can be regarded as valid since it resulted in a good illumination of the concepts under study (Mason, 1996).

4.4 Results

The results are presented by first giving a description of the successful broker for each respondent. After each description, a short description of the respondent's construction system is given.

4.4.1 Respondent 1

The successful broker

The respondent did not distinguish between characteristics associated with people that he regarded as successful and those that he regarded as unsuccessful. He listed a number of characteristics of brokers of which some seemed to be more important to him when looking at the frequency with which they occur. By not having a combination of the characteristics, a person could be viewed as unsuccessful in his eyes. The presence of the characteristics did not automatically imply success. There were other characteristics that could make a person unsuccessful, even though they had characteristics of successful people. It seemed as if the respondent distinguished between those who were failures because their sales figures were not good and those who were unsuccessful as a result of certain characteristics that they possessed. It was as if they possessed characteristics that made them failures as people. He also came across as negative towards females in the industry.

Two themes that figured very strongly were a service orientation towards the client and integrity. These two themes seemed to be very closely interwoven and they seem to be two sides of the same coin for the respondent. With integrity the respondent meant honesty towards the client with regard to the client's needs. The broker would sell to the client according to the client's needs and not according to what would bring in the most commission for him. His own interest would be placed below the interest of the client. Service orientation further involved that the broker would deliver a follow-up service after the transaction and would keep the client informed on the performance of his investment. A long-term relationship based on trust was built with the client. A person for whom commission ruled over integrity was regarded as unsuccessful regardless of the fact that this person's sales figures probably looked good. A lack of integrity went hand in hand with a lack of client service. The one could not happen without the other. The respondent was of the opinion that it was a tendency of women in the industry to force products down a client's throat.

The respondent believed that different people felt comfortable in different market segments. According to the respondent a person's comfort zone determined in which market segment he worked, and not his level of knowledge. Comfort zone referred to a person's ability to form relations with a specific type of client. He was of the opinion that a person should stay in the market where he felt comfortable, otherwise he could just run into problems. It was however the successful people who tended not to stay in their comfort zones. The unsuccessful people stayed where they were comfortable. Successful people tended more to aim for a market that could yield a higher income, even though they were not comfortable there. It could be an indication that those people were very ambitious.

Even if a person delivered a good service to his clients and placed the client's needs first, he could still be unsuccessful. This person possessed other traits that reduced the effect of these characteristics. This person worked at a slower and more relaxed pace that actually made him work himself into bankruptcy. The person was also not prepared to work long hours and the respondent connected this to support of his spouse in the sense that it was not acceptable to his spouse that he worked long hours. It seemed to the respondent as if the unsuccessful person did not have the ambition to want more. A high income was not important to such a person.

Successful people were more skilled with the management of their practices. They usually had assistants, because they could afford them. They were prepared to invest money in manpower and did not let their assistants work too hard.

To summarise, it could be said that the respondent basically used three characteristics to distinguish between successful and unsuccessful brokers, and those were a service orientation towards the client, integrity and level of performance.

Construction System

For each combination of cards, the respondent looked at only one grouping of the three elements. He used his constructs in a loose way in the sense that the rating of an element on one construct did not predict where he would place the element on other constructs. This is associated with flexibility and pliancy and can also be indicative of a complex construction system. He also used constructs in a propositional way in the sense that his final conclusion about success depended on circumstances, allowing himself to consider other alternatives. Conclusions reached at a superordinate level did not influence his final conclusion. This respondent used a combination of propositional and evaluative constructs, with the majority of constructs being evaluative, which could have been expected.

4.4.2 Respondent 2

The successful broker

The respondent distinguished in a black/white way between people who were successful in the industry and those who were not successful. Successful people had certain characteristics and behaved in a certain way. Unsuccessful people were just the opposite. Only good characteristics were ascribed to successful people, while the respondent had nothing good to say about those that he regarded as unsuccessful. In a way there was a differentiation between successful people.

A theme that figured very strongly, and to which many of the other constructs were linked, was drive. A successful person did things for himself and did not wait for someone else to do things for him. By doing things himself, growth and self-development took place within the person. A person with drive was in control of his environment and activities. The person who was in control of his environment usually had a large knowledge base and was not qualification driven. The person could delegate and plan and his environment was irrelevant. The less successful person did better in a more structured

environment. That was probably because the successful person had the ability to analyse and to organise himself.

A person with drive had an optimistic disposition and was not afraid to explore new territories and to try new things. They noticed opportunities – even in problems and had the ability to surround them with the right people. They had experience of people and practice and were strong communicators whose communication was continuously well planned. They could work well in a team if required. Successful people had good relations with all role players and had the ability to connect with the client over the long-term. The person installed confidence and kept his old clients. Their service was very thorough and precise and they gave the client the best advice. Those that were not as successful gave the advice that would yield them the most commission and their integrity was questioned by the client. The person that was successful, was loyal and dedicated and gave more than expected in terms of time and knowledge.

Two other aspects that the respondent gave attention to, but that was not distinguishing, were the stability of a person's family life and the ability to think in a multidimensional way and integrate financial services. All the successful people could think multidimensionally and integrate services. The respondent differentiated between successful people according to the way that they approach their clients. Some had an aggressive approach and were more marketing oriented. They needed people who supplemented their service orientation. Others were practice builders whose service was very thorough and precise. The respondent referred to them as hunters and farmers.

To summarise, it could be said that there were basically three aspects that the respondent saw as defining success. Firstly, he looked at a person's drive. Then he looked at a person's service delivery and whether he could build relations with his clients with dedication.

Construction System

The respondent looked at only one grouping per combination of cards, except at the first combination where he looked at more than one grouping. The first combination gave him the three successful people and he had to differentiate between them, perhaps indicating that to him there was more than one type of successful person.

His constructs were tightly organised and he tended to use them in a pre-emptive way. This was done to such an extent that it could be predicted on completing the Grid form at which end of the construct pole he would place an element. It was also obvious that all the positive characteristics belonged to the successful people and all the negative characteristics to the unsuccessful people. The constructs he used to distinguish between successful people were impermeable for unsuccessful people. They fell outside the scope of these constructs. Almost all his constructs could be categorised as evaluative.

4.4.3 Respondent 3

The successful broker

This protocol yielded very rich responses, in fact so many responses on each card combination that there was not enough time to present all the card combinations. With regard to success criteria, he differentiated properly between successful people. This respondent had a tendency to distinguish in a black/white way between those who were successful and those who were not successful. An interesting phenomenon was that some of the characteristics that the respondent used to distinguish between successful people were similar to those used to distinguish between successful and unsuccessful people. The person that possessed those particular characteristics when differentiated between successful people was categorised with successful people when looking at successful and unsuccessful people. There was probably something else that distinguished this person from the unsuccessful people and made that he was viewed as an example of success.

A theme that figured very strongly was the person's disposition towards the bank. Successful people were very strong image builders for the company and they participated in the development of the company by sharing their knowledge and successes with others. Their disposition towards association with the bank was high and they combined their own values and the values of the bank in a manner that was mutually beneficial. There were, however, also those who were successful but were self centred and only focussed on their own values. A theme that connected with this was that successful people were mostly indispensable in the bank environment. They were well accepted and did not battle with bank co-operation. Regarding values, those who were successful were seen as people with high values whose integrity was also regarded as high. Their way of conducting business was credible and with them it was not necessary to be constantly on the look out for distortions. Another theme that connected with this, was expertise in terms of financial planning. The expertise of people who were successful was far above suspicion and they had a passion for learning and understanding financial planning and the intricacies of the financial industry.

Two smaller themes that connected to bank co-operation, were networking and disposition towards cross marketing. Successful people were experts at networking. They did not wait for others to come and network with them, but created opportunities. They were mostly narrowly focused on cross marketing and would do a complete financial plan for their clients. Also linking to this was that those that were successful had a good client retention and did an upfront selection of their clients. They were directed towards servicing their clients and were in general not commission hunters. Even though there could be successful people that hunted commission.

Another characteristic of successful people was that they had been in service for long – they did not change jobs often. The respondent also distinguished between successful and unsuccessful people on grounds of practice management. Those that were successful applied their practice to their and their client's advantage. Their secretaries were part of their practice and they did not have a high secretary turn over. The high secretary turn over of

unsuccessful people could be attributed to an implausible remuneration package or an inability to get the people trained.

In summary, it could be said that this person viewed success in terms of the value the person added to the bank. Then he looked at the person's disposition towards the bank, bank co-operation and expertise. In the end everything was about what the person meant to the bank.

Construction System

The respondent looked only at one grouping per combination, but yielded very rich responses. On the first combination, which gave the three successful people and which respondents usually found a bit more difficult to discriminate, he produced quite a number of constructs. The same thing happened on the other combinations.

On completion of the Grid form, it appeared that the respondent had a continuum on which he rated success. These constructs (elicited on the first combination) seemed to be impermeable for the unsuccessful people. These constructs just did not apply to them. While the respondent seemingly used constructs in a loose way when only looking at successful people, the picture changed when the unsuccessful people entered the equation. Then he started using the constructs in a tight, pre-emptive way, indicating that he was flexible in terms of successful people, but that he had a rigid attitude towards unsuccessful people. Once a person was classified as unsuccessful, he received a whole set of negative characteristics – justifiable or not.

When looking only at the successful people again, something else emerged. The elements were divided in two distinct groups with no shared characteristics between them. They only started sharing characteristics once the unsuccessful people entered the picture. The one group received all the characteristics that seemed negative and that brought forth the question on why the respondent regarded this person as successful. Maybe this person had some quality that the respondent associated with successful people and that that made him successful, regardless of his other qualities or maybe the

respondent saw the potential in him to be successful. The respondent produced mostly evaluative constructs.

4.4.4 Respondent 4

The successful broker

This respondent yielded a rich amount of responses. The characteristics used to discriminate between successful people were not determining of success. Though this respondent tended to ascribe certain characteristics to successful people and others to unsuccessful people, it was not in a rigid way. The respondent looked at each combination of cards at different groupings, which may be an indication that he has a thinking style that views matters from different perspectives.

The two main themes that surfaced, concerns drive and interpersonal abilities. Interpersonal abilities was a theme that figured quite strongly. On the one side it involved that a person was good at reading people. He knew when a person was giving buy signals and also how much pressure to put on the person to clinch the transaction. On the other side, interpersonal abilities also involved the broker's success in the source. Successful people could work well in a team and the source had enough confidence in them to give them leads. Teamwork was not a criterion for success though. A person could work on his own and be very successful. The difference here was that it was by own choice that a successful person worked on his own. People that were successful usually created a good impression. They were well groomed and created confidence, although appearance was not determining of success. The respondent also looked at verbal abilities, although that was also not determining of success. Successful people tended to have better verbal abilities and could communicate better, especially in groups. They could usually uphold themselves in a situation that they knew nothing about and in general had more self-confidence.

Successful people were usually very client directed – they came with good solutions and it was not just about themselves or their own pockets. Linked to their interpersonal abilities, they would phone the client themselves, or use an assistant that was up to the task. They were not shy of working and they referred to themselves as brokers – nothing else.

Another characteristic that the respondent used to distinguish between people, was technical knowledge and academic qualifications. Also, these characteristics were not regarded as determining of success.

The other important theme that distinguished successful people from unsuccessful people was drive. Successful people had drive and energy. They did not come to a standstill at problems, but climbed over them. They had clear objectives with target dates and they planned well. Planning was a theme that figured quite strongly. They had a wide vision and plan for success. They appeared to have an innate sense of how to effectively utilise available resources.

Construction System

The respondent responded with at least two groupings on each combination of the cards. By doing so he indicated that he preferred to look at matters from different angles, making him flexible and showing his pliancy. It also indicated that he probably had a very complex construction system. He used constructs in a propositional way, by allowing his conclusion to depend on the specific circumstances of the person and not the category the person belonged to in terms of success.

Although there were characteristics that were exclusively reserved for successful people, there were also characteristics that were shared between successful and unsuccessful people. The respondent left room for grey areas and evaluated success on an individual base. Even though he could classify a person as successful or unsuccessful, they were not two distinct breeds of people to him. He was still able to see positive characteristics in unsuccessful people and negative characteristics in successful people. He was not

completely negative towards unsuccessful people. Most of the constructs he produced could be classified as evaluative, but he also used propositional constructs.

4.4.5 Respondent 5

The successful broker

This respondent looked at success and failure in a black/white way. Those who were successful all possessed a number of characteristics that they shared with one another, but not with those that are unsuccessful. At the first combination, where only successful people were compared with one another, the respondent looked at different combinations. That was something that he did not do at any of the other combinations. At this combination successful people shared characteristics with unsuccessful people, but that did not happen at all further in the protocol.

The respondent compiled a list of characteristics that a person should have to be successful beforehand. Initially the respondent worked off the list, but was later persuaded to hand over the list and concentrate on similarities and differences.

A theme that came to the fore very strongly, was high energy levels. A person with high energy levels was very goal driven and it was not necessary to urge such a person to action. They took very strong initiative and launched many projects. They did not just sit and wait for things to happen. They were driven by performance and money was very important to them. A theme that connected with this was acceptability in the branch. Those that were successful were usually highly acceptable in the branch. There was a great degree of co-operation between them and the bank manager and the staff of the branch. They were also very involved in the branch. They participated on all levels in the activities of the branch and gave their input at meetings. They also gave the necessary recognition to the bank personnel when necessary.

Another theme that came through strongly referred to their way of working. Those that were successful had a strong infrastructure and also made use of the existing infrastructure. They were not thrown at their own resources and did not wait for business. They worked according to systems to generate leads. By doing complete analyses for their clients and not only selling single needs, they built practice. They further built practice by giving the best advice to their clients and their legal technical knowledge was very high. The integrity of those that were successful were in general (but not always) very high, and they did not need to be watched the whole time.

Another theme that emerged referred to interpersonal skills. People who were successful usually had a lot of self-confidence and did not stand back in conflict. Their interpersonal skills were very good and they possessed excellent negotiating skills.

Other characteristics that the respondent looked at, but that were not determining of success, were family life and working hours. The respondent looked at whether people came from stable families and whether they would work long hours or were more bound by time. Then he also looked at what they did after work. Some would socialise with their colleagues, while others would drive to get home. Further, he also looked at appearance – whether the person was neat and well groomed.

To summarise, it could be said that there were basically three things that were important to the respondent in terms of success. These were high energy levels, good interpersonal skills and self-confidence, as well as the way the person approached his work.

Construction System

On the first combination of cards, the respondent looked at all possible groupings. From the second combination onwards, the respondent only looked at one group per combination. The constructs elicited on the first combination, were used in a loose, propositional way. This is the only place where

successful people shared characteristics with unsuccessful people and where one could not predict where an element would be placed.

From the second combination onwards, the picture changed. The respondent started using the constructs in a tighter, more pre-emptive way. There were no shared characteristics between the successful people and the unsuccessful people. The characteristics of the two categories were mutually exclusive with the more negative sounding characteristics ascribed to the unsuccessful people. This respondent probably tended to be rigid in his thinking and when a person was viewed as unsuccessful, that person possessed a whole bunch of negative characteristics in the respondent's eyes – justifiable or not. The constructs that this person used could be classified as evaluative.

4.4.6 Respondent 6

The successful broker

The respondent looked at more than one combination on almost each of the card combinations. He did not distinguished between successful and unsuccessful people in a black/white way. Even though there were characteristics that successful people share with one another, but not with unsuccessful people, there were also characteristics that people share with one another regardless of the fact of whether they were successful or unsuccessful. In terms of these characteristics, success or not did not depend on the presence of these characteristics, but on the way that these characteristics presented in the specific person.

There were five basic characteristics that the respondent looked at in his evaluation of brokers. Firstly, and that was also the characteristic that he started with, there was efficiency. Then there was, in terms of personality, introversion and extraversion. Further, the respondent looked at energy levels, integrity and client orientation.

As far as efficiency was concerned, there were various aspects that the respondent looked at. Firstly, there was efficiency with regard to time usage. Here it was not important whether the person worked short or long hours, but how those hours that were worked, were utilised. People who were effective in terms of time usage had a time schedule according to which their activities were planned. They were punctual and time was important to them. They were organised and focused on their end goal. They were task directed and followed things through. Adaptability was another characteristic that was mentioned. That involved the exchange of appointments if necessary. Efficiency also involved planning for financial independence. Efficient people were very analytical and in control of their matters and their administration were good. They had only the necessary people in service. When they wanted to appoint someone, the person was carefully selected to ensure that the person that was appointed would also be effective.

As far as personality was concerned, the respondent distinguished between extroverts and introverts, but that was not a distinction that was determining for success. The respondent placed a lot of emphasis on honesty and integrity. This seemed to be a characteristic that was very important to him. With honesty he connected integrity. The integrity of a person that led an honest life, was above suspicion. They were concerned about what people said about them and they had respect for fellow human beings. They were highly acceptable and were respected by their colleagues and clients. Successful people were dedicated and proud of their work. They would call themselves brokers and not anything else.

Characteristic of successful people was high energy levels, although that could also be found in those that were not successful. They were career driven and their careers were very important to them. They were incredibly competitive, went flat out and ensured that they appeared to know everything. They were not afraid to expose themselves. They had strong leadership abilities that came out in a group. Another characteristic of successful people in this industry was that they were very hungry for money.

The respondent also looked at client orientation. People that were successful as brokers, were very client oriented, but not in a profuse way. They had databases on their clients that contained more than just the basic information. They focused on what was best for the clients and not only on their own interest. They were practice builders that built relationships with their clients through their actions and the necessary follow-up work.

To summarise, it could be said that success did not necessarily depend on the presence or absence of these characteristics, but on the way that these characteristics presented.

Construction System

The respondent looked at more than one grouping on most of the card combinations. This could once again indicate that this person was flexible and liked to view matters from different angles. He used constructs in a propositional way. Successful people and unsuccessful people could be rated on the same end of a construct. The characteristics were not mutually exclusive.

It appeared that the respondent differentiated between two types of unsuccessful people – those who shared characteristics with successful people, but somehow did not make it and then there were those who were failures as people. They mostly possessed negative characteristics and such a person would probably never be acceptable in the eyes of the respondent. Most of the constructs were evaluative with the occasional propositional construct.

4.4.7 Respondent 7

The successful broker

This respondent looked at different combinations at most of the card combinations. The respondent did not seem to distinguish in a black/white fashion between those who were successful and those who were

unsuccessful, there was a degree of rigidity present in some of the responses. Even though he looked from various angles, the responses were not very rich and the respondent tended to focus on obvious, factual detail instead of giving his own opinion. Here and there his opinion came through, and this was there where rigidity came through.

The respondent started by placing the brokers in a specific context. Different contexts required different approaches to success. He distinguished between those who worked in the corporate environment and those who worked in the personal market. A further distinction that he made was between those who worked on their own and those who worked in a branch. Those who worked in the corporate market, saw few clients, did detailed analyses to which large premiums were connected. They worked nation-wide and their clients were sophisticated and demanding. Their total legal technical knowledge had to be extensive. Those in the personal market saw more clients, wrote smaller policies and worked in a geographically smaller area. Their clients were less sophisticated and not very demanding.

Then the respondent moved over to characteristics that distinguished successful people from unsuccessful people, regardless of the market they found themselves in. A theme that came through strongly, was dedication and focus. Those that were successful were dedicated and knew where they were going. They were internally motivated and did not give up. The respondent felt that men were more dedicated with regard to their work because they were usually the breadwinners while the women usually had husbands with money. That influenced the way they sell. Although qualifications were not a prerequisite for success, the respondent associated the obtaining of qualifications with perseverance.

Those that were successful had very strong networks and they were very popular in the bank. They obtained good co-operation from their source for sending them clients through. Successful people liased more with clients and they delivered very good service. Their clients did not complain about them.

Successful people focused with regard to practice building and had very effective administrative support.

To summarise, it could be said that the two universal characteristics of successful people were dedication and good interpersonal skills.

Construction System

The respondent looked at more than one grouping per card combination on all the combinations except for the first combination that gave all three the successful people. Initially he used situational constructs as well as propositional constructs. Later on he came up with a few evaluative constructs, but the bulk still remained propositional. This was quite unexpected, since the nature of the topic dictates for the bulk of the constructs to be evaluative.

There are indications that the respondent used the constructs in a loose way, but when focusing on the evaluative constructs, it seemed that they were used in a more tight fashion. Although the extensive use of propositional constructs may seem almost inappropriate in a situation that dictates evaluation, it was for some reason important to the respondent, and he had to get them out of the way first before he could move on to evaluation. He also displayed a bias in terms of race and gender.

4.4.8 Respondent 8

The successful broker

At the beginning and at the end, the respondent looked only at one combination per card series. Round about in the middle, he looked at different combinations at three series. He looked at success in a black/white way. There was a clear distinction between those who were successful and those who were unsuccessful. It seemed as if these characteristics were mutually exclusive and that unsuccessful people did not share characteristics with those that were successful.

A theme that came to the fore very strongly, was something that the respondent referred to as a 'point B'. A point B could be described as a personal objective or aspiration that pulled a person and gave him a will to do things. All successful people had a set of clearly identifiable personal objectives and those who were not successful, didn't. Successful people were very competitive and had a high sense of urgency. They had a passion to do things and they were high drivers. Their activity levels were high and they worked for long hours at a high tempo. Their productivity and time usage were dramatically higher than those that were unsuccessful. Successful people took responsibility themselves and tackled problems. They did not make others responsible for their results.

Successful people were highly organised. Their desks were clean and they complete documents. They knew where everything was, and each had up to four secretaries. They had a pride and were very neat on their person and everything they did. They went and fetched the clients and did not wait until the clients came to them.

A further characteristic of successful people, was that their work was very central to their lives. They were always at the office – also on public holidays and over weekends. It did not sound as if they spent much time with their families. They were also unlikely to have other external interests, while unsuccessful people tended to have other things that kept them busy as well. Those that were successful practised sport by exception and their wives were very involved in their careers. The wives of the people, who were unsuccessful, had their own careers.

To summarise, it could be said that there were basically three things that made a person successful, and those were drive and urgency, organisational skills as well as total dedication to their careers.

Construction System

The respondent only looked at one grouping per card combination, except for one or two combinations where he looked at more than one grouping. He used his constructs in a tight manner, indicating a rigid attitude. He also seemed to use constructs in a pre-emptive way. Successful people and unsuccessful people did not share any characteristics. A person belonging to the successful group shared a set of characteristics with other successful people, while unsuccessful people seemed not to have any positive characteristics.

Most of his constructs were evaluative and he only started using propositional constructs once he ran out of evaluative ones.

4.5 Conclusion

The Repertory Grid proved itself in practice to be a very fitting technique to meet the objectives of this study. One of the objectives of the study was to uncover the mental models of the respondents. In order to do that, one needs to get past the respondent's espoused theory on success criteria for brokers to the theory-in-use. That the Repertory Grid indeed does that, is illustrated by the fact that some respondents started talking about the successful broker up front reciting what they think the characteristics of the successful broker are, which were not necessarily the same characteristics that emerged from the Grid.

Then it was also very important to get a good quality response from the respondents. This would be ensured if the respondents take a good degree of ownership in the study. The respondents were supplied with guidelines for the selection of elements. The point where they selected elements, was also the point where they took ownership. From that point onwards they were the experts on the elements who wished to share their views on the elements. The degree of ownership the respondents took, was also clear from their level of involvement in the interview.

All the respondents were very busy people, and initially it was hard for them to set aside an hour for the interview. They did so because it was important for them. Most of them became so involved in the interview, and participated with so much enthusiasm, that it was difficult to try and limit them to an hour and most interviews lasted slightly longer. This is a clear advantage above a semi-structured interview where the respondent could at any time felt that he has said what he wanted to and excused himself for his next appointment, leaving the interviewer with maybe not enough material to work with.

In general the respondents found the technique non-threatening and enjoyable, but one or two respondents had only a small range of constructs available on the topic, and their answers soon got repetitive. This may be an indication that they haven't given this topic much thought, or that they haven't bought in to the necessity of a new dispensation yet. They may not be very committed to change or even to the organisation – therefore the seeming lack of interest.

In the next chapter the results will be interpreted on a deeper level with reference to the individuals as well as the impact that these models may have on the group as a whole. It is also on this level that the concept of a shared mental model come into play.

Chapter 5 Discussion of results, Conclusions and Recommendations

5.1 Introduction

In the previous chapter it was determined what the mental model of each member of the management team on the successful broker looked like. To investigate how these mental models tie up with the picture of the successful broker in the new dispensation and to determine if, and to what extent, a shared mental model exists requires a deeper level of analysis. This will be investigated in this chapter after which it will be possible to formulate recommendations regarding the facilitation of change in the mental models in order to align them with the new client focus if needed.

5.2 Discussion of results

5.2.1 The individual mental models and the new dispensation

From the background information given in Chapter 1, two distinct pictures of successful brokers emerge – one who fits in with the product focus of the past and one that fits in with the client focus of the future. Their characteristics can be summarised as follows:

The successful broker who fits in with the product focus:

- Focuses on selling a specific product
- Has a functional focus
- Bases products or services on shared characteristics and/or needs
- Views the client as less knowledgeable - a lot of insight and knowledge is required by the broker
- Follows a marketing or sales approach

- Is rewarded based on product marketing and sales
- Is very competitive - there is a large competition element between individual brokers within a company

The successful broker in the client focus:

- Does not focus on selling one product without looking at a client's overall financial picture
- Is focused on the process
- Has the client/market needs determine the products
- Must give the client the best advice
- Must operate under a code of ethics
- Must keep proper records to prove that the prescribed process has been followed
- Realises that the client is more sophisticated and must participate in decision-making
- Is rewarded based on service quality, client retention and practice building
- Is competitive in a different way - the competitive element is between different companies and not individuals as such
- Commission as a motivating factor may fall away

In the Insurance industry, people sometimes distinguish between brokers as being hunters or farmers where hunters go for a kill as soon as possible while farmers are more nurturing and focus on a long term relationship with the client. When looking at the characteristics for the different dispensations, it seems as if a person with farmer characteristics is most likely to succeed in a client focused approach. In terms of success, it means that the industry needs more farmers and less hunters. Hunters would have to develop a more client-oriented approach than in the past if they want to succeed in the new dispensation. The individual mental models will now be discussed to see how they tie up with the picture of the successful broker in the new dispensation.

5.2.1.1 Respondent 1

This respondent is cognitive complex as indicated by his loosely-knit constructs (Fransella & Bannister, 1977). This allows him to construct social behaviour in terms of success in a multidimensional way. He can look at a situation broadly and take more facts into consideration. In a group situation he is probably someone who is very open to considering views different from his own. He is probably also someone who will point out to the rest that the circumstances should be taken into consideration before making a final decision on a matter.

His mental model is very much in line with the client-focused approach. To him, a service orientation towards the client is of the utmost importance as indicated by the frequency that he repeated this construct with (Fransella & Bannister, 1977). The broker must give the advice that is in the best interest of the client. The client and the broker sit together to determine the client's needs and then the broker works out a solution according to these discussions. This respondent is focused on quality of service and practice building. Integrity is also very important to him.

This respondent does not need to adapt to a new focus, because he is already there. He doesn't need to spend any energy on realigning his mental model, he can go ahead and focus on how to implement the administrative systems required for the new dispensation. The people working for him are probably all very client orientated and will most probably be described as farmers. Previous experience must have taught him that a person can be more successful when focusing on the client. He may always have had this perception, or he may have experienced it by accident and then had it strengthened by successful outcomes.

The respondent is prejudiced, maybe unconscious, towards women in the industry. He feels they tend to force products down a client's throat. He needs to be made aware of this prejudice and also how it influences his

perception of the successful broker. Having this prejudice may lead him to evaluate women's actions and achievements inaccurately (Kotze, 1995). Addressing this prejudice is important to him in terms of employment equity where it may be expected of him to employ more women as brokers and he may not feel comfortable in doing so.

Questions that this person will probably ask when looking for a successful broker are:

- Would this person place the needs of his client above his commission?
- Would this person give the client the best advice according to the client's needs?
- Would this person build a long-term relationship with the client?
- Would this person fit into the market where he wants to work?
- Would this person work at a rapid pace?
- Would this person work long hours?
- How would this person spend money to expand his practice (e.g. assistants)?
- Would his partner support him?
- How important is money to this person?
- Is this person male or female?

5.2.1.2 Respondent 2

This respondent uses his constructs in terms of success in a tight way which can be associated with consistent, even rigid attitudes (Winter, 1992). In a group situation things will probably be black or white for him and he will probably not be very open to accepting viewpoints that are very different from his own.

His ascribing of all the positive characteristics to successful people and negative characteristics to unsuccessful people indicates that he is very prone to stereotyping and that he very probably evaluates the actions and achievements of people who work for him inaccurately. He doesn't allow for

successful people to do negative things and for unsuccessful people to do anything right in his eyes. His mental model probably causes him to ignore contradictory information (Kotze, 1995) in this regard. Being aware of his mental model and the influence it has on his behaviour can help him to look at a situation more broadly and take into consideration facts that he hasn't previously.

With regard to his mental model he falls somewhere in-between the two dispensations, closer to the client focus, but still with room for development. In terms of the client focus, he looks at integrating financial services, giving the best advice, integrity and honesty and planning and organisation which is important for proper record keeping. These elements are there, but are not the key elements to him in determining the success of a broker.

To him it is most important that a broker is dynamic and can deal with change. The term 'dynamic' can create the impression that the respondent is looking at a hunter, but according to him, a farmer and a hunter can both be dynamic. Dealing with change is also an important characteristic, since change is at hand and those that would like to continue being successful, must be able to deal with it. He feels a successful broker takes charge of his marketing environment – this has a feel of the product focus where a marketing or sales approach is followed. Since marketing seems to be important to him, he can possibly adapt his marketing approach to be more client focused if he hasn't done that already.

In terms of success, he leaves room for both hunters and farmers, but with the specification that hunters need someone to supplement their service orientation. Thus, a team consisting of a hunter and a farmer. Teamwork is important to him and the question is whether this is his solution for the issue of what to do with those who have been successful in the old dispensation, but does not have the skills/orientation necessary for the new dispensation yet or may never develop it.

This respondent should grow his client focus more. In order to do this he needs to understand the significance of having a client focus and how it can impact negatively on business if he does not develop this. The respondent should be open to growth, since he indicated that growth and self-development is very important to him in terms of success. He has also shown some flexibility in the way he views successful brokers, he just needs to expand on this.

He would probably ask the following questions when looking for a successful broker:

- Would this person be able to build practice by getting the client committed to him on the long-term?
- Will this person give the client the best advice?
- Is this person dynamic?
- Can this person make things happen?
- Is this person structured?
- How good is this person's knowledge?
- Can this person work in a team?
- Does this person have the ability to integrate financial services?
- Would this person be loyal?
- Does this person have a stable family life?
- Is this person a good communicator?
- Is this person a hunter or a farmer?

5.2.1.3 Respondent 3

His tight use of constructs indicates that this person holds consistent, maybe even rigid attitudes towards success. This respondent probably tends to stereotype people in terms of success. When he has to evaluate their actions and achievements, he does so inaccurately – he will probably view the same action differently when performed by a successful person than when performed by a person that he judges as unsuccessful.

In a group situation he will probably talk a lot as indicated by the length of his response on each card combination. This, coupled with the tight organisation of his constructs, indicate that he would probably not be very open for views different from his and that he will probably also not give the other people in the group much opportunity to air their views. He most likely dominates meetings by talking a lot.

This respondent seems to be in the middle of the two dispensations in terms of his views on the successful broker. There are two types of people that are successful in this industry, the hunter and the farmer. It seems as if it is not that important to the respondent to which group a person belongs since both are successful. What is crucial, however, is that the person is acceptable in the bank environment and adds value to the bank.

The emphasis that this respondent places on the bank, as determined by frequency counts, indicates that he sees the bank as an entity that has to compete with the other players out there. This can fit in with the client focus, but in order to succeed, the respondent has to move much more towards the client focus in terms of the brokers employed by the bank. Staying with his perspective can in the long run result in loosing the competitive advantage that the bank may have. By having no firm vision in terms of whether his brokers should be focusing on products or clients, he leaves it up to them to decide. The organisation will not move in a direction effectively if all the members are not moving with it in the same direction.

The respondent needs to be made aware of the fact that he is actually sitting on the fence between the two dispensations and that he needs to address his mental model and develop a more client focussed approach if he wants the bank, which seems so important to him, to keep its competitive advantage. He also needs to be made aware of the fact that he tends to stereotype people and is prejudiced towards unsuccessful people and the effect that these perceptions can have on this business.

He would probably ask the following questions when looking for a successful broker:

- Would this person be able to commit the client to him?
- Would this person be acceptable in the bank environment?
- How much value would this person add to the bank?
- Is this person knowledgeable?
- Does this person have high integrity?
- Would this person be innovative in terms of helping the company to develop?
- Would the person be able to expand his practice by the sensible utilisation of staff?
- Does this person create confidence?
- Would this person be best at selling single needs or doing a total financial planning?

5.2.1.4 Respondent 4

Respondent 4 has the ability to construct social behaviour in terms of success in a multidimensional way as suggested by his loosely knitted constructs. He can look at things from different angles perhaps illustrated by him looking at the card combinations from different angles. In a group he is probably the person that would like to investigate a matter from all angles before making a decision. He allows for circumstances to influence his final decision and he is probably very open for views different from his own.

The respondent seems to be on his way to the client focus. He brings in the theme of the client's needs more than half way through the protocol and then spends some time on it. This may indicate that he is busy making the shift towards the client focus and that even though it surfaced at a late stage, it is there. It just needs to develop a bit stronger.

Some of the themes that are present suggest that this respondent is still more product focused. Interpersonal skills are very important to him in

terms of communication skills and the instinct to read when people give selling signs. The person must be able to apply the right amount of pressure to close the deal. This fits in with a product focus where the broker is the expert and knows what is best for the client. Appearance or the impression that a person creates is also important to him and that can also be linked to a sales approach, although it is important for client service as well, it may be more important when trying to sell something.

The other theme that is important to him is planning or objectives, which can be linked with marketing, but is also an important skill to have in the new dispensation where it will be important to have good record keeping systems.

Although the importance of the client and analysing the client's needs are coming to the surface, the respondent needs to realise that today's client is more sophisticated and needs to have a say and be part of the decision-making process. The days of the broker as the expert who knows what will be best for the client are gone. This respondent is very flexible and views issues from various different angles, so it should not be too difficult for him to buy into making the necessary changes to his mental model in order to align it more with the client focus.

The respondent will probably ask the following questions when looking for a successful broker:

- What is the first impression that this person creates?
- Would this person be able to work in a team if necessary?
- Does this person have drive and energy?
- Does this person plan his work?
- How well does this person communicate?
- Does this person have the interpersonal skills to obtain other people's co-operation?
- Would this person present the best solution according to the client's needs and not the one that yields the most commission?
- Does this person have the instinct to close successfully?

- Can this person apply his knowledge?
- How does this person approach a problem situation?
- Does this person have a hunger for money?
- What would the person call himself when he works?
- What does this person's support systems look like?

5.2.1.5 Respondent 5

The respondent's tight use of constructs when differentiating between successful and unsuccessful brokers indicates that he has consistent, to some extent rigid attitudes towards the topic of success. He stereotypes unsuccessful people and probably does not evaluate their actions and achievements accurately – he has made up his mind beforehand and will not let circumstances influence his views. His experience has taught him what the characteristics are that he cannot afford to overlook and he sticks with that. In a group he will probably state his view and will not be very open to accommodating different views. He will most likely try to convince the others of his views.

The respondent has some elements of a client focus present in his mental model. He mentions looking at the client's overall financial picture versus selling single products, practice building and giving the client the best advice, but the picture is still dominated by a product focus.

What is more important to him, is that a person has high energy levels, they must have good interpersonal and communication skills and they must be competitive and performance driven. This has a strong sales or marketing element to it. Also important is a person's involvement and acceptability in the bank. The impression is created that a great part of a person's acceptability in the bank can be ascribed to good sales figures that make that branch look good. Once again an indication of a competition element on individual level.

This person came to the interview with a list of characteristics of successful brokers that he has prepared beforehand. Initially he cited from the list while completing the grid interview, but was later persuaded to forget about the list and concentrate on the task at hand. A client focus did not feature in the list at all. The presence of the list may indicate that this person regards himself as very experienced in identifying the successful person. He needs to made aware of his mental model in order to help him to make better decisions by looking at the situation more broadly and taking facts into consideration that he hasn't previously.

The tight way in which he uses the constructs in terms of successful or unsuccessful, might indicate that he would possible not be willing to let go of his views easily and he will need some convincing of the significance of a client focus before changing his mental model. On the other hand, he used constructs more loosely when having to differentiate between successful people. This may indicate that he would be more open in terms of changing his views on successful people than changing views on unsuccessful people. He may thus be open to embracing more of a client focus, but he will not let go of his stereotypes about unsuccessful people easily.

He would probably ask the following questions when looking for a successful broker:

- What impression does the person's appearance create?
- Is the person full of self-confidence?
- Can the person assert himself and deal with conflict?
- Is the person dynamic with high energy levels?
- Would the person initiate projects?
- Would the person build practice by building long-term commitments with his clients?
- Would this person give the best advice according to the client's needs?
- Would the person be involved in the branch?
- Does the person have a stable family life?
- What does the person's financial environment look like?
- Would the person be prepared to work long hours?

- Does the person have a high legal technical knowledge?
- Is this person driven by performance?

5.2.1.6 Respondent 6

The respondent's loosely knitted constructs indicate that he is cognitively complex and able to construct social behaviour in a multidimensional way. He looked at more than one grouping on most of the card combinations, indicating that he likes to view things from different angles. In a group situation he would probably like to look at things from different angles before making any decisions. He would also be open for views different from his own.

This respondent has a definite client orientation. A broker must give the client the best advice and it is very important that he must be an honest person. He must be good with organisation and planning, which is important in terms of the new requirements for proper record keeping. This person must be proud of what he is doing and his career must be very important to him.

He does mention the successful people being competitive, which can be associated with a sales or marketing approach, but he couples that with always being busy and high energy levels. This respondent must be made aware of his mental model so that he can examine it. Although he is client oriented, he can increase his client focus by looking at whether a person looks at a client's overall financial needs and to what extent the person focuses on practice building. If he realises the significance of this in terms of success, he can align his mental model a bit more in terms of the client focus.

This respondent will probably ask the following questions when looking for a successful broker:

- Would this person use his time effectively?
- Does this person have an outgoing personality?
- Would this person do what is best for his client?
- Would this person be able to build practice?
- Is this person honest?
- Does this person have high energy levels?
- Is being a broker a career for this person?
- Does this person believe in what he does and is he proud of it?
- What does this person's interpersonal skills look like?
- Is this person knowledgeable?
- Does this person have a hunger for money?
- Does this person plan for financial independence?
- How organised is this person?
- Is this person competitive?
- Does this person possess strong leadership skills?
- Is this person focussed?

5.2.1.7 Respondent 7

Respondent 7 seems to have the ability to view things from different angles as suggested by the fact that he looks at more than one grouping on most card combinations. One expects to find more cognitive complexity on success criteria for brokers with this person than is the case. Especially since he is the Human Resources person who can in general be viewed as an expert on selection. The lack of complexity may indicate that he hasn't internalised the group's objectives as his own and have lower levels of dedication (Klimoski & Mohammed, 1994).

It is also possible that he is not as familiar with the ways in which successful brokers work as the other respondents who are all in the line function. Maybe he has only dealt with the successful brokers form a distance and

that a lot of his perceptions are thus more based on hearsay. This supports the idea that he may not be very dedicated to the organisation or its objectives – he probably only works there in order to be able to pay all his bills at the end of the month.

The respondent indicated a prejudice in terms of race and gender. In terms of being in a human resource capacity this can be fatal. The human resource person is the one who is supposed to drive employment equity and how can one do so successfully when one host prejudices in terms of race and gender? He needs to be made aware of the impact that these perceptions can have not only on the organisation, but also on his career.

The respondent does not seem to belong to a product or a client focus. He mentions practice building and client service, but it is not clear whether he means giving the client the best advice when he talks about client service. It seems as if he rather refers to seeing that the client gets the documentation afterwards quickly and that the quality of the received documentation is good. He mentions nothing about looking at the client's overall financial picture or the client having a say in the process. There is nothing that indicates that he may be more product focused either.

This is very concerning, since as already mentioned, this respondent is in a human resources capacity and is supposed to be the expert in selection. How can this respondent assist the rest of the team in making decisions when he clearly has no idea of what type of person would be successful in this environment, or in which direction the organisation is moving? It is crucial that his mental model be aligned in terms of the client focus. He needs to know where the organisation is moving in order to be able to give the best possible support.

It is positive that he has the flexibility to look at things from different angles as indicated by his use of different groupings per card combination. By looking at things from different angles, he should be able to add value by bringing up possibilities that the line functionaries maybe did not consider

and help them to look at brokers from different angles as well. The fact that he produced less constructs than the other respondents, may be a limiting factor in the sense that his construction system may not be broad enough to give him that many angles to look from.

The respondent must be made aware of the significant contributions that his position allows him to make in terms of the success of the organisation. He needs to internalise this and make it part of his mental model. In order to do this an intervention must be made to find out why he possibly has lower levels of commitment and this must be addressed first before any changes in his mental model will take place.

This respondent will probably ask the following questions when looking for a successful broker:

- Would this person fit in that specific market segment?
- What is the gender and race of this person?
- Does this person have qualifications?
- Is this person dynamic/ internally motivated?
- Would this person be able to obtain the co-operation of the branch?
- Would this person be able to build effective support systems?
- Would this person be able to build a client base?
- Is this person neat in appearance?
- Is this person focussed?

5.2.1.8 Respondent 8

The tight use of constructs indicates that Respondent 8 tends to have rigid attitudes. He stereotypes people on grounds of whether he regards them as successful or not. His cognitive structure does not allow him to see information that contradicts his stereotypes. He will probably view the same behaviour differently when expressed by a person that he regards as successful than when expressed by an unsuccessful person. In a group, this person will probably stick to his view and will not be able to understand

how people cannot see his view and agree that it is best. He will probably try to rather convince people of his views than opening up to their views.

The respondent is very product focused and shows no signs of a client focus, which can be an indication of his attitudes tending more towards rigidity than consistency. The only time he has mentioned the client has been in the context of the successful broker not waiting for the client but going to fetch the client. To him it is most important that a broker has a high activity level and is always on the go. Brokers must be organised and there is a very strong competition element.

He expects his people to spend all their time on their work, ideally they should have no external interests and their families should be part of the business as well. This is a very unbalanced picture and fits in with a sales approach where winning is everything. He probably looks for people following this type of life style to employ.

This respondent needs to be reoriented towards the client focus. He needs to understand the importance of focusing on the client's total needs and giving the client the best advice and how that can produce better results in the long run. Giving the rigidity in his construction system, he would not easily give up his views and change them to the almost complete opposite. He would need a lot of significant information before he will consider changing his mental model. Becoming aware of his mental model and changing it will help him to look at situations more broadly and take facts into consideration that he hasn't done previously. This will help him to make better decisions.

He would probably ask the following questions when looking for a successful broker:

- Is this person a doer with high energy levels?
- Is this person highly organised?
- Does this person have an identifiable motivating force that drives him?
- Does this person have a life outside his work?

- What does this person look like in terms of appearance?
- Is this person's partner available to the industry?
- How does this person approach problems?
- How important are results to this person?
- What does this person's competencies look like?
- Is this person competitive?
- Is money important to this person?
- Can this person adapt to changing circumstances?

5.2.2 The Shared Mental Model

Although the individual mental models are important, the shared mental model is important in terms of how successful the organisation will make the transition to the new dispensation. The shared mental model determines how the organisation will move forward. First it will be investigated what the shared mental model looks like as well as to what extent it is shared. Then, the extent to how it fits in with the new dispensation will be explored.

5.2.2.1 What the shared mental model looked like

For the purpose of extracting a shared mental model, a construct was considered shared if it was used by at least four (half) of the respondents. The constructs that were shared, were the following:

- Orientation towards client or client's needs
- The broker's administrative support systems
- Dynamic, driver, high energy levels
- Integrity and honesty
- Knowledge, expertise
- Planning, organisation
- Practice building
- Acceptability in banking environment
- Putting in more than expected
- Importance of money

These constructs will now be discussed in detail.

5.2.2.1.1 Orientation towards client or client's needs

All the respondents, with the exception of Respondent 8, touched upon the topic of the client or the client's needs. For some respondents this aspect was very important, while others had just mentioned it.

For Respondent 1, a service orientation towards the client and placing the client's needs before one's own pocket in terms of commission was most important and he mentioned it on almost every card combination. To him, success was about having the client's best interest at heart and not to let the advice that one gave be influenced by the commission attached to it.

Respondent 2 brought in doing what was best for the client in about the middle of the protocol. He didn't seem to give this a high priority – there were other characteristics that were more determining of success than having the client's best interest at heart. For Respondent 3, a client orientation featured very early in the protocol, but he also seemed to have other criteria that were more determining for success. In his eyes, the person who hunted for commission could also be successful, as long as it was not totally for their own gain and they serviced the client in another way.

Respondent 4 brought client orientation in very late in the protocol. He distinguished between being orientated towards the client and being orientated toward one's own pocket. For him these were the opposites of two poles. Even though he brought client orientation in late, he attached some importance to it – maybe indicating that it might not have been top of mind in his success criteria right then, but

that he was busy making a shift and that it might become more important to him in the future.

Respondent 5 mentioned about in the middle of the protocol analysing of the client's needs and giving him the best advice, but that was not a criterion that he would use in determining success. For Respondent 6, a client orientation was one of the more important characteristics in determining success. This was something he would probably take into consideration when commenting on the success of a broker. Respondent 7 touched on the topic of good service delivery, but it was not clear whether he referred to acting in the best interest of the client. It seemed as if he had more a good technical service in mind with documents being correct and delivered on time and so on.

5.2.2.1.2 The broker's administrative support systems

In terms of administrative support, two things were important in distinguishing the successful broker. He had administrative assistants and he used these assistants effectively. In the way the respondents mentioned this, there seemed to be an element of status present. As if a broker's success was measured by whether he could afford to have assistants and also how many he could afford to employ. This was not a theme that was repeated often in a protocol, but was mentioned by almost all the respondents.

Respondent 2 and Respondent 6 were the only ones who did not mention administrative assistants. Respondent 1 explicitly mentioned that the successful people had assistants because they could afford them. The unsuccessful people couldn't afford assistants, or made them work too hard. Respondent 3 mentioned that secretaries stay long at the practices of the successful brokers, while the unsuccessful brokers had a very high staff turnover. Partly because

they threw their staff in at the deep end and battled to get them trained, but also because they did not pay them well enough.

Respondent 4 mentioned that successful brokers had good support staff that stayed with the practice, while unsuccessful brokers had someone that would stay for a short while or that was not so good. Respondent 5 placed great emphasis on the fact that successful brokers had a strong infrastructure that could support them.

Respondent 7 pointed out that successful brokers had very effective administrative support and that they had a large team, while unsuccessful brokers tended to have smaller, less effective support teams. Respondent 8 also mentioned that unsuccessful brokers did not have secretaries while those that were successful had.

5.2.2.1.3 Dynamic, driver, high energy levels

This theme was also mentioned by most and seemed to carry a lot of weight with most who mentioned it. Respondent 1 did not describe it as explicitly as the others, but he mentioned a high level of performance with a work tempo that was fast enough to ensure a good income. This was not part of his success criteria, but if one did not do it, he could easily work himself into bankruptcy.

For Respondent 2 this was an important criterion for success – that a person had to be a driver and make things happen instead of waiting for them to happen. Respondent 3 brought this theme only in at almost the end of the protocol, where he mentioned that successful brokers created opportunities for advancement. This did not seem to be the most distinguishing characteristic for success according to Respondent 3.

Respondent 4 felt that unsuccessful brokers lacked drive and energy, but he did not put that much emphasis on it. For Respondent 5, high energy levels were one of the determining factors for success and he would definitely search for that in a broker. He mentioned energy levels on almost every card combination. To Respondent 6, high energy levels were not a distinguishing factor between those who were successful and those that were not – maybe more a characteristic of the people in the industry. Although all successful brokers have high energy levels according to him.

Respondent 7 did not mention this theme explicitly, but he did refer to successful brokers as being internally motivated or having "inner go". For Respondent 8, high activity levels, or drive was from the utmost importance. He mentioned it on almost every card combination and this was probably the characteristic that he would look for in a person above all.

5.2.2.1.4 Integrity and honesty

This was mentioned by more than half of the respondents, but did not seem to be extremely important to them. For most, it seemed more like a nice characteristic that the broker possesses.

Respondent 1 gave great importance to honesty and integrity. Unsuccessful brokers could also be honest and have integrity, but to him that was one of the key characteristics of a successful broker. For Respondent 2, integrity was a characteristic found with successful people, but unsuccessful people were usually dishonest. He did not put much emphasis on this.

Respondent 3 mentioned integrity a couple of times and he linked it to values in the sense that the successful person's values are also directed towards the client and the bank's values. Respondent 4

never mentioned integrity or honesty explicitly. Respondent 5 put shrewdness opposite integrity. To him integrity was not something necessary for success. A successful broker could be shrewd, such a person just need to be watched a bit more closely by his manager.

Honesty was also very important to Respondent 6. To him it was something necessary for success, but being honest did not necessarily make one successful. Respondent 7 and Respondent 8 did not mention honesty or integrity at all.

5.2.2.1.5 Knowledge, expertise

Knowledge or expertise was a topic that featured moderately with most respondents. Respondent 1, Respondent 6 and Respondent 8 did not mention knowledge or expertise at all. Probably not because it was not important to them, but because they viewed it as a given that anybody employed by them should have sufficient knowledge regardless of whether they turned out to be successful or not. To them, knowledge might not be the factor that determined whether a person will make it or not.

Respondent 2 did not view knowledge or expertise as a determining factor for success, even though he felt it was important to have the knowledge or to know where to find it. He found that unsuccessful brokers were qualification driven, while the successful brokers were not, probably because they were successful. For Respondent 3, unsuccessful brokers fell far short in terms of expertise in financial planning. To him expertise could distinguish between successful and unsuccessful people.

Respondent 4 noticed technical knowledge and academic qualifications, but remarked that the lack thereof did not make a person less successful. For Respondent 5, expertise did make a

difference in terms of success. Successful brokers had a much higher legal technical expertise than those who were unsuccessful. Respondent 7 also noticed qualifications, although he did not view it as determining for success or something found only with successful people. To him it was important, because it showed that the person who obtained the qualification had drive and could persevere.

5.2.2.1.6 Planning, organisation

The ability of a person to plan or organise was viewed as very important by half of the respondents. The other half of the respondents did not mention this theme. Respondent 1, Respondent 3 and Respondent 7 did not mentioned planning at all, while Respondent 5 mentioned that unsuccessful brokers were not objective driven, while those that were successful were, which had an implicit element of planning.

Respondent 2 felt that successful brokers were able to organise themselves, were good with planning their daily tasks and could set and manage objectives. For Respondent 4, planning and the setting of objectives was very important. This was the theme that he touched upon most and would definitely be something that he would look for when deciding the likelihood of a person being a successful broker. The successful broker had a very detailed planning, he set objectives, which were very important to him, and he also brought his planning to execution.

Organisation and planning was also the dominant theme for Respondent 6, although the presence of it was not determining of success. He looked at people in terms of them being organised, managing their time and planning their activities. Respondent 8 also attached great importance to this theme. To him, being highly organised was determining of success. Unsuccessful brokers were

not very organised, while successful brokers knew exactly what was going on in their work and they also had clean desks and all their work was filed.

5.2.2.1.7 Practice building

Half the respondents mentioned practice building, but none had given it exceptional prominence. Respondent 1 did not mention practice building explicitly, but other themes that he had mentioned prominently, like a service orientation towards the client, could be associated closely with practice building. Respondent 2 mentioned practice building, not as a criterion to distinguish between those who are successful and those who are not, but as a way to distinguish between successful people. He referred to those who focused on practice building as farmers and to those who had less of a service orientation, but were more aggressive in their selling as were hunters.

Respondent 3 did not mention practice building explicitly, but spoke of client focus that could be associated with practice building. He did mention that successful brokers applied their practice to the advantage of the client as well as themselves. Respondent 4 did not mention practice building, although he did refer to client orientation, he was not as descriptive as the others that it called up a picture of practice building.

Respondent 5 gave much more importance to practice building than any of the other respondents. He associated practice building with only the successful brokers and linked it to client service and acting in the best interest of the client. Respondent 6 associated practice building with caring for the client and was something that was not found with unsuccessful people.

Respondent 7 mentioned practice building, but he did not use this to distinguish between successful and unsuccessful brokers. He basically mentioned that practice building did happen. Respondent 8 did not mention practice building at all, and there was no indication that it may be implicit in any of the themes that he had mentioned.

5.2.2.1.8 Acceptability in banking environment

Half of the respondents mentioned this theme and to most of them this seemed to be quite important. Respondent 1, Respondent 2, Respondent 6 and Respondent 8 did not mention acceptability in the banking environment at all, but Respondent 3 found it most important. To him it was very important how the banking environment perceived a broker. The successful broker was an image builder for the bank and he added value to the bank. Because they added value and because of the way they did business, they were highly acceptable in the banking environment.

According to Respondent 4, the people in the bank were very eager to give leads to successful brokers. A successful person had an aura of success, and they would gladly be associated with it. The people in the bank did not trust the unsuccessful people enough to give them any leads. For Respondent 5, involvement and acceptability in the branch where the broker was located, were extremely important. To him involvement stretched past a work level onto a social level as well. Successful brokers were more involved and they had the staff of the branch behind them.

Respondent 7 also felt that co-operation of the branch distinguished between successful and unsuccessful brokers. The people in the branch were on the side of the successful broker and they would gladly send him leads. The successful broker had good networks in the branches and he was popular with them.

5.2.2.1.9 Puts in more than expected

Another theme that emerged with half the respondents, was that the successful broker put in more than was expected of him. The respondents just mentioned this and none had given extreme importance to it as a success criterion.

Respondent 1 mentioned that the successful brokers would work long hours, while those that were unsuccessful, tended to work only an eight hour day. Respondent 2 felt that the successful broker not only gave more than expected in terms of time, but also in terms of knowledge, in contrast with the unsuccessful broker who put in much less than expected in terms of time and knowledge.

Respondent 3 did not explicitly mention that successful people put in more, but he did mention that they think broader than the average broker. They came with new innovations and opportunities in the market. Respondent 4 did not touch on this theme, while Respondent 5 mentioned that some successful brokers would work long hours, although working office hours would not automatically make a person unsuccessful.

Respondent 6 and Respondent 7 had not mentioned anything in this regard, but for Respondent 8, working long hours was essential for success. According to him, successful people spent their day at the office doing office work, seeing clients after hours – they even spent weekends and public holidays working.

5.2.2.1.10 Importance of money

More than half of the respondents mentioned the importance of money, but they had varying opinions on the role that it played in the life of the brokers.

Respondent 1 mentioned that a high income was important to most brokers, especially the successful ones. What differed was their propensity towards money. For the successful broker, commission was an opportunity and not the only reason why they did business. They were in the industry to make money, but not at cost of the client. For the unsuccessful broker, it was about commission above all.

Respondent 2 felt that the unsuccessful brokers gave the advice that would give them the most commission and not necessarily the advice that was best for the client. Respondent 3 also mentioned that some brokers were focused on income, they could be successful or unsuccessful. The difference would be that unsuccessful brokers focused on income for their own gain. The successful broker that was a commission hunter would service his client in another way.

For Respondent 4 the distinction was also in the propensity towards money. For successful brokers it was not about their own pockets, for them money was a side issue that enabled them to enjoy a lot of nice things. Respondent 5 did not make any such distinctions. He found that money was much more important to successful brokers than unsuccessful brokers. The unsuccessful brokers were satisfied with less, they did not have the same type of financial commitments than those who were successful.

Respondent 6 felt that brokers were very hungry for money. Their living standards were above average. Being hungry for money would not make one a successful broker, but without that hunger one was unlikely to be successful. Respondent 7 didn't say anything about the importance of money to brokers, he only pointed out that there were differences in the size of commission according to the type of market they were working in. Respondent 8 did not mention income, or even commission at all.

5.2.2.2 The Shared Mental Model and the New Dispensation

In terms of the shared mental model two questions need to be answered. How effectively the respondents share the mental model and to what extent does it reflect the new dispensation. If their mental models overlap too much it can be a liability in the sense that the potential for individual contributions gets lost (Kotze, 1995). If there are too little overlap it means that it is difficult for them to communicate effectively and that their mental models are not shared effectively This would decrease the quality of their decisions (Klimoski & Mohammed, 1994). Mental models that are not effectively shared can threaten the existence of an organisation (Dent & Goldberg, 1999) since shared mental models determine the direction that the organisation will move in.

When looking at the individual mental models, it is clear that too much overlap is not an issue for this team. The respondents differ in their constructions of the successful broker. This can be explained by Kelly's (1955) individuality corollary that states that people see different things in what may be regarded as the same event. Kelly also stated that the degree of agreement between people's constructions of an experience is a measure of the extent to which they are alike and likely to understand each other without effort. When looking at the individual mental models in terms of this, it seems as if the respondents are not likely to understand each other without effort. There are individuals that are more likely to understand one another, but not the group as a whole, which may be an indication that their mental models are not shared effectively.

In a group situation, Respondent 1, Respondent 4 and Respondent 6 will probably understand one another well and work together effectively. They are also the respondents who are already client focused or close to being client focused. Between them they share at least two characteristics that are very important to them, but with enough room for individuality and disagreement that may also stimulate growth. Respondent 3 and Respondent 5 speak the same language and Respondent 2 is most likely to align himself with them since he and Respondent 5 both feel very strong

about drive. Respondent 8 will also most probably join this group since there are points that he shares with Respondent 5 and Respondent 2. He also shares points with Respondent 4 and Respondent 6, but since he is very product focused and they are more client focused, he will probably feel more comfortable with Respondent 3 (their boss) and Respondent 5. Respondent 7 will probably be on his own. The group of Respondent 3 and Respondent 5 will probably dominate decisions, which means that the client focus will have to battle to find its place in the sun.

In terms of a client focus, one expects that the members of the management team will give great importance to focusing on what is best for the client, looking at the client's overall financial picture, seeing the client as a co-decision maker and building practice by working on a long-term relationship with the client. They must have a view on the criteria for reward – based on service quality, client retention and practice building and not necessarily or exclusively sales figures. This is unfortunately not the case with this management team.

The shared mental model has elements of both the product focus and the client focus. This can be expected when looking at the mix of individual mental models from which the shared mental model emerges. The shared mental model has a strong element of an orientation towards the client or the client's needs. Even though this is a strong theme in the shared mental model, when looking at the individual mental models, it is clear that this is not well developed. Other themes that are present that are also important in terms of the client focus are integrity and honesty, practice building and to a lesser extent planning and organisation.

These managers have learned from previous experience that there are certain aspects in terms of identifying a successful broker that they cannot afford to overlook (Day & Nedungadi, 1994). Successful outcomes in a product focus have strengthened these for them. When looking for a successful broker, they will only observe information that proves their observations correct. Since many of them still see a broker as successful

more in terms of a product focus, that is what they will act on, since their mental models determine how they will act. The respondents are most likely unaware of how their mental models influence their perceptions of success.

Currently, even though the respondents do have constructs that they share, everybody has something else that they attach more value to and feel strong about having to be present in the successful broker. In order to reach consensus, they may have to settle for a profile of a successful broker with key characteristics that are of less importance to them. Since most of their construction systems are tight in terms of success criteria, they also are not likely to give up their criteria without a battle. This is not conducive to group cohesion and is a threat to the team. It would also most probably be the more flexible people, who happen to be more client focused as well, that give in first. This increases the possibility that a more product-focused approach will be followed to try to achieve success.

5.3 Conclusions

Conclusions about this research can be made in terms of both the results and the methodology used to obtain the results.

5.3.1 Results

The fact that the members of the management team do not seem to share a mental model effectively may have a negative effect on any competitive advantages that exist for their organisation. The decision to change to a new dispensation was not made by the team, but dictated by the industry and is something that all their competitors have to do as well. Having a shared mental model will help them to implement this decision faster and more effectively (Klimoski & Mohammed, 1994) and this is where there is an opportunity for competitors to overtake them, given that competitors effectively share a mental model on this themselves.

The strong presence of the product focus is most probably due to the fact that the respondents have all done processing on characteristics of the successful broker on many previous occasions and as a result will still try to use their old and trusted criteria to evaluate brokers in the new dispensation (Kotze, 1995). Their mental models need to be challenged with new or different information so that they can adapt their mental models to make more accurate predictions (Argyris, 1980) in terms of success in the new dispensation.

The respondents need to be aware of the fact that different people look at the same situation and may see different things and that what others see is not necessarily wrong or of lesser value. People confuse what they directly observe with the images in their minds and for them that is the reality (Senge, 1993). Being aware of how other people see the same situation can challenge the respondents to examine their own mental models. Not examining their key assumptions on important business issues can limit their actions to what is comfortable and familiar (Senge, 1990) and then the organisation will go nowhere. Being aware of the mental models of the other role players will help them to make more effective business decisions and take into consideration facts that they haven't previously taken into consideration.

Since communication is the primary way in which mental models are shared (Kotze, 1995), the respondents need more or better opportunities to communicate. The members of this team are not hosted in the same building, some are even in other towns. Each member also has his own unit to manage and the opportunities for communication are few and far between. More effective dialogue needs to be initiated between them. They need a safe platform where they can communicate and share about important business matters. The platform needs to be safe, because feeling threatened in any way opens up the possibility for the respondents to build defensive routines in an effort to protect themselves, which may not be in the best interest of the organisation (Espejo et al., 1996).

Some of the negative results of mental models like stereotyping people and evaluating people's actions and achievements inaccurately (Kotze, 1995) can

be seen in this organisation. Since this represents reality to the managers, they need not only be aware of this, but also what steps can be taken to counteract this. They need to acquire skills that can help them to be aware of their mental models and use the values of openness and merit to manage the mental models (Senge, 1990). Through this process they will be able to manage and change their shared mental models and this is what will determine success in the long term. Being aware and examining underlying assumptions regarding important business issues will lead to the broadening of the organisation's range of actions.

To summarise, a good sharing of mental models will increase their effectiveness as a management team (Dent & Goldberg, 1999). If they can develop a well-developed shared mental model, they will be able to implement decisions faster and with fewer problems. Working relationships between them will improve (Klimoski & Mohammed, 1994) and they will be able to move faster in the direction of a new dispensation and possibly maintain their competitive advantage.

5.3.2 Methodology

The Repertory Grid proved itself very effective in practice. The flexibility in terms of form and content (Gammack & Stephens, 1994) meant that the technique could be adapted to fit the research problem. The technique did not impose structure but set structure according to the respondents' own terms (Kotze, 1995) and that helped to reduce resistance that the respondents may have had against the data collection process. The technique also helped the respondents to focus their thoughts and clarify the meaning of their constructs.

By laying down guidelines for the elicitation of the elements, a bit more time was used, but it had the advantage of helping in giving the respondents a greater sense of ownership (Kotze, 1995). It also created a deeper level of rapport. The technique minimised possible observer bias (Stewart et al., 1981). The opportunity for the researcher to influence results by giving input or

make suggestions was also minimal since the elements belonged to the respondent's life world and he is the expert on them who is familiar with them.

The technique is very efficient and flexible (Cruise & Sewell, 2000) and provides very systematic data (Brook, 1992). It yields a good variety of ways of looking at the data. The data can be examined in terms of the elements, relationships between the elements, constructs or the relationships between the constructs. The technique captures the respondent's own perceptions and constructs on the topic under investigation and revealed the patterns in the data with relative ease (Kotze, 1995).

Some constructs elicited did not seem very useful. In such a case the challenge was to find out what meaning they had to the respondent. He mentioned them because they had some meaning to him and he first had to get them out of the way before he could continue (Fransella & Bannister, 1977). The technique of laddering (Stewart et al., 1981) was very useful in finding out what the meanings of the seemingly unuseful constructs were.

Some respondents started to repeat constructs very quickly. It is possible that they did not have many constructs on the topic to begin with, which can be indicative of lower levels of commitment from their side. Respondents also proved that some constructs were more important to them than others by repeating them more often and giving more focus to them (Fransella & Bannister, 1977).

In terms of the grid form used, the dichotomous form was found to be a bit restrictive and for future research it may be more useful to use a rating form with a five point scale. A rating form would have yielded a finer discrimination between the elements and the rating of the elements on the constructs (Solas, 1991). When applying the grid form, some respondents felt that some elements did not fit between the two constructs, but rather on the outside of one of the poles. In some instances they felt that when bringing a specific element in the picture, the element that formed the original contrasting pole, should fall more in the middle of the scale. A scale would make it possible to

determine whether there are degree differences between a successful person and an unsuccessful person when they fall on the same end of the scale.

5.4 Recommendations

Recommendations can be made in terms of the management team as well as suggestions for future research in the field.

5.4.1 The management team

The following recommendations may assist the management team in obtaining a more effectively shared mental model:

- In the immediate future an intervention needs to be made on group level where the respondents can become aware of their own mental models as well as the mental models of the other team members. They must realise what impact this can have on their business and the advantages that an effectively shared mental model will hold for the organisation.
- To revise their performance appraisal system to reward brokers on performance on behaviour that is in line with a client focus and penalise/not reward behaviour that is in line with a product focus.
- To schedule meetings on a more regular base where not only business is discussed, but also an opportunity is created for social interaction where they can communicate on a more informal base.
- The team leader should make an effort to involve the team high quality planning and keep them part of the process the whole time. They can maybe have more sessions where they discuss the way forward, progress thus far, problems and successes experienced and their thoughts in general about the process.

5.4.2 Future research

In terms of future research the following suggestions can be made:

- From a methodological point of view, the question arises what, if any, the differences would have been if a different method of elicitation, for example the method of dyadic differences, was used. Would it have yielded a clearer distinction between successful and unsuccessful at the cost of a lower degree of cognitive complexity?
- What is the perspective of the organisation's clients on the successful broker and how does that compare with the management team's perspective of the successful broker? Are they hearing the voice of the client?
- What communication patterns exist in the organisation that may hinder the effective sharing of mental models?
- Are there differences between the mental models of top management and middle management or top management and the rest of the organisation?
- Would an intervention to make people aware of their mental models have a long term effect or would the effect fade away after a while?

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Appendix A

Example of Repertory Grid Recording Sheet

REPERTORY GRID RECORDING SHEET

Combination	Construct: Description of pair	Elements					Construct: Single description
		1	2	3	4	5	