

TRAINER COMPETENCY AND PSYCHOLOGICAL OPTIMALITY

by

Hendrik Johannes Cilliers

submitted in part fulfillment of the requirements
for the degree of

Master of Administration

in the subject

Industrial Psychology

at the

University of South Africa

Supervisor: Prof. F. Cilliers

June 1995

* * *

TABLE OF CONTENTS

	Page number
List of Figures	vi
List of Tables	vi
Summary	vii
Key terms	vii
CHAPTER 1 SCIENTIFIC REVIEW OF THE RESEARCH	1
1.1 Background to the research	1
1.2 Problem statement	4
1.3 Aims of the research	6
1.4 Research model	6
1.5 Paradigm perspective of the research	9
1.5.1 Relevant paradigms	9
1.5.2 Metatheoretical statements	12
1.5.2.1 Industrial psychology	12
1.5.2.2 Human resource development	12
1.5.2.3 Growth psychology	12
1.5.2.4 Training and development	13
1.5.3 The market of intellectual resources	13
1.5.3.1 Theoretical statements of the research	13
1.5.3.2 Central hypothesis	14
1.5.3.3 Theoretical models	14
1.5.3.4 Conceptual descriptions	14
1.5.4 Methodological assumptions	14
1.6 Research design	15
1.7 Research method	16
1.8 Chapter division	18
1.9 Chapter summary	18
CHAPTER 2 TRAINING AND ITS PERSONALITY PROFILE	19
2.1 Description of training	19
2.1.1 Approaches to learning	19

2.1.1.1	Humanistic approach to learning	20
2.1.1.2	Behaviouristic and cognitive approaches to learning	21
2.1.2	The process of learning	22
2.1.3	Definition of training	23
2.2	Training in organizational context	25
2.3	The personality profile	34
2.3.1	Key outputs and requirements for trainers	34
2.3.2	Knowledge competence	37
2.3.3	Skill competence	38
2.3.4	Attitude/value competence	39
2.4	Chapter summary	41

CHAPTER 3 PSYCHOLOGICAL OPTIMISATION AND ITS PERSONALITY PROFILE 42

3.1	Description of psychological optimisation	42
3.1.1	Allport: The mature person	42
3.1.2	Frankl: The self-transcendent person	43
3.1.3	Fromm: The productive person	43
3.1.4	Maslow: The self-actualising person	44
3.1.5	Rogers: The fully functioning person	44
3.1.6	Jung: The individualising person	45
3.1.7	Perls: The here and now person	45
3.1.8	Antonovsky: A sense of coherence	46
3.1.9	Rosenbaum: Learned resourcefulness	47
3.1.10	Definition and discussion of psychological optimisation	48
3.2	Psychological optimisation in organisational context	49
3.3	The personality profile of psychological optimisation	51
3.3.1	Intrapersonal characteristics	52
3.3.1.1	Cognitive characteristics	52
3.3.1.2	Affective characteristics	52
3.3.1.3	Conative characteristics	53
3.3.2	Interpersonal characteristics	53

	Page number	
3.4	Chapter summary	54
	INTEGRATION	55
	CHAPTER 4 EMPIRICAL STUDY	58
4.1	Step 1: Determination and description of the sample population	58
4.2	Step 2: Choosing the psychometric battery	59
4.2.1	The Trainer Competency Questionnaire (TCQ)	60
4.2.1.1	Development of the TCQ	60
4.2.1.2	Rationale of the TCQ	60
4.2.1.3	Description of the TCQ	61
4.2.1.4	Scales of the TCQ	61
4.2.1.5	Administration of the TCQ	63
4.2.1.6	Interpretation of the TCQ	63
4.2.1.7	Validity of the TCQ	64
4.2.1.8	Reliability of the TCQ	64
4.2.1.9	Motivation for inclusion of the TCQ	64
4.2.2	The Personal Orientation Inventory (POI)	66
4.2.2.1	Development of the POI	66
4.2.2.2	Rationale of the POI	66
4.2.2.3	Description of the POI	67
4.2.2.4	Scales of the POI	67
4.2.2.5	Administration of the POI	70
4.2.2.6	Interpretation of the POI	71
4.2.2.7	Validity of the POI	72
4.2.2.8	Reliability of the POI	73
4.2.2.9	Motivation for inclusion of the POI	73
4.2.3	The Sense of Coherence Questionnaire (SOCq)	75
4.2.3.1	Development of the SOCq	75
4.2.3.2	Rationale of the SOCq	76

4.2.3.3	Description of the SOCq	76
4.2.3.4	Scales of the SOCq	76
4.2.3.5	Administration of the SOCq	78
4.2.3.6	Interpretation of the SOCq	78
4.2.3.7	Validity of the SOCq	79
4.2.3.8	Reliability of the SOCq	80
4.2.3.9	Motivation for inclusion of the SOCq	81
4.2.4	The Self-Control Schedule (SCS)	82
4.2.4.1	Development of the SCS	82
4.2.4.2	Rationale of the SCS	83
4.2.4.3	Description of the SCS	84
4.2.4.4	Scale of the SCS	84
4.2.4.5	Administration of the SCS	85
4.2.4.6	Interpretation of the SCS	85
4.2.4.7	Validity of the SCS	86
4.2.4.8	Reliability of the SCS	86
4.2.4.9	Motivation for inclusion of the SCS	87
4.3	Step 3: Administration of the psychometric battery	88
4.4	Step 4: Scoring the psychometric battery	89
4.5	Step 5: Statistical processing of data	89
4.6	Step 6: Formulation of hypotheses	89
4.7	Chapter summary	91
CHAPTER 5 RESULTS		92
5.1	Step 7: Reporting and interpretation of results	92
5.1.1	Correlation between trainer competency and psychological optimisation	92
5.1.2	Differences between trainer competency and psychological optimisation	96
5.2	Step 8: Integration and conclusion of research	99
5.3	Step 9: Discussion on the limitations of the research	100
5.4	Step 10: Recommendations	101

Page number

References	103
Appendix	109

List of Figures

Figure 1.1	An integrated model of social sciences research	8
Figure 2.1	Three levels of activity	27
Figure 2.2	Congruence model	28
Figure 2.3	ASTD wheel of human resource development	30
Figure 2.4	Training as an open system	31
Figure 2.5	Critical events model	32
Figure 2.6	Six-stage instructional process model	33
Figure 2.7	The role and function of competencies	34
Figure 3.1	The process nature of psychological optimisation	48

List of Tables

Table 5.1	Correlation between trainer competency and psychological optimisation	93
Table 5.2	Differences in means of high and low trainer competency groups on psychological optimisation	97

SUMMARY

A productive workforce is recognized as the primary resource for all organizations. Workforce training and constant retraining must be a priority. The trainers' role to add value in this process is recognised.

The general aim of this research was to ascertain the correlation and difference between trainer competency and psychological optimisation.

The following measurement instruments were used in the study - TCQ, POI, SOCq and SCS. This study was conducted among 57 trainers working for a large transport organisation.

Through a literature survey, training and psychological optimisation were defined and a personality profile of the competent trainer integrated with that of the psychological optimal functioning individual. Through an empirical study, the correlation and difference between trainer competency and psychological optimisation were determined.

Supporting evidence, although not enough, indicates a correlation between trainer competency and psychological optimisation, and a difference in psychological optimisation between the high and low trainer competency groups.

KEY TERMS

Competence, Growth psychology, Human resource development, Learning, Open systems, Personality profile, Potential, Psychological optimal functioning, Systemic nature of training, Training effectiveness.

CHAPTER 1 SCIENTIFIC REVIEW OF THE RESEARCH

This dissertation focuses on the correlation and difference between trainer competency and psychological optimisation. In this chapter the background of the research is formulated that flows into the formulation of a problem statement and research questions. From the aforementioned, the aims of the research are then stated. A specific research model, serving as framework for the research, is presented. The paradigm perspective which guides the research is discussed and the research design (strategy) and research method with its different steps, giving structure to the research process, is formulated. Finally the manner in which the chapters will be presented, is introduced.

1.1 Background to the research

Haasbroek, as mentioned by Van Dyk, Nel and Loedolff (1992: foreword) states that: "human resources is the key factor in constituting the wealth of a nation. The challenge facing a country is to develop its human resources to the optimum and to establish it as a national asset. In doing so, a country will be in a position to build a strong economy that would meet the needs of its citizens".

Van Dyk et al. (1992: 4) emphasise the above by stating that human resources training and development is regarded as one of the major success variables for a future prosperous South Africa in the African and international context.

According to Drucker (1989: 247-250) the success of an organisation depends ultimately on its people. Therefore any organisation that does not encourage the development of its people retards long-term organisational success. Drucker further mentions that organisational membership can be enhanced through the development of its human resources to enable them to function as total beings within an interactive environment. Membership to organisations gives people a sense of belonging and elicits their loyalty, trust and willing co-operation - things which modern organisations cannot do without if they are to remain viable.

McLagan (1989: 1) mentions that organisational leaders are becoming more aware of the competitive advantage that competent, and committed people bring to the workplace. The value of people's judgement, creativity, and thinking has increased

with the accelerated rate of change in technology. In this environment, the development of people and of the organisation itself becomes one of the most critical processes that the organisation can undertake and sponsor (McLagan, 1989: 2).

Tom Peters (1988: 322) recommends: "Workforce training and constant retraining.....must climb to the top of the agenda of the individual firm and the nation. Value added will increasingly come through people, for the winners. Only highly skilled - that is trained and continuously retrained - people will be able to add value".

The success of training depends on a variety of organisational and training variables. The importance of the trainer as a success factor in this regard cannot be overemphasised (Van Dyk et al., 1992: 263).

According to Broad and Newstrom (1992: 3), human resource development professionals' challenges and opportunities are escalating as a productive workforce is recognised as the primary critical resource for organisations of all kinds.

Any trainer's task is essentially related to promoting and facilitating growth in people (more specifically in adult learners) from a work-related reference framework with a view to fulfilling individual needs and organisational objectives (Van Dyk et al., 1992: 269).

The instrumental role trainers play in increasing an organisation's human resource capacity through development becomes even more evident when it is recognised that the substratum of all human motivation is the organismic tendency toward fulfilment. This tendency may express itself in the widest range of behaviours and in response to a very wide variety of needs (Rogers, 1977: 242).

Rogers (1977: 250) states that human nature is a process base, not a static authority base. It represents a continual process of testing hypotheses in thought and action, discarding some, but following others. It recognises that there is no such thing as static truth, only a series of changing approximations to the truth.

Given the opportunity, a living organism tends to fulfil its more complex potentialities rather than settle for simpler satisfactions (Rogers, 1977: 241).

The study of human potential for growth (growth psychology) focuses on what a person can become, not on what he or she has been or is at this moment (Schultz, 1977: iii). The focus is therefore on the capacity for expanding, enriching, developing, and fulfilling of the individual, to become all he or she is capable of becoming - psychological optimal functioning.

Schultz (1977: 147) mentions that individuals undergo new experiences and change as a result if they are truly open to the world. Ideally this refers to a dynamic and creative process of growth.

Gould (1993: xii) states that the search for meaning is the central quest of human beings. Meaning analysis focuses our attention on the human spirit as the key resource for recapturing the health, wholeness and caring of the fully human person. It emphasises the importance of our being value-bearers, of being able to learn from the past, to live responsibly in the present, and to plan hopefully for the future.

According to Gilley and Egglund (1989: 43) the primary aim of learning is to acquire knowledge, or to develop skills and competencies, or to change behaviours, or all three. Trainers must present information in such a manner that it motivates the learners to become absorbed by it. Trainers must stimulate the minds of learners and challenge their abilities and skills. Only then can a learner become truly self-directed.

From the aforementioned the dynamic and creative growing process of human beings becomes evident, as well as the important role that organisations and trainers fulfil in this process. However, not all trainers are equally competent in stimulating learners to become truly self-directed, fulfilling all they are capable of becoming, thereby functioning at a psychological optimal level.

Various terminology reflective of the concept of psychological optimisation exists in different literature (Cilliers, 1984: 15) for instance - the mature person (Allport), the fully functioning person (Rogers), the productive person (Fromm), the self-transcendent person (Frankl), and the here and now person (Perls).

By finding points of similarity among the theorists, the characteristics of the person who is functioning on a psychological optimal level can be identified. Various characteristics of psychological optimality can be identified and can logically be divided into interpersonal and intrapersonal characteristics (Cilliers, 1988: 15-18). The intrapersonal (within) refers to the cognitive, affective and conative characteristics, and the interpersonal refers to between persons' characteristics.

Psychological optimal functioning refers to a continuous growing process (Cilliers, 1988: 16) and not to a static state. The trainer who wants to promote and facilitate growth in people, supporting them in this process of growth, also has a responsibility to develop himself, to grow and to continuously function on higher levels of psychological optimality, not only for his own benefit, but mostly for the benefit of the learners.

1.2 Problem Statement

According to Laird (1985: 28) the trainer is the ultimate "delivery agent" of the learning system. Trainers therefore manage the critical dynamic process - acquisition of new behaviours by the learner. This implies skill in bringing to life all the content and all the methods called for in the "lesson plan".

Trainers are usually well trained in the mechanics of training, which refers to the process of need analysis, goal formulation, curriculum building, program compilation, presentation and evaluation. There are a wide variety of short courses available in which the various facets of the training of trainers are addressed. These courses usually run between 1 and 5 days and are offered as external courses by tertiary institutions, consultancy groups and trade associations such as the Institute for Personnel Management. Most large organizations also have internal "Train the Trainer" courses (Van Dyk et al., 1992: 272).

The perception of the competent trainer has changed in recent years. The concern is less with platform skills and more with skills in facilitating learning in others. The emphasis is on questioning and listening, on getting feedback and positive reinforcement into the learning experience. Involvement, rather than favourable impression, becomes the focus (Laird, 1985: 29).

According to Laird (1985: 29) training is both a science and an art - and trainers must have mastered instructional skills sufficiently to ensure that behavioural change does indeed take place in the learners.

Considering the critical role fulfilled by trainers, it is essential to determine what constitutes trainer competency.

Rogers (1961: 280) states that it is learning which makes the difference - in the individual's behaviour, in the course of action he or she chooses in the future, in his or her attitudes and personality. This learning is referred to him as significant learning, that is pervasive, not just an accretion of knowledge but learning that interpenetrates with every portion of the person's existence.

According to Rogers (1961: 285) the motivation for learning and change springs from the self-actualising tendency of life itself. Rogers (1961: 191) notes that this movement of a person in the direction of becoming a more fully functioning person reflects a process, not a state of being. He (1961: 185-187) mentions that psychological optimality is not a state of drive-reduction, or tension-reduction, or homeostasis.

According to Rogers (1961: 292) organisations and trainers may wish to set up conditions of learning which make up for uniqueness, for self-direction, and for self-initiated learning.

In studying the literature on both trainer competency and psychological optimisation, no linkage between the two concepts was found. Considering adult learners' experiences and feedback to training departments, a definite linkage between trainer competency and psychological optimisation exists. It is therefore expected that as the trainer's level of psychological optimisation rises, it would result in higher levels of trainer competency as experienced by the learners. An integration between the two profiles seems to be a logical conclusion.

From the above the following research questions are formulated:

- * what is trainer competency, and does the literature refer to a trainer personality profile with reference to psychological optimality as characteristic ? ;
- * what is psychological optimal functioning, and is there a distinguishable personality profile for this individual ? , and
- * does the level of psychological optimisation predict trainer competency ?

1.3 Aims of the research

From the above research questions, the following aims are formulated:

The general aim of this research is to ascertain the correlation and difference between trainer competency and psychological optimisation.

In terms of the literature survey, the specific aims are:

- * to define trainer competency and determine the personality profile of the competent trainer;
- * to define psychological optimisation and determine the personality profile of the psychological optimal functioning individual, and
- * to integrate the above-mentioned profiles.

In terms of the empirical study, the specific aim is to ascertain the correlation and difference between trainer competency and psychological optimisation amongst a group of trainers.

1.4 Research Model

The research model of Mouton and Marais (1990: 7-26) serves as a framework for this research. It aims to incorporate the five dimensions of social science, namely the sociological, ontological, teleological, epistemological and methodological dimensions and to systematise it within the framework of the research process. It is emphasised that these five dimensions are aspects of one and the same process, namely research.

The assumption of this model is that research represents a social process. In terms of this model it can be defined as follows: "social sciences research is a collaborative human activity in which social reality is studied objectively with the aim of gaining a valid understanding of it". In figure 1.1 this model is described as a system theoretical model, with three subsystems which interrelate with each other and with the research domain of the specific discipline - in this case industrial psychology. The subsystems represent the intellectual climate, the market of intellectual resources and the research process itself.

According to Mouton and Marais (1990: 21) the term intellectual climate is used to refer to the variety of metatheoretical values or beliefs which are related to this research. These beliefs, values and assumptions can usually be traced to non-scientific contexts. The origins of many of these values may be traced back to traditions in philosophy and are frequently neither testable, nor were they ever meant to be tested. For the purpose of this research these assumptions are formulated with respect to beliefs about industrial psychology, human resource development, growth psychology, and training and development.

The markets of intellectual resources refer to the collection of beliefs which has a direct bearing upon the epistemic status of scientific statements, i.e. to their status as knowledge-claims. The two major types are: theoretical beliefs about the nature and structure of phenomena on the one hand, and methodological beliefs concerning the nature and structure of the research process (Mouton & Marais, 1990: 21).

For the purpose of this research a central hypothesis is presented, as well as theoretical models and theories and a conceptual description regarding trainer competency and psychological optimal functioning.

In the research project, the researcher internalises specific inputs from the paradigm(s) to which he subscribes in a selective manner, so as to enable him to interact with the research domain in a fruitful manner and to produce scientifically valid research (Mouton & Marais, 1990: 23). A distinction is made between the determinants of research decisions on the one hand, and the decision-making process on the other hand.

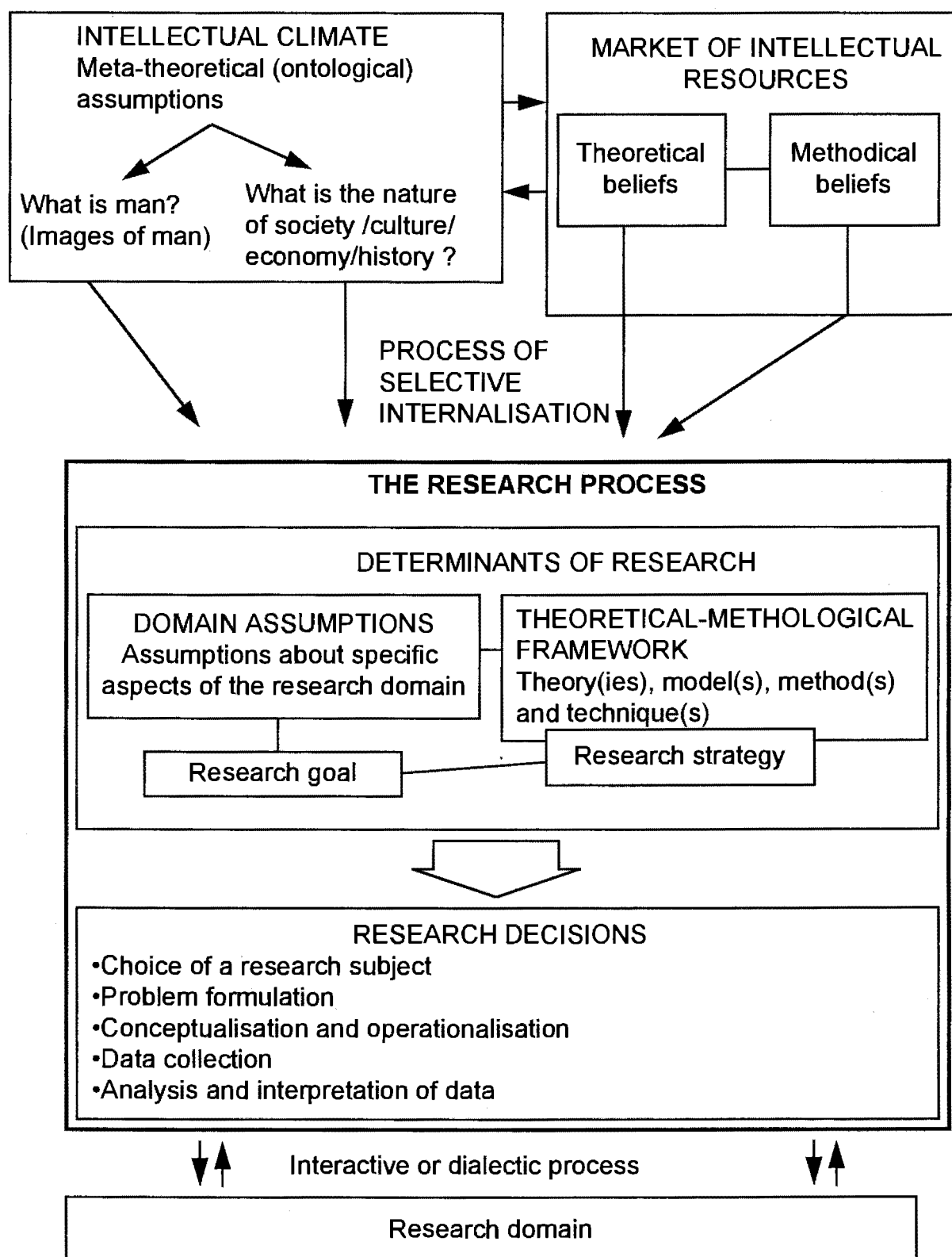


Figure 1.1 An integrated model of social sciences research (Mouton & Marais, 1990: 22).

With regard to the determinants of the research decisions, a description of the research design is given in terms of its descriptive nature.

Furthermore, the research aims are formulated with regard to the two phases of the literature review and the empirical study. Regarding the theoretical methodological framework, phase one refers to trainer competency, and psychological optimisation; and phase two to the determination of the correlation and difference between these two aspects. With regard to the decision-making steps in the research process, the research method is described in two phases, each with specific distinguishable and consecutive steps.

1.5 Paradigm Perspective of the Research

With reference to the paradigm perspective of the research, the relevant paradigms, metatheoretical statements, the market of intellectual resources and the methodological assumptions will be discussed.

1.5.1 *Relevant paradigms*

Patton (1975: 9) describes a paradigm as a view of the world, a total, all encompassing perspective, "a way of breaking down the complexity of the real world". Morgan (1980: 606) uses the term "in a metatheoretical or philosophical sense to denote an implicit or explicit view of reality". Kuhn (1970, in Morgan, 1980: 606) reduced the term to three broad meanings: a complete view of the reality, or way of seeing; as relating to the social organisation of science in terms of schools of thought connected with particular kinds of scientific achievements; and as relating to the concrete use of specific kinds of tools and texts for the process of scientific puzzle-solving.

The most important implication of the above stems from the identification of paradigms as alternative realities. The term paradigm is therefore used in its metatheoretical or philosophical sense to denote an implicit or explicit view of reality.

Thematically the literature survey will be on trainer competency and psychological optimisation.

The literature survey on trainer competency will be presented from the behaviouristic and humanistic paradigms. The literature survey on psychological optimisation will be presented from the humanistic and salutogenic paradigms.

The following are the basic assumptions of the behaviouristic paradigm (Ivey & Simek-Downing, 1980: 217-227):

- * it is concerned with the observable, immediate and durable action in the lives of individuals;
- * the human condition can be studied objectively and predicted;
- * the success of predictions and interventions can be measured;
- * an individual's behaviour is directly related to events and stimuli in the environment;
- * learning is defined in terms of changes in behaviour;
- * behaviour develops and maintains itself through a system of rewards or reinforcers and punishments;
- * behaviour change must be relevant to the individual, and
- * all behaviour change procedures seek to modify by increasing or decreasing the frequency of specific behaviours.

The following are the basic assumptions of the humanistic paradigm (Quitmann, 1985: 16-17):

- * a human being represents more than the sum of his or her parts;
- * humans exist within a human context;
- * humans are conscious. Independent of the amount of consciousness not assessable, the available consciousness forms a characteristic and basis for understanding and experience;
- * humans have and make decisions based on choices. They need not be passive spectators, but can actively change their life and situations surrounding that. Underlying this is the need of actualisation of potential, and
- * human existence is intentional. This forms the basis of human identity.

The following are the basic assumptions of the salutogenic paradigm (Strümpfer, 1990: 265-268):

- * the emphasis is placed on the origins of health, or wellness;
- * the primary concern is with the maintenance and enhancement of wellness, in addition to the prevention and treatment of illness;
- * the assumption that stressors are inherently bad, are rejected in favour of the possibility that stressors may have salutary consequences;
- * stressors are omnipresent, rather than the exception. People are nevertheless surviving and are remaining healthy, and
- * the focus is on how people manage stress and stay well.

The empirical study will be presented from the functionalistic paradigm and the results obtained will be interpreted within the aforementioned growth perspective. The following are the basic assumptions of the functionalistic paradigm (Morgan, 1980: 608):

- * the functionalist perspective is primarily regulative and pragmatic in its basic orientation;
- * it is concerned with understanding society in a way which generates useful empirical knowledge;
- * society has a concrete, real existence, and a systemic character oriented to produce an ordered and regulated state of affairs;
- * it encourages an approach to social theory that focuses upon understanding the role of human beings in society, and
- * behaviour is always seen as being contextually bound in a real world of concrete and tangible social relationships.

Thematically the empirical study will be on the correlation and difference between these two variables - trainer competency and psychological optimisation.

In disciplinary context this research focuses on psychology and industrial psychology as fields of application. More specifically the focus in the literature survey is on human resource development and growth psychology. In terms of the empirical study, the focus is on psychometrics and statistical analysis.

1.5.2 Metatheoretical Statements

The metatheoretical assumptions represent an important category of assumptions underlying the theories, models and paradigms that form the definitive context of this study. The metatheoretical values or beliefs have become part and parcel of the intellectual climate of a particular discipline in the social sciences (Mouton & Marais, 1990: 21). In terms of this research, metatheoretical statements are presented on the following:

1.5.2.1 Industrial psychology

Industrial psychology refers to a branch of applied psychology (Reber, 1988: 352). In essence it is an umbrella term covering organisational, military, economic and personal psychology and includes such areas as tests and measurements, the study of organisations and organisational behaviour, personnel practices, human engineering, human factors, the effects of work, fatigue, pay and efficiency, consumer surveys, market research, etc. With reference to this research, training and psychological optimisation influencing human and organisational behaviour are studied.

1.5.2.2 Human resource development

According to Gilley and Egglund (1989: 5) human resource development refers to the advancement of knowledge, skills and competencies in individuals as well as the improved behaviour of people within the organisation for personal and professional use. The development of people within an organisation is directed at performance improvement in order to benefit the organisation via greater efficiency, more effective competitiveness and greater profitability. Human resource development refers to learning and to the activities that bring about desired change.

1.5.2.3 Growth psychology

Growth psychology is concerned not with the sick side of human nature (psychological illness) but with the healthy side (psychological wellness). The

purpose of growth psychology is not to study victims of neuroses and psychosis, but to study the vast human potential for growth and fulfilling one's capabilities and for finding a deeper meaning in life. In short, growth psychology attempts to expand, enlarge, and enrich knowledge about the human personality (Schultz, 1977: 1). With reference to this research, the focus is on the growth capability and self-actualisation of human beings.

1.5.2.4 Training and development

According to Van Dyk et al. (1992: 148) training can be seen as the systematic process of changing the behaviour and/or attitudes of people in a certain direction to increase goal achievement within the organisation.

Nadler (1970: 88) notes that development is concerned with preparing employees so that they can "move with the organisation as it develops, changes and grows". With reference to this research, training and learning's link with development and psychological optimisation is studied.

1.5.3 *The market of intellectual resources*

The above statements will next be discussed as applied in this research.

1.5.3.1 Theoretical statements of the research

Theoretical beliefs about the nature and structure of phenomena are those beliefs of which testable statements about social phenomena are made. Theoretical beliefs may, therefore, be regarded as assertions about the what (prescriptive) and why (interpretative) aspects of human behaviour. It would include all statements which form part of hypotheses, typologies, models or theories (Mouton & Marais, 1990: 21).

1.5.3.2 Central hypothesis

The central hypothesis of this research can be formulated as follows:

If the personality profile of the competent trainer refers to aspects of self-development, then the competent trainer must possess the characteristics of the psychologically optimal personality.

1.5.3.3 Theoretical models

The models of trainer competency and psychological optimal functioning serve as guides for the two variables.

1.5.3.4 Conceptual descriptions

Trainer competency refers to the relevant competencies (knowledge, skill, and attitudes/values), that a trainer uses to perform a variety of behaviours and activities that produces outputs that lead to positive results for individuals and organisations (McLagan, 1989: 17).

Psychological optimal functioning from the viewpoints of theorists from the pure humanistic school, and analytical and gestalt psychologists with very clear humanistic influences as well as the salutogenic paradigm with its clear humanistic connections, refers to "an intentional search for meaning in life reflecting a continuing growing process wherein the individual develops, integrating all aspects of his life into one uniqueness, building upon his authentic values that serve as source of strength enabling him to push into an hostile environment, turning stressors into an advantage, thereby not only to hold his own, but to adapt, enhance and actualize his well-being" (Allport, 1961: 543, Antonovsky, 1987: 19, Cilliers, 1988: 15-18, Frankl, 1962: 99, Gould, 1993: 132, Maslow, 1970: 159, Rogers, 1961: 280 & 1977: 238, Schultz, 1977: 47, 99 & 125, and Strümpfer, 1990: 265).

1.5.4 *Methodological assumptions*

Methodological assumptions are beliefs concerning the nature of social science and scientific research. Methodological beliefs are more than methodological

preferences, assumptions and presuppositions about what ought to constitute good research. As there is a direct link between methodological beliefs and the epistemic status of research findings, and because these beliefs can invariably be traced to the concept of scientific praxis, they are included as a component of the market of intellectual resources (Mouton & Marais, 1990: 23). With regard to this research project:

- * the ontological dimension refers to the study of being or reality. The content of this dimension may be regarded as humankind in all its diversity, which include human activities, characteristics and behaviour. This research focus is specifically on trainer competency and psychological optimal functioning;
- * the teleological dimension refers to a human activity, its main aim being the understanding of phenomena. In this research it is understanding the correlation and difference between trainer competency and psychological optimal functioning;
- * the epistemological dimension refers to providing a valid and reliable understanding of reality. In this research this is achieved by an appropriate research design and method to ensure the validity of the research, and
- * the methodological dimension refers to the objectivity of the research, being critical, balanced, unbiased, systematic, and controllable. In this study the research is planned, structured, and executed to comply with the criteria of science. The research design and research method are structured to ensure rational decision-making.

The relevant person roles in this research refers to the first person as researcher and psychometrist and the second as trainer and respondent.

1.6 Research Design

According to Mouton and Marais (1990: 33), the "aim of a research design is to plan and structure a given research project in such a manner that the eventual external and internal validity of the research findings is maximised".

Research design is therefore synonymous with rational decision making during the research process. Irrespective of how structured or unstructured a research project is likely to be, it is the duty of the researcher to ascertain which factors may pose a threat to the validity of the findings. By paying attention to nuisance variables in a critical and systematic manner, it is possible to ensure that the ultimate research findings are likely to be more valid (Mouton & Marais, 1990: 32).

In this research strategy the internal validity on a contextual level is ensured through:

- * models and theories chosen in a representative manner and presented in a standardised manner, and
- * measuring instruments chosen in a responsible and representative way and presented in a standardised manner.

In this research the external validity is insured by the selection of the sample to be representative of the total population. The findings therefore have greater validity than merely for the project in which they were generated. The aim of the research design is to determine if the specific chosen variable, known as the independent variable, influence another variable, known as the dependent variable (Huysamen, 1993: 24-26). In this research the dependent variable is trainer competency and the independent variable is psychological optimisation.

In the presentation of the literature review and the empirical study, the research can be categorised as descriptive. The integration of the aforementioned in the conclusion and recommendations will be contextualised regarding the presented problem.

1.7 Research method

This research will be conducted in two phases, each with different steps.

Phase 1 Literature survey

Step 1 Training in organisational context

Training will be defined and the personality profile of the competent trainer will be discussed.

Step 2 Psychological optimisation

Psychological optimisation will be defined and the personality profile of the psychologically optimal individual will be discussed.

Step 3 Integration

The personality profile of the competent trainer will be integrated with that of the psychologically optimal individual.

Phase 2 Empirical investigation

Step 1 Determination and description of the sample population

Step 2 Choosing the psychometric battery

Step 3 Administration of the psychometric battery

Step 4 Scoring of the psychometric battery

Step 5 Statistical processing of data

Step 6 Formulation of hypotheses

Step 7 Reporting and interpretation of results

Step 8 Integration and conclusion of research

Step 9 Discussion on the limitations of the research

Step 10 Recommendations

1.8 Chapter division

The chapters will be presented in the following manner:

Chapter 2 Training and its personality profile

Chapter 3 Psychological optimisation and its personality profile

Chapter 4 Empirical study

Chapter 5 Results

1.9 Chapter summary

This chapter discussed the scientific review of this dissertation focusing on trainer competency and the correlation with and difference between psychological optimisation. The background to the research, problem statement, aims, research model, paradigm perspective, research design, research method and chapter division were presented. Chapter two discusses trainer competency as concept as well as its personality profile.

CHAPTER 2 TRAINING AND ITS PERSONALITY PROFILE

Chapter 2 represents the first step in the literature review, namely trainer competency from the humanistic and behaviouristic paradigms (as mentioned in 1.5.1). The aim of the chapter is to describe learning and training, discuss training in organisational context and define the personality profile of the competent trainer.

2.1 Description of training

The description of training will include various approaches to learning, the process of learning, and conclude with a definition of training.

2.1.1 Approaches to learning

Laird (1985: 113) states that change begins when learning about a better way of performing a task. This highlights the necessity for knowledge upon which is based the approaches to, and operating activities that produce learning and change. Through this knowledge, trainers can develop a personal philosophy in order to make concrete, consistent decisions about arranging the events of the learning experience and manage the dynamics of the learning activity (Laird, 1985: 128).

According to Gilley and Egglund (1989: 121) the occurrence of learning and change is a subject not agreed upon by researchers and scholars. Several theories exist of how learning occurs, each having a different orientation to the "nature of human beings".

Gilley and Egglund (1989: 120) define learning as "knowledge obtained by study and/or experience; the art of acquiring knowledge, skills, competencies, attitudes, and ideals that are retained and used; a change in behaviour through experience". Seifert (1983: 146) states that "learning refers to a relatively permanent or lasting change in a behavioural tendency which is a result of specific experiences or repetitions of an experience". Burton (Knowles, 1984: 5) has a similar view of learning. He defines learning as "a change in the individual, due to the interaction

of that individual with the environment, which fills a need and makes him or her more capable of dealing with the environment”.

2.1.1.1 Humanistic approach to learning

This approach maintains that all people are unique and possess individual potential. It also maintains that all people have the natural capacity to learn, thus the purpose of learning is to encourage each individual to develop to his or her full unique potential (Gilley & Eggland, 1989: 121).

Learning occurs to the extent that learners are motivated to change, and is applied in the real world to the extent that they take successful steps to integrate that learning into real world situations (McLagan, 1989: 1). Adult learners are independent and able to make and carry out decisions. They are problem-centered and not subject-centred (applications orientation). They come from different backgrounds with different responsibilities, experiences, needs and interests. Learning must be "real world" oriented and is their own responsibility because the trainer won't be there when the learning must be applied.

Andragogy, based on the humanistic orientation is derived from Greek: anere = adult and agogus = leader of, refers to the art and science of helping adults to learn. Because adults learn different from children (pedagogy) they should be treated differently (Knowles, 1984: 55).

Lessing (1982: 107) explains that these differences also provide a basis for deriving the characteristics of the adult learner:

- * adults need to know why they need to learn something before undertaking to learn it;
- * the learner is a self-directing adult who has assumed responsibility for his or her own life and acts relatively independently;
- * the adult learner can be a rich source of learning which can be tapped;
- * they become ready to learn when they experience a need to know or a need to achieve something which will help them become more successful in the real-life situation;

- * educational activities are life-centred, task-centred or problem-centred;
- * motivation must be intrinsic and internal to be more potent and persistent;
- * the adult learner is normally in charge of his or her own development, and
- * the adult accepts a co-responsibility for training and development within the organisation.

2.1.1.2 Behaviouristic and cognitive approaches to learning

Behaviourist approaches, according to Seifert (1983: 146), are mainly concerned with the stimuli that immediately precede the learned behaviour. In addition they are concerned with the consequences of behaviour, which are called reinforcements. Cognitive approaches on the other hand are concerned more directly with the less visible processes of human learning, namely memory, attention, insight, organisation of ideas, and information processing (Seifert, 1983: 146). They are primarily concerned with the internal, organising processes of thought that lead to performance.

The world view of the behaviourist approach is defined by many as mechanistic and reductionistic and as perceiving people as reacting to a genetic history and to an environment which controls them. In this view, humankind is considered to have no volition, no will and to have no control over destiny (Ivey & Simek-Downing, 1980: 218). The purpose of learning according to this approach is to produce prescribed behaviours - how one should perform.

This approach equates the human being with a machine - like the machine, an input is introduced (stimulus), which is controlled (how the input is processed - known as operand conditioning) and a predetermined output (response) results (Gilley & Egglund, 1989: 121).

The cognitive approach maintains that the purpose of learning is to lead the brain to engage in critical thinking and problem solving. The one thing that separates human beings from other living things is their capacity to think critically and solve problems (Gilley & Egglund, 1989: 121). According to Jean Piaget (in Salkind, 1985: 184) the

individual plays an active role in his or her own developmental process. Piaget defined development as a spontaneous process and emphasised the individual's inherent capabilities of being dynamic and not remaining static.

The cognitive learning paradigm is less concerned with the outcomes of learning as compared to the behaviourist viewpoints; it is primarily concerned with the internal, organising processes of thought that lead to performance. " They look at how human beings acquire information and knowledge, how they remember it, and how they relate ideas and concepts to one another" (Seifert, 1983: 178).

2.1.2 *The process of learning*

Marsick (1987: 4) defines learning as "the way in which individuals or groups acquire, interpret, reorganise, change or assimilate a related cluster of information, skills and feelings. It is also primary to the way in which people construct meaning in their personal and shared organisational lives".

Marsick and Watkins (1990: 5) distinguish between three types of learning, namely: formal, informal and incidental learning. Formal learning is institutionally sponsored and refers to individual, career, and organisation development. With informal learning the control of learning rests primarily in the hands of the learner and is predominantly experiential and non-institutional. Incidental learning is a subcategory of informal learning and is unintentional; a by-product of another activity.

The process of learning refers to the facilitation of change in the learner. Through guidance it is intended to promote learning (Rothwell & Sredl, 1992: 326).

Van Dyk et al. (1992: 133-135) highlights the following principles of learning:

- * contiguity - implying the almost simultaneous occurrence of the stimulus and the response, a necessary condition for learning association;
- * practice - transfer of learning is improved by active involvement of the learner;
- * reinforcement - feedback of results creates insight into the learning process;

- * factual information - new information must be communicated and previous learning must be retrieved;
- * intellectual skills - enabling people to respond to their environment, making them competent;
- * learning events - require the activation of strategies for learning and remembering;
- * only the learner can learn - the trainer can merely facilitate the learning situation;
- * motivation - provision must be made for both intrinsic and extrinsic motivation;
- * the learner must be involved in selecting and planning the learning material.
- * active participation - enhances motivation, rate of learning and achieving of objectives;
- * the learning and task must be broken down in relation to the desired end behaviours;
- * sequenced steps - presented so that the learner can master the subject matter and learning activities;
- * required behaviours - must be clearly stated, serving as guidelines for learning and for measuring achievement;
- * meaningful versus rote learning - to form associations, apply principles, discover understanding and relate it to previous learning;
- * rate of learning - self-pacing is effective and essential, and
- * different kinds of learning require different training processes - learning activities suited to learners' abilities and styles.

In order to manage and co-ordinate all learning experiences taking place in any organisation, it is important to formally plan the learning activities. This planning can be based on any one or all of the major approaches to learning and training, and will be discussed under the heading: training in organisational context, item 2.2.

2.1.3 Definition of training

Each approach to learning (as discussed in item 2.1.1) makes key assumptions about human nature and learning that serve as foundation for different applications in the process of learning.

Rothwell and Sredl (1992: 333) describe three general approaches to training, matching the three approaches to learning. The three approaches are opportunity-centered, objectives-centered and experience-centered. The different approaches are not mutually exclusive and a certain degree of overlapping does occur.

The opportunity-centered approach is based on humanism and focuses on matching individual needs to appropriate training experiences (Rothwell & Sredl, 1992: 339).

The objectives-centered approach is based on behaviourism and focuses on observable, measurable training outcomes (Rothwell & Sredl, 1992: 338).

The experience-centered approach is based on cognitivism and focuses on what learners experience during training (Rothwell & Sredl, 1992: 339).

Rothwell and Sredl (1992: 340) indicate that the nature of the learning task and the needs of the learners provides clues to which instructional approach will probably work best. The humanistic approach works best when the focus is on personal growth or career planning. The behavioural approach work best when learners are faced with acquiring a measurable or observable skill; and the cognitive approach works best when the aim is to stimulate creativity and examination of attitudes. In short, learners differ in their readiness for self-directness and the trainer should take that into account.

Van Dyk et al. (1992: 150) derived at the following principles underlying the learning process, applicable to the training situation:

- * all people are capable of learning. Any normal person can learn something at any time in his or her life. Since people differ, all do not have the same approach to learning;
- * people must be motivated to learn;
- * learning is an active process;
- * guidance is important in the learning process;
- * appropriate training aids are essential;
- * learning methods should be varied;
- * the learner must experience satisfaction from what he or she learns;

- * the individual should be given positive reinforcement for correct behaviour, and
- * the learner should be required to attain a particular standard of achievement.

Training refers to a system of learning delivery and can thus be defined as the systematic process of changing the behaviour and/or attitudes of people in a certain direction to increase goal achievement within the organisation (Van Dyk et al., 1992: 148).

2.2 Training in organisational context

According to Gilley and Egglund (1990: 4) the value of a well-trained, highly-skilled and knowledgeable employee is ultimately reflected in increased productivity and efficiency, as well as in the employee's attitude toward work and the organisation. This is what human resource development is all about - the introduction of organised activities designed to foster increased knowledge, skills, attitudes and values, and improved behaviour (Gilley & Egglund, 1989: 5).

A critical relationship exists between an organisation's human resources and the contribution of the latter toward the achievement of organisational goals (Van Dyk et al., 1992: 52).

Managing in today's turbulent world of global competition, scarcity of resources and an overwhelming amount of information, necessitates any organisation to actively plan for achieving goals. Strategic planning is therefore essential for organisational success. Kochan and Barocci (1985: 13) describe strategic planning in simple terms as "the process of setting organisational objectives and deciding on comprehensive programs of action which will achieve these objectives"

Kochan and Barocci (1985: 112) stresses the need for a strategic perspective on human resource management, pointing out various advantages in aligning strategic planning and human resource management:

- * an improved understanding of the implications of strategic organisational planning for human resources;

- * proactive recruitment of experienced human resources;
- * improved human resources development activities, and
- * improved analysis and control of costs related to human resources, by providing more objective criteria for payroll expenses.

Kochan and Barocci (1985: 115) further point out that the ability of an organisation to attain its strategic goals is affected by human resources in three ways, namely cost economy, ability to function effectively, and ability to establish new enterprises and change operations.

Van Dyk et al. (1992: 55) therefore state unequivocally that strategic planning cannot be carried out efficiently without due consideration of the human resources in an organisation. Ultimately, strategic planning is implemented by human resources, with their unique abilities. Any strategic human resource plan should therefore link up with the overall corporate strategic plan. This integration between human resources and strategic planning is highlighted in figure 2.1, indicating three levels of activity for business and human resources.

Strategic training and development should be viewed as a substrategy within the overall human resource management strategy (Van Dyk et al., 1992: 56) in order for organisations to be able to continually improve employee's abilities within rapid changing external and internal environments.

To grasp the major impact that interaction between the variables in the internal and external environments have on training and development management, it is essential to view training and development from a systemic viewpoint. The word system simply implies a number of components operating concurrently to achieve a common purpose or function. An open system can be thought of as a system that interacts with its internal and external environment (Camp, Blanchard & Huszco, 1986: 10).

Katz and Kahn (1978: 3) suggest that social systems are best defined by tracing the pattern of energy exchange or activity of people, as it results in some output. The manner in which the output is translated into reactivating input energy should then be ascertained.

Business functions

Human resource functions

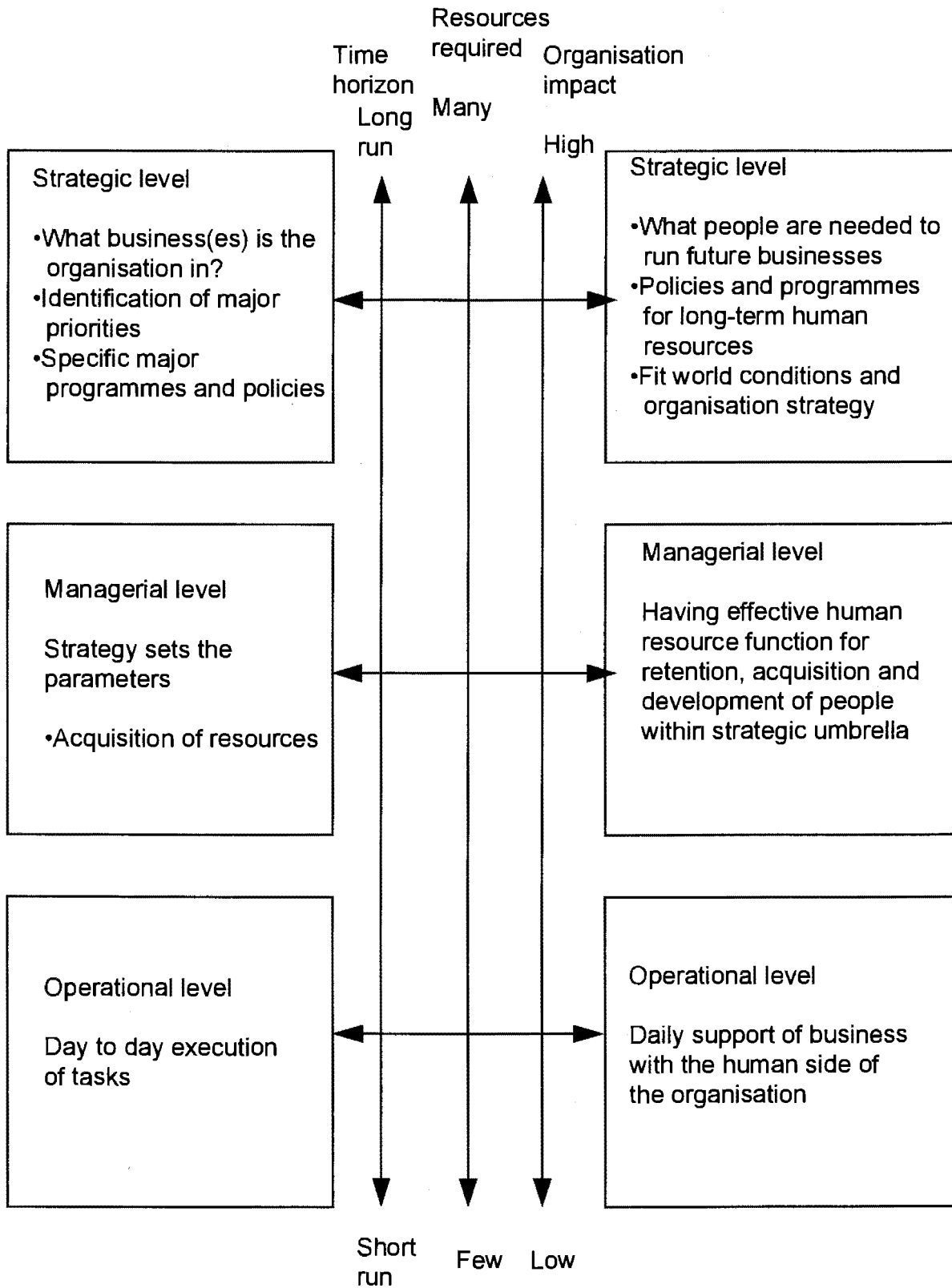


Figure 2.1 Three levels of activity (Fomburn, Tichy & Devanna, 1984: 43).

The system approach is essentially a way of thought; a tendency to think about problems in system terms. The system approach follows five general stages, namely: problem definition (in system terms); analysis (to generate alternatives); selection and synthesis of an optimal solution; controlled implementation; and evaluation and possible revision (Van Dyk et al., 1992: 156).

A distinction can be made between open and closed systems. An open system is one that considers that outside factors exist which can have an impact on the design process. An open system therefore interacts with the environment. A closed system on the other hand is based on the assumption that all inputs can be identified and all possible variables are normally built into the system (Nadler, 1981: 6).

The congruence model of organisation behaviour (Nadler & Tushman, 1989: 102) depicts an open systems theory model, indicating the dynamic relationships affecting organisations.

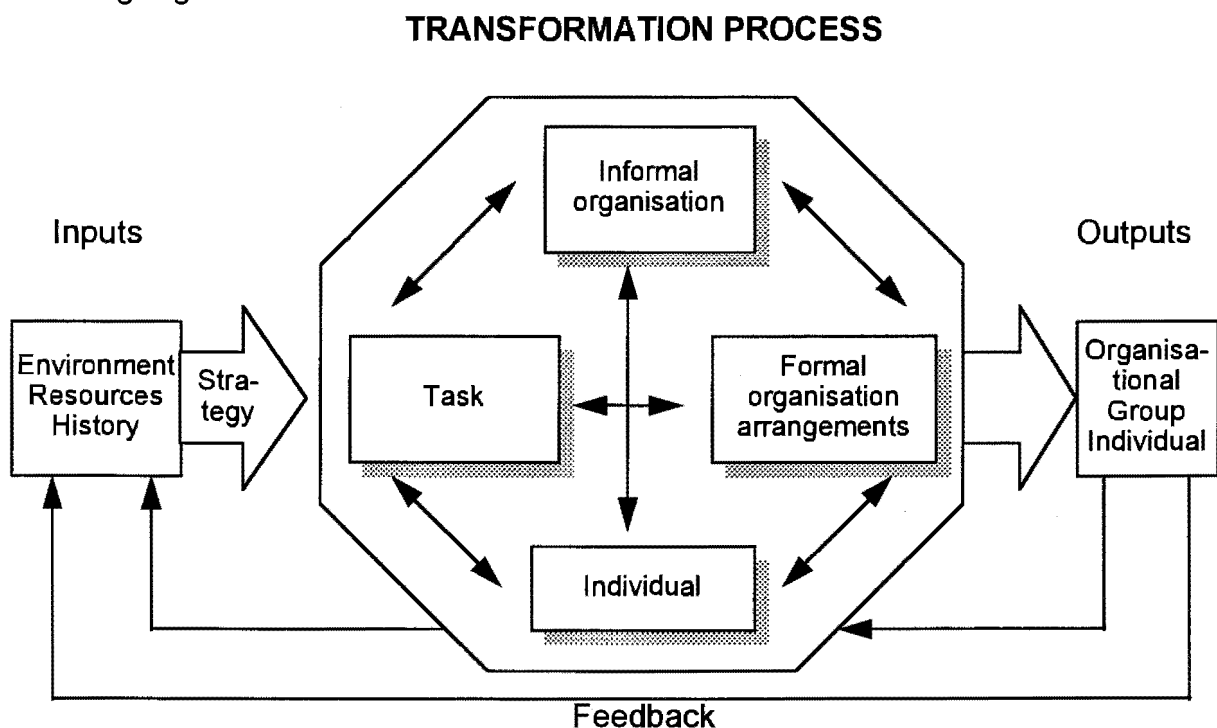


Figure 2.2 Congruence model (Nadler & Tushman, 1989: 102).

Conceptual models which are based on the systems approach are extremely useful and enhance the chances of success in training (Van Dyk et al., 1992: 157). A good

model thus helps with the understanding of what is essentially a complicated process, representing reality in a simplified and comprehensible form.

The human resource wheel of the American Society for Training and Development (ASTD) proposes that people whose role is to increase an organisation's human resource capacity through development must be able to integrate three areas: training and development, organisation development, and career development. It also acknowledges the other human resource areas that impact on individual, group, and organisational development (McLagan, 1989: 5). Figure 2.3 depicts the ASTD wheel of human resource development.

Camp, Blanchard and Huszycz (1986: 12) developed an open systems theory perspective of the training function in organisations. Figure 2.4 depicts this model.

Different models for the design of training programs exist, depending on the purpose, situation or circumstances.

An example of an open model is Nadler's (1981: 12) critical events model for the design of training programmes. The name of this model reflects to the critical steps that must be followed in designing an effective training programme. The Nadler model makes provision for nine events. Figure 2.5 depicts this model.

Gilley and Egglund's (1989: 126), six-stage instructional process model is an attempt to highlight the important role of the trainer in the training process. Each of the six stages is designed as a means of enhancing learning. Figure 2.6 depicts the six-stage instructional model.

The choice of model will be determined largely by the situation within each organisation. It may be possible to utilise some of the existing models or necessary to adapt a model to suit the needs of the organisation (Van Dyk et al., 1992: 162). Deciding on which model to use depends on curriculum purposes and goals, values of decision makers, and learner needs (Rothwell & Sredl, 1992: 361).

HUMAN RESOURCE WHEEL (AS ADAPTED)**HUMAN RESOURCE RESULTS (OUTPUTS)**

Innovation	Productivity
HR fulfillment	Quality
Readiness for change	

HUMAN RESOURCE AREAS

INDIVIDUAL DEVELOPMENT Focus: identifying, assuring and - through planned learning - helping develop the key competencies that enable individuals to perform current or future jobs	CAREER DEVELOPMENT Focus: assuring an alignment of individual career planning and organization career management processes to achieve an optimal match of individual and organization needs
ORGANIZATION DEVELOPMENT Focus: assuring healthy inter- and intra-unit relationships and helping groups initiate and manage change	ORGANIZATION / JOB DESIGN Focus: defining how tasks, authority and systems will be organized and integrated across organization units and in individual jobs
HUMAN RESOURCE PLANNING Focus: determining the organization's major human resource needs, strategies and philosophies	PERFORMANCE MANAGEMENT SYSTEMS Focus: assuring individual and organization goals are linked and that what individuals do every day supports the organization goals
SELECTION AND STAFFING Focus: matching people and their career needs and capabilities with jobs and career paths	COMPENSATION / BENEFITS Focus: assuring compensation and benefits fairness and consistency
EMPLOYEE ASSISTANCE Focus: providing personal problem solving / counseling to individual employees	UNION LABOUR RELATIONS Focus: assuring healthy union / organization relationship
HR RESEARCH AND INFORMATION SYSTEMS Focus: assuring an HR information base	

Human resource development

Human resource management

Figure 2.3 ASTD wheel of human resource development (McLagan, 1989: 6).

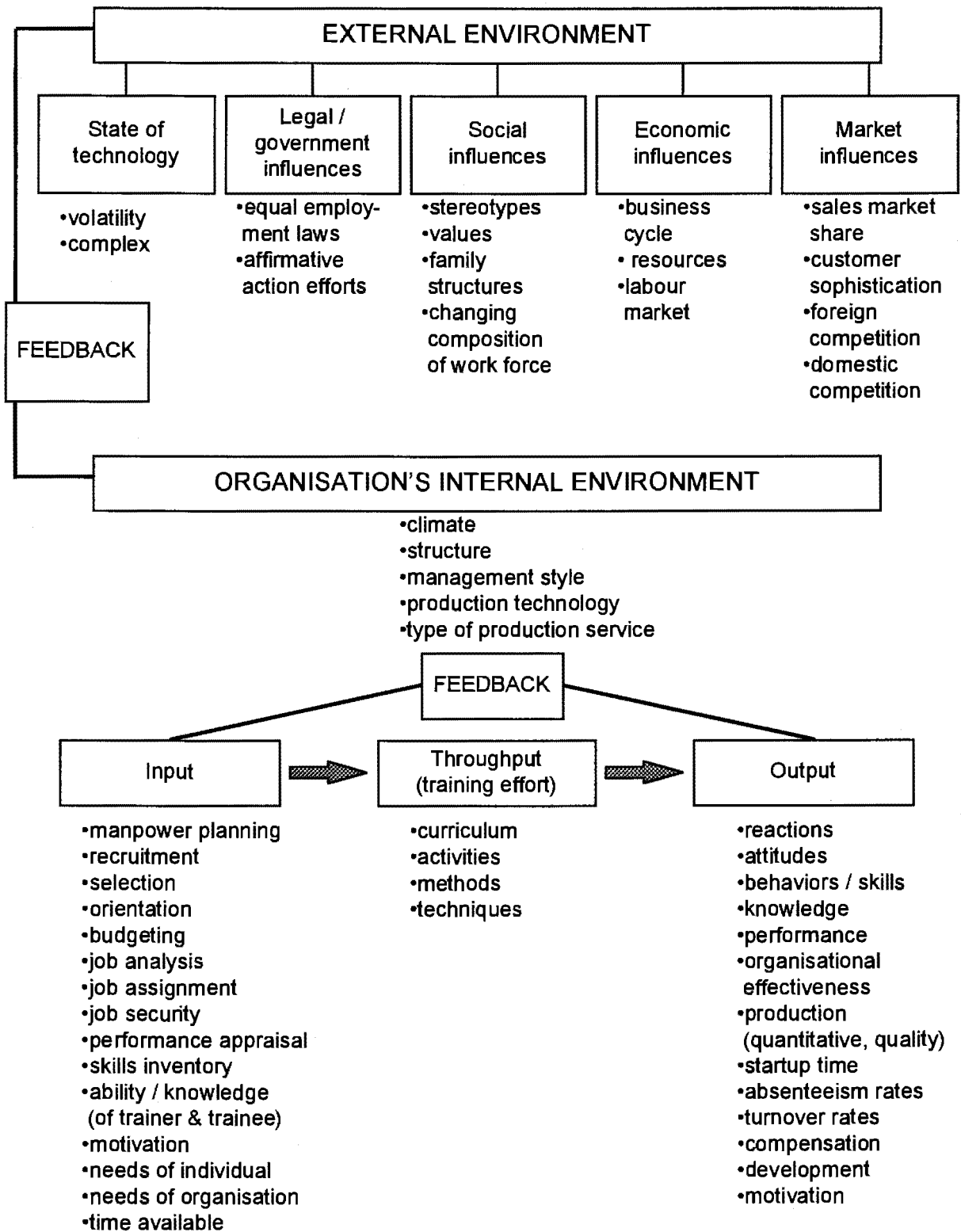


Figure 2.4 Training as open system (Camp, Blanchard & Huszczo, 1986: 12).

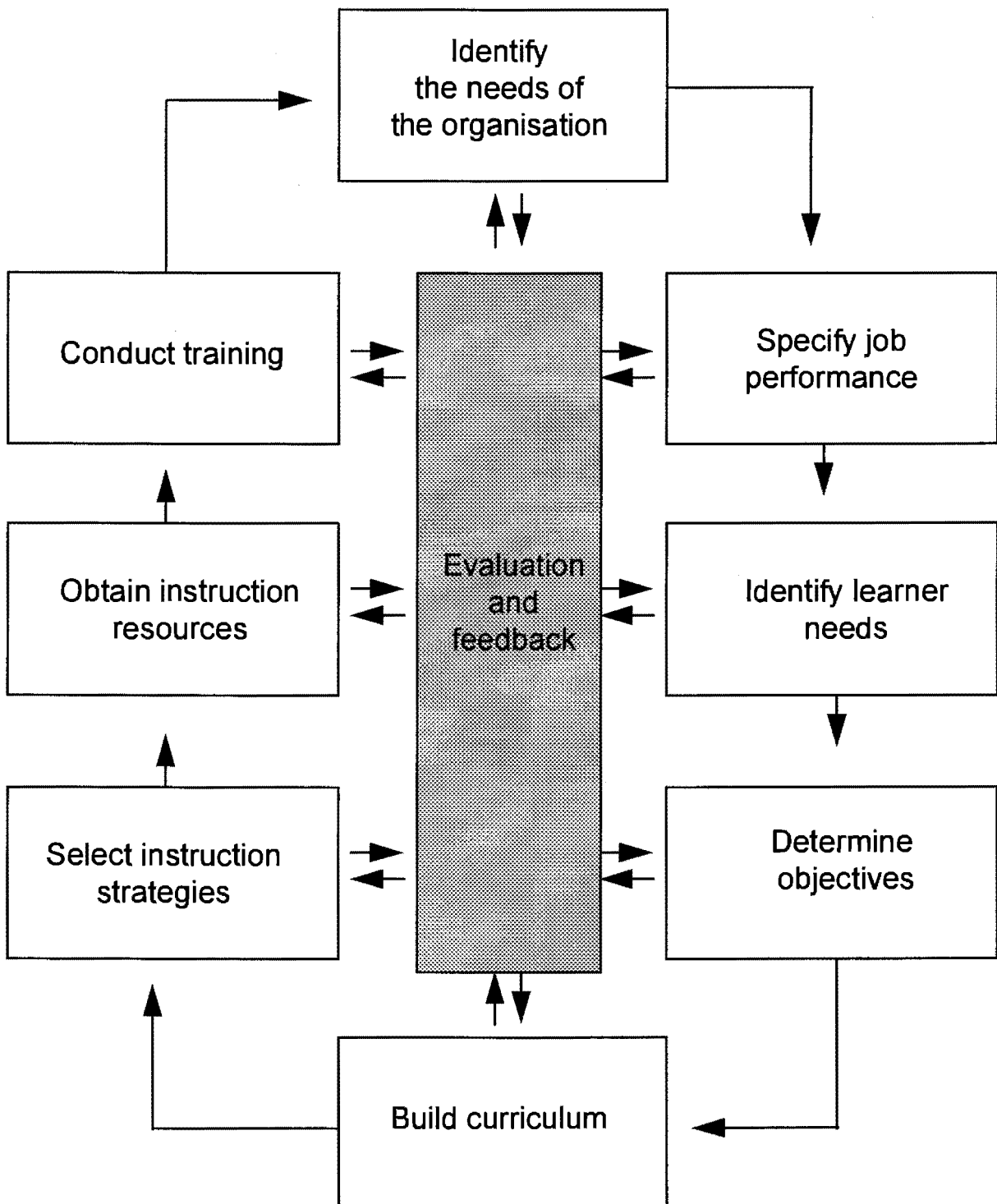


Figure 2.5 Critical events model (Nadler, 1981: 12).

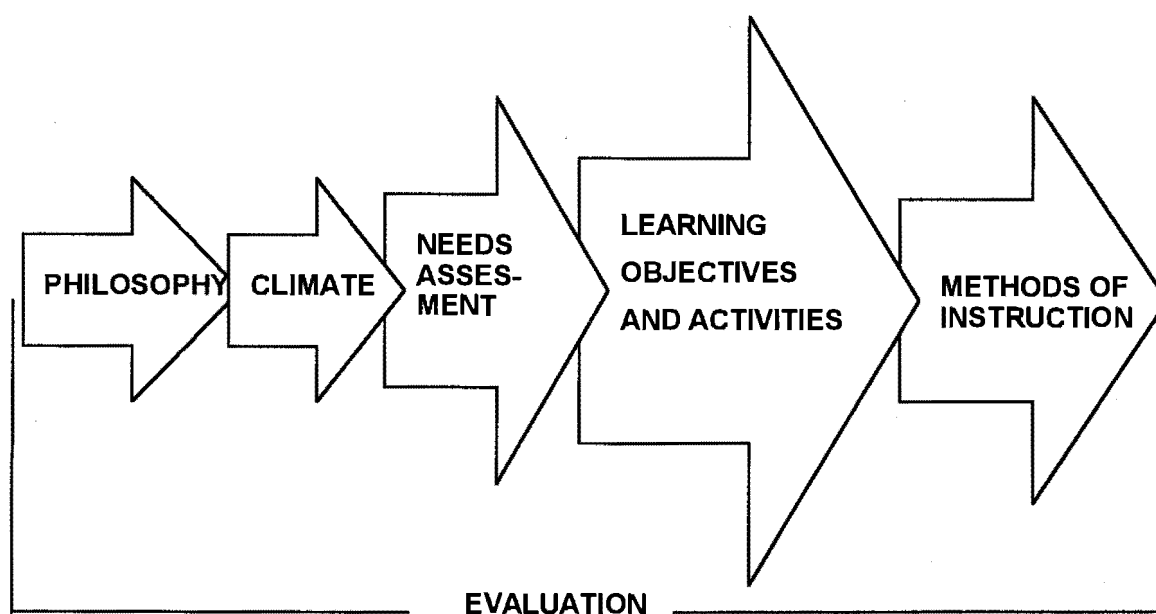


Figure 2.6 Six-stage instructional process model (Gilley & Egglund, 1989: 126).

Van Dyk et al. (1992: 162) identified some common elements and steps which are used in training design activities:

Definition (analysis) phase

- * Conducting a situational analysis.
- * Establishing training needs.
- * Collecting and analysing job data.

Systems development phase

- * Formulating and classifying training objectives.
- * Developing criterion tests.
- * Developing evaluation measures.
- * Determining learning content.
- * Determining learning sequence.
- * Selecting instructional strategies.
- * Selecting instructional media.
- * Developing the training programme and materials.
- * Producing instructional resources.

Validation phase

- * Conducting training.
- * Administering and analysing criterion measures.
- * Evaluating the training programme and system.
- * Validating training materials.
- * Tabulating and interpreting the data.

2.3 THE PERSONALITY PROFILE

The competencies constituting the personality profile of the competent trainer can be divided into three main areas namely: knowledge, skills, and attitudes and values. Figure 2.7 illustrates the role and function of competencies.

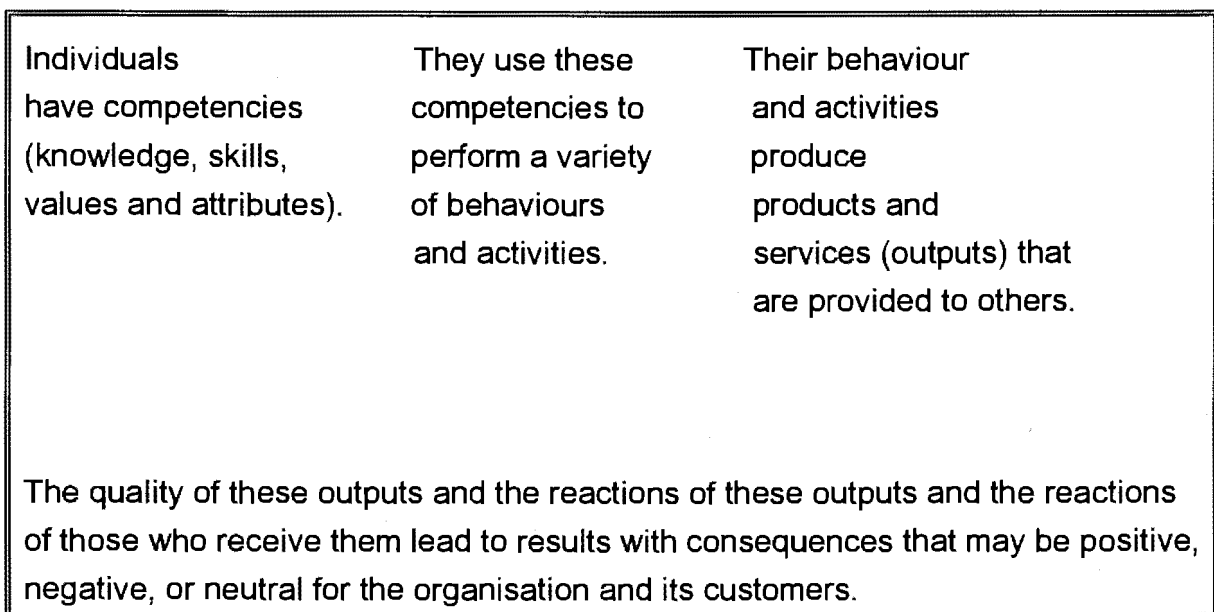


Figure 2.7 The role and function of competencies (McLagan, 1989: 17).

2.3.1 Key outputs and requirements for trainers.

McLagan (1989: 77) defined the key outputs as a product or service that an individual or group delivers to others, especially to colleagues, customers or clients. The key requirements that each of these outputs must meet in order for human

resource experts to agree that it represents quality training (McLagan,1989: 28-31) that emerged as important deliverables for the nineties, (McLagan,1989: 55) for trainers are:

A learning environment where individuals feel safe to try new skills and behaviours; the facilitator models behaviour consistent with the goals of the program; self-esteem is maintained or enhanced; individual differences are respected; agreed-upon levels of confidentiality and privacy are respected; and the environment supports the learning process.

Presentations of material where connections between the instructional event and on-the-job issues/problems are made; the facilitator adapts according to the unique issues of the group; presentations are directly linked to the intended learning objectives; the methodology used is appropriate to multiple learning styles; individual's issues, concerns, and expectations about the material content are addressed; the learning points are clear, accurate, and organised; examples related to the learning points are provided; presentations are consistent with the program design; and they make appropriate use of support materials and aids.

Facilitation of structured learning events where connections between the instructional event and on-the-job issues/problems are made; the facilitator adapts according to the unique issues of the group; participants are able to identify what they are doing well or might do differently on the job; timely, sensitive, and relevant feedback is provided; participant self-esteem is maintained or enhanced; participants are physically and psychologically safe when moving in and out of role plays, simulations, and so on; participants make generalisations and contribute application ideas; individuals achieve the intended objectives; the facilitator and participants discuss and summarise key points; individuals understand the event's purpose; and individual issues, concerns, and expectations about the event are addressed.

Facilitation of group discussions where each group member feels valued and listened to, self-esteem is maintained or enhanced; participation is encouraged; agreed upon levels of confidentiality are maintained; conflicts are addressed and managed; adequate time is provided for discussion, debriefing, and application; there is enough flexibility to respond to group needs and issues as they arise;

participants are provided opportunities to explore ideas in a safe manner; rights of individual group members are respected; and group members feel the experience is meaningful.

Facilitation of media-based learning events where connections between the instructional event and on-the-job issues/problems are made; the intended objectives are clearly presented to participants; the objectives are consistent with the program design; equipment is operated properly and back-up systems or contingency plans exist for use in the event of equipment failure; transitions between media segments and other portions of the program are smooth; individuals' issues and concerns about the material's content are addressed; the instructor adapts audio-visual use according to unique issues of the group.

Test delivery and feedback where competencies being tested are relevant and clearly defined; reasons for testing and uses for test results are clearly communicated; feedback is timely and relevant; instructions are clear and easily understood; and agreed upon levels of confidentiality are maintained.

Group members' awareness of their own group process where group members are clear about the group process and their roles in it; the group takes ownership for the process and self-corrects without deferring to the facilitator; the group is able to discuss and decide on process; and the group is clear about what constitutes effective and ineffective behaviours.

Feedback to learners where self-esteem is maintained or enhanced; feedback is clearly communicated; it is supported by specific examples; it can be used to make on-the-job behaviour changes; it is given as soon after the behaviour as possible; agreed-upon levels of confidentiality are maintained; and it is given in a respectful manner.

Individual action plans for learning transfer where the participant is committed to the plan; it is linked to on-the-job needs; it can be monitored by the participant; supervisory support needs are identified; it includes legitimate standards, timetables, and measurements; and individuals have clearly identified incentives for achieving the plan.

Individuals with new knowledge, skills, attitudes where individuals are able to apply new learning; the learning is relevant to job performance and/or career development; individuals are able to perform more effectively; and the learning process matches individual learners' styles and needs.

Trainers fulfil the role of presenting information, directing structured learning experiences, and managing group discussion and group process according to McLagan (1989: 55). The key competencies critical for producing the key outputs that the trainer are responsible for are discussed under the headings knowledge, skill and attitude and values.

2.3.2 Knowledge competence

Reber (1988: 384-385) distinguishes between procedural knowledge (knowing how) and declarative knowledge (knowing what). Collectively knowledge represents the body of information possessed by a person or, by extension, by a group of persons or a culture. Declarative knowledge (factual) is defined as knowledge about the world that can be represented as consciously known, factual knowledge.

Procedural knowledge (functional) is defined as knowledge about how to do something; knowledge that is operational; practical. Functional knowledge can also be described as technical knowledge (McLagan, 1989: 43) which is required to meet the specialised functional demands of the position i.e. the knowledge base required for trainer competency. This includes adult learning understanding - knowing how adults acquire and use knowledge, skills, attitudes, and understanding individual differences in learning.

Factual knowledge can also be described as business knowledge. Business competencies have a strong management, economics or administration base (McLagan, 1989: 44). This includes business understanding: knowing how the functions of a business work and relate to each other, and knowing the economic impact of business decisions.

2.3.3 Skill competence

Reber (1988: 701) defines skill as: "the capability of carrying out complex, well-organised patterns of behaviour smoothly and adaptively so as to achieve some end or goal". Although the term was originally used largely with respect to motor activity, it is now common to see references to verbal and social skills.

Knowledge and skills go hand in hand - the one cannot do without the other. Skills represent the practical application of required knowledge. Skills required of a trainer can be divided into two main groups, namely: interpersonal and intellectual (cognitive) skills.

Interpersonal skills have a strong communication base (McLagan, 1989: 45) and is representative of the dynamic interaction of training. Interpersonal skills also play an important role in psychological optimisation. These include the following :

- * coaching skill - helping individuals recognise and understand personal needs, values, problems, alternatives and goals;
- * feedback skill - communicating information, opinions, observations, and conclusions so that they are understood and can be acted on;
- * group-process skill - influencing groups in order for tasks, relationships and individual needs to be addressed;
- * presentation skill - presenting information orally so that an intended purpose is achieved;
- * questioning skill - gathering information by stimulating insight in individuals and groups through use of interviews, questionnaires and other probing methods, and
- * relationship-building skill - establishing relationships and networks across a broad range of people and groups.

Intellectual (cognitive) skills represent knowledge and skills related to thinking and processing of information (McLagan, 1989: 45) and include the following:

- * intellectual versatility - recognising, exploring, and using a broad range of ideas and practices, and thinking logically and creatively without undue influence from personal biases;

- * observing skill - recognising objectively what is happening in or across situations, and
- * visioning skill - projecting trends and visualising possible and probable futures and their implications.

2.3.4 Attitude and values competence

Reber (1988: 65) notes that psychology regularly gets itself into stormy definition waters, for instance with the concept of attitude which is of fundamental importance to human behaviour, but more complex than the original neologists ever imagined. Originally the term derived from Latin: *aptitudo* = fitness. An attitude rendered one fit to engage in the performance of some task. In ethnology and comparative psychology the idea of intended action is reflected.

Attitudes for the first time took on an explanatory rather than merely a descriptive role in traditional personality and social psychology. An attitude was viewed as some internal affective orientation that would explain the actions of a person. Contemporary usage entails several components namely - cognitive (consciously held belief/opinion); affective (emotional tone/feeling); evaluative (positive or negative) and conative (disposition for action). The usage of the term in modern psychological literature depends largely on the theoretical tilt of the writer.

Value on the other hand is defined as the quality or property of a thing that makes it useful, desired or esteemed (Reber, 1988: 810-811). Social values form central principles around which individual and societal goals can become integrated. Classic examples include freedom, justice and education. A value judgement reflects a perspective toward a person, object, principle etc. based on how one values the properties or characteristics thereof. A value clarification represents the awareness and clarification of moral judgements and ethical considerations. Any reasonably coherent set of values (individual/societal/absolute) is referred to as a value system.

Attitudes and values are deeply rooted and reflective of a person's own world view. It can also be an underlying aspect that plays a role in the acquiring of knowledge and skills. Together with knowledge and skills, the attitudes and values that a trainer reflect plays an important role in the characteristics that he or she has to possess.

Because human nature changes, value systems can be seen as changing entities. Values represent a kind of thought within a person. It is a kind of thinking in which intelligence does not play a role. To promote human development and build relationships, the trainer must teach how to think instead of what to think.

McLagan (1989: 45) mentions that a trainer must possess self-knowledge - knowing one's personal values, needs, interests, style, and competencies and their effect on others.

Murray (1991: 111) mentions that a trainer must possess willingness to be responsible for someone else's growth - being secure in his or her own competence and generous with time spent in helping others to grow.

Rogers (1983: 121-127) mentions the following important attitudes/values that a trainer must possess:

- * realness or genuineness - being him or herself, not denying the self. A real person entering into a relationship with the learner without presenting a front or facade. Entering into a direct personal encounter with the learner, meeting him or her on a person-to-person basis;
- * prizing, acceptance and trust - an acceptance of the other individual as a separate person, having worth in his or her own right. It is a basic trust and belief that the other person is somehow fundamentally trustworthy. Trusting the capacity of the individual for developing his or her own personality, providing opportunities, and permitting the learner to choose his or her own way and direction of learning, and
- * empathic understanding - has the ability to understand the learner's reactions from the inside, has a sensitive awareness of the way the process of learning seems to the learner.

A trainer must possess a positive attitude, valuing the following (Rothwell & Sredl, 1992: 207-210):

- * maintaining appropriate confidentiality - by not revealing the names of individuals or groups who provide information on condition that they remain anonymous;

- * managing personal biases - try to reduce or eliminate own human biases, making sure that bias does not affect professional activities. Do not make statements or engage in behaviours that set the wrong example for others;
- * saying “no” to inappropriate requests - trainers serve the needs of many customers with diverse perspectives about which there is not always agreement within a group. This makes it occasionally necessary to say “no” to inappropriate requests from members of one or all of these customer groups, and
- * showing respect for and representation of individual and population differences - not deliberately exclude certain individuals or groups from participating. Celebrates diversity.

2.4 CHAPTER SUMMARY

This chapter discussed and described training, viewed it in an organisational context and defined the personality profile of the competent trainer. Herewith the first aim of the literature survey, namely to define trainer competency and determine the personality profile of the competent trainer, has been achieved.

Chapter three discusses psychological optimisation as concept as well as its personality profile.

CHAPTER 3 PSYCHOLOGICAL OPTIMISATION AND ITS PERSONALITY PROFILE

Chapter 3 represents the second step in the literature review, namely psychological optimisation from the humanistic and salutogenic paradigms (as mentioned in 1.5.1). The aim of the chapter is to define psychological optimisation and to determine the personality profile of the psychologically optimal functioning individual.

3.1 Description of psychological optimisation

Psychological optimisation will be described from the viewpoints of the following theorists: Allport, Frankl, Fromm, Maslow, and Rogers from the pure humanistic school, Jung as analytic psychologist but with very clear humanistic ideas, and Perls as gestalt psychologist and its humanistic influence. Lastly, Antonovsky and Rosenbaum's work from the salutogenic paradigm and its clear humanistic connections will be included.

3.1.1 Allport: The mature person

According to Allport (1955: 89) the central aspect of personality is the deliberate and conscious intentions, hopes, aspirations and dreams of the mature person. This intentional nature of the mature personality unifies and integrates the total personality. This again motivates the mature personality, as the possession of long-range goals is regarded as central to one's personal existence (Allport, 1955: 68). Allport believes that "personal values are the dominating force in life and all of a person's activity is directed toward the realization of these values" (Allport, 1961: 543). Values guide persons toward commitment, toward the true use of freedom, and toward responsibility.

Allport's theory further includes the principle of mastery and competence. This holds that mature persons are driven to perform as well as they possibly can to attain high levels of competence and mastery in striving to satisfy their motives (Allport, 1955: 288). Mature individuals thus function on a rational and conscious level, fully aware of the forces that guide them, and they are able to control those forces.

3.1.2 Frankl: The self-transcendent person

In Frankl's (1962: 110) view a person's major motivation in life is to search not for self, but for meaning. The psychologically healthy person has moved beyond or transcended the focus on self. He argues against a view that depicts the person as a closed system concerned not with interaction with the real world or with other persons, but only with the self.

Frankl's (1962: 99) view of psychological health stresses the importance of the will to meaning. Meaning can be found in all circumstances, including suffering and death. Frankl called this system of experiencing meaning in human existence, logotherapy ("logos" taken from the Greek, translated as "meaning"). Frankl (1962: 76) quoted Nietzsche on this point of view: "He who has a why to live can bear with almost any how".

Frankl believes that three factors comprise the essence of human existence: spirituality, freedom and responsibility. Logotherapy proposes three ways by which persons can give meaning to life - by what they give to the world in terms of some creation, by what they take from the world in experience, and by the attitude they take toward suffering (Frankl, 1962: 113).

Frankl discussed these under the general heading of values, stressing the uniqueness of each person and situation. He describes three fundamental systems of values, corresponding to the three ways of giving meaning to life - creative values, experiential values and attitudinal values. Frankl (1962: 101) stresses the point that the self-transcendent person is pulled by values, thus highlighting freedom of choice.

3.1.3 Fromm: The productive person

Fromm (Schultz, 1977: 47) depicts the psychologically healthy person as one who lives fully, is creative, has highly developed powers of reason, perceives the world and the self objectively, possesses a firm sense of identity, is related to and rooted in the world, is the agent of self and destiny, and is free of incestuous ties.

Fromm (Schultz, 1977: 47) calls the healthy personality the productive orientation which represents the fullest realisation of human potential. Being productive means using all of one's powers and potentialities. By "orientation" Fromm stresses the point that it is a general attitude that encompasses all aspects of life - the intellectual, emotional and sensory responses to people, objects and events in the world as well as to the self.

3.1.4 Maslow: The self-actualising person

Maslow (1970: 146) recognises that no one is perfect. In his view all human beings possess an innate striving or tendency to become self-actualised. This theory of human motivation is incorporated in Maslow's hierarchy of needs, with self-actualisation as the highest need (Maslow, 1970: 22). Self-actualisation can be described as the supreme development and use of an individual's abilities, the fulfillment of all qualities and capabilities.

He believes that persons who are self-actualising are those who are able to take hold of life. Maslow (1970: 133) noted that self-actualising persons differed drastically from other people and this led him to his theory of growth motivation or meta-motivation. Maslow (1970: 66) wrote: "The highest motive is to be unmotivated and nonstriving" meaning self-actualising persons do not strive, they develop. This motivation represents character growth, character expression, motivation, and psychological development (Maslow, 1970: 135).

Maslow's holistic model of the self emphasises mind, body and spirit. He urges individuals to construct a comprehensive, integrated synthesis of values that fosters trust and creative interdependence (Gould, 1993: 132).

3.1.5 Rogers: The fully functioning person

Rogers (1977: 237) posits a single motivation in his system of personality, namely to maintain, actualise, and enhance all aspects of the individual. Actualisation does much more than maintain the organism, it also facilitates and enhances maturation and growth.

For Rogers (1983: 290) the person is a total organism who must find ways to deal with a changing environment and a myriad of life experiences. Rogers (1961: 186, 192) notes that self-actualisation represents a life-long process. The direction chosen and the behaviour displayed is determined solely by the individuals themselves. The process of becoming oneself, of developing one's unique characteristics and potentialities involves continuous testing, stretching and prodding of all capabilities (Rogers, 1961: 196). The struggle and tenacity involved in actualisation brings the individual in contact with more, not less, tension (Rogers, 1961: 186). The fully functioning person leads a life that is enriching, challenging and meaningful. Psychological adjustment comes from an open, assured and relaxed self that uses experience to replace distorted values with those that are authentic (Gould, 1993 : 135).

3.1.6 Jung: The individualising person

Jung (Schultz, 1977: 96) defined the individuation process as that of becoming a unique individual. The first requirement of individuation is that the person be aware of those aspects of the self which have been neglected. The second aspect of individuation involves bringing all aspects of the personality into balance. No single function or attitude must be dominant, all must be expressed. Those who find meaning in life reach the state of self-transcendence, the ultimate state of being for the healthy personality.

As an analytical psychologist Jung (Schultz, 1977: 96) placed a strong emphasis on the unconscious. He believed that individuals need to regain contact with the symbols, rituals and myths of human history as contained in the unconscious. His ideal of psychological health was the conscious direction and guidance of the unconscious forces - integrating the worlds of the conscious and unconscious.

3.1.7 Perls: The here and now person

Perls' theory and life are marked by the essence of his Gestalt therapy, namely that: "I had to take all responsibility for my existence myself" (Schultz, 1977: 122). The essence of Perls' (Schultz, 1977: 127) approach to personality lie in that individuals are motivated to regulate their internal balances - in other words, to finish unfinished situations or uncompleted gestalts. In order to do that, a person

must accept all his or her impulses and yearnings and deal with them (as with all aspects of life) in the present (the here and now).

Perls (Schultz, 1977: 125) argues that the here and now is the only reality an individual has and must take the responsibility for emerging the self fully in each moment and benefiting from its existence. In doing their own regulating, without interference from external forces, the here and now persons do everything with zest, passion and a sense of joy - living a full life.

Perls (Schultz, 1977: 127) believes that individuals function on two levels - the public level of overt behaviour and the private level of thought and fantasy. The basic principle of Perls's view of the development of personality is the change to self-support from environmental support. The here and now person ceases playing roles for others and actualises all potential by behaving in ways that truly reflect his or her inner nature.

3.1.8 Antonovsky: A sense of coherence

Antonovsky introduced the neologistic concept of salutogenesis from Latin: *salus* = health, and Greek: *genesis* = origins. He expressed the opinion that all people, even those living in comfortable, benign and sheltered environments, are fairly continuously exposed to fairly serious stressors (Antonovsky, 1979 : 80-81). In the light of evidence from his research he concluded that "stressors are omnipresent in human existence" - in fact, "the human condition is stressful" (Antonovsky, 1979: 9-10). Antonovsky introduced the concept of generalised resistance resources that can facilitate effective tension management in any situation of demand. In Antonovsky's view (1987: xiii), all generalised resistance resources have in common that they facilitate "making sense out of the countless stressors with which individuals are constantly bombarded". Through repeated experience of such sense-making, a person develops, over time, a strong sense of coherence (Antonovsky, 1987: 118).

The three core components of the sense of coherence identified by Antonovsky (1987: 16-19) can be described as comprehensibility, referring to cognitive sense-making of perceptions; manageability, that refers to the extent to which a person perceives the events of his or her life as experiences that can be coped with or even

challenges that can be met, and meaningfulness, which refers to the extent to which a person feels that life makes emotional sense.

3.1.9 Rosenbaum: Learned resourcefulness

As another theorist working in the salutogenesis paradigm, Rosenbaum (1988: 492) focusses on learned resourcefulness that refers to an acquired repertoire of self-control skills and is operationally defined as a repertoire of behaviour and skills (mostly cognitive) by which a person self-regulates internal responses, such as emotions, pain, and cognitions, that interfere with the smooth execution of an ongoing behaviour.

Rosenbaum (1988: 485) conceptualised learned resourcefulness in the process of self-regulation in three phases - presentation of experiences, evaluation of changes, and action or coping to minimise negative effects.

Thus any effective coping with a stressor involves the three phases of the self-regulatory process. The first is an emotional or a cognitive reaction, i.e. the representational phase of the process. This is followed by a conscious evaluation of the stressor, i.e. the evaluation or self-regulation. The final phase consists of an active response to minimise negative effects of the disruption, which is the action phase of the self-regulatory process (Rosenbaum, 1988: 486).

Learned resourcefulness is postulated to have its major impact on the third phase of the self-regulatory process, namely, the action phase. During this phase the person engages in what Folkman, et al. (1986: 542, in Rosenbaum, 1988: 487) defines as "coping". These authors define coping as "the person's cognitive and behavioural efforts to manage (reduce, minimise, master, or tolerate) the internal and external demands of the person-environment transaction that is appraised as taxing or exceeding the person's resources". The cognitive and the behavioural skills required for effective coping are part of the person's learned resourcefulness repertoire. Therefore, how a person evaluates a stressful encounter will determine whether or not he or she will attempt to cope with the stressor. However, without the appropriate repertoire of self-control skills (i.e. learned resourcefulness), coping will be ineffective (Rosenbaum, 1988: 487).

3.1.10 Definition and discussion of psychological optimisation

For the purpose of this research, the above-mentioned descriptions can be integrated into a general viewpoint of psychological optimisation. Psychological optimisation can thus be defined as an intentional search for meaning in life reflecting a continuing growing process. The individual develops, integrating all aspects of his or her life into one uniqueness, building upon his or her authentic values that serve as source of strength. This enables the person to push into an hostile environment, turning stressors into an advantage, thereby not only to hold their own, but to adapt, enhance and actualise his or her well-being (Allport, 1961: 543; Antonovsky, 1987: 19; Cilliers, 1988: 15-18; Frankl, 1962: 99; Gould, 1993: 132; Maslow, 1970: 159; Rogers, 1961: 280 & 1977: 238; Schultz, 1977: 47, 99 & 125; and Strümpfer, 1990: 265).

The process nature of psychological optimisation can be illustrated as follows:

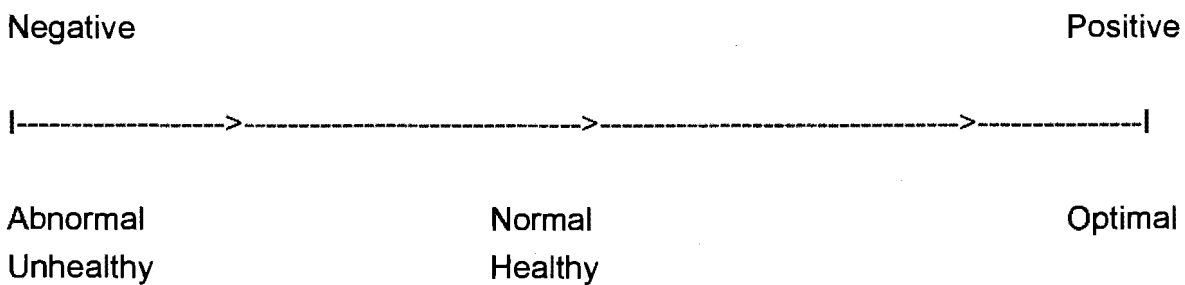


Figure 3.1 The process nature of psychological optimisation (Cilliers, 1988: 15).

Through this intentional growing process, the individual develops all aspects of the self, namely intrapersonal (cognitive, affective and conative) characteristics and interpersonal characteristics.

The cognitive characteristics refer to thinking, reasoning and problem-solving skills and functioning, and is centered in the left hemisphere of the brain. The affective characteristics refer to feeling or being, containing the potentially richest human experience and opportunity for growth and psychological optimisation. This experience of feeling is centered in the right hemisphere of the brain. The conative characteristics refer to motivation (doing behaviour), emphasising the "will" instead of "can" or "cannot" as in the intellectual (Cilliers, 1988: 15-18).

The interpersonal characteristics refer to all contact or communication with other people. However, the intrapersonal aspects (within) play a determining role in every interpersonal activity the individual engages in. Psychological optimisation is mainly stimulated by interpersonal contact (Allport, 1961: 283). On his or her own the individual grows and develops relatively less than in contact with others. Therefore the quality of the psychological optimisation is determined (to a large degree) by the quality of the interpersonal relationship.

The optimal use of the individual's intrapersonal and interpersonal characteristics enable the person to have greater flexibility in linking belief systems to action. This also provides the basis for further learning, turning stressors to the advantage of the individual (Strümpfer, 1990: 267, 269 & 274).

3.2 Psychological optimisation in organisational context

Since the majority of adults spend the largest portion of their waking hours in the workplace, it is a dominant source of internal, as well as external stimulation, to be comprehended, managed and made meaningful (Strümpfer, 1990: 269). The link between psychological optimisation and the work environment is also of particular concern to this research since the focus is on the correlation and difference between trainer competency and psychological optimisation.

As mentioned previously, the level of psychological optimisation is to a large degree determined by the quality of the individual's interpersonal relationships. It is deduced that the work environment would play a large role in the development of psychological optimisation in individuals, since ample opportunity for interpersonal contact and the formation of relationships exists in the work environment.

The presentation of psychological optimisation in the workplace as described by the aforementioned theorists, namely Allport, Frankl, Fromm, Maslow, and Rogers from the pure humanistic school, Jung as analytic psychologist but with very clear humanistic ideas, Perls as gestalt psychologist and its humanistic influence and lastly, Antonovsky and Rosenbaum's work from the salutogenic paradigm and its clear humanistic connections is characterised by the following work-related aspects:

Meaningful work activity reflects an extension of the psychological optimal functioning individual. The more a person is fully involved with various activities, people or ideas, the more psychologically healthy he or she would be (Gould, 1993: 139).

Work and responsibility provide meaning and a sense of continuity to life. A person is less likely to achieve psychological maturity and health without having meaningful work to do and the dedication, commitment and skills with which to do it. Success at work not only implies a certain level of competence, but engaging skills and abilities in a whole-hearted, enthusiastic and committed manner. It also implies investing the self fully in work (Allport, 1961: 284-285; Gould, 1993: 139).

The psychological optimal functioning individual is highly creative, expressing the self in creative products and creative living in all spheres of existence (Rogers, 1961: 193). This creativity is more of an attitude, an expression of psychological health, and more concerned with the way individuals perceive and react to the world, than concerned with finished artistic products. Persons in any occupation can thus display creativity. Psychological optimal functioning individuals are original, inventive and innovative, showing an unbiased and direct way of looking at life (Maslow, 1970: 142).

The psychological optimal individual involves intelligence, reason and objectivity in evaluating the whole of the problem, not focusing only on isolated pieces (Fromm in Schultz, 1977: 48-49).

The psychological optimal functioning individual devotes energy to a sense of mission. He or she is committed and dedicated to the work. The job and the person seem to be meant for each other - it is something that must be done, not merely a job (Maslow, 1970: 133). They experience meaning in life which suits them (Frankl, 1962 in Gould, 1993: 159-160).

Through this intense dedication to their work, psychological optimal functioning individuals are able to fulfill their meta-needs and challenges. This develops their abilities, causes them to grow to the highest level of their potential, and helps define their sense of who and what they are. As a result of this commitment to work, they work very hard (Maslow, 1970: 133), applying problem solving strategies

(Rosenbaum, 1980: 110) and have considerable performance responsibility (Antonovsky, 1987: 17-18). Their uniqueness is expressed through their actions (Frankl, 1962 in Gould, 1993: 159-160).

Occupational self-direction seems to be a major construct in the area of work amongst psychological optimal functioning individuals. It can be described as the use of initiative, thought and independent judgment in work, attending to internal dynamics, as well as external consequences, being open-minded and being trustful of others. This description reflects three main characteristics, namely thought and independent judgement, job freedom, and job variability (Kohn & Schooler, 1982: 1259).

Self-directed learning in the work situation also influences off-the-job realities, since a person's life is never compartmentalised into work and non-work domains. This is reflected by Kohn and Schooler (1982: 1272) saying, "occupational self-direction leads to self-directed orientations to self and society: men (and women) who are self-directed in their work are consistently more likely to become non-authoritarian, to develop personally more responsible standards of morality, to become self-confident and not self-deprecatory, to become less fatalistic, less anxious, and less conformist in their ideas".

This process of development does not only flow from work to personality, but also from personality to work. Strümpfer (1992: 28) indicated that a self-directed orientation leads, over time, to more responsible jobs, which in turn allows greater latitude for self-direction on the job, and thus for a virtuous cycle of reciprocal influences to continue.

3.3 The personality profile of psychological optimisation

The various theories as discussed will now be integrated into a personality profile reflecting the characteristics of psychological optimisation. This profile will be presented from the intrapersonal and interpersonal behaviour characteristics.

3.3.1 Intrapersonal characteristics

The intrapersonal characteristics is discussed in terms of the cognitive, affective and conative.

3.3.1.1 Cognitive characteristics

The following cognitive characteristics of the psychological optimal functioning individual are reflected by the various theorists. This person is seen to act rationally (Allport, 1955: 95; Fromm in Schultz, 1977: 48-49) guided by his or her own conscious perception (Maslow, 1970: 128; Rogers, 1961: 188). This person is responsible, and makes own decisions (Frankl, 1962: 111; Maslow, 1970: 134). This individual is guided by own well-defined personal values that serve as ethical and moral standards for self-directed action (Maslow, 1970: 141; Rogers, 1961: 195). This person perceives the world and the self objectively (Antonovsky, 1985: 16-17) and as such has no biases or pre-judgements (Fromm in Schultz, 1977: 48-49; Maslow, 1970: 140). Through thinking he or she actively plans for the future (Perls in Schultz, 1977: 135-137). This person, who in the past succeeded to self-regulate internal responses, acquired skill in doing so, hence the learned resourcefulness, provides a basis for further learning, acting as a source of information for judgements of self-efficacy in coping (Rosenbaum, 1988: 487).

3.3.1.2 Affective characteristics

The following affective characteristics of the psychological optimal functioning individual are reflected by the various theorists. This person accepts all emotions (Allport, 1961: 288), express own nature through emotions (Jung in Schultz, 1977: 99; Maslow, 1970: 132-133) and display a wide range of emotions (Rogers, 1961: 195). He or she is able to experience joy and ecstasy (Fromm in Schultz, 1977: 48-49; Maslow, 1970: 132-133) and has a realistic self-concept and a firm sense of identity (Fromm in Schultz, 1977: 48-49) knowing own true inner nature (Jung in Schultz, 1977: 99) resulting in self-acceptance (Allport, 1961: 287-288). This person has an innate urge to be creative (Rogers, 1961: 193) and expresses the self (Frankl, 1962: 100). The individual develops the self holistically (Maslow, 1970: 3), applying self-regulation in life (Perls in Schultz, 1977: 135-137). He or she trusts his or her total organismic sensing of a situation (Rogers, 1983: 288), valuing the self

(Fromm in Schultz, 1977: 48-49). For these persons life makes sense emotionally (Antonovsky, 1979: 124-128), they judge themselves more efficacious in dealing with emotional and task demands and are as a consequence more likely to continue with self-regulation (Rosenbaum, 1988: 483).

3.3.1.3 Conative characteristics

The following conative characteristics of the psychological optimal functioning individual are reflected by the various theorists. This person actively directs the course of his or her own life (Fromm in Schultz, 1977: 48-49), being in conscious control of it (Frankl, 1962: 122). This self-shaping forward outlook (Allport, 1961: 285), gives the individual freedom in choice and action (Fromm in Schultz, 1977: 48-49; Rogers, 1991). This person acts with deliberate and conscious intentions (Allport, 1955: 51), fulfilling a meaning beyond the self (Frankl, 1962: 100), devoting sense and energy to this mission (Maslow, 1970: 133). The individual is driven to perform as well as he or she possibly can (Allport, 1961: 290), growing by being curious (Maslow, 1970: 136), taking risks and exploring new things (Allport, 1955: 66). The individual has the courage to be (Rogers, 1982: 288), tolerating setbacks (Allport, 1955: 50) and inventing new motives for action (Allport, 1961: 288). The problems and demands of living are felt to be welcome challenges, motivating the person to invest energy (Antonovsky, 1987: 17-18), pursuing goals despite anxiety, seeing it as promising meaningful rewards (Rosenbaum, 1988: 490). This coping with stressful events calls for attempts at self-control using self-statements (Rosenbaum, 1988: 484). To deal with such phenomena, one needs a philosophy of life stressing strength to carry on (Strümpfer, 1992: 13).

3.3.2 Interpersonal characteristics

The psychological optimal individual participates freely in interpersonal experiences, is spontaneous in behaviour, is open to the opinions of others, and grows and develops, formulating an objective picture of his or her self through this contact (Allport, 1961: 290; Rogers, 1961: 188, 193). They are ready to listen and learn from anyone who can teach them something (Maslow, 1970: 140). The more the individual is fully involved in various activities, people or ideas, the more psychologically healthy he or she would be (Allport, 1961: 283).

Their interpersonal relationships, while intense, are however few in number (Maslow, 1970: 139), reflecting a reciprocated relationship where both sides benefit. The growth of and realisation of potential in the other person is as important as their own growth (Frankl in Gould, 1993: 159-160; Maslow, 1970: 139). They possess a capacity for intimacy and compassion (Allport, 1961: 285), acting thoughtfully and in consideration of others (Maslow, 1970: 132). They accept all people, do not maintain a posture of superiority (Maslow, 1970: 140), accept human frailties, and know that he or she share the same weaknesses (Allport, 1961: 286). Such people are tolerant of others, not judging or condemning (Allport, 1961: 286; Maslow, 1970: 128).

They have strong and deep feelings of empathy, affection (Maslow, 1970: 138; Jung in Schultz, 1977: 98-100), care, respect and understanding (Fromm in Schultz, 1977: 48-49), and unselfish love, and are able to give and receive love (Frankl in Gould, 1993: 159-160).

They are self-contained seemingly not needing other people, but they do not shrink from human contact (Maslow, 1970: 134), maintaining an inner detachment and are guided by themselves rather than others (Maslow, 1970: 143). They can be quite conventional but with moral or ethical issues of great personal importance, they will openly challenge the rules and norms of society (Maslow, 1970: 143).

3.4 Chapter summary

In this chapter psychological optimisation has been described from various viewpoints. Psychological optimisation has been described in organisational context and defined and integrated into a personality profile of the psychological optimal functioning individual. Herewith the second aim of the literature survey, namely to define psychological optimisation and determine the personality profile of the psychological optimal functioning individual, has been achieved.

Chapter four discusses the empirical study starting with the determination and description of the sample population and ending with the formulation of hypotheses.

INTEGRATION

The dynamic, reciprocal relationship that exists between trainer competency and psychological optimisation following from the personality profiling, will be highlighted by this integration.

This integrated profile will be presented from the intrapersonal (cognitive, affective and conative characteristics) and interpersonal behavioural characteristics.

Intrapersonal characteristics

Cognitive characteristics

Only through intellectual versatility, thinking logically and creatively (McLagan, 1989: 45) will the person be able to act rationally (Allport, 1955: 95) and responsibly (Frankl, 1962: 111) making his or her own decisions. When the individual is guided by well-defined personal values that serve as ethical and moral standards (Maslow, 1970: 141; Rogers, 1961: 195) the individual would be able to say no to inappropriate requests (Rothwell & Sredl, 1992: 207-210). Through managing own personal biases (Rothwell & Sredl, 1992: 207-210) the individual would act without biases or pre-judgements (Fromm in Schultz, 1977: 48-49; Maslow, 1970: 140).

Through the skill of projecting trends and visualising possible and probable futures and their implications (McLagan, 1989: 45) would the person be able to actively plan for the future (Perls in Schultz, 1977: 135-137). This planning would depend on knowledge of how the functions of a business work and relate to each other, and knowing the economic impact of business decisions (McLagan, 1989: 44).

Affective characteristics

Only with an attitude of realness or genuineness in being himself or herself (Rogers, 1983: 121-122) would the individual be able to accept all of his or her emotions (Allport, 1961: 288), expressing own nature through emotions (Jung in Schultz, 1977: 99; Maslow, 1970: 132-133), displaying a wide range of emotions (Rogers, 1961: 195) and having a realistic self-concept (Fromm in Schultz, 1977: 48).

With self-knowledge, knowing one's personal values, needs, interests, style, and competencies and their effect on others (McLagan, 1989: 45) these individuals would be able to create a firm sense of identity (Fromm in Schultz, 1977: 49), knowing their own true inner nature (Jung in Schultz, 1977: 99) and applying self-regulation in their lives (Perls in Schultz, 1977: 135-137). With intellectual versatility, recognising, exploring, and using a broad range of ideas and practices (McLagan, 1989: 45) will the person be able to express the self (Frankl, 1962: 100) through an innate urge to create (Rogers, 1961: 193).

Conative characteristics

Self-knowledge, knowing one's personal values, needs, interests, style, and competencies and their effect on others (McLagan, 1989: 45) represents a crucial ingredient for the individual to be able to actively direct the course of his or her own life (Fromm in Schultz, 1977: 48-49), being in conscious control of it (Frankl, 1962: 122).

A self-shaping forward outlook (Allport, 1961: 285) enables the person with projecting trends to visualise probable futures and their implications (McLagan, 1989: 45). Through intellectual versatility, recognising, exploring, and using a broad range of ideas and practices (McLagan, 1989: 45) individual freedom in choice and action is created (Fromm in Schultz, 1977: 48-49).

Being able to act with deliberate and conscious intentions (Allport, 1955: 51) the person is able to influence groups, enabling tasks, relationships, and individual needs to be addressed, and to achieve the intended purpose through verbal communication (McLagan, 1989: 45). Through questioning skill, gathering information by stimulating insight (McLagan, 1989: 45) the individual grows by being curious (Maslow, 1970: 136), taking risks and exploring new things (Allport, 1955: 66).

Through willingness to be responsible for someone else's growth and being secure in own competence and generous with time spent in helping others to grow (Murray, 1991: 111) the individual is motivated to invest energy (Antonovsky, 1987: 17-18), devoting sense and energy (Maslow, 1970: 133) and fulfilling a meaning beyond the self (Frankl, 1962: 100).

Interpersonal characteristics

By participating freely in interpersonal experiences (Allport, 1961: 290; Rogers, 1961: 188) the individual is able to help individuals recognise and understand personal needs, values, problems, alternatives, and goals; and to coach them (McLagan, 1989: 45). In being spontaneous (Allport, 1961: 290; Rogers, 1961: 188) and fully involved in various activities, people or ideas (Allport, 1961: 283) the individual is able to establish relationships and networks across a broad range of people and groups (McLagan, 1989: 45). By being ready to listen and learn (Maslow, 1970: 140) the individual is able to recognise objectively what is happening in or across situations (McLagan, 1989: 45).

In thoughtful and considerate action (Maslow, 1970: 132) the person is able to maintain appropriate confidentiality in his or her action (McLagan, 1989: 45). In accepting all people and not maintaining a posture of superiority (Maslow, 1970: 140) the person is capable of showing respect for and representation of individual and population differences (McLagan, 1989: 45), being tolerant of others, not judging or condemning (Allport, 1961: 286; Maslow, 1970: 128).

Through strong and deep feelings of empathy and affection (Maslow, 1970: 138) the individual has the ability to understand others' reactions from the inside, being sensitive in awareness (Rogers, 1983: 125). With care, respect and understanding (Fromm in Schultz, 1977: 48-49) and acceptance of human frailties (Allport, 1961: 286) the individual can have basic trust and belief in the other person, accepting him or her as having worth in own right (McLagan, 1989: 45).

Herewith the third aim of the literature survey, namely to integrate the personality profile of the competent trainer with that of the psychological optimal functioning individual, has been achieved. Next, the correlation and difference between trainer competency and psychological optimisation will be tested empirically.

CHAPTER 4 EMPIRICAL STUDY

Chapter 4 contains the empirical investigation with the specific aim to ascertain the correlation and difference between trainer competency and psychological optimisation. The research hypotheses will be tested by means of descriptive research. The relevant models and theories of measurement and psychometrics are utilised in this phase. This phase consists of 10 steps, namely:

- | | |
|---------|--|
| Step 1 | Determination and description of the sample population |
| Step 2 | Choosing the psychometric battery |
| Step 3 | Administration of the psychometric battery |
| Step 4 | Scoring of the psychometric battery |
| Step 5 | Statistical processing of data |
| Step 6 | Formulation of hypotheses |
| Step 7 | Reporting and interpretation of results |
| Step 8 | Integration and conclusion of research |
| Step 9 | Discussion on the limitations of the research |
| Step 10 | Formulation of recommendations |

Steps 1 to 6 are addressed in this chapter and steps 7 to 10 in chapter 5.

4.1 Step 1: Determination and description of the sample population.

The population (N = 148) of this empirical study represents trainers working for a large transport organisation. These trainers are responsible for the introduction of organised activities (presenting information, directing structured learning experiences and managing group discussion and process) designed to foster increased knowledge, skills, attitudes and values and improved behaviour in order to increase goal achievement within the organisation. From this a sample (N = 57) was drawn by means of random sampling (57 trainers responded by completing and sending back the questionnaires). The composition of the group is as follows.

- * Gender: The sample group consists of 40 male and 17 female respondents.

- * Age: 18 of the respondents are 30 and younger, 23 of the respondents are between 30 and 40, and 16 respondents are older than 41 years.
- * Field of training: 40 of the respondents are in the behavioural field of training and 17 of the respondents in the technical field.
- * Job level: The sample group was drawn from three job levels, namely - 11 from the instructor level, 25 from of the trainer level, and 11 from the junior management level.
- * Qualifications: 12 of the respondents have a high-school qualification ranging between std. 8 and 10, 16 of the respondents have Bachelor degrees/diplomas, 16 of the respondents have Honours degrees and 13 of the respondents have Masters degrees.

4.2 Step 2: Choosing the psychometric battery

The consideration given to the selection of the psychometric battery was guided by the literature review. It can be categorised as descriptive research in which the relevant models and theories of trainer competency and psychological optimisation were presented in an integrated manner.

Various psychometric instruments were considered regarding their applicability to the relevant models and theories of the research. Particular emphasis was placed on the validity and reliability of the various instruments.

Validity refers to the extent to which the instrument measures what it is supposed to measure. Reliability refers to the precision, accuracy, and stability of a measuring instrument. A measuring instrument is reliable if it accurately and constantly produces the same measurement.

No measuring instrument exists that could be used to assess trainer competency. The following instrument was developed and administered in this research design to measure trainer competency:

- * Trainer Competency Questionnaire (TCQ)

The following psychometric instruments were chosen and administered in this research design to measure psychological optimisation:

- * The Personal Orientation Inventory (POI)
- * The Sense of Coherence questionnaire (SOCq)
- * The Self-Control Schedule (SCS)

4.2.1 *The trainer competency questionnaire (TCQ)*

The TCQ will now be discussed with reference to the development, rationale, description, scales, administration, interpretation, validity, reliability and motivation for inclusion.

4.2.1.1 Development of the TCQ

The competencies outlined by the TCQ is the result of an in-depth literature review of what constitutes trainer competency.

As such it represents ideas from Camp, Blanchard and Huscuzo (1986), Coulson-Thomas (1990), Gilley and Egglund (1989), Laird (1985), McLagan and Bedrick (1983), McLagan (1989), Rae (1992), Rogers (1983), Steward and Laidlaw (1992), and Townsend (1985).

The identified competencies were grouped together under the relevant scales of knowledge, skill, and attitude/values. A preliminary questionnaire was developed and evaluated. A final version of the TCQ was then compiled. (A copy of the TCQ is attached as Appendix A.)

4.2.1.2 Rationale of the TCQ

According to McLagan (1989: 17) competencies are used to perform a variety of behaviours and activities which in their turn produce products and services (outputs) that are provided to others (clients/customers). In order to attain the aforementioned goals within organisations, trainers are expected to exhibit certain competencies.

According to McLagan (1989: 55) the key outputs (products or services) expected of trainers are:

- * creating a learning environment;

- * presentation of material;
- * facilitation of structured learning events;
- * facilitation of group discussions;
- * facilitation of media-based learning events;
- * testing delivery and feedback;
- * facilitating group members' awareness of their own group process;
- * feedback to learners;
- * individual action plans for learning transfer, and
- * individuals with new knowledge, skills and attitudes and values.

4.2.1.3 Description of the TCQ

The TCQ is a self-report instrument directed at assessing individual knowledge, skills, and attitudes/values regarding training. The TCQ is used to assess individual trainer competency levels.

The TCQ consists of 31 items (54 questions) that indicate the extent to which the respondents evaluate the item as characteristic of themselves. Nine questions relate to knowledge, twenty-one questions relate to skill and twenty-four questions relate to attitudes/values. The scale used for measuring knowledge and skills consists of a 4-point scale and the scale used for measuring attitudes/values consists of a 3-point scale.

4.2.1.4 Scales of the TCQ

The TCQ consists of three sub-scales namely: knowledge, skills, and attitude/values. Although the three scales can be measured independently, the total score of the TCQ reflects trainer competency.

(1) Knowledge. Knowledge represents the body of information possessed by a respondent. It can be divided into procedural (knowing how) and declarative (knowing what) knowledge. Procedural knowledge (functional) is defined as knowledge that is operational and practical. Declarative knowledge (factual) can be represented as consciously known, factual knowledge (Reber, 1988: 384-385).

A high score on the knowledge dimension indicates that the respondent has the necessary factual and functional (technical) knowledge base required for trainer competency.

The knowledge dimension of the TCQ includes knowledge about adult learning understanding and business understanding.

(2) Skills. Skills represent the capacity for carrying out complex, well-organised patterns of behaviour smoothly and adaptively so as to achieve some end or goal. The term was originally used largely with respect to motor activity, but is now commonly applied to verbal and social skills (Reber, 1988: 701).

Knowledge and skills go hand in hand - the one cannot do without the other. Skills represent the practical application of required knowledge. A high score on the skills dimension indicates that the respondent has the ability to practically apply his or her trainer competency.

Skills required of a trainer can be divided into two main groups, namely interpersonal skills and intellectual (cognitive) skills. Interpersonal skills have a strong communication base and is representative of the dynamic interaction side of training. According to McLagan (1989: 45) interpersonal skills include coaching, feedback, group-process, presentation, questioning and relationship building skills. According to McLagan (1989: 45) intellectual skills include intellectual versatility, observing and visioning skills.

(3) Attitudes and values. An attitude renders one fit to engage in the performance of some task. According to Reber (1988: 65) attitude entails several components, namely cognitive (consciously) held belief/opinion, affective (emotional love/feeling), evaluative (positive or negative) and conative (disposition for action). According to Reber (1988: 810-811) values refer to an abstract and general principle concerning the patterns of behaviour of a particular culture or society. It is defined as the quality or property of a thing that makes it useful, desired or esteemed.

A high score on the attitudes and values dimension indicates that the respondent possesses underlying thought processes guiding actions expected of a competent trainer. It also indicates an internal orientation necessary to acquire the knowledge and skills required of a competent trainer.

Attitudes and values are deeply rooted and reflective of a person's own world view. It is also an underlying aspect that plays a role in the acquiring of knowledge and skills. McLagan (1989: 45) mentions self-knowledge, and Murray (1991: 111) mentions willingness to be responsible for someone else's growth. Rogers (1983: 121-127) mentions realness or genuineness, prizing, acceptance, trust and empathetic understanding.

According to Rothwell and Sredl (1992: 207-210) a trainer must possess the attitudes and values of maintaining appropriate confidentiality, managing personal biases, saying "no" to inappropriate requests, and showing respect for differences.

4.2.1.5 Administration of the TCQ

The TCQ is essentially self-administering. The items are printed on the answer sheet which the respondent uses to record his or her answers. The respondent is instructed to print his or her name on the answer sheet. The respondent is asked to read the directions. There is no time limit for the TCQ. The respondent is encouraged not to omit any answers. Since the TCQ is for the most part self-administering, it may be completed in group sessions, individually or even at home.

To hand score the answer sheet, each marked sheet should first be inspected. A horizontal line should be drawn through any item where the respondent gave no answer or either gave a multiple answer. Items 1 to 12 (questions related to attitude/values) represent negative items and their scores must be reversed before being marked. The scoring is a straightforward clerical task. The raw score for each item is counted to get the sum of the respondent's responses. The highest score a respondent can obtain is 192.

4.2.1.6 Interpretation of the TCQ

The three competency categories can be measured independently, but the total score of the TCQ is reflective of trainer competency. Higher scores reflect a higher level of trainer competency on every aspect in the systematic process of changing the behaviour and/or attitudes of people in a certain direction to increase goal achievement within the organisation.

4.2.1.7 Validity of the TCQ

The extent to which the TCQ is related to its theoretical concept, namely trainer competency, is mostly related to the face validity of the TCQ. The two industrial psychologists which evaluated the TCQ expressed consensus that the TCQ measures trainer competency. Practical constraints prohibited the determination of concurrent, predictive or construct validity. The validation process would require more empirical investigation and is representative of an ongoing process.

4.2.1.8 Reliability of the TCQ

The preliminary questionnaire was given to two industrial psychologists who were well experienced in training and development. They were requested to evaluate each item on the criteria on whether the item was comprehensible and whether the item described a situation that could be experienced by a wide range of trainers. Items were omitted on which there was a disagreement on one or both of the above criteria. Items that measured more than one criteria were rewritten.

4.2.1.9 Motivation for inclusion of the TCQ

The literature review on trainer competency made it evident that trainers are expected to exhibit certain competencies in order to facilitate human resource development. The conceptualisation of trainer competency links with the humanistic and behaviouristic theories of McLagan, Murray, Rogers and Rothwell and Sredl. The TCQ was developed specifically with the purpose to serve as a measure of these competencies. The TCQ items reflect the knowledge, skills, and attitude and value characteristics incorporated in the personality profile of the competent trainer; and describe a wide range of trainer situations. More specifically, the congruence between these theoretical views and the TCQ scales exists in specific interpersonal cognitive, affective and conative, as well as interpersonal behaviour characteristics.

The specific cognitive characteristics are intellectual versatility, thinking logically and creativity (McLagan, 1989: 45) as measured by the skill scale of the TCQ, saying "no" to inappropriate requests from others (Rothwell & Sredl, 1992: 207-210) as measured by the attitude and values scale of the TCQ. The person manages his or her own personal biases (Rothwell & Sredl, 1992: 207-210) as

measured by the attitude and values scale of the TCQ. The person is able to project trends and to visualise possible and probable futures and their implications (McLagan,1989: 45) as measured by the skill scale of the TCQ. The person's planning is dependent on knowledge of how the functions of a business work and relate to each other, knowing the economic impact of business decisions (McLagan,1989: 44) as measured by the knowledge scale of the TCQ.

The specific affective characteristics are self-knowledge and managing the effects of personal values, needs, interests, style, and competencies on others (McLagan,1989: 45) as measured by the attitude and values scale of the TCQ.

The specific conative characteristics are intellectual versatility and the recognising and exploring of a broad range of ideas and practices (McLagan,1989: 45) as measured by the skill scale of the TCQ. The person is able to influence groups so that tasks, relationships, and individual needs are addressed, and the intended purpose is achieved (McLagan,1989: 45) as measured by the skill scale of the TCQ. Through questioning skill, the person gathers information and stimulates insight (McLagan,1989: 45) as measured by the skill scale of the TCQ. Through willingness to be responsible for someone else's growth and being secure in own competence, the person generously spends time helping others to grow (Murray, 1991: 111) as measured by the attitude and values scale of the TCQ.

The specific interpersonal characteristics are coaching individuals to recognise and understand their personal needs, values, problems, alternatives, and goals. (McLagan,1989: 45) as measured by the skill scale of the TCQ. The person is able to establish relationships and networks across a broad range of people and groups (McLagan,1989: 45) as measured by the skill scale of the TCQ. The individual is able to recognise objectively what is happening in or across situations (McLagan,1989: 45) as measured by the skill scale of the TCQ, and is able to maintain appropriate confidentiality in action (McLagan,1989: 45) as measured by the attitude and values scale of the TCQ. The person respects individual and population differences (McLagan,1989: 45) as measured by the attitude and values scale of the TCQ, and has a basic trust and belief in the other person, accepting his or her worth in own right (McLagan,1989: 45) as measured by the attitude and values scale of the TCQ.

4.2.2 *The Personal Orientation Inventory (POI)*

The POI will now be discussed with reference to the development, rationale, description, scales, administration, interpretation, validity, reliability and motivation for inclusion.

4.2.2.1 Development of the POI

The POI was developed to provide a standardised instrument for the measurement of values and behaviour hypothesised to be of paramount importance in the development of the self-actualising person (Knapp, 1976: 3). Initial development of the item pool was based on observed value-judgment problems seen by therapists in private practice. These items were agreed to be related to the theoretical formulations and research of leaders in humanistic, existential, and gestalt schools of psychotherapy. Among the concepts incorporated in the initial development of the POI were Maslow's (1962, 1970) concept of self-actualisation, Riesman, Glazer, and Denny's (1950) system of inner- and outer-directness, May, Angel, and Ellenberger's (1958), as well as Perls' (1947,1951) conceptualisation of time orientation, and Bach and Goldberg's (1974) theories of acceptance of aggression (Knapp, 1976: 3-4; Shostrom, 1974: 23).

4.2.2.2 Rationale of the POI

Items in the POI were designed to reflect value orientations that are commonly held and that are considered to be significant to a person's approach to living (Shostrom, 1974: 23). Items in the POI are stated both positively and negatively. The particular end-poles of the dichotomy in question are made explicitly clear, because opposites are dictated not by words but by their context. Thus, the same word often has several correlated terms, according to different relations in which it is considered. The use of double-statement items provides the respondent with a more clearly delineated choice than the respondent would otherwise have (Knapp, 1976: 4; Shostrom, 1974: 23).

4.2.2.3 Description of the POI

The POI consists of 150 two-choice comparative-value-judgment items reflecting values and behaviour seen to be of importance in the development of the self-actualising individual (Knapp, 1976: 2). Such persons may be described as those who utilise their talents and capabilities more fully than the average person, live in the present rather than dwelling on the past or the future, function relatively autonomously, and tend to have a more benevolent outlook on life and on human nature than the average person (Knapp, 1976: 2).

In responding to the POI, the respondent is asked to select the one statement in each pair that is most true of himself. Clinically derived scales, comprising items logically grouped into two major scales and ten subscales, are used in comparing the respondent's responses to normative samples. The major scales are interpreted in terms of a time ratio and a support ratio. The time ratio (time-competence/time-incompetence) assesses the degree to which the respondent is reality oriented in the present and is able to bring past experiences and future expectations into meaningful continuity. The support ratio (inner-directed/other-directed) defines relative autonomy by assessing a balance between other-directness and inner-directness. Other-directed persons tend to be dependent, whereas primarily inner-directed persons tend to be self-willed. A self-actualising person transcends and integrates both orientations, and this transcendence expresses itself in an optimal ratio between other-directness and inner-directness (Knapp, 1976: 2-3).

The subsidiary scales purport to tap values important in the development of the self-actualising individual - self-actualising value, existentiality, feeling reactivity, spontaneity, self-regard, self-acceptance, nature of man (constructive), synergy, acceptance of aggression, and capacity for intimate contact (Knapp, 1976: 3).

Scales are normative rather than ipsative, with the score on one scale in general not being dependent upon responses to another scale (Knapp, 1976: 3).

4.2.2.4 Scales of the POI

The POI consists of twelve scales: two main scales and ten subscales. The two main scales yield the time and support ratios.

(1) Time ratio (TC). This scale measures the degree of competence with which the respondent manages time. Hence a high score on this scale indicates that the perceiving past experiences and expectations of the future forms part of a meaningful continuum. Conversely, a low score indicates that the respondent's time management is less effective, in the sense that the respondent's idealistic expectations or fears make him or her primarily future-oriented (Knapp, 1976: 5; Shostrom, 1974: 13).

(2) Support ratio (I). This scale measures the extent to which the respondent is able to act autonomously and/or relies on others for support. A high score indicates that the respondent is able to act independently and autonomously, and able to make decisions in terms of his or her own motivation and internalised principles. Such individuals are able to both transcend and integrate the two extremes of being self-directed and other-directed so as to strike an optimal balance. Respondents who appear to be exclusively other-directed will tend to rely on others and to be highly susceptible to external influences. They seek acceptance through manipulation and attempt to impress others from behind their masks (Knapp, 1976: 5; Shostrom, 1974: 14-15).

Scores on each of the ten subscales are intended to reflect a particular facet important in the development of self-actualisation (Knapp, 1976: 6). The ten subscales are divided into five facets: values, feelings, self-perception, synergistic awareness and interpersonal sensitivity. These paired scales seem to be synergistic and represent the balancing that is critical to self-actualisation (Shostrom, 1974: 17).

Values

(3) Self-actualising values (SAV). This scale measures the extent to which a person adheres to the primary values of self-actualising persons. A high score indicates that the respondent is living in accordance with the values that are reflected in self-actualisation (in a very broad sense), while a low score indicates that the respondent rejects these values (Knapp, 1976: 6; Shostrom, 1974:17).

(4) Existentialism (Ex). This scale measures the respondent's ability to behave in accordance with the demands of the situation - that is, existentially - without rigidly

adhering to principles. A high score indicates flexibility in the application of values, whereas a low score indicates a tendency to adhere to values rigidly, compulsively and dogmatically (Knapp, 1976: 6; Shostrom, 1974: 17).

Feelings

(5) Feeling reactivity (Fr). This scale measures the extent to which a person is responsive towards his or her own feelings and needs. A high score indicates sensitivity in this regard, while a low score indicates a lack of sensitivity (Knapp, 1976: 6; Shostrom, 1974: 17).

(6) Spontaneity (S). This scale measures the extent to which the respondent feels free to act spontaneously and to be himself or herself. A high score reflects the ability to express feelings through spontaneous action, while a low score reflects a fear of expressing feelings through actions (Knapp, 1976: 6; Shostrom, 1974: 17).

Self-perception

(7) Self-regard (Sr). This scale measures the affirmation of the self in terms of own worth or strength. A high score reflects a tendency to regard the self positively as a result of a feeling of personal strength, while a low score reflects feelings of low self-worth (Knapp, 1976: 7; Shostrom, 1974: 17).

(8) Self-acceptance (Sa). This scale measures the extent to which respondents accept themselves despite their weaknesses or shortcomings. A high score indicates acceptance of the self and weaknesses, while a low score reflects an inability to accept shortcomings. It is more difficult to achieve self-acceptance than self-regard, and both are required for self-actualisation (Knapp, 1976: 7; Shostrom, 1974: 18).

Synergistic awareness

(9) Nature of man - constructive (Nc). This scale measures the extent to which respondents have a constructive view of human beings. A high score suggests that the respondent sees people as essentially good and that he or she can resolve dichotomies such as good/bad, masculinity/femininity, selfishness/unselfishness. A

high score thus reflects the ability to achieve synergy in one's understanding of human beings, something that is characteristic of a self-actualising person. A low score indicates that the respondent sees human beings as evil or bad (Knapp, 1976: 7; Shostrom, 1974: 18).

(10) Synergy (Sy). This scale measures the ability to achieve synergy by transcending dichotomies. A high score indicates that the respondent is able to connect and integrate seeming opposites, for instance by understanding that work and play, selfishness and selflessness are not necessarily mutually exclusive. A low score indicates that the respondent sees opposites as antagonistic (Knapp, 1976: 7; Shostrom, 1974: 18).

Interpersonal sensitivity

(11) Acceptance of aggression (A). This scale measures the extent to which the respondent is able to accept his or her own natural aggression. High scores indicate that respondents are able to accept their anger or aggression as natural or as a voluntary response. Low scores indicate that respondents defend against such feelings by denying and/or repressing them (Knapp, 1976: 7; Shostrom, 1974: 18).

(12) Capacity for intimate contact (C). This scale measures the ability to develop meaningful intimate relationships with others, without undue emphasis on expectations and obligations. A high score indicates that the respondent is able to establish meaningful, close relationships with other people, and a low score indicates that the respondent has some difficulty establishing warm (i.e. genuine, spontaneous, honest) interpersonal relationships (Knapp, 1976: 7; Shostrom, 1974: 18).

4.2.2.5 Administration of the POI

The POI is essentially self-administered. The items are printed in a reusable test booklet and the respondent records answers on the standard POI answer sheet for hand scoring. The respondent is instructed to print his or her name and the additional information called for on the answer sheet. The respondent is asked to read the directions on the cover of the booklet. There is no time limit for the inventory. Testing time is usually about 30 minutes. The respondent is encouraged

to use own judgment in choosing the most appropriate alternative in question dealing with concepts or interpretation of test items. The respondent is encouraged not to omit any answers. Since the inventory is for the most part self-administered, it may be completed in group sessions, individually or even at home (Shostrom, 1974: 6).

To hand-score the answer sheet, each marked sheet should first be inspected. A horizontal line should be drawn through both columns of any item where the respondent gave no answer or either gave a multiple answer. Inventories having more than 15 items so marked should be considered invalid. The scoring is a straightforward clerical task. The raw score for each scale can be obtained by placing a scoring template over the answer sheet and counting the number of blackened areas showing through the holes in the key (Shostrom, 1974: 6).

4.2.2.6 Interpretation of the POI

A score of between 50 and 65 is indicative of self-actualising behaviour. Scores of more than 65 may indicate that respondents either overestimated themselves or were trying to "fake good". Scores of less than 50 indicate that the respondent's quality of psychological life can be improved if he or she strives for greater self-actualisation in certain fields. When a quick estimate is desired of the respondent's level of self-actualising, the time competence (Tc) and inner directed (I) scales only may be scored (Knapp, 1976: 72).

After plotting the profile, the overall profile elevation can be noted. If the time competence and inner-directed scores, or most of the scale scores, fall above the mean standard score line based on the normal adult sample, the probability is that the person is one who is functioning relatively effectively and is comparatively competent in development towards a self-actualising person. If most scores are below this mean, it may be that the individual is experiencing difficulty in personal effectiveness and that changes in value orientations would be beneficial in facilitating further personal development toward self-actualisation (Shostrom, 1974: 13).

4.2.2.7 Validity of the POI

Perhaps the most important test of validity, in the case of the POI, is that it should discriminate between individuals who have shown self-actualising behaviour from those who have not (Shostrom, 1974: 23). To test the POI's effectiveness in making this discrimination, it was administered to two groups, one of relatively "self-actualising" and the other of relatively "non-self-actualising" adults. Persons in these two groups were carefully selected, each being nominated by practicing, certified clinical psychologists. N's were 29 and 34 respectively .

Results of the above study reported by Shostrom (1964, in Shostrom, 1976: 23-24) indicate that the POI significantly discriminates between clinically judged self-actualising and non-self-actualising groups on 11 of the 12 scales. The means for the self-actualising group were above the normal adult group means on 11 of the 12 scales and the means for the non-self-actualising group were below the norm means on all scales. A consistent difference between the self-actualising group and the non-self-actualising group is apparent (Shostrom, 1974: 23).

In a study by Knapp and Shostrom (1966, in Shostrom, 1974: 23) to investigate the sensitivity of the POI in clinical settings, it was administered to two groups of outpatients. One group (N = 37) was beginning with therapy and the other (N = 39) was in advanced states of psychotherapeutic progress. Analysis of the POI scores showed that all 12 POI scales differentiate between the criterion groups at the 0,01 confidence level and higher.

Murray (1966) as reported by Shostrom (1974: 26) investigated the relationship of teacher success in self-actualisation as measured by the POI. In her study, teacher success was measured by ratings of "teacher concern for students" made by the teacher's students. Ratings for 26 teachers were based on responses by 2,333 students. A marked difference in self-actualisation was found between teachers with high ratings and those with low ratings, with the more successful teachers being more self-actualising.

Dandes (1966, in Knapp, 1976: 40) empirically investigated the relationship between those constructs of psychological health measured by the POI and those value measures, such as the Minnesota Teaching Attitude Inventory previously

demonstrated to be related to teaching effectiveness. As predicted, the greater the self-actualising, the greater the possession of attitudes and values characteristic of effective teaching.

Flanders (1969, in Knapp, 1976: 40) reported significant correlation between the POI and teacher attitude in a sample of 129 elementary and secondary teachers. Correlations were all positive, ranging in magnitude from 0,12 to 0,47.

McClain (1970a, in Knapp, 1976: 42) in a study involving 424 biology students and 18 teachers, found significant differences in self-actualising between the teachers whose students showed significant gains in critical thinking as contrasted with those whose students evidenced non-significant changes in critical thinking.

4.2.2.8 Reliability of the POI

Test-retest reliability coefficients have been obtained by Klavetter and Mogar (1967, in Shostrom, 1974: 33) for POI scales based on a sample of 48 undergraduate college students. The POI was administered twice, a week apart, to the sample with the instructions that it was part of the experiment to take the POI twice. Reliability coefficients for the major scales of time competence and inner-direction were 0,71 and 0,77 respectively, and coefficients for the subscales ranged from 0,52 to 0,82.

Illardi and May (1968, in Shostrom, 1974: 33) examined the stability of the POI scores among a sample of 46 student nurses over a one year period. They reported coefficients ranging from 0,32 to 0,74.

Based on re-administration of the POI to a sample of 172 university students following a two week interval, Wise and Davis (1975, in Knapp, 1976: 76) reported test-retest coefficients of 0,75 and 0,88 for the time competence and inner-directed scales respectively.

4.2.2.9 Motivation for inclusion of the POI

The POI was developed upon value concepts, having broad personal and social relevance, representing a comprehensive measure of values and behaviour seen to be of importance in the development of the psychological optimal functioning

person. The validity of the POI (as discussed in 4.2.2.7) also indicate that this inventory discriminates between high and low self-actualising behaviour. Furthermore studies related to teacher success are significant for this research. This conceptualisation of psychological optimisation links with the humanistic theories of Allport, Frankl, Fromm, Maslow and Rogers, as well as with the process of individualisation proposed by Jung and gestalt psychology concepts used by Perls.

More specifically, the congruence between these theoretical views and the POI scales exists in specific intrapersonal affective and conative as well as interpersonal behaviour characteristics.

The specific affective characteristics are, being sensitive toward own feelings (Jung in Schultz, 1977: 99) as measured by the POI Fr - scale, the expression of feelings (Rogers, 1961: 195) as measured by the POI S - scale. This person has a realistic self-concept and a firm sense of identity (Fromm in Schultz, 1977: 48-49) as measured by the POI Sr - scale. Through self-acceptance (Allport, 1961: 287-288) as measured by the POI Sa - scale, the individual expresses (Frankl, 1962: 100) as measured by the POI S - scale, and values the self (Fromm in Schultz, 1977: 48-49) as measured by the POI Sa - scale.

The specific conative characteristics are, actively directing the course of his or her own life (Fromm in Schultz, 1977: 48-49) as measured by the POI TC - scale and acting with deliberate and conscious intentions (Allport, 1955: 51) as measured by the POI I - scale. The problems and demands of living are felt to be welcome challenges, motivating the person to invest energy (Antonovsky, 1987: 17-18) as measured by the POI I - scale.

The specific interpersonal characteristics are, being spontaneous in behaviour, open to the opinions of others and grows and develops, formulating an objective picture of the self through this contact (Allport, 1961: 290) and (Rogers, 1961: 188,193) as measured by the POI Sa and C - scales. Relationships are fewer in number but more intense (Maslow, 1970: 139) as measured by the POI C - scale. This person has a capacity for intimacy and compassion (Allport, 1961: 285) as measured by the POI C - scale, acting thoughtful and considerate of others (Maslow, 1970: 132) as measured by the POI C - scale. This individual accepts

human frailties and is tolerant of others (Allport, 1961: 286) and (Maslow, 1970: 128) as measured by the POI Nc - scale.

4.2.3 The Sense of Coherence questionnaire (SOCq)

The SOCq will now be discussed with reference to the development, rationale, description, scales, administration, interpretation, validity, reliability and motivation for inclusion.

4.2.3.1 Development of the SOCq

The SOCq was constructed to measure the sense of coherence, in order to test the hypothesis that the sense of coherence is causally related to health status (Antonovsky, 1987: 63). Once the sense of coherence was explicitly defined and conceptually clarified Antonovsky (1987: 64) conducted a pilot study translating it into an operational definition. Fifty-one persons ranging in age from 21 to 91 were interviewed. Two criteria had to be met by the pilot group. Firstly, the person was known to have undergone severe trauma with inescapable major consequence for his or her life and secondly, the person was thought to be functioning remarkably well (Antonovsky, 1987: 64).

The operationalisation lead Antonovsky (1987: 75) to the design of SOCq referring to a wide variety of stimuli or situations. The SOCq was designed on the basis of facet design. The first facet to be considered was the response mode of the respondent to a given stimulus. Three components, namely comprehensibility, manageability, and meaningfulness are included (Antonovsky, 1987: 76).

Consistency as source has a close link to the comprehensibility component of the SOCq. The underload-overload balance has a close link with the manageability component of the SOCq. Participation in decision making provides the basis for the meaningfulness component of the SOCq (Antonovsky, 1984: 123).

Next, important facets of the stimuli and the elements to be included under each facet needed to be determined. Four facets were selected - the modality of the stimulus (instrumental, cognitive, or affective), its source (internal, external, or both), the nature of the demand it posed (concrete, diffuse, or abstract), and its time

reference (past, present, or future) (Antonovsky, 1987: 76-77). A process of testing resulted in the SOCq.

4.2.3.2 Rationale of the SOCq

The SOCq is used to assess where people are located on the health-ease-dis-ease continuum. The stronger their SOC, the more likely they are to maintain that location or improve on it. The essence of the SOC concept is seeing the world as more or less ordered and predictable. A person with a strong SOC is less likely to perceive stressful situations as threatening and anxiety-provoking than one with a weak SOC. A person with a high SOC score is less likely to have a tendency to perceive many situations as ego threatening and anxiety arousing (Antonovsky & Sagy, 1986: 214-216).

4.2.3.3 Description of the SOCq

The SOCq is a self-reporting instrument directed at assessing individual tendencies to apply successful coping mechanisms, what may be called behavioural immunology (Antonovsky, 1984b: 117).

The SOCq consists of 29 items rated on a seven-point scale (agreement/disagreement) that indicates the extent to which the respondents evaluate the item as characteristic of themselves (Antonovsky, 1987: 79).

4.2.3.4 Scales of the SOCq

The concept of SOC is seen as a unitary one, consisting of three components that are inextricably intertwined. A respondent's score on the SOCq is the sum of all his or her responses. These three components consist of comprehensibility, manageability and meaningfulness.

(1) Comprehensibility. Comprehensibility refers to the extent to which individuals perceive the stimuli that confront them; deriving from the internal and external environments, as making cognitive sense, as information that is ordered, consistent, structured, and clear, rather than as noise - chaotic, disordered, random, accidental and inexplicable. The person with a high sense of comprehensibility expects that the

stimuli he or she will encounter in the future will be predictable or, at the very least, when they do come as surprises, that they will be orderable and explicable. When comprehensibility becomes internalised, it turns into an order-seeking attitude and the ability to find structure in the events (Kalimo & Vuori, 1990: 77). It is important to note that nothing is implied about the desirability of stimuli. Death, war and failure can occur, but such a person can make sense of them (Antonovsky, 1987: 16-17).

(2) Manageability. Manageability is defined as the extent to which individuals perceives that resources are at their disposal which are adequate to meet the demands posed by the stimuli that bombarded them. "At their disposal" may refer to resources under their own control or to resources controlled by legitimate others - their spouse, friends, colleagues, God, history, the party leader, a physician - whom the individual feels he or she can count on and trusts. To the extent that an individual has a high sense of manageability, he or she will not feel victimised by events or feel that life treats him or her unfairly. Untoward things do happen in life, but when they do occur, the individual will be able to cope and not grieve endlessly (Antonovsky, 1987: 17-18).

(3) Meaningfulness. Meaningfulness refers to the importance of being involved "as a participant in the processes shaping destiny as well as daily experience". This component represents the motivational element. Those classified as having a strong SOC always spoke of areas of life that were important to them, that they very much cared about, that "made sense" to them in the emotional and not only the cognitive meaning of the term. Events that went on in these areas tended to be viewed as challenges, as worthy of emotional investment and commitment.

The meaningfulness component of the SOCq refers to a sense of importance - the extent to which the individual feels that life makes sense emotionally. It also refers to value inherent in events and the feeling that at least some of those problems and demands posed by living which are worth investing energy in, are worthy of commitment and engagement, are challenges that are welcome rather than burdens that the individual would much rather do without. This does not mean that someone high on meaningfulness is happy about the death of a loved one, the need to undergo a serious operation, or being fired. When these unhappy experiences are imposed on such a person, he or she will willingly take up the challenge, will be

determined to seek meaning in it, and will do his or her best to overcome it with dignity (Antonovsky, 1987: 18-19).

4.2.3.5 Administration of the SOCq

The SOCq is essentially self-administered. The items are printed on the answer sheet that the respondent uses to record answers. The respondent is instructed to print his or her name on the answer sheet, and to read the directions. There is no time limit for the questionnaire. The respondent is encouraged not to omit any answers. Since the questionnaire is for the most part self-administered, it may be completed in group sessions, individually or even at home.

To hand score the answer sheet, each marked sheet should first be inspected. A horizontal line should be drawn through any item where the respondent gave no answer or either gave a multiple answer. Items no 1, 4, 5, 6, 7, 11, 13, 14, 16, 20, 23, 25, and 27 represent negative items and their scores must be reversed before being marked. The scoring is a straightforward clerical task. The raw scores for each item are counted to determine the sum of the respondent's responses.

4.2.3.6 Interpretation of the SOCq

The highest score a person can obtain is 203. The higher a respondent's score on the SOCq, the higher they are located on the health-ease-dis-ease continuum (closer to the healthy and optimal side). The three components of the SOCq are inextricably intertwined and can really only be separated for analytic purposes. Theoretically a respondent can be high on one component and low on others, but this is inherently unstable. The respondent who is high on manageability but low on the other two components, is like a punch-drunk fighter who will soon quit. Respondents who are high on comprehensibility and meaningfulness but low on manageability, are strongly motivated to search for resources that will enable them to think that they can manage (Antonovsky, 1984b: 120). The true intellectual, however, for substantive and structural reasons, is not likely to have a strong SOCq.

The three components are, though all necessary, of unequal centrality. The motivational component of meaningfulness seems most crucial. Without it, being high on comprehensibility or manageability is likely to be temporary.

Comprehensibility seems next in importance, for high manageability is contingent on understanding. This does not mean that manageability is unimportant. If the individual does not believe that resources are at his or her disposal, meaningfulness will be lessened and coping efforts weakened. Successful coping then, depends on the SOC as a whole (Antonovsky, 1987: 22).

Having a strong SOCq does not mean that a respondent views his or her entire world as comprehensible, manageable and meaningful. People set boundaries, some wide, some narrow, and what happens outside these does not bother them (Antonovsky, 1984b: 119). Antonovsky (1987: 23) maintained that there are four areas that cannot be excluded if the person is to maintain a strong SOC; own feelings; immediate interpersonal relationships; the major area of activity (work) and the existential issues of death, inevitable failures, shortcomings, conflict and isolation.

Flexibility about those life areas included within the boundaries may be an effective way of maintaining a coherent view of one's world. This is done by contracting away from an area whose demands are becoming less comprehensible or manageable, or by including new areas within the boundaries (Antonovsky, 1987: 24).

4.2.3.7 Validity of the SOCq

Preliminary data (Antonovsky, 1987: 82-83) suggest this instrument to be both valid and reliable. Subsequent cross-sectional empirical studies have continued to support the validity of this measure. Margalit (1985) in Antonovsky (1987: 86) adapted the measure for young children and found that hyperactive children had lower scores on the SOCq which "reflected that their environment seemed less ordered and predictable; expected (age-appropriate) tasks seemed less manageable, and to a large extent seemed meaningless".

During 1981, Rumbaut (Antonovsky, 1987: 82-83) developed an instrument in complete independence to measure the same concept, thereby providing evidence for criterion as well as convergent and discriminant validity. Dana's study (Antonovsky, 1987: 85) found a correlation of 0,72 between Antonovsky's SOCq and Rumbaut's 22 item SOCq.

An indication of predictive validity is found in the Israeli national sample data rating health status (Antonovsky, 1987: 84-85). Carmel and Bernstein (1989: 221-222) studied trait anxiety (A-trait) and SOC in a group of medical students to explain individual differences in appraisal of environmental demands. Their findings supported the hypotheses that trait anxiety (A-trait) and SOCq actually measure similar phenomena.

In a study by Kalimo and Vuori (1990: 82) significant differences between the well-being of competent, satisfied individuals and incompetent and dissatisfied individuals were found in four factors, namely job characteristics (influence), employment conditions (stability), work attitudes (appreciation of work) and health resources (SOC).

4.2.3.8 Reliability of the SOCq

The normative data from a number of studies indicate that the SOCq can be used cross-culturally, although as yet it has only been used in Hebrew and English. The distribution of responses, as shown by the range of scores and the standard deviations, points to an instrument that makes considerable distinction among members of different populations. The coefficients of variation (standard deviation / mean), designed to indicate heterogeneity of responses are considerable (from 0,10 to 0,20) even in the most homogeneous of the samples (Antonovsky, 1987: 79-82).

Antonovsky (1987: 82) used facet design as a basis for the questionnaire construction. Before going out into the field he asked four colleagues to check each item and to indicate whether they thought it appropriate. He asked them to record the facet profile, ensuring that the 29 items of the SOCq do indeed cover the important aspects designed to be measured.

The consistently high level of Cronbach's alpha, which ranges from 0,84 to 0,93, points to a respectable degree of internal consistency and reliability of the questionnaire (Antonovsky, 1987: 82).

4.2.3.9 Motivation for inclusion of the SOCq

By definition, individuals with a high sense of coherence are those who usually evaluate stressors in a positive way because they are generally confident that their “internal and external environments are predictable and that there is a high probability that things will work out as well as can be expected” (Antonovsky, 1979: 123). The focus is thus placed on behavioural immunology.

This conceptualisation of psychological optimisation links with the humanistic theories of Allport, Frankl, Fromm, Maslow and Rogers, as well as Antonovsky’s work as from the salutogenic paradigm and its clear humanistic connections. The validity of the SOCq (as discussed in 4.2.3.7), specifically as indicated by the study of Kalimo and Vuori (1990) are applicable to this research. More specifically, the congruence between these theoretical views and the SOCq exists in specific intrapersonal cognitive, affective and conative behaviour characteristics.

The specific cognitive characteristics are acting rational (Allport, 1955: 95; Fromm in Schultz, 1977: 48-49) as measured by the meaningfulness component of the SOCq. The person is guided by own conscious perception (Maslow, 1970: 128; Rogers, 1961: 188) as measured by the comprehensibility component of the SOCq, acting responsible, making own decisions (Frankl, 1962: 111; Maslow, 1970: 134) as measured by the meaningfulness component of the SOCq. He or she perceives the world and the self objectively (Antonovsky, 1985: 16-17) as measured by the comprehensibility component of the SOCq.

The specific affective characteristics are emotional sense of life (Antonovsky, 1979: 124-128) as measured by the meaningfulness component of the SOCq.

The specific conative characteristics are a self-shaping outlook (Allport, 1961: 285) as measured by the comprehensibility component of the SOCq, tolerating setbacks (Allport, 1955: 50) as measured by the manageability component of the SOCq. The problems and demands of living are felt to be welcome challenges, motivating the person to invest energy (Antonovsky, 1987: 17-18) as measured by the meaningfulness component of the SOCq.

4.2.4 The Self-Control Schedule (SCS)

The SCS will now be discussed with reference to the development, rationale, description, scale, administration, interpretation, validity, reliability and motivation for inclusion.

4.2.4.1 Development of the SCS

According to Rosenbaum (1988: 492) the concept of learned resourcefulness originated from Kanfer's theory of self-regulation (Kanfer, 1977;1986, in Rosenbaum, 1988: 492) and Meichenbaum's stress-inoculation training program (Meichenbaum, 1985, in Rosenbaum, 1988: 492). The concept of learned resourcefulness refers to an acquired repertoire of self-control skills and is operationally defined as a repertoire of behaviours and skills (mostly cognitive) by which a person self-regulates internal responses, such as emotions, pain, and cognition, which interfere with the smooth execution of ongoing behaviour (Rosenbaum, 1988: 492).

Considering the cognitive-behavioural conceptualisation of self-control behaviours, situations were sampled in which self-controlling responses would most likely occur. Thirty items were written in which a direct reference was made to an unpleasant emotional or physiological experience such as anxiety, depression, boredom, pain, and hunger. Twenty additional items were written that refer to tasks requiring self-controlling responses such as breaking an undesirable habit, doing a boring but a necessary job, and handling one's limited funds. Ten items were written to represent a general belief in self-control (also described as self-efficacy). Except for the last 10 items, each item consisted of a description of a self-controlling response in a specific situation (Rosenbaum, 1980: 111).

The preliminary list of sixty items was given to two experienced, behaviourally oriented clinical psychologists who were well acquainted with the concept of self-control as defined. They were asked to evaluate each item on the following criteria:

- * is the item comprehensible ? ;
- * does the item describe a situation that could be experienced by a wide range of people ? , and
- * does the item reflect an effective use of a self-controlling response ?

The 10 items describing expectations for self-efficacy were evaluated on the basis of their comprehensibility as well as on the extent to which the items describe expectations for self-efficacy. Sixteen items in which there were a disagreement on one or more of the above criteria were eliminated. The resulting schedule with 44 items was then administered to a group of 152 subjects for an empirical item analysis and a final version of the SCS with 36-items was then compiled (Rosenbaum, 1980: 111).

4.2.4.2 Rationale of the SCS

For the purposes of developing a schedule for the assessment of self-control behaviours, self-controlling responses were assumed to be cued by any internal event such as anxiety, pain or thought that disrupts the effective performance of a target behaviour (Rosenbaum, 1980: 110). Self-controlling responses are then directed at reducing the interference caused by such events. This conceptualisation of self-control enables the defining of the conditions in which self-controlling responses are likely to occur and the function of self-control behaviour (Rosenbaum, 1980: 110).

The specific kinds of self-controlling behaviour to be assessed by the SCS were derived from the growing literature on the nature of stress-handling methods and from the various coping skills therapies proposed by the cognitively oriented behaviour therapists (Goldfield & Goldfield, 1975; Lazarus, 1976; Mahoney, 1974 & Meichenbaum, 1977, in Rosenbaum, 1980: 110). Coping skills therapies are characterised by their emphasis on general coping strategies to deal more effectively with stressful life events.

Self-control behaviours were categorised by Rosenbaum (1980: 110-111) in the following way:

- * the use of cognition and "self-statements" to control emotional and physiological responses;
- * the application of problem solving strategies (e.g. planning, problem definition, evaluating alternatives, anticipation of consequences);
- * the ability to delay immediate gratification, and

* perceived self-efficacy.

The last category is similar to Bandura's concept of self-efficacy which is the conviction that an individual can successfully execute the behaviours to produce the outcome. In other words, before a person applies any specific self-controlling skill he or she must believe in controlling his or her own behaviour without outside help (Rosenbaum, 1980: 111).

4.2.4.3 Description of the SCS

The SCS is a self-report instrument directed at assessing individual tendencies to apply self-control methods to the solution of behavioural problems. The SCS is used to assess the concept of learned resourcefulness (Rosenbaum, 1988: 483).

The schedule consists of 36 items rated on a six point scale that indicates the extent to which the respondents evaluate the item as characteristic of themselves. Twelve items refer to the use of cognition to control emotional and physiological sensations; eleven items refer to the respondent's tendency to employ problem-solving strategies (e.g. planning, problem definition, evaluating alternatives and anticipation of consequences); four items relate to the respondent's ability to delay immediate gratification, and nine items are indicative of general expectations for self-efficacy (Rosenbaum, 1980: 112).

4.2.4.4 Scale of the SCS

The 36 items in the SCS describe the use of cognition and "self-statements" to control emotional and physiological responses, the application of problem solving strategies, the ability to delay immediate gratification, and perceived self-efficacy. Collectively these items represent one score, representing the respondent's self-control (Rosenbaum, 1980: 112-113).

A high score indicates that the respondent has developed an appropriate repertoire of self-control skills. This person will therefore attempt to cope with stressors.

4.2.4.5 Administration of the SCS

The SCS is essentially self-administered. The items are printed in a reusable test booklet and the respondent records answers on the standard SCS answer sheet. The respondent is instructed to print his or her name on the answer sheet. The respondent is asked to read the instructions. There is no time limit for the schedule. The respondent is encouraged not to omit any answers. Since the schedule is for the most part self-administered, it may be completed in group sessions, individually or even at home.

To hand score the answer sheet, each marked sheet should first be inspected. A horizontal line should be drawn through any item where the respondent gave no answer or either gave a multiple answer. Items no 4, 6, 8, 9, 14, 16, 18, 19, 21, 29, and 35 represent negative items and their scores must be reversed before being marked. The scoring is a straightforward clerical task. The raw score for each item is counted to get the sum of the respondent's responses. Care must be taken during adding because of the positive and negative values assigned to the item scale. Individual differences in the tendency to employ self-control methods are reflected by the scores (Rosenbaum, 1980: 112-114).

4.2.4.6 Interpretation of the SCS

Learned resourcefulness as measured by the SCS is calculated by determining a single score for the total questionnaire (Rosenbaum, 1988: 489). The total score of the schedule could range from -108 to +108. For normal populations the score is usually +25 with a standard deviation of 20 (Rosenbaum, 1990: 229).

High scores reflect a high tendency to employ self-control methods and vice-versa (Rosenbaum, 1980: 112-114). High and low resourceful individuals do not differ in their initial reactions to stressful life events, or in their evaluation of the stressor, but they do differ in their abilities to reduce the interfering effects of stress reactions on ongoing behaviours (Rosenbaum, 1988: 487-488). High resourceful persons, in comparison to low resourceful persons, utilise more self-control methods when faced with a stressful event.

4.2.4.7 Validity of the SCS

The validation of the SCS is a complex task, since self-control behaviours are mostly covert and must be inferred from the behaviour of a person under specific circumstances, or from self-reports (Rosenbaum, 1980: 115).

The convergent and the discriminant validity of the SCS was examined by comparing scores obtained on the SCS to scores obtained using a number of existing instruments. According to Rosenbaum (1980: 115-116) there are no other published instruments which assess self-control behaviours, yet there are two other instruments that are conceptually related to the SCS. The first instrument is Rotter's I-E (1966) questionnaire which deals with the extent to which an individual believes that reinforcements are a function of his or her own behaviour (internal locus of control) or a function of luck, powerful others, etc. (external locus of control). A person who reports the use of self-control methods might reasonably be expected to adopt an internal locus of control. The second instrument expected to be related to the SCS is the Irrational Beliefs Test (Jones, 1968). Ellis (1973) and Meichenbaum (1977) showed that "appropriate" or "rational" self-verbalisations play an important role in the control of own emotional arousal. Jones' (1968) Irrational Beliefs Test was devised to measure the ten types of irrational beliefs described by Ellis (1962, in Rosenbaum, 1980: 116).

The SCS was found to be a reliable measure of self-control behaviours. Supporting its validity, the Irrational Beliefs Test was administered to 111 candidates for undergraduate studies at Tel Aviv University together with the SCS. All correlations were moderate - to - low and statistically significant (Rosenbaum, 1980: 117). Respondents scoring high on the SCS when compared to respondents scoring low, were found to have an internal locus of control and to hold fewer "irrational" beliefs. In addition, these respondents were better able to control and tolerate noxious stimuli (Rosenbaum, 1980: 117).

4.2.4.8 Reliability of the SCS

The SCS was administered to six groups of subjects in order to obtain reliability and normative data (Rosenbaum, 1980: 112). The data collected by sample 1 was used to assess the test-retest reliability of the SCS. The mean score on the first testing

was 25.1 (SD 23.7) and on the second testing 24.4 (SD 25.1). The difference between the means was not significant [$t(81) = 0,72, p > 0,05$]. The Pearson correlation between the scores of the two testing periods was 0,86 ($p < 0,01$) indicating a fairly high stability of test scores over a four week period (Rosenbaum, 1980: 114-115).

The internal consistency of the SCS items was computed using the data obtained from samples 2-6 by the use of Kuder-Richardson formula 20. The alpha coefficients obtained for samples 2, 3, 4, 5, and 6 were 0,81, 0,80, 0,84, 0,78, and 0,80 respectively. These levels of reliability may be considered satisfactory for experimental purposes according to Nunnally (Rosenbaum, 1980: 115). The normative data indicates that the SCS might be applicable to the Israeli and American populations. Additional studies however are needed to cross-validate it to other population groups. T-tests performed on the data revealed no significant differences between the means of both sexes. The fairly high standard deviations obtained in all the samples reflect the existence of large individual differences in self-control behaviours as assessed by the SCS (Rosenbaum, 1980: 115).

4.2.4.9 Motivation for inclusion of the SCS

The concept of learned resourcefulness represents a personality repertoire which has been defined as a set of behaviours and skills by which individuals self-regulate internal responses which interfere with the smooth execution of an ongoing behaviour. This conceptualisation of psychological optimisation links with the humanistic theories of Frankl, gestalt psychology concepts used by Perls as well as Rosenbaum's work as from the salutogenic paradigm and its clear humanistic connections. The personality repertoire of learned resourcefulness consists not only of a set of beliefs, but also of skills and self-control behaviour. The validity of the SCS (as discussed in 4.2.4.7) also indicates that the SCS was found to be a reliable measure of self-control behaviours. More specifically, the congruence between these theoretical views and the SCS exists in specific intrapersonal cognitive, affective and conative behaviour characteristics.

The specific cognitive characteristics are acquired skill in self-regulation of internal responses by persons who succeeded in the past. Hence the learned resourcefulness provides a basis for further learning, acting as a source of

information for judgments of self-efficacy in coping (Rosenbaum, 1988: 487) as measured by the use of cognition to control emotional and physiological sensations, items of the SCS.

The specific affective characteristics are the application of self-regulation in life (Perls in Schultz, 1977: 135-137) as measured by the tendency to employ problem-solving strategies, items of the SCS. This individual judges the self more efficacious in dealing with emotional and task demands and is as a consequence more likely to continue with self-regulation (Rosenbaum, 1988: 483) as measured by the general expectations for self-efficacy, items of the SCS.

The specific conative characteristics are conscious control of his or her life (Frankl, 1962: 122) as measured by the tendency to employ problem-solving strategies, items of the SCS. This person pursues goals despite anxiety, seeing it as promising meaningful rewards (Rosenbaum, 1988: 490) as measured by the ability to delay immediate gratifications, items of the SCS. This coping with stressful events calls for attempts at self-control using self-statements (Rosenbaum, 1988: 484) as measured by the general expectations for self-efficacy, items of the SCS.

4.3 Step 3: Administration of the psychometric battery.

This step refers to the data collection step in the research design, which according to Mouton and Marais (1990: 75) poses a great challenge to the social science researcher because of the rational, historic, and normative characteristics of human beings. The critical consideration of validity concerning the process of data collection, is that of reliability. Mouton and Marais (1990: 79) require that the application of a valid measuring instrument to different groups under different sets of circumstances leads to the same observations.

In gathering the data, the following procedure was used: a cover letter was drawn up, indicating the aim of the research, the confidentiality of responses, instructions for completion and the date of completion; the cover letter together with the four questionnaires, relevant answer sheets and instructions were compiled into one document and posted to all trainers (N = 148). Fifty-seven subjects responded by completing the questionnaires and returning it by mail.

4.4 Step 4: Scoring of the psychometric battery.

All instruments were hand scored, using the relevant scoring templates (where applicable) and double-checked for accuracy. Raw scores were utilised. Results were plotted on individual profile sheets. Care were taken to ensure that individual respondent's scores were filed separately.

4.5 Step 5: Statistical processing of data

Statistica (Statsoft, 1991), a computer software packet was used in the management and statistical analysis of the research data.

The process of determining whether a correlation or difference exists between the level of trainer competency and his or her psychological optimal functioning, can be described as follows:

- * the standard scores for the TCQ, POI, SOCq and SCS were determined in order to apply the statistical procedures;
- * the mean scores for the TCQ were computed in order to distinguish the competent and non-competent trainer groups on the basis of the normal distribution curve;
- * in answering the question if trainer competency is related to psychological optimisation the concern lies with correlation, and the measure of the degree or strength of this relationship is represented by a correlation coefficient (Howell, 1989: 100), and
- * in testing the difference between the means of the competent and non-competent trainer groups and to determine whether this difference is sufficiently large to justify the conclusion that the two samples were drawn from different populations the t test were used.

4.6 Step 6: Formulation of hypotheses.

Before formulating the hypotheses, some criteria for formulation of hypotheses and the objectives to be covered by the hypotheses for this research is discussed.

Cawood (in Robinson, 1987: 48), concludes that for a hypothesis to be acceptable " what is required in the first instance is that the hypothesis be a living one... but it needs by no means be a forced option or a momentous hypotheses" . McGuigan (1968: 48) states seven criteria for testing a hypothesis:

- * the hypothesis must be testable;
- * it should be in general harmony with other hypotheses in the field of investigation;
- * it should be parsimonious;
- * it should answer (be relevant to) the problem;
- * it should have logical simplicity;
- * it should be expressed in a quantified form or be susceptible convenient quantification, and
- * the hypothesis should have a large number of consequences and should be general in scope.

The following hypotheses are formulated with a view to cover the objectives of the study and meeting the criteria for the formulation of hypotheses as outlined above:

Ho1 - No correlation between trainer competency and the level of his or her psychological optimal functioning exists.

Ho2 - No difference between trainer competency and the level of his or her psychological optimal functioning exists.

H1 - There is a correlation between trainer competency and the level of his or her psychological optimal functioning.

H2 - There is a difference between trainer competency and the level of his or her psychological optimal functioning.

4.7. CHAPTER SUMMARY

This chapter discussed the first six steps of the empirical investigation. The sample population's determination and description; the choice, administration and scoring of the psychometric battery; the statistical processing of the data and the formulated hypotheses were described.

Chapter 5 discusses steps 7 to 10 of the empirical investigation.

CHAPTER 5 RESULTS

Chapter 5 contains the reporting of results with the specific aim to integrate the results and formulate recommendations.

5.1 Step 7: Reporting and interpretation of results

The results of the empirical study are subsequently reported and interpreted.

5.1.1 Correlation between trainer competency and psychological optimisation

The correlation between trainer competency and psychological optimisation is represented by a correlation coefficient in table 5.1.

Table 5.1 reflects the following:

- * a statistically significant correlation was found between the attitude and values scale as measured by the TCQ and the self-regard and synergy scales as measured by the POI;
- * a statistically significant correlation was found between the attitudes and values scale as measured by the TCQ and the manageability scale as measured by the SOCq, and
- * a statistically significant correlation was found between the knowledge and skills scales as measured by the TCQ and the SCS.

Based on the above correlation data (table 5.1), the supporting evidence for a statistically significant correlation between trainer competency and psychological optimisation would seem to be not conclusive enough. H1 is thus rejected.

The positive statistically significant correlations between attitudes and values as measured by the TCQ and self-regard and synergy as measured by the POI reflects the following:

Table 5.1 Correlation between trainer competency and psychological optimisation.

		Correlations $r(x,y)$		
		N = 57		
		Knowledge	TCQ Skill	Attitude and values
POI	Time ratio (TC)	0,12 p<0,36	0,23 p<0,08	0,26 p<0,05
	Support ratio (I)	0,02 p<0,90	0,22 p<0,11	0,15 p<0,26
	Self-actualisation (SAV)	0,03 p<0,83	0,16 p<0,22	0,21 p<0,11
	Existentiality (Ex)	0,03 p<0,81	0,16 p<0,22	0,01 p<0,92
	Feeling reactivity (Fr)	0,10 p<0,48	0,20 p<0,14	0,22 p<0,10
	Spontaneity (S)	0,03 p<0,85	0,10 p<0,46	0,14 p<0,30
	Self-regard (Sr)	0,12 p<0,39	0,20 p<0,14	0,40 p<0,00 *
	Self-acceptance (Sa)	0,09 p<0,52	0,26 p<0,05	0,04 p<0,80
	Nature of man - constructive (Nc)	-0,14 p<0,30	-0,09 p<0,51	0,25 p<0,06
	Synergy (Sy)	0,17 p<0,20	0,02 p<0,88	0,35 p<0,01 *
	Acceptance of aggression (A)	0,09 p<0,51	0,10 p<0,46	0,15 p<0,28
	Capacity for intimate contact (C)	0,09 p<0,51	0,13 p<0,32	0,00 p<0,97
SOCq	Comprehension	0,23 p<0,09	0,22 p<0,10	0,24 p<0,07
	Manageability	0,09 p<0,49	0,10 p<0,47	0,30 p<0,02 *
	Meaningfulness	0,11 p<0,40	0,07 p<0,59	0,12 p<0,40
SCS	SCS	0,31 p<0,02 *	0,32 p<0,02 *	0,25 p<0,06

* $p < 0,05$

Table 5.1 (continued)

		Correlations $r(x,y)$			N = 57
		SOCq			SCS
		Comprehension	Manageability	Meaningfulness	
POI	Time ratio (TC)	0,16 p<0,24	0,20 p<0,13	-0,05 p<0,70	0,09 p<0,48
	Support ratio (I)	-0,28 p<0,03 *	0,04 p<0,75	-0,06 p<0,69	-0,04 p<0,78
	Self-actualisation (SAV)	-0,26 p<0,06	0,05 p<0,70	-0,06 p<0,65	0,01 p<0,94
	Existentiality (Ex)	-0,24 p<0,07	0,09 p<0,52	-0,12 p<0,39	-0,03 p<0,84
	Feeling reactivity (Fr)	-0,17 p<0,21	0,07 p<0,61	0,03 p<0,83	-0,09 p<0,49
	Spontaneity (S)	-0,13 p<0,34	0,06 p<0,65	-0,10 p<0,48	-0,04 p<0,75
	Self-regard (Sr)	-0,11 p<0,41	0,08 p<0,56	-0,03 p<0,80	0,01 p<0,93
	Self-acceptance (Sa)	-0,07 p<0,58	0,12 p<0,37	0,13 p<0,32	0,06 p<0,64
	Nature of man - constructive (Nc)	-0,10 p<0,44	0,02 p<0,85	-0,04 p<0,79	-0,09 p<0,48
	Synergy (Sy)	-0,26 p<0,05	0,07 p<0,62	-0,13 p<0,32	0,02 p<0,87
	Acceptance of aggression (A)	-0,38 p<0,00 *	0,03 p<0,84	0,03 p<0,85	-0,12 p<0,38
	Capacity for intimate contact (C)	-0,38 p<0,00 *	-0,11 p<0,43	-0,20 p<0,14	-0,01 p<0,92
SOCq	Comprehension	-----	-----	----	0,37 p<0,00 *
	Manageability	-----	-----	----	0,42 p<0,00 *
	Meaningfulness	-----	-----	----	0,17 p<0,20

* p < 0,05

The attitude dimension indicates that the competent trainer possesses an underlying thought process guiding his or her actions, whilst the value dimension indicates an internal orientation necessary to acquire the knowledge and skills required of a competent trainer.

A high score on the self-regard scale reflects a tendency to regard the self positively as a result of a feeling of personal strength. A high score on the synergy scale indicates that the respondent is able to connect and integrate seeming opposites.

The guiding attitudes and internal value orientation of the competent trainer affirms the positive self-perception of the person, indicating synergistic awareness in transcending differences.

The positive statistically significant correlation between attitudes and values as measured by the TCQ and manageability as measured by the SOCq reflects the following:

A high score on manageability reflects a feeling of being adequate to meet the demands posted by bombarding stimuli. The person therefore does not feel victimised by events or feel treated unfairly.

The guiding attitudes and internal value orientation of the competent trainer prepare the person to adequately meet the demands of bombarding stimuli.

The positive statistically significant correlations between knowledge and skills as measured by the TCQ and the SCS reflect the following:

The knowledge dimension indicates that the respondent has the necessary factual and functional (technical) knowledge base required of a competent trainer. The skill dimension indicates that the respondent has the ability to practically apply his or her trainer competency.

The SCS indicates that the respondent has developed an appropriate repertoire of self-control skills.

The knowledge base and skills ability of the competent trainer thus enables the person not only to develop an appropriate repertoire of self-control skills but also to utilise it when faced with a stressful event.

In linking the empirical results with the literature review the following seems to be evident:

The underlying thought processes and internal orientation of the competent trainer leading to a positive self-perception and the ability to integrate opposites must be based on a personal philosophy, regarding life and training, guiding the person. Without corresponding values, the expected commitment to self-development and trainer competency would be non-existent. To be able to function on a rational and conscious level, the competent trainer needs a supportive knowledge and skills base. Freedom of choice in the application of knowledge and skills in guidance is also based on the before stated aspect.

The general attitude preparing the person to meet situational demands is based on a productive orientation that is present in work and non-work domains of the individual's life. Through experience the person is able to integrate opposites in life leading also to flexibility in value application.

The repertoire of self-control skills based on appropriate training knowledge and skills equip the person with creativity in training. This creativity is supported by an attitude reflective of a high self-regard.

It is learning that makes the difference. Through the above the competent trainer is equipped to deliver what the training system promised. He or she will have the skill to manage the training process, guide the learners and create and maintain optimal conditions for learning. The results of this would be beneficial to learners, trainers and organisations. A well-trained, highly productive and committed workforce is the result.

5.1.2 Differences between trainer competency and psychological optimisation

The differences between the high and low trainer competency groups is represented in table 5.2.

Table 5.2 reflects a statistically significant difference in the means of the high and low trainer competency groups were found on the time ratio and self-regard scales, as measured by the POI.

Table 5.2 Differences in means of high and low trainer competency groups on psychological optimisation

	t	p-level	Competency group	
			High (mean) (N = 11)	Low (mean) (N = 13)
TCQ (total score)	11,23	0,00	185,00	152,38
Knowledge	4,97	0,00	32,64	24,08
Skills	5,60	0,00	81,00	61,38
Attitude and values	3,21	0,00	71,36	66,92
POI				
Time ratio (TC)	2,71	0,01 *	17,91	15,00
Support ratio (I)	1,31	0,20	83,00	76,92
Self-actualisation (SAV)	2,06	0,05	21,27	19,38
Existentiality (Ex)	0,99	0,33	18,27	16,23
Feeling reactivity (Fr)	1,59	0,12	14,82	13,23
Spontaneity (S)	0,89	0,38	11,36	10,46
Self-regard (Sr)	2,52	0,02 *	14,18	12,31
Self-acceptance (Sa)	1,40	0,17	16,36	14,46
Nature of man - constructive (Nc)	-0,17	0,86	11,27	11,38
Synergy (Sy)	1,21	0,23	6,36	5,62
Acceptance of aggression (A)	0,69	0,49	15,64	14,69
Capacity for intimate contact (C)	0,85	0,40	18,27	17,00
SCS	1,47	0,15	157,91	146,85
SOCq (total score)	2,04	0,05	55,91	38,92
Comprehension	1,91	0,06	55,64	48,92
Manageability	1,12	0,27	54,45	50,85
Meaningfulness	0,34	0,73	47,82	47,08

* p < 0,05

Based on the above differences data (table 5.2), the supporting evidence for a statistically significant difference between trainer competency and psychological optimisation would seem to be not conclusive enough. H2 is thus rejected.

The positive statistically significant difference between the high and low trainer competency groups on the time ratio scale as measured by the POI reflects the following:

A high score on the time ratio scale indicates that the perceiving past experiences and expectations of the future of the person, forms part of a meaningful continuum. A low score indicates that the respondent's time management is less effective, in the sense that his or her idealistic expectations or fears make him or her primarily future-oriented.

The high trainer competency group reflects competence in managing time, whilst the low trainer competency group reflects less effective time management.

The positive statistically significant difference between the high and low trainer competency groups on the self-regard scale as measured by the POI reflects the following:

A high score reflects a tendency to regard the self positively as a result of a feeling of personal strength, whilst a low score reflects feelings of low self-worth. The high trainer competency group reflects a stronger self-perception regarding their own worth or strength than the low trainer competency group.

In linking the empirical results with the literature review, the following seems to be evident:

Time management is a critical dimension for a competent trainer. Only with experience and the necessary skills based on knowledge will the less competent trainer develop his or her competence in managing time. Growth in psychological optimality will result in more realistic expectations and skill to manage his or her fears. This would support growth in time management skills.

A growth in self-perception and personal strength would support the skills of time management and vice versa. All in all this would result in higher levels of trainer competency and an upward growth spiral. The ultimate goal, namely competent employees contributing to organisational goal achievement, will be reached by these trainers.

5.2 Step 8: Integration and conclusion of research

This study was guided by the following research questions:

- * what is trainer competency, and does the literature refer to a trainer personality profile with reference to psychological optimality as characteristic ? ;
- * what is psychological optimal functioning, and is there a distinguishable personality profile for this individual ? , and
- * does the level of psychological optimisation predict trainer competency ?

From the above research questions, the following aims were formulated:

The general aim of this research was to ascertain the correlation and difference between trainer competency and psychological optimisation.

In terms of the literature survey, the specific aims were:

- * to define trainer competency and determine the personality profile of the competent trainer;
- * to define psychological optimisation and determine the personality profile of the psychological optimal functioning individual, and
- * to integrate the above-mentioned profiles.

Chapters 2 (training and its personality profile) and 3 (psychological optimisation and its personality profile) addressed and achieved the above three stated aims of the literature survey.

In terms of the empirical study, the specific aim was to ascertain the correlation and difference between trainer competency and psychological optimisation.

Chapters 4 and 5 addressed this through empirical testing and statistical procession of the data. A certain degree of significant statistical evidence was found supporting correlations and differences between trainer competency and psychological optimisation. With this the above stated empirical aim was achieved.

With regard to the central hypothesis of this study, namely:

If the personality profile of the competent trainer refers to aspects of self-development, then the competent trainer must possess the characteristics of the psychologically optimal personality; the literature survey provided supporting evidence for the before stated hypothesis. The empirical study however, although providing statistically significant evidence, failed to provide enough evidence supporting the hypothesis.

The results obtained from the empirical study did not support the results obtained from the literature survey.

Herewith the three research questions has been answered and the aims of the study achieved.

5.3 Step 9: Discussion on the limitations of the research

The limitations of the research are discussed with regard to the literature review and the empirical study.

With regard to the literature review the following limitations were encountered:

- * various competency models exist. A standardised model is not yet used in South Africa;
- * a limited amount of literature with reference to trainer competency exists, and
- * although the literature makes a direct link between self-development and trainer competency, no direct link between trainer competency and psychological optimisation is made.

With regard to the empirical study the following limitations were encountered:

- * the whole area of competency measurement represents a new concept;
- * specific behavioural examples could have been used in the TCQ;

- * other assessors such as trainees and training managers could have been used to support the self-assessment;
- * the impact of the organisation's culture on the individual assessment should not be underestimated. Trainers generally do not get feedback regarding their competency, and are not used to evaluate their own competence, and
- * the trainers' own assessment might therefore be more of a reflection of "knowledge about", based on theoretical knowledge and not on real skill or underlying values.

5.4 Step 10: Recommendations

The literature survey on trainer competency resulted in a profile of the competent trainer supporting the change in perception of the current and future role of trainers. Further research is necessary to determine if this profile is applicable to trainers in other environments and situations.

Considering the critical role fulfilled by trainers, by ensuring behavioural change in learners and influencing the self-directed search for meaning as central quest in people's lives, the concept of trainer competency and psychological optimisation can have significant applications in the field of training and development. Further research is necessary to measure if trainer competency does indeed result in transfer of learning and behavioural change in learners.

The findings of this research, specifically the link between attitudes and values, and psychological optimisation, should further be explored, tracing trainers' challenges and opportunities in developing a productive workforce, fulfilling individual needs and organisational objectives.

The literature survey resulted in an integrated personality profile reflecting trainer competency and psychological optimisation. The empirical study failed to provide enough statistically significant evidence supporting the literature survey. The assessment battery should be critically looked at, adding behavioural examples reflecting competent trainer behaviour on the knowledge, skills and attitude and values dimensions. The battery should be tested again to determine if psychological optimisation does indeed predict trainer competency.

It is also recommended that the influence of trainer competency and psychological optimisation on the training of trainers be measured to determine the applicability of "train the trainer" programmes.

REFERENCES

- Allport, G. W. (1955). *Becoming: basic considerations for a psychology of personality*. New Haven: Yale University Press.
- Allport, G. W. (1961). *Pattern and growth in personality*. London: Holt, Rinehart & Winston.
- Antonovsky, A. (1979). *Health, stress, and coping*. San Francisco: Jossey-Bass.
- Antonovsky, A. (1984a). A call for a new question - Salutogenesis - and a proposed answer - the sense of coherence. *Journal of preventative psychiatry*, 2: 1-13.
- Antonovsky, A. (1984b). *The sense of coherence as a determinant of health*. In Matarazzo, J. D, Weiss, S.M, Herd, J.A, Miller, N.E. & Weiss, S. M. (Eds). *Behavioural health: a handbook of health and disease prevention*: 114-129. New York: Wiley - Interscience.
- Antonovsky, A. (1985). The life cycle, mental health and the sense of coherence. *Israeli journal of psychiatry relation science*, 22, 4: 273-280.
- Antonovsky, H. & Sagy, S. (1986). The development of a sense of coherence and its impact on responses to stress situations. *The journal of social psychology*, 126, 2: 213-225.
- Antonovsky, A. (1987). *Unraveling the mystery of health. How people manage stress and stay well*. San Francisco: Jossey Bass.
- Broad, M. L. & Newstrom, J. W. (1992). *Transfer of training: action-packed strategies to ensure high payoff from training investments*. Reading: Addison-Wesley.
- Camp, R.R., Blanchard, P.N. & Huszco, G.E. (1986). *Toward a more organisationally effective training strategy & practice*. Englewood Cliffs: Prentice-Hall.

- Carmel, S. & Bernstein, J. (1989). Trait-anxiety and sense of coherence: a longitudinal study. *Psychological reports*, 65: 221-222.
- Carmel, S. & Bernstein, J. (1990). Trait-anxiety, sense of coherence and medical school stressors: observations at three stages. *Anxiety research*, 3: 51-60.
- Cilliers, F.v N. (1984). 'n Ontwikkelingsprogram in sensitiewe relasievorming as bestuursdimensie. Potchefstroom. (Thesis (D.Phil.) - PU vir CHO).
- Cilliers, F.v N. (1988). Die konsep sielkundige optimaliteit in bestuur. *IPB joernaal*, 10: 15-18.
- Coulson-Thomas, C. J. (1990). Developing tomorrow's professionals today. *Journal of european industrial training*, 15: 3-11.
- Drucker, P. F. (1989). *The new realities in government and politics, in economics and business, in society and world view*. New York: Harper & Row.
- Ellis, A. (1962). *Reason and emotion in psychotherapy*. New York: Lyle Stuart.
- Fomburn, C., Tichy, N. N. & Devanna, M. A. (1984). *Strategic human resource management*. New York: John Wiley & Sons.
- Frankl, V. (1962). *Man's search for meaning: an introduction to logotherapy*. Boston: Beacon.
- Gilley, J. W. & Egglund, S.A. (1989). *Principles of human resource development*. Reading: Addison-Wesley.
- Gould, W. B. (1993). *Frankl: life with meaning*. Pacific Grove: Brooks / Cole.
- Howell, D. C. (1989). *Fundamental statistics for the behavioural sciences*. 2nd ed. Boston: PWS Kent.

- Huysamen, G. K. (1993). *Metodologie vir die sosiale en gedragwetenskappe*. Halfwayhouse: Southern.
- Ivey, A.E. & Simek-Downing, L. (1980). *Counseling and psychotherapy: skills, theories, and practice*. Englewood Cliffs: Prentice-Hall.
- Kalimo, R. & Vuori, J. (1990). Work and sense of coherence - resources for competence and life satisfaction. *Behavioral medicine*, 16, 2: 76-89.
- Katz, D. & Kahn, R. L. (1978). *The social psychology of organisations*. 2nd ed. New York: John Wiley & Sons.
- Knapp, R. R. (1976). *Handbook of the personal orientation inventory*. San Diego: Edits.
- Knowles, M. (1984). *Andragogy in action: applying modern principles of adult learning*. San Francisco: Jossey-Bass.
- Kochan, T. A. & Barocci, T. A. (1985). *Human resources management and industrial relations: text, reading & cases*. Boston: Little Brown.
- Kohn, M.L. & Schooler, C. (1982). Job conditions and personality: A longitudinal assessment of their reciprocal effects. *American sociological review*, 87: 1257-1286.
- Laird, D. (1985). *Approaches to training and development*. 2nd ed. Reading: Addison-Wesley.
- Lessing, B. C. (1982). *Die rol van die opleier van die swart werker in Suid-Afrika. 'n Bedryfsielkundige studie*. Johannesburg. (Thesis (D. Com.) - RAU).
- Marsick, V. J. (1987). *Learning in the workplace*. London: Croom Helm.
- Marsick, V. J. & Watkins, K. (1990). *Informal and incidental learning in the workplace*. London: Routledge.

- Maslow, A. H. (1970). *Motivation and personality*. 3rd ed. New York: Harper & Row.
- McGuigan, F. S. (1968). *Experimental psychology - a methodological approach*. New Jersey: Prentice-Hall.
- McLagan, P. & Bedrick, R. (1983). *Model for excellence*. Alexandria: ASTD Press.
- McLagan, P.A. (1989). *The models-models for HRD practice*. Alexandria: ASTD Press.
- Morgan, G. (1980). Paradigms, metaphors, and puzzle solving in organisational theory. *Administrative science quarterly*, 25, 4: 605-622.
- Mouton, J. & Marais, H. C. (1990). *Basic concepts in the methodology of the social sciences*. Pretoria: Human Science Research Council.
- Murray, M. (1991). *Beyond the myths and magic of mentoring. How to facilitate an effective mentoring program*. San Francisco: Jossey-Bass.
- Nadler, D. A. & Tushman, A. (1989). *A model for diagnosing organisational behaviour: applying a congruence perspective*. In Tushman, M. L, O'Reilly, C, & Nadler, D. A. (Eds). *The management of organisations: strategies, tactics, analysis*. New York: Harper & Row.
- Nadler, L. (1970). *Developing human resources*. Houston: Gulf.
- Nadler, L. (1981). *Designing training programs. The critical events model*. Reading: Addison-Wesley.
- Patton, M. Q. (1975). *Alternative evaluation research*. Grand Forks: University of North Dakota Press.
- Peters, T. (1988). *Thriving on chaos: handbook for a management revolution*. New York: Alfred A. Knopf.
- Quitmann, H. (1985). *Humanistische psigologie*. Gottingen: Hubert & Co.

- Rae, L. (1992). *Assessing trainer effectiveness*. London: Gower.
- Reber, A. S. (1988). *The penguin dictionary of psychology*. Middlesex: Penguin.
- Robinson, R. (1987). *The mediating effect of organisational climate on personal growth amongst quality circle members*. Cape Town (Thesis (M.Com.) - University of Cape Town).
- Rogers, C. R. (1961). *A therapist view of psychology: on becoming a person*. London: Constable.
- Rogers, C.R. (1977). *Carl Rogers on personal power*. London: Constable.
- Rogers, C. R. (1983). *Freedom to learn for the 80's*. Culombus: Merrill.
- Rosenbaum, M. (1980). A schedule for assessing self-control behaviours: preliminary findings. *Behaviour therapy*, 11: 109-121.
- Rosenbaum, M. (1988). *Learned resourcefulness, stress and self-regulation*. In Fisher, S. & Reason, J.(Eds). *Handbook of life stress, cognition and health*: 483-496. Chichester: Wiley.
- Rosenbaum, M. (1990). (Ed). *Learned resourcesfulness. On coping skills, self-control, and adaptive behavior*. New York: Springer.
- Rothwell, W. J. & Sredl, H. J. (1992). *The ASTD reference guide to professional human resource development roles and competencies*. Vol. 1. 2nd ed. Amherst: HRD Press.
- Salkind, N. J. (1985). *Theories of human development*. 2nd ed. New York: John Wiley & Sons.
- Schultz, D. (1977). *Growth psychology: models of the healthy personality*. New York: Van Nostrand & Reinhold.
- Seifert, K. (1983). *Education psychology*. Boston: Houghton Mifflin.

- Shostrom, E. L. (1974). *Manual for the personal orientation inventory: an inventory for the measurement of self-actualisation*. San Diego: Edits.
- Statistica. (1991). Tulsa: Statsoft.
- Steward, V. & Laidlaw, B. (1992). *Leading edge management competencies: a research summary*. Bristol: Mosaic Management Consulting Group.
- Strümpfer, D. J. W. (1990). Solutogenesis: a new paradigm. *South African journal of psychology*, 20(4): 265-276.
- Strümpfer, D. J. W. (1992). *Psychological strengths as point of departure: fortigenesis*. Address on occasion of receiving PASA award, annual congress, Psychological Association of South Africa, Stellenbosch.
- Townsend, J. (1985) The trainer grid. *Journal for european industrial training*, 9(3): I-ii.
- Van Dyk, P. S., Nel, P. S. & Loedolff, P. van Z. (1992). *Training management: a multidisciplinary approach to human resources development in Southern Africa*. Halfway House: Southern.

Appendix A

*TRAINER COMPETENCY QUESTIONNAIRE
(TCQ)*

General instructions

Please answer all the questions by encircling the appropriate number on the 4 point scale. Please choose the one number that best matches your description of the item. It is important that you answer all the questions.

A. Knowledge

The body of information possessed by a person. It can be divided into procedural (knowing how) and declarative (knowing what) knowledge.

Assessment scale:

1	2	3	4
---	---	---	---

1	Have no knowledge of this aspect
2	Have minimal knowledge of this aspect
3	Have good, basic knowledge of this aspect.
4	Have complete, thorough knowledge

1. Training and development theories and techniques understanding

(a) Knowing the theories and methods used in training.

1	2	3	4
---	---	---	---

(b) Understanding the appropriate use of the different theories and methods.

1	2	3	4
---	---	---	---

2. Organizational behaviour understanding

Seeing organizations as dynamic, political, economic and social systems which have multiple goals.

1	2	3	4
---	---	---	---

3. Adult learning understanding

(a) Knowing how adults acquire and use knowledge, skills and attitudes.

1	2	3	4
---	---	---	---

(b) Understanding individual differences in learning.

1	2	3	4
---	---	---	---

4. Organisation development theories and techniques understanding

Knowing the techniques and methods used in organisation development and understanding their appropriate use.

1	2	3	4
---	---	---	---

5. Business understanding

Knowing how the functions of a business work and relate to each other. Knowing the economic impact of business decisions.

1	2	3	4
---	---	---	---

6. Organisation understanding

- (a) Knowing the strategy, structure, power networks, financial position and systems of Spoornet.

1	2	3	4
---	---	---	---

- (b) Knowing the environmental influences (external and internal) and how this will influence growth and change in the organisation.

1	2	3	4
---	---	---	---

B. Skill

The capacity of carrying out complex, well-organised patterns of behaviour smoothly and adaptively so as to achieve some end or goal.

Assessment scale:

1	2	3	4
---	---	---	---

1	Does not perform this aspect.
2	Rarely perform this aspect.
3	Can and do perform this aspect for basic situations.
4	Can and do perform this aspect for all situations.

1. Trainer as provider of learning

- (a) Shares with the trainee the responsibility for and control over the learning process.

1	2	3	4
---	---	---	---

- (b) Guides the training process as a collaborative effort.

1	2	3	4
---	---	---	---

2. Delivery of training/presentation skill

- (a) Presenting information so that an intended purpose is achieved.

1	2	3	4
---	---	---	---

- (b) Using the most appropriate training and development method at the correct time.

1	2	3	4
---	---	---	---

- (c) Utilising training aids effectively.

1	2	3	4
---	---	---	---

3. Group process skill

Influencing groups so that tasks, relationships and individual needs are addressed appropriately.

1	2	3	4
---	---	---	---

4. Coaching skill

- (a) Helping individuals recognise and understand personal needs, values, problems, alternatives and goals.

1	2	3	4
---	---	---	---

- (b) Coach rather than tell, questions not answers, guide not force.

1	2	3	4
---	---	---	---

5. Feedback skill

Communicating information, opinions, observations and conclusions so that they are understood and can be acted upon.

1	2	3	4
---	---	---	---

6. Questioning skill

Gathering information from stimulating insight in individuals and groups through the use of different probing methods.

1	2	3	4
---	---	---	---

7. Communication skill

(a) Empathy with the feelings of people.

1	2	3	4
---	---	---	---

(b) Able to work with the hearts and minds of people.

1	2	3	4
---	---	---	---

(c) Able to involve people.

1	2	3	4
---	---	---	---

8. Diagnostic ability

The ability to know what questions to ask to test the present and potential size of the issue and its implications.

1	2	3	4
---	---	---	---

9. Relationship building skill

(a) To build trust and mutual knowledge, expectations of support, openness and shared values.

1	2	3	4
---	---	---	---

- (b) Establishing relationships and networks across a broad range of people and groups.

1	2	3	4
---	---	---	---

10. Writing skill

Preparing written material that follows generally accepted rules of style and form, is appropriate for the audience, is creative and accomplishes its intended purpose.

1	2	3	4
---	---	---	---

11. Intellectual versatility

- (a) Recognising, exploring, and using a broad range of ideas and practices.

1	2	3	4
---	---	---	---

- (b) Thinking logically and creatively without undue influence from personal biases.

1	2	3	4
---	---	---	---

12. Observing skill

Recognising objectively what is happening in or across situations.

1	2	3	4
---	---	---	---

13. Visioning skill

Projecting trends and visualizing possible and probable futures and their implications.

1	2	3	4
---	---	---	---

C. Attitudes and values

An attitude renders one fit to engage in the performance of some task. The term entail several components, namely cognitive (consciously) held belief/opinion); affective (emotional tone/feeling); evaluative (positive or negative); and conative (disposition for action). Values refer to an abstract and general principle concerning the patterns of behaviour with a particular culture or society.

Assessment scale:

1	2	3
---	---	---

1	Yes
2	Uncertain
3	No

1. Self-knowledge

- (a) I know my personal values, needs, interests, and competencies and their effects on others.

1	2	3
---	---	---

- (b) I know my own strengths and weaknesses.

1	2	3
---	---	---

2. Values about ends, not means in organization

- (a) I have firm ethical values, but am flexible about the means by which those values are to be achieved.

1	2	3
---	---	---

- (b) I am open to debate about what specific values look like in practice.

1	2	3
---	---	---

3. Focusing on principles

- (a) I think, question, and take personal responsibility for my principles.

1	2	3
---	---	---

- (b) I encourage others to do the same.

1	2	3
---	---	---

4. Person-centered

- (a) I have patience and persistence with people.

1	2	3
---	---	---

- (b) My efforts are directed towards empowering people.

1	2	3
---	---	---

5. Humanistic value system

(a) I believe in the importance of the individual.

1	2	3
---	---	---

(b) I enjoy watching people grow.

1	2	3
---	---	---

6. Establish a climate that will foster learning, learner innovation, participation and development

(a) I have an attitude that is empathetic, accepting and understanding.

1	2	3
---	---	---

(b) I am honest in giving and receiving feedback.

1	2	3
---	---	---

7. Maturity

(a) I have self-confidence and the courage to stand by my views.

1	2	3
---	---	---

(b) I am willing to take necessary risks.

1	2	3
---	---	---

(c) I am able to cope with rejection, hostility and suspicion.

1	2	3
---	---	---

8. Enthusiastic, outgoing and flair

I have the ability to make learning enjoyable and exiting.

1	2	3
---	---	---

9. Secure within self

I am satisfied with myself.

1	2	3
---	---	---

10. Willing to change self

I demonstrate through my actions that I am open to change and project growth.

1	2	3
---	---	---

11. Intelligence

I am able to quickly adapt and adjust to learners' questions and answers in the context of the information being taught. "Think on feet."

1	2	3
---	---	---

12. Act ethically

(a) I show respect for individual, group, population and gender differences.

1	2	3
---	---	---

(b) I maintain appropriate confidentiality about individuals.

1	2	3
---	---	---

(c) I say no to inappropriate requests.

1	2	3
---	---	---

(d) I balance organisational and individual needs and interests.

1	2	3
---	---	---

(e) I am aware of and manage my own personal biases.

1	2	3
---	---	---