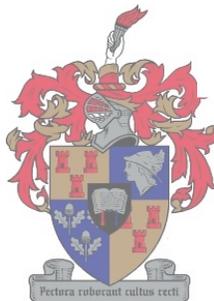


# **The Relationship between Ego Development and Sense of Coherence**

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**Thesis presented in partial fulfillment of the requirements for the degree of Masters of Arts  
(Counselling Psychology) at the University of Stellenbosch.**

**Supervisor: Prof TWB van der Westhuysen**

**December 1999**

## DECLARATION

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I, the undersigned hereby declare that the work contained in this thesis is my own original work, and that I have not previously in its entirety or in part been submitted at any other university for a degree.

S.E. Nortier

24.11.99

Date

## ABSTRACT

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This study is exploratory in nature and explores the potential relationship between Loevinger's concept of ego development and Antonovsky's Sense of Coherence (SOC) construct. The common ground shared by these theories lies in the search for an orientation to life or an attitude to life through which experiences may be made sense of and organised.

The search for meaning in Loevinger's theory is facilitated by the development of the ego which has a core organising function. Loevinger's theory of ego development posits ten stages through which individuals move across the lifespan. Very few individuals ever reach the final stages of ego development as stages are not inevitable. The rate at which progression through the stages takes place varies, as human beings interpret life experiences to a lesser or higher degree of coherence.

The salutogenic approach to wellbeing that was developed and refined by Antonovsky, posits that health and disease are not absolutes, but are rather situated along a continuum. Individuals are located at different points along this continuum and are able to move to different positions thereon. SOC is comprised of three principal components, namely 'comprehensibility', 'manageability' and 'meaningfulness'. The degree to which these components are present, represent the degree to which an individual exhibits a global orientation to life that includes the view that life is comprehensible, manageable and meaningful.

The Washington University Sentence Completion Test (WUSCT) that measures the level of ego development, and the Orientation to Life Questionnaire (OLQ) that measures SOC were completed by 45 individuals (n=45) aged 30 and older. Analyses of the data showed significant positive relationships between level of ego development and level of education, ego level and 'manageability', SOC and level of education, and SOC and socio-economic status.

## OPSOMMING

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Die huidige navorsingsprojek is eksploratief en ondersoek die potensiële verwantskap tussen Loevinger se konsep van ego ontwikkeling en Antonovsky se 'Sense of Coherence' (SOC). Die ooreenkoms tussen dié teorieë is geleë in die soeke na 'n oriëntasie of houding teenoor die lewe waardeur lewensondervindinge georganiseer en sin van gemaak kan word.

Die soeke na betekenis in Loevinger se teorie word gefasiliteer deur die ontwikkeling van die ego se kern organisasiefunksie. Loevinger se teorie van ego ontwikkeling stel tien stadia voor waardeur individue gedurende die lewenspan beweeg. Dit is selde dat individue die finale stadia bereik aangesien alle stadia nie noodwendig bereik hoef te word nie. Die tempo waarteen progressie deur die stadia plaasvind, verskil tussen individue omdat nie alle individue lewenservaringe in dieselfde mate van koherensie ervaar nie.

Die salutogeniese gesondheidsmodel wat ontwikkel en verwerk is deur Antonovsky, stel voor dat gesondheid en siekte nie absolute konstruksies is nie, maar eerder dat dié konstruksies op 'n kontinuum geleë is. Individue bevind hulself op verskillende 'stasies' op die kontinuum en is daartoe in staat om na verskillende punte op die kontinuum te beweeg. SOC bestaan uit drie komponente, naamlik verstaanbaarheid, hanteerbaarheid en betekenisvolheid. Die graad waarin die drie komponente teenwoordig is, verteenwoordig die graad waartoe die individu 'n globale oriëntasie teenoor die lewe het en waarin die lewe as verstaanbaar, hanteerbaar en betekenisvol beskou word.

Die 'Washington University Sentence Completion Test' (WUSCT) wat die vlak van ego ontwikkeling meet en die Lewensoriëntasievraelys (OLQ) wat SOC meet, is deur 45 (n=45) individue 30 jaar en ouer voltooi. Beduidende positiewe korrelasies is aangetoon tussen ego vlak en akademiese vlak, tussen ego vlak en hanteerbaarheid, SOC en akademiese vlak en SOC en sosio-ekonomiese status.

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## CHAPTER ONE

### Problem statement and motivation for conducting this study

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#### 1.1 Aims of the study

The current investigation is exploratory in nature and aims to answer the question as to whether a relationship exists between Jane Loevinger's (1976) concept of ego development and Antonovsky's (1987a) 'Sense of Coherence'(SOC) construct. In essence then, two theoretical orientations are relevant to this investigation. Antonovsky's theoretical approach encompasses a 'global orientation' that holds that individuals who are able to organise their resistance resources well will perceive life as more comprehensible, manageable and meaningful than those individuals who cannot manage to organise their resources, thereby placing individuals at different points on the health/disease continuum (Antonovsky, 1991). Jane Loevinger on the other hand holds that all people undergo a gradual process through which they search for coherent meanings in daily experiences, shaping a certain attitude to life and its challenges that at different phases in life place them at different stages of ego development (Hy & Loevinger, 1996). As individuals proceed through life, they thus tend to organise their inner and outer worlds and the accompanying resources in a proliferating degree of complexity.

The SOC construct is comprised of three components, namely comprehensibility, manageability and meaningfulness. According to Antonovsky (1987b), each of these components (discussed at length in chapter 3) represent a separate dimension of the SOC construct, and accordingly this study was also aimed at investigating whether any of these three components could be specifically related to ego development. In order to motivate why one would choose to relate the aforementioned two theoretical constructs, a brief introduction to each is necessary.

##### 1.1.1. An introduction to Jane Loevinger's notion of ego development

Jane Loevinger's (1976) theory of ego development (discussed comprehensively in Chapter 2) takes cognisance of the work of diverse researchers such as Erik Erikson, Lawrence Kohlberg, Jean Piaget, Harry Stack Sullivan, Sigmund Freud, Carl Jung and others. A careful study of the work of some of the greatest theorists in psychology, philosophy and humanistic psychology, combined with her own valuable insights and integration has led to one of the most comprehensive developmental stage theories applicable to adolescents and adults currently known. Loevinger's notion of ego development attempts to trace how human beings strive for coherence throughout life by

interpreting life experiences in a meaningful way. Ego development, in a nutshell can thus be conceptualised as a lifelong process during which interrelated patterns of cognitive, interpersonal and intrapsychic processes are integrated by the individual to form “unified, successive and hierarchical world views” (Weathersby, 1981; p. 52).

Loevinger has developed a measuring instrument known as the Washington University Sentence Completion Test (WUSCT) and an accompanying scoring manual to quantify the ten different stages of ego development (Hy & Loevinger, 1996). The levels or stages of ego development embody a self-reinforcing frame of reference through which experiences in both the inner world of the individual and the external reality is filtered and made sense of. For Loevinger (1976), ego development is much more than a personality trait but includes many other traits to be integrated in developmental sequences throughout the lifespan. She regards it as the ‘master trait’ second only to intelligence. Loevinger’s stages are sequential and cumulative, but not inevitable as most individuals never reach the final stages of ego development. The rate at which adults move through the later stages varies widely, and one can only move to the next stage once development in the current stage has been consolidated.

Loevinger’s theory has made an extremely valuable contribution to the field of adult development for a number of reasons. It is a comprehensively researched and well integrated theory; it has as its foundation some of the best theoretical tenets offered by psychology and philosophy over the last century, and it lays down no rigid rules that inevitably connects age with specific levels of ego development. It is however Helson and Roberts (1994) who perhaps verbalise the value of Loevinger’s theory best when they state that “Ego development is not only a matter of inner complexity. It is the story of the hero, which is a hazardous search for realisation, self-knowledge and maturity” (p.919).

### **1.1.2 An introduction to Aaron Antonovsky and the salutogenic approach**

Aaron Antonovsky (1979) coined the term ‘salutogenesis’ (‘salus’ = health; ‘genesis’ = origin’) to counteract the well-known term, ‘pathogenesis’. Whereas pathogenesis examines the origins of disease, salutogenesis investigates the origins of health and well-being. Antonovsky argues as follows: the human condition is stressful as stressors are omnipresent in the external environment. Despite the prevalence of stressors, many individuals manage to stay healthy. Antonovsky was interested in why individuals manage to deal effectively with life’s stresses despite adversity - what he refers to as the ‘mystery of health’ (Antonovksy, 1987a).

Unlike the pathogenic paradigm where individuals are classed as either ill or healthy, Antonovsky's salutogenic approach postulates a health/disease continuum along which individuals are located and along which individuals move toward either pole at certain times. Antonovsky (1987a) found tentative answers to his questions in the form of Generalised Resistance Resources (GRR's) that serve to 'protect' individuals against the potential impact of stressors. GRRs may be drawn from a number of sources such as ego strength, financial stability, social support, cultural activities, physical health, strong family bonds, etc. At this point it should be quite clear that GRR's could not provide all the answers. What was needed was a construct that could embody the concept GRR's, and moreover capture the essence of the salutogenic approach. Antonovsky's answer came in the refinement of his salutogenic model which provided the basis for the Sense of Coherence (SOC) construct. Although GRR's are very much a part of SOC, this construct is broader. It becomes the culmination of successful coping experiences and a world view that is strengthened with every new potentially stressful life experience that the individual is able to make sense of. The eventual definition for SOC is offered by Antonovsky (1987a) when he states the following:

The sense of coherence is a global orientation that expresses the extent to which one has a pervasive, enduring though dynamic, feeling of confidence that (1) the stimuli deriving from one's internal and external environments in the course of living are structured, predictable, and explicable; (2) the resources are available to one to meet the demands posed by these stimuli; and (3) these demands are challenges, worthy of investment and engagement. (p. 725)

It is mainly this 'global orientation' that this script looks toward in exploring a possible relationship with Loevinger's notion of ego development. Antonovsky's (1987a) coherent world can essentially be viewed as a system, always in a state of flux wherein the world is continuously made sense of (The systemic component of Antonovsky's theory is discussed in chapter 3). If the required resources can be mobilised in order to make sense of the world, and if this process is repeated often, the individual is likely to develop the 'global orientation' that may give rise to a general perception of the world as making sense despite adversity. It is at this point necessary to explore why one would choose to relate ego development to Antonovsky's salutogenic world view.

## **1.2 Motivation for relating ego development and SOC**

Why would one choose to focus on the potentiality of such a conceptual relationship? The answer lies in the common ground shared by these two theoretical approaches to adult development.

Loevinger's stage developmental conception of ego development refers to the "...the method of facing problems, and the whole attitude toward life..." (Hy & Loevinger, 1996; p. 3). If one is to compare the core definition of ego development to Antonovsky's SOC construct, the possibility of a relationship becomes clear. The affinity between Antonovsky's 'orientation to life' and Loevinger's 'attitude to life', Loevinger's 'method of facing problems' and Antonovsky's 'dynamic feeling of confidence' (Antonovsky, 1993a) point toward the shared search for coherent meanings in experience. Antonovsky (1987a) attempts to provide his answer through the Orientation to Life Questionnaire (OLQ, available on request) whereas Loevinger (Loevinger, Wessler & Redmore, 1970) seeks answers through her stages of ego development denoted by the WUSCT (available on request). At this stage the primary motivation for postulating a relationship between these two approaches should become clear. By combining Loevinger's approach with Antonovsky's approach one is able to explore the possibility that an individual's level of ego development is somehow connected to his/her global orientation of the world as comprehensible, manageable and meaningful. If one is then to work from the assumption that individuals continuously refine and organise in more complex ways the self-system known as the ego, one may also attempt to attain a preliminary understanding as to why some individuals manage to contextualise adversity better than others do (SOC), and whether this is in any way connected to the development of the ego. Two important points to bear in mind is, firstly that ego development cannot be equated to SOC despite the common ground shared by these approaches (discussed at the end of Chapter 2) and secondly that no causality between these two constructs may be assumed as it is the existence of a *relationship* that is the focus of the current investigation.

### 1.3 Conclusion and overview

In this chapter the concepts of ego development and SOC were introduced and a brief exposition of the main aims of the study was offered. In sum, this exploratory study explores a potential relationship between ego development and SOC and between ego development and each of the three subscales yielded by the OLQ. The motivation for conducting such a study was also offered.

This script consists of seven chapters. Chapter two provides a theoretical overview of the main theorists upon which Loevinger's ego developmental theory is based and aims to clarify and contextualise Loevinger's theory within available research and theory. The discussion then moves to the SOC construct outlined in Chapter three. The two relevant measuring instruments used in this study are introduced in Chapter four along with other methodological concerns, whilst the research

results are presented in Chapter five. Chapter six is devoted to the discussion of results and Chapter seven explores the possibilities for future research.

## CHAPTER TWO

### Defining and Contextualising the Ego and Ego Development

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#### 2.1 Introduction

The field of ego psychology is vast and ever-evolving as new findings continuously shed light on numerous emerging questions surrounding this area of psychology. This chapter does not make the pretence of including all of the research in this field, but has as its focus the search for an understanding of what it is that denotes the somewhat abstract notion of the ego and its development. In doing so, the views of Jane Loevinger (1976) enjoy particular emphasis as this author and researcher's measure of ego development provides one of the primary research tools in the current investigation into ego development and its potential relationship with Antonovsky's (1987a) Sense of Coherence construct. In order to understand the bulk of Loevinger's theoretical framework in terms of her understanding of the ego and the way in which it develops, it is necessary to take cognisance of the main theorists who contributed to an understanding of the field. It was only through a thorough study of the work of several theorists that Loevinger was able to comprehend and construct her extensive and well known theory of ego development, and accordingly this script too devotes a considerable amount of time in search of an understanding of the ego, its development and what it represents. The decision to include other theories related to the ego therefore stems from the firm conviction that a sound foundation of the construct as a whole is needed before one may attempt to understand Loevinger's theory which at times seems rather complicated. The theorists deemed by Loevinger to have made meaningful contributions in this regard are therefore included in this theoretical section with section 2.10 devoted to integrating such theories. There is however more to an understanding of the ego than theories only, and accordingly personality traits, links with psychopathology and defence mechanisms are also explored within an ego developmental context.

At this point in the research it seems as if one needs to integrate three main variables if one is to make any attempts at finding an explanation for differing levels of ego development. Firstly, one needs to take into account theoretical tenets, secondly one needs to examine how individual traits may potentially influence ego functioning, and thirdly one should resist the temptation of generalisation, for our subject matter always remains uniquely human and as Helson and Roberts (1994) demonstrated, unique, challenging experiences can potentially influence the ego development of individuals in an unique way. Life paths thus have the potential to encourage new

thinking patterns and trigger almost inevitable adaptation to the environment, or life paths may lead to negative adaptation, and ultimately stagnation at certain ego levels or even regression (Helson & Roberts, 1994).

In conclusion an almost cautionary statement, often repeated throughout this script needs to be made, namely that higher levels of ego development do not function as immediate solutions to life's problems. High levels of ego development do not guarantee happiness, nor do these predict 'easier' life paths and inevitable elevated levels of adjustment to life's problems. A high level of ego development is associated with a set of 'tools' that include psychological mindedness, self-chosen standards according to which one lives life and ways of perceiving life that might ease the journey. In a way then, the ego is instrumental in the organisation and planning of that lifelong journey, and accordingly a clear understanding of the ego is essential if one takes the business of making sense of life's experiences seriously.

In the first section of this chapter eight main theorists cited by Loevinger (1976) in her primary work, *Ego Development* are discussed and their respective contributions to the field of ego psychology are examined with a particular emphasis on Loevinger's theory in the final theoretical subsection. The forelast section of this chapter is devoted to finding an all-embracing way to view the ego through a theoretical synthesis that takes cognisance of all of the theories presented here, whilst in the final section an exposition of some of the main research areas and findings within these areas are put forward. This discussion now turns to the first theorist who contributed to an understanding of the ego, namely Sigmund Freud.

## 2.2 Freud's conception of the ego

Almost all current definitions of the ego are in some way connected to the Freudian conception of the ego, and it is therefore important to familiarise oneself briefly with the main tenets of this theory. The Freudian view at times appears to be rather confusing and complex, as Sigmund Freud for example never placed the same emphasis on the ego as did his daughter, Anna Freud (1937). Even the briefest literature review clearly reveals how different authors interpret Freud's original work in different ways. A full discussion of the ego in Freudian terms cannot be encompassed by this script, and accordingly this discussion will be structured in three parts: firstly, how the Freudian ego comes into existence, secondly the mechanistic view of the ego, and finally the process view of the ego.

### 2.2.1 The early development of the ego

The ego in the neonate does not exist as the ego and non-ego are one at this time. At this stage of human development, differentiation between the self and external objects has not yet occurred. According to Sigmund Freud, the new-born infants' incapability to experience separateness constitutes a feeling of something immeasurable that is in unity with the entire cosmos. In its earliest form the Freudian ego is thus all inclusive and whole, encompassed by what Freud termed the 'oceanic feeling' - that feeling of satisfaction that can only be fully experienced by the young infant when he/she is in union with the mother's breast (Klopfer, Ainsworth, Klopfer & Holt, 1954). It is only later that the division between the self and the external world gives rise to an ego that is devoid of the 'oceanic feeling'.

The first signs of 'separateness' come in the form of the first oral object as the internal and external worlds move apart. The oceanic feeling's omnipotent power, now greatly diminished is recreated in a sense by the projection of this omnipotence upon the external object. It is almost with a sense akin to relief that the infant realises the value in mastering the external object, as this would provide the key to once again attaining the oceanic feeling. Narcissism clearly plays a major role in this mastery process (Haan, 1977).

In a nutshell, the origin of the ego and the origin of the perception of an external reality are closely intertwined. The ego thus becomes that part of the human mind that deals with reality, whilst the external reality in turn shapes the ego. The feeling of individuality depends on one's sense of separateness from others.

One of the primary 'forces' to be kept in check by the ego at such an early stage is 'excitation'. An excess of excitation may potentially 'swamp' the ego and give rise to 'primal anxiety' that may weaken ego functioning in the process. It is at this point that emergency mechanisms known as vegetative discharges attempt to defend against the excessive excitation state that in turn causes 'primal anxiety'. The next logical step taken is one in which 'primal anxiety' is avoided at all costs by an *anticipatory* function. This function includes the ability, albeit primitive to judge, thereby enabling the ego to anticipate potential consequences of actions, e.g. anticipating an action as dangerous because the consequence may be experienced by the organism as traumatic. In this sense then anxiety becomes necessary as it signals potential harmful consequences. Unlike 'primal anxiety' that is a threat to the ego, this anxiety serves as a catalyst in the development of the ego. Accompanied by such 'emotional' advances, motoric development stands central in the evolution of

the ego as increased mobility enables the child to experiment, build frustration tolerance, develop his/her reality testing and enables the development of an independence from the environment. This in turn facilitates a separation between the ego and non-ego that prepares the way for self-assertion. (Klopfer et al., 1954).

As the child develops, attempts are made at once again experiencing the 'oceanic feeling' by embarking on a search for self-esteem. The protagonists in this search take on the form of the parental figures from which loving and caring is demanded in attempts to recreate the oceanic feeling. A later source in the quest for this feeling becomes the super ego (Freud, 1950) that develops at approximately four to six years of age (Möller, 1980).

## 2.2.2 The ego as a mechanistic state

The view that the ego is part of a triad that is comprised of the id, ego and superego in a type of 'hierarchy' is the most common conceptualisation of the ego in Freud's work. It seems as if though the positivist climate of the time heavily influenced the striving for a 'scientific' approach, hence the mechanistic state of the ego (Haan, 1977).

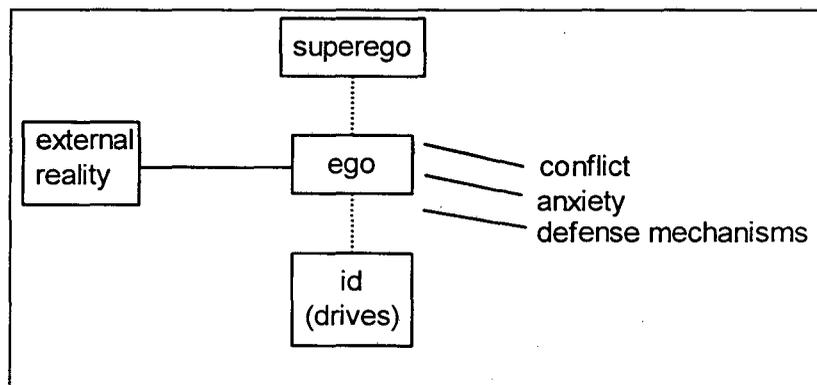


Figure 1. Freud's structural view of the ego

Freud's ego is also closely intertwined with his 'drive' theory. In the introductory section of this discussion the physiological drives of the baby was prominent, but in the organism's later development the principal drives now become sex and aggression. From the author's conceptualisation in Figure 1 it can be seen that the ego thus once again enters the picture, mainly as a 'traffic controller' that regulates the flow of internal and external events between the id on the one hand and the superego on the other. The function of the ego is however not only one of mediation between the id (drive impulses) and the demands of the superego (the requirements of external

reality), but also of defence in the sense that it has to ‘protect’ the triad system as a whole against “unacceptable drive impulses, threatening anxiety, and overwhelming shame or severe guilt” (Klopper et al., 1954, p. 42). Figure 1 furthermore depicts the ego as being under constant pressure from an array of different demands, both from the external reality and the superego and id. Genetically this positivist ‘system’ has its origin in the introjected relations between the id and reality, and topographically that part of the system known as the ego is partly conscious and partly unconscious. Defence mechanisms are predominantly seated within the unconscious realm.

When Freud thus referred to the ego he mostly did so in a structural way indicative of a measure of organisation. This organisation seems rather comfortable in the way that the personality or person can be made sense of in the three composite parts forming a whole, and yet this ‘organised’ way of approaching the triad does not provide all the answers. As a whole the ego strives for consistency, whilst the id and superego are unconscious structures and therefore not organised - and it is precisely here where the whole matter becomes rather complicated in Freud’s formulation, for as was mentioned earlier, the ego is partly unconscious and partly conscious. The ego may therefore contain certain inconsistencies although its *striving* is always toward consistency (Loevinger, 1976).

### 2.2.3 The processing view of the ego

Freudians sometimes regard the ego as having a processing function. This implies that the patient in therapy necessarily forces the therapist to interpret the process aspects in order to practice effective therapy (Haan, 1977). It is here where a movement away from the ego as a structure is seen in that the therapist interprets *within* such a structure, focusing on the process. Freud himself was aware of such an ‘additional’ capacity owned by the ego when he states the following in terms of its process function: “After considering the present state of things and weighing up earlier experiences, (the therapist intellectually) endeavours by means of experimental action to calculate the consequences of the proposed line of conduct” (Freud, 1949, p. 110). Such a statement necessarily opens up the question as to whether or not the ego is autonomous, and the answer is in the negative. The ego can never be completely free from the demands of the id and the superego in the same way that the ego is only partly conscious and partly unconscious.

## 2.3 C.G. Jung’s conception of the ego

*The organ of awareness is called the ego, and as such the ego functions as the centre of consciousness.* (Singer, 1994, p.15)

The ego in analytical Jungian psychology is part of the whole of consciousness at any given moment in time. In fact, the ego's whole orientation is geared towards its own emergence from the unconscious realm, affording the ego the capability of becoming conscious (Singer, 1994). Jung's conception of the ego seen in terms of its primary functions not only stands outside the realm of the unconscious forces of the psyche, but is in opposition to such forces. In this sense then the ego has a protective function in that it strives to protect the conscious life of the personality against unconscious threats. The ego thus becomes a 'mediator' between the outer reality and the forces from the unconscious (Klopfer, et al., 1954), and accordingly we are never free from the confrontations that occur between the ego and the unconscious (Singer, 1994). In such a conception of the ego Freud's notion of the superego will thus be included, as Jung's ego includes the individual's conscience too. The keyword in the Jungian understanding of the ego seems to be '*conscious*'. The ego is that entire part of the individuals' personality of which he/she is aware - that part of the personality in terms of which he/she identifies him/herself.

The ego arises from the psyche in the young child. Jung refers to this structure as a "complicated base" (Jung, 1993; p. 381) as the psyche, even long before it has reached a state of consciousness is by no means a *tabula rasa*, but is 'loaded' with uniquely human instincts and higher functions. When this base ceases to function, life ceases. Experience throughout the entire lifespan facilitates the growth and development of the ego, but the degree to which such growth and development occurs depends on the integration of formerly unknown knowledge into the realm of the ego. This 'unconscious knowledge' has two sources, namely *knowledge* of the world (both formal knowledge in the form of schooling, and empirical experience) and *wisdom* (an understanding of human nature including one's own nature) (Singer, 1994). This takes on the form of a lifelong process that is closely intertwined with the emergence of the Self.

The Jungian approach *includes* the ego in the Self and it is for this reason that the concept of the *Self* cannot be fully understood without acknowledgement from the ego. If we are to conceptualise Jung's view of the personality in terms of different 'centres', then Jung's concept of the Self encompasses a second centre of the personality, less conscious and less differentiated than the ego. This makes sense when one briefly returns to the preceding paragraph where it was stated that the ego mediates between the outer reality and unconscious forces. The Self too has a mediating function in that it mediates between the ego itself and the 'archaic' forces of the unconscious. At first glance the relationship between the Self and the ego may seem extremely complicated - however it soon becomes quite clear that both of these structures have their respective functions and

places: "...the Self has as much to do with the ego as the sun with the earth. They are not interchangeable" (Jung, 1953, p. 236).

Both the ego and the Self make contact with unconscious forces, but whereas the ego tries to *defend* against these, the Self attempts to *amalgamate* by absorbing as much of the creative power of these forces as the unconscious personality will allow for. The Self evolves very gradually and becomes a compensation for the continuous struggle between the external forces of reality and the internal unconscious forces. Within the Self lies the ego, the 'only content of the self that we do know' (Jung, 1953, p. 238). The ego and the Self is therefore neither opposed nor subjected to each other, but merely attached. Whereas the Self functions as the centre of the *objective* psyche (collective unconsciousness), the ego functions as the center of the *subjective* psyche (consciousness). It is only through this mirroring effect that the Self can aspire to life's goal, namely *individuation*. This is a process of realisation or self-knowledge as the Self is recognised and reflected by the ego, (Von Franz, 1980) and accordingly such a sensing of the Self can only be enabled through the ego. Klopfer et al. (1954, p. 568) summarises the Jungian conception of ego functioning best when they refer to the task of the ego as functioning in the 'service' of self realisation.

The significance of the ego in Jungian analytical psychology is prominent. Jung clearly regarded the process of individuation as central to a meaningful existence (Jung, 1953; Singer, 1994), a meaningfulness that can only be attained through self-awareness that in turn must necessarily be facilitated by the functioning of the ego.

## **2.4 Erik Erikson's psychosocial theory of human development**

### **2.4.1 Introduction**

No attempt at viewing the ego within a developmental context would be complete without taking cognisance of Erikson's theory as the ego has a definite function within each of the eight developmental stages that Erikson posits. In fact, progression to the next stage is not likely to be successful if the ego has not performed its functions adequately in the preceding stage. In Loevinger's opinion Erikson's theory essentially deals with the development of the ego, although it is often intertwined with psychosexual development (Loevinger, 1976). This section of the script will thus briefly examine the function of the ego within the context of Erikson's well-known 'Eight ages of Man' (Erikson, 1959). The immediate task at hand is however to clarify what Erikson meant when he referred to the ego within a developmental paradigm.

## 2.4.2 Erikson's theory of development in the context of the ego

The purpose of this section of the script is not to rehash the very familiar stages of psychosocial development posited by Erikson, but rather to contextualise these stages within an ego developmental paradigm. First and foremost Erikson's stages are sequential, each characterised by a unique conflict that he deems to be appropriate to a particular developmental stage and age grouping. One soon realises that thinking along pure positivist lines in terms of Erikson's successive stages will not prove to be beneficial. The primary contribution that his theory seems to make is more in terms of a sociological and philosophical point of view, and this may render the relation of his theory to the theory of ego development quite confusing at times (Loevinger, 1976).

The ego of the individual in the developmental process grows and is strengthened throughout the eight developmental stages that Erikson posits, and accordingly ego development is very much a part of, if not essential to each of these stages. Erikson's comment on the connection between his stages and the ego is clarified in an article (Erikson, 1963) when he states the following in relation to his proposed stages: "Ego qualities emerge from critical periods of development by which the individual demonstrates that his ego, at any given stage, is strong enough to integrate the timetable of the organism with the structure of social institutions" (Erikson, 1963, p. 221).

No human being is exempt from this process in which societal and other social pressures impact on him/her, and it is here where Erikson attempts to fill in the spaces left by Freud's theory in terms of the reality that humankind has to deal with. (Early Freudian theory with its predominant intrapsychic focus did not explicitly deal with this reality). In Eriksonian terms it is the *interaction* between the social reality (both familial and cultural influences) and biological components that encompass the scope of the development of the individual personality. The very way in which Erikson conceptualises personality growth shares certain commonalities with biological development. In the same way that human beings develop sequentially in a biological way, the personality too develops sequentially - hence his reference to the "epigenetic principle of growth" (Erikson, 1959, p. 52) that implies different parts arising from a ground plan in special ascendancy to form a whole.

"Phase-specific life crises" (Polansky, 1982) are located along a continuum and the resolution of such crises depend both on the type of person that the individual is (the self) and the type of situation that the individual finds him/herself in (sociocultural factors). In fact, if the individual's ego is to develop and strengthen it is essential that the individual finds a way of dealing with the

ever-present societal pressures (Lowis, 1989). Once again one sees the importance of the interaction between the self and sociocultural factors in the development and organisation of the ego.

### **2.4.3 Ego development or psychosexual development: Clarifying the confusion**

Of particular importance in an attempt to grasp Erikson's theory in relation to Loevinger's theory of ego development is distinguishing psychosexual development from the development of the ego in Eriksonian terms. Loevinger (1976) attempts to clarify this issue by stating that Erikson's psychosexual model of development serves as the overarching structure that incorporates both psychosexual and ego development. Such a view stands in direct contrast to Adler's view that regards the ego structure as primary, thereby incorporating psychosexual phenomena (Loevinger, 1976). The preferred approach in terms of finding a middle ground between two such extreme views would probably lie in acknowledging that both psychosexual development and ego development should be taken cognisance of if one is to capture the complexity of human development, but such an undertaking is not quite that simple. The important point to realise is that ego development cannot be measured in the same way that psychosexual development is measured. The reason for this is at first glance rather complex, but it does make good sense:

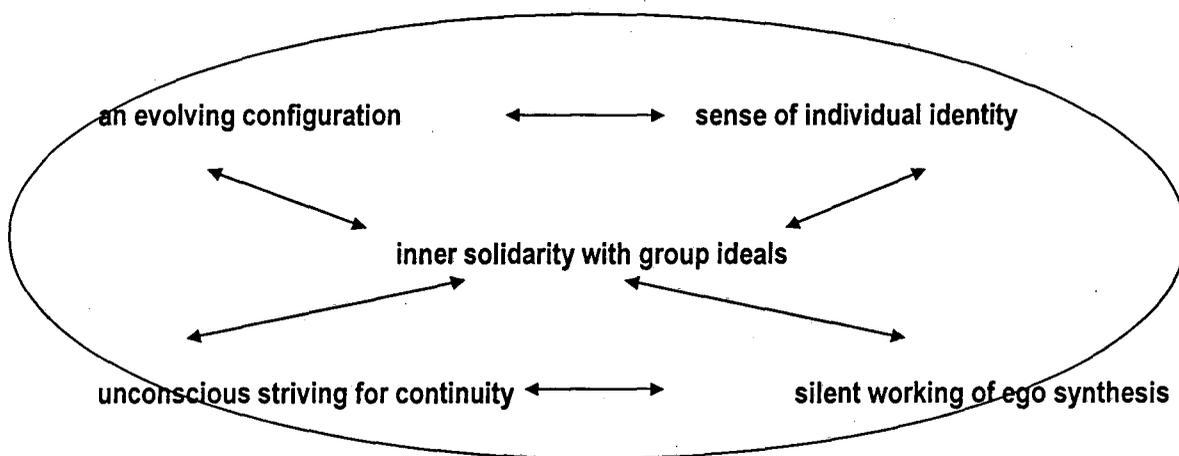
Psychosexual development does not constitute a continuum such that evidence of functioning at one level contraindicates functioning at another level...This aspect contrasts with ego and intellectual development..., ego development (can be viewed as) a succession of increasingly complex views of the world. There does not seem to be any corresponding aspect of psychosexual development. (Loevinger, 1976, p. 174)

In a nutshell then, Loevinger is saying that although one needs to take into account both ego development and psychosexual development when working with the emerging personality, it would be a pointless exercise to attempt a correlation between ego development on the one hand and psychosexual development on the other. The most that one can attempt is to relate these constructs to each other.

### **2.4.4 Exploring ego identity within Erikson's theory**

Even the briefest examination of Erikson's work reveals that any attempt to understand what was meant by the term ego identity has to take into account several components. Loevinger (1976; p. 375) draws these components together and the overall impression leaves one with a sense of constant flow as the ego constructs its identity. In Loevinger's conception these components are interrelated to the degree that they can no longer be seen as separate from each other, but creates a

flow that is holistic in nature. If even one of these elements are removed from the process, the development of an ego identity will be disrupted.



**Figure 2.** Erikson's conception of ego identity: The flow between components.

Figure 2 is a graphic representation of the author's understanding of this flux among the respective 'elements'. It includes a configuration that is constantly evolving, an enduring sense of individual identity, an identification and solidarity with group ideals, the unconscious and a continuous striving for continuity facilitated by the silent working of the ego.

The critical time for the formation of an ego identity seems to be during adolescence, although this task is by no means completed during this developmental stage. The adolescent faces the rather copious task of integrating surviving resolutions from earlier stages in such a way that the personality bears overall coherence. Erikson (1959) himself refers to the main function of the emerging ego identity as that of a bridge that connects the early childhood stages with later stages.

In colloquial terms, this is indeed the time to 'get one's head together' as the adolescent may experience difficulty reaching a comfortable synthesis. It is during this time that the ego identity often finds itself in a crisis state, hence the term *identity diffusion* (Polansky, 1982). It is however important to realise that the almost typical identity struggle or temporary identity diffusion that often characterises the adolescent years is by no means a definite indicator of psychopathology. The majority of individuals arrive at a workable identity that paves the way for a well functioning ego

that continues the life-long task of ego integration. An important concept in Erikson's theory that does however point to dysfunction, is the *negative identity*. This identity pattern *seems* to be constructed holistically to a degree, but the service of this organisation usually encompasses a dysfunctional aim, typically that of *spite*. Polansky (1982, p. 173) illustrates this negative identity pattern well when he quotes a patient as making the following statement: "If I can't be the biggest success, I'll be the biggest failure", and bearing in mind the epigenetic effect<sup>1</sup> that Erikson regards as central to his developmental theory, one understands the potential danger inherent in the construction and maintenance of a negative identity in service of a dysfunctional goal.

#### 2.4.5 Conclusion

Both Polansky (1982) and Loevinger (1976) regard Erikson as, in essence an ego psychologist and given Erikson's careful and comprehensive inclusion of the ego within his developmental theory, it is also the view taken in this paper. Perhaps this point is belaboured most notably in Erikson's work entitled *Insight and Responsibility* (Erikson, 1964) in which Erikson clearly connects one's past developmental processes with the formation of a workable ego identity. It seems as though the one is always intertwined with the other in the formation of an individual's ego strength, that in turn points toward health in the developing personality. At this point it seems as if no further motivation seems necessary for the inclusion of Erikson's theory in this discussion, and one may now turn one's attention to Alfred Adler's understanding of the ego.

### 2.5 Alfred Adler's conception of the ego

#### 2.5.1 Introduction

In 1911 Alfred Adler, up to that time one of Freud's followers broke away from him and chose the term 'Individual Psychology' for his new view of human nature. One of the main factors that contributed to this split was the fact the Adler no longer agreed with Freud in terms of the ego being subservient to the primitive drives of the id (Loevinger, 1976). Adler's understanding of the ego encompassed an inherent tendency towards self realisation, and this would eradicate the traditional psychoanalytic view of the primacy of drives. It was thus this tendency to seek a goal or purpose in life, or stated in Adlerian terms - an individuals' *guiding fiction* that now provided the catalyst for continuous ego development (Orgler, 1963).

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<sup>1</sup> According to the *epigenetic effect*, earlier developmental decisions influence later ones.

## 2.5.2 The coherence of the personality, guiding fiction and style of life

Adler believed that the personality forms an *Einheit*, unity or coherent whole. Every individual is comprised of a single, indivisible entity - hence the term 'Individual Psychology', and all of human life is directed by a goal that represents the dynamic present in emotional and mental life. Central to this idea stands the guiding fiction which replaces the Freudian drives as the primary motivating forces that underlie the development of the personality. In sum, the coherent personality always strives towards a goal, and it is the guiding fiction that enables this lifelong developmental process. At this point two issues need to be clarified: firstly one needs to establish what exactly is meant by the term '*guiding fiction*' (also known as fictional finalism), and secondly one needs to clarify the role of the ego within such a process.

The term '*fiction*' may give rise to confusion, for Adler does not use the term in its traditional sense that implies a fantastical state. He was influenced by a philosopher named Hans Vaihinger (in Corey, 1996) who held that individuals live according to fictions in terms of how they would like the world to be. Guiding fictions are predictive schemes, constructed by every individual, both subjective and unconscious in a sense, but crucial to orientate the individual within his/her world. Neurosis arises from a picture that the individual constructs that is based on a false premise - that is, a dysfunctional fiction that is followed by the individual (Way, 1950).

It was more or less during the second half of Adler's career that he coined the notion of *style of life*. This term is of great importance to this discussion as it may be used almost interchangeably with the ego. In fact, Loevinger (1976) herself states that Adler's formulation of the style of life shares some common ground with how she understands the ego: "...self or ego, unity of the personality, individuality, method of facing problems, opinion about oneself and the problems of life, whole attitude to life, and schema of life" (Ansbacher & Ansbacher p. 174 in Loevinger, 1976).

The distinction between ego and non-ego in Adlerian terms only emerges quite a while after the child has begun to talk as it is a precondition that the young organism refers to him/herself in the first person. This serves as an indication that he/she is thus able to distinguish a separate existence from the environment and others. A person's lifestyle is formed during the first four to five years, and after this time mistaken conceptions are not spontaneously rectified (Orgler, 1963). Opinions concerning the dangers and difficulties in the environment are now fairly set and the child has drawn an estimation of his/her capabilities to overcome challenges presented by the external environment. An important point to make in terms of the external environment is that it now *reacts* or conforms to

the view that the individual has already formed of that environment. It is of little consequence if that picture is contradicted at times, for only those aspects of reality that are in congruence with the preconceived picture of the world will be employed to confirm the individual's own point of view. Adler describes this interaction best when he states that the child is both the artist and the picture (Adler, 1964b). That which one perceives and understands is therefore marked by the ego as the individual is protected against intrusive or unwanted information. The umbrella term for this occurrence is *tendentious apperception* (Loevinger, 1976).

The ego serves as a frame of reference. It also provides the structure and framework within which one perceives the external reality of the world that one finds oneself in, and it is interesting to note that Adler pointed out that the psychological theories which one may prefer are in themselves representations of how one views the world. Understanding ego development may thus be tainted by personal obstacles in one's style of life, and this is a cautionary statement that is acknowledged throughout this script (Adler, 1964b).

### **2.5.3 Conclusion: Adler and the social importance of surroundings**

It is clear that the main emphasis of briefly exploring certain personality theorists in this section is to condense their understanding of the ego. As is the case with all the other theories explored here, the ego forms only a part of the whole and Adlerian theory is no exception. For the sake of providing a more holistic understanding one needs to mention Adler's notable contribution in terms of social interest (*Gemeinschaftsgefühl*) where the focus is on problems that cut across the fields of education, delinquency, child-rearing practices and psychosis. In fact, Loevinger (1976) argues that an acknowledgement of this *Gemeinschaftsgefühl* provides an important catalyst for the study of ego development. Whereas Freud elected to view the individual as a mechanism, in a sense isolated from the social environment, Adler connects the individual to that reality and strives to explain the individual, his lifelong developmental process and his goal-oriented social strivings precisely within such an environment.

## **2.6 Jean Piaget's understanding of the ego**

### **2.6.1 Introduction**

The choice to include Piaget as a theorist may at first glance seem to be quite a strange one seeing that the ego did not feature as prominently in his theory as it did in for instance Erikson's theory. In fact, when Piaget does refer to the ego he often uses it in conjunction with the 'self' which includes an awareness of one's own self and the self as the epicentre from which activity originates (Haan,

1977). One may extend this argument further and cite one of Piaget's earliest works entitled "*The child's conception of physical causality*" (1960) where the distinction between the ego and the self becomes blurred at times. If one is therefore to understand how Piaget views the ego, one also needs to understand how Piaget views the self. Piaget's position on the ego contributes to an understanding of the post classical psychoanalytic conceptions of the ego and this is the main reason for the inclusion of this theorist's view.

## 2.6.2 Piaget and the constructivist organisation of processes

The most prominent contribution made by Piaget seems to lie in his understanding of developmental processes. According to Piaget, development is encompassed by two underlying processes, namely the continuous alteration and reorganisation of individuals' interaction with their environment. It is here that one encounters the notion of process in Piaget's theory which is echoed in Loevinger's understanding of the ego when she states that "...the ego is above all a process, not a thing" (Loevinger, 1976, p.58). The Piagetian ego is comprised of an organisation of processes that include the affective and social schemas and his well-known intellectual structures. The very word 'process' implies a state of flux and the term that Piaget chose to represent such a process is that of a *mobile equilibrium* (Gruber & Vonèche, 1982). The implication is that the more flexible or mobile a structure is the more stable it will become, and included in this notion is the attempt to know oneself.

For Piaget the key to unlock the meaning of human behaviour first and foremost encompasses an understanding of the intellect. The following example provides a case in point: Younger children are seen to have less of a sense of their ego than older children do, and from a Piagetian intellectual point of view, no adequate distinction can at this point be made between that which is internal or external, subjective or objective. From an action point of view, the child is rather defenceless against the external reality, for he/she is at this point still unable to liberate the self from the will of others because a consciousness of the ego is still lacking. Piaget's view of the ego as lacking awareness during infancy (approximately 0 to 2 years old) and sleep is reiterated in his book, *Play, dreams and imitation* (Piaget in Haan, 1977). The intellectual process that therefore accompanies the barely emerging ego during early childhood is one in which the child's own fantasies are intertwined with accepted opinions from which, in turn emerge typical features of child thought such as sincere lies (Gruber & Vonèche, 1982). It is locked in an example such as this that is found what is probably Piaget's greatest contribution, namely showing that some fundamental processes grow in terms of milestone sequences, hence his stages of cognitive development.

### 2.6.3 Conclusion

Piaget's two main criticisms of psychoanalysis centred around the following: Firstly that there was not enough emphasis on developmental processes, and secondly that those analysts such as Freud chose to ignore intellectual processes almost completely. It naturally follows that Piaget's understanding of humankind (which always had the intellect as its point of departure) makes a unique contribution that is very different from Freud's understanding where the departure point is the unconscious. Haan (1977) however rightly argues that an understanding of the ego involves a lot more than a focus on an intellectual developmental process. Although one should thus not ignore the constructivist, more 'organised' contribution that Piaget made, one necessarily needs to include the contributions of other theorists in an attempt to fully grasp what is meant by the term 'ego'.

## 2.7 H.S. Sullivan's conception of the ego

I believe that a human being without a self-system is beyond imagination. (Sullivan, 1953; p. 168)

### 2.7.1 Introduction

Harry Stack Sullivan who is acknowledged as a Freud revisionist made a prominent contribution to our current understanding of the ego, and it is not at all difficult to understand why Loevinger (1976) includes his views in a prominent manner in her primary work, *Ego Development*. Although strongly influenced by Freudian ideas, Sullivan formulated his own views and went as far as stating that psychiatry is essentially applied social psychology (Polansky, 1982) because its main focus will always be interpersonal relationships.

The Freudian constructivist approach that is characterised by the id, ego and superego was rejected by Sullivan and replaced by his view of the self known as the self-system. Sullivan could also not identify with the Freudian preoccupation with instincts although he did include in his theory "unfortunate aspects" of the self-system which bore some similarities to the Freudian id instincts (Sullivan, 1953).

### 2.7.2 Self-system as an approximation of the ego

Sullivan's self-system is akin to Freud's concept of the ego (see section 2.2.) and has its beginnings in the organisation of experiences. It is not an identification with or a function of identity formation with the primary caregiver (usually the mother), but rather fulfils an organisatory function aimed at avoiding anxiety that presents itself through experience of the environmental reality. Attempts at organisation on the one hand and the ever-present anxiety on the other represents an ongoing

process which Sullivan refers to as a 'dynamism' (Sullivan, 1953, p.167). It is through this constant interaction that the personification of the self takes place.

The self-system seems to come into being because of a misfit between what cultural and societal norms expect from individuals and that which they in reality are able to give. The self-system is therefore under constant pressure to maintain acceptable relationships with others within the external environment and in interaction with the external environment itself. From such a notion it almost logically follows that the self-system has the potential to develop and encompass what Sullivan refers to as 'unfortunate aspects' (Sullivan, 1953; p. 168). It may in fact become a stumbling block to personality change as it may assume an almost too conformist character, trapped by choice within cultural and social contexts in attempts to avoid the ever present anxiety. In sum then, the self-system comes into being and develops throughout the lifespan to meet the needs of interpersonal relations with the potential for both positive and negative developmental outcomes. The self-system can therefore be seen as a process as well as a structure that acknowledges and interacts with the social world. It is perhaps here that one finds an indirect reference to Adler's work as it includes one's world view. It is what distinguishes the human animal from the human being and it provides purpose and meaning to life in a holistic manner.

### **2.7.3 The development of the ego and its holistic nature**

Sullivan conceptualises the development of the ego in terms of stage levels of integration that correspond to life-span levels of maturity. There are seven primary phases namely infancy, childhood, the juvenile era (early school years), preadolescence, early adolescence, late adolescence and sexual maturity (adulthood). One can see how prominently psychosexual development features within Sullivan's understanding of ego development. In order to clarify this perception, a brief exploration of the developmental stages is needed.

The young infant's earliest conception of the world is split three ways: firstly the 'good me' that emerges when interpersonal security is recognised, secondly the 'bad me' that recognises tolerable anxiety associated with the external environment, and thirdly the 'not me' that is overwhelmed by anxiety to the degree that the infant cannot integrate it as a constructive learning experience. At this stage the infant also makes no differentiation between primary caregivers - all caregivers are either 'good' or 'bad' - what Sullivan refers to as either 'good mother' or 'bad mother', whether it may be an older 'good' sister or a 'bad' grandmother etc. At this stage the infant's experiences are undifferentiated as there is no awareness yet that he/she is a separate entity. All experiences are

woven into an inseparable whole at this time (Sullivan, 1953). It is only through the mediums of language and experience that the infant manages to personify his reality and the primary caregivers in a more specific way which introduces the second stage, namely childhood (Loevinger, 1976).

Although there is now a sense of separateness, the child is not able to relate events and circumstances in any coherent or logical manner. Experience at this stage is comprised of different states of being that are recognised but that remain unconnected. In childhood there is an almost exclusive reliance on models through which interpersonal learning takes place. The child may not only act like or sound like his/her parents, but attempts to act like he/she *is* the parents. The role that the parents play at this stage lies principally in their attempts to perfect the child's socialisation (Loevinger, 1976; Sullivan, 1953). The transition from the childhood stage to the juvenile stage is characterised by the child's differentiation between reality and fantasy. Central to this transition one finds the term '*consensual validation*' that denotes a child's understanding of the important role that others play in shaping his/her external reality. It is thus the validation and acknowledgement of acquired meanings by the child that eases the transition to the next stage.

The early school years or juvenile era as Sullivan refers to this stage is rather brief, but extremely important as it is the first stage in which the opportunity for correction of the socialising influence is afforded. Peers serve as a barometer for cultural idiosyncrasies and now more than ever before the individual is open to development and change. Three primary modes of communication namely competition, compromise and co-operation characterise this stage where approval stands as a primary positive motive and being ostracised is situated on the opposite pole. The individual learns how to minimise anxiety whilst satisfying important interpersonal needs (Loevinger, 1976).

Whereas the juvenile stage is predominantly egocentric in its nature, the next stage known as the preadolescent stage provides an outward shift with the opportunity to engage in a more social state. This stage has its beginnings during puberty and the primary need is for interpersonal intimacy, initially through friendship with a member of the same sex, and in later adolescence through more intimate relations with a member of the opposite sex. The shift is thus one from not only seeking self-interest, but of seeking to contribute to the happiness of others too. Once again one finds a psychosexual component to Sullivan's theory as by late adolescence this outward focus extends to a preferred genital activity combined with a striving for meaningful human interaction and relations. The ultimate aim is sexual maturity, also known as *lust dynamism* (Sullivan, 1953) which, according to Sullivan's theory is only achieved in the last stage, namely adulthood.

## **2.7.4 Conclusion**

Sullivan's work is difficult to condense precisely because of the nature of his theory. It is both process and structure and because of its developmental nature, always in flux. The more specific contribution that Sullivan makes in terms of an understanding of the ego is not to be found in a neat packaged version of various stages of ego development, nor has he provided an adequate exposition of the dynamics involved in such a complex process. It is rather in his acknowledgement that ego development encompasses more than mere intrapsychic processes (drive theory), more than interpersonal relations with the environment (social learning theory) and more than an inclusion of psychosexual theory that the value of his theoretical approach is to be found. All of these elements are sought in the lifelong process that he terms the personification of the self, and it is this process that closely parallels the development of the psychoanalytic ego.

## **2.8 Lawrence Kohlberg's views on the ego**

### **2.8.1 Introduction**

Piaget is known as Kohlberg's "intellectual father" as Kohlberg's work does build on Piaget's work to a large degree. Lawrence Kohlberg was however not an ego psychologist in the purest sense of the word and it is perhaps this very fact that makes his conceptualisation of the ego so impressive. Kegan (1985) goes as far as stating that Kohlberg is potentially the theorist whose work provides the most important catalyst for further research in the field of ego development since Sigmund Freud, and continues by referring to Kohlberg as father of "cognitive-developmental ego psychology" (p. 163). Whether or not one agrees with such a statement is irrelevant. The point is simply that Kohlberg provides an invaluable contribution to an understanding of the ego, and this section of the script will provide a brief exposition of his main contributions.

### **2.8.2 Moral development, cognitive development and ego development**

Kohlberg's understanding of the relationship between moral development, cognitive development and ego development is complex and problematic at times and it is certainly not the aim of this section to solve this dilemma. Possibly the most important contribution that Kohlberg has made lies in his positioning of the mind as an organising structure in the social-personal world. Kohlberg's theory is thus both process (a lifelong developmental process) and structure (the mind's capacity to redefine processes). It is in his stages of moral development that this continuous redefinition takes place and in which development is shown to be intrinsically related to the search for meaning. In the opinion of the current author, Kohlberg's conceptualisation of the ego is extremely valuable

precisely because it takes cognisance both of that which is objective and that which is subjective. Kegan (1985) explains this rather complicated notion by quoting Stage 3 of Kohlberg's theory of moral development at which stage the individual recognises differing points of view. Apart from merely acknowledging such points of view, the individual may simultaneously hold such points of view, organise or relate them to one another, thereby constructing an individual system of reciprocity such as the maxim 'do unto others as I would have them do unto me.' For Kohlberg the development of knowing is not a *consequence* of psychobiology (the mind), but the *process* in itself that extends throughout human life, and it is clearly here that an important contribution to an understanding of ego development is made. Kohlberg summarises the core of his understanding best when he writes the following about ego development:

Ego development may be understood as the overall unity of the ego as it progressively reconstructs itself through a dialectical process in which the person 'makes sense' of his or her evolving relationship with others, the world, and life as a whole. Ego development thus includes the continuous redefinition of what is subjective and what is objective: on the subject side is an evolving self and on the object side is an evolving differentiation of one's natural, social, and ultimate environments. (in Kegan, 1985, pp. 163-181)

Kohlberg's formulation thus includes not only an intrapsychic view of the evolving ego, but takes into account the external environment within which the individual finds him/herself in.

At this stage Kohlberg's views on the ego and its development may seem rather complicated and accordingly the following breakdown delineating the main gist of his contributions is summarised:

1. The human organism maintains its capacity to create meaning;
2. The innate capacity to organise and judge experiences give rise to a comprehensible wholeness of experience;
3. The organism retains a certain vulnerability to development; and
4. This developmental process gives rise to sequences of organisational principles (Kohlberg's stages of moral development.). (Adapted from Kegan, 1985, pp 163-181)

It is clear that Kohlberg deems moral development and cognitive development to be components of ego development as a whole. He supports this idea further by stating that to be able to extrapolate a corresponding ego level with a stage of moral development, an individual must not only have achieved a certain degree of maturity in mental processes, but also that other factors (presumably

those in the social environment) need to be taken into account to draw such a parallel. In 1983 Kohlberg and his co-authors again echo the theoretical position that “moral development is necessary but not sufficient for the parallel level of ego functioning” (Noam, Kohlberg & Snarey, 1983, p.185). Kohlberg’s ego therefore is comprised of self-contained sub-domains, each with its independent and distinct structure that is not necessarily dependent on the functioning of the other domains that comprise the ego (Kohlberg in Loevinger, 1985).

### **2.8.3 Conclusion**

Loevinger (1985) makes the point that Kohlberg’s attempts at near scientific logical consistency do not necessarily meet its stringent criteria and if anything, his theory in terms of what it is that denotes ego development seems confused at times. This is a separate debate and although one acknowledges this possibility, the main aim of the theoretical section of this script should remain focused on the contribution that the respective theorists make to further an understanding of ego development.

This script aligns itself with Loevinger when she ultimately argues that Kohlberg’s contribution should be seen within a broader context and perhaps in doing so, one will recognise the true value of his work despite the inconsistencies that are often found in psychological theories. For the first time a theorist attempted to connect cognitive, moral and ego development and this in itself has not only proven to be a catalyst for a body of research unto itself, but can only enrich an understanding of a complex field of inquiry.

## **2.9 Loevinger’s understanding of the ego and ego development**

### **2.9.1 Introduction**

Loevinger traces her understanding of the ego back to the period between 800BC and 200BC. This was a time when various cultures first became conscious of themselves as human beings able to fulfil their true potential (Loevinger, 1976). We have come a long way since then and the theory of ego development has been refined by various philosophers, psychiatrists and psychologists who ushered us into a 20<sup>th</sup> Century understanding of the ego. In the opinion of this author, Jane Loevinger stands as one of the primary contributors to such an evolving understanding of the ego and the processes that are encompassed by the ego. Her theory has respectfully taken cognisance of previous conceptions of the ego and this enriches her own conceptualisation and theory of ego development. The focus of this section of the script will thus be on condensing the main tenets of Loevinger’s views on the ego. The fact that the Washington University Sentence Completion Test

provides one of the main research tools in this investigation renders an understanding of her work even more crucial.

### 2.9.2 Loevinger's ego: Definition and characteristics

The degree of Loevinger's understanding of the ego is mirrored in her encapsulation of the fundamental characteristics of the ego. For Loevinger the ego is an evolving *process*, and a *structure* with its' origins situated in the *social world*. It functions as a *whole* and it is always guided by *meaning* and *purpose* (Loevinger, 1976). Loevinger's ego represents the unity of the personality, a whole method of facing the complexities of life. The ego is thus an overall orientation to oneself and the world within which one finds oneself and must never be reduced to a "set of functions" (Levit, 1993; p 494). The importance of this idea is echoed by Loevinger when she states that: "The striving to master, to integrate, to make sense of experience is not one ego function among many but the essence of the ego" (Loevinger, 1969, p. 85). The main task of the ego is thus to search for "coherent meanings in experience" (Weathersby, 1981, p. 51). In colloquial terms one may say that the ego 'keeps things together'.

### 2.9.3 Loevinger's concept of ego development

Loevinger's understanding of ego development naturally flows from her understanding of the ego as an organising process-oriented entity. Her theory of ego development assumes that there is a continuum along which such a coherence-seeking process will position itself across the lifespan, and along which one's orientation to oneself, the world and the relation of one's inner world (both feelings and thoughts) to others can be positioned (Bursik, 1991). The notion of ego development should however not simply be seen as yet another possible personality trait. According to Loevinger ego development is the master trait secondary only to intelligence in terms of governing one's responses to situations. Ego development is a successive process in which change is brought about by turning points known as *milestone sequences*. These sequences do not consist of specific, fragmentary components that bring about change, but rather consist of broader patterns that involve a whole array of personality aspects. If one wants to position specific traits within a specific developmental stage, one needs to see that characteristic within a whole and one needs to understand how such a characteristic fits into that particular developmental sequence. The reason for this is that in Loevinger's stages of ego development, traits develop, reach a point of crucial importance and reappears in a differing degree of prominence in a new sequence. One may thus say that although

traits do not disappear from one developmental sequence to the next, future contexts will affect the degree of prominence with which such traits will appear (Weathersby, 1981).

Loevinger states that to fully understand the essence of ego development, one has to take cognisance of its four fundamental characteristics:

1. Stages represent potential anchoring points along the developmental continuum;
2. Stages bear an inner logic and structural component;
3. The conception of ego development may be applied to all ages, and
4. Specific methods and research techniques exist to conduct research in this domain (Hy & Loevinger, 1996).

\*Ego development represents an entire dimension to be taken into account when attempts are made at understanding individual differences in any age grouping. It thus represents both a developmental sequence and a dimension in itself shedding light on individual differences. If one asks the question as to what it is that is meant by 'individual differences', one may answer endlessly. Loevinger (1976; p. 26) cites five overarching changes that take place during the process of ego development namely "impulse control, character, interpersonal relations, conscious preoccupations and cognitive complexity". Once again she stresses the nature of ego development as bearing coherence when she warns against seeing these four dimensions as separate. The process remains holistic in nature.

Ego development cannot be seen to be the same as intellectual or psychosexual development or adjustment to one's environment, neither does it pretend to include the whole of personality development. Although one will certainly acknowledge these dimensions in a study of the development of the ego, merely taking these as absolutes will amount to no more than reductionism of the field (Bursik, 1991). Loevinger herself does not make elaborate attempts at defining the exact nature of ego development, but points toward the ten successive stages for an operational definition. It is hoped that the exploration of the stages in the following section will contribute to an understanding of the ever-evolving nature of the concept of ego development.

## **2.9.4 Jane Loevinger's Stages of Ego Development**

### **2.9.4.1 Introduction**

In sections 2.2 to 2.8 attempts were made to gain an understanding of how various theorists conceptualise the somewhat elusive construct of the ego. Such attempts could be seen as building blocks which underlie an understanding of Loevinger's terminology of the *stages of ego development* that this paper seeks to explore within a coping paradigm. Attention should however

not only be paid to the actual stages proposed by Loevinger, but the concept of *stages* in themselves should be attended to ensure a thorough understanding of the conceptual framework.

#### 2.9.4.2 The terminology of stages: How to make sense of it

If one looks closely at Loevinger's developmental stage theory, it is in actual fact not as stage-bound as one would first observe. In fact, her stages probably lie more toward the middle of a stage/non-stage continuum. The main reason for such an assertion is that although Loevinger's stages of ego development are both sequential and cumulative, they are not inevitable (Bee, 1994) and not all individuals necessarily reach all of the stages. The stages do however build on each other, so stages cannot be jumped or left out in an individual's ego development throughout the lifespan. A person can thus only proceed to the next stage once ego development in the current stage has been attained (Hy & Loevinger, 1996). It would however be a mistake to assume that all the ego functions that are characteristic of a certain stage come into existence simultaneously in one stage, only to 'disappear' with the advent of the next stage. Human characteristics simply do not come into existence all at once. Ego functions developed in earlier stages thus remain, defining a stage in terms of the *maximum* characteristics that are present within that stage. Loevinger states that it is the "*total pattern that defines a stage*" (Loevinger, 1976; p. 15). It is this search for the identification of stable configurations that gave rise to Loevinger's "working list of ego stages" (Hy & Loevinger, 1996, p. 11).

Another matter of concern often revolves around the question of whether age categories can be related to stages of ego development. The answer in terms of Loevinger's theory is essentially in the negative, for although connections may be made these are more in terms of early developmental categories. Although one may thus assert that young infants are generally in the Presocial (I-1) and Symbiotic Stages (I-1) of ego development, Loevinger's principle remains one in which she attempts to describe every stage so that it is applicable to a wide range of ages. Loevinger furthermore takes the view that not working closely to age opens up a whole array of questions such as determining the earliest age for transition into a next level of ego development, or the latest age etc. and accordingly at no point does she directly relate her stages to age (Loevinger, 1976). The implication is thus that amongst a group of e.g. 40 year old adults, one would find quite a wide range of stages of ego development with the inference being that individuals move through the developmental sequence at different rates (Bee, 1994).

Loevinger also states that her stages are not to be numbered as this could complicate future matters in the event that stages are expanded to include new stages, and accordingly the ten stages of ego development are referred to by name or code symbol and not by number (Loevinger, 1976). We now turn our attention to a description of each of the ten stages.

## **2.9.5 A Description of Loevinger's Stages of Ego Development**

### **2.9.5.1 Presocial Stage (I-1)**

In this first stage the baby has no ego and the neonates' first task therefore becomes one of differentiating the self from his/her surrounding environment. The attainment of object constancy and the conservation of objects are important aspects of the process that has as its end goal the differentiation of the self from the outer reality (Bee, 1994; Loevinger, 1976). This stage is acknowledged in Loevinger's theory mainly for the sake of theoretical completeness and actually lies outside the scope of a proper stage formulation (Hy & Loevinger, 1996).

### **2.9.5.2 Symbiotic Stage (I-1)**

Although the differentiation of the self from the non-self is now much further advanced than in the Presocial Stage, the baby remains in a state of symbiosis with the primary caregiver and the developmental task thus entails an emergence from this symbiosis. The primary 'mechanism' to facilitate such an emergence is through the medium of language as this consolidates a sense of separateness (Bee, 1994). Loevinger (1976) furthermore makes an interesting comment when she states that unlike the other stages, the remnants of the Presocial and Symbiotic Stages do not seem to be accessible through language in later life as a result of the large role that language plays in this process of differentiation.

### **2.9.5.3 Impulsive Stage (I-2)**

Hy and Loevinger (1996) state that this is the lowest stage that is really accessible through the ego stage developmental theory. It is at this stage that the child, with the aid of his/her own impulses establishes a separate identity (Bee, 1994). Significant others are appraised according to what they can offer, rendering the child's need for others both dependent and demanding. At this stage there are two primary ways in which the child's impulses are controlled: firstly by constraint, and secondly through imminent rewards and/or punishments (Loevinger, 1976). Judgements at this stage are value judgements and not moral judgements whilst dichotomies stand central (Hy & Loevinger, 1996). People fall into two classes - they are either good or bad. Children at this stage furthermore seem to be preoccupied with age appropriate sexual and aggressive bodily impulses, whilst their

emotions appear to be quite intense. Superstitious ideas are also quite common. If a child remains in this stage for too long, he/she may appear to be incorrigible or uncontrollable as logical justification for actions are confounded. In addition, a sense of psychological causation is absent and rules are not comprehended well. At this stage concerns are not situationally located, but location-bound (Loevinger, 1976).

#### **2.9.5.4 Self-Protective Stage (Delta $\Delta$ )**

In the Self-Protective Stage impulse control is learnt when the child recognises that immediate short-term rewards and punishments are involved. In contrast to the child in the Impulsive Stage there is thus an awareness of the existence of rules, but the orientation is still in terms of satisfying personal needs. The wrongfulness of actions are judged in terms of being found out, and accordingly the main rule of this stage seems to be “Don’t get caught” (Hy & Loevinger, 1996; Loevinger, 1976). The individual in this stage of ego development will not be likely to employ self-criticism, and if there is to be an acknowledgement of a transgression of some sorts, the blame will fall on an ‘unaccountable’ part of him/herself, e.g. ‘my figure’ (Loevinger, 1976). This stage is also prevalent amongst certain adults, and the adult or older child who remains at this stage could very well become opportunistic, deceptive and take advantage of others (Loevinger, 1976). In the worst case scenario life becomes a ‘zero-sum’ game with the individual displaying hostility, opportunism and antisocial traits. Most adults do however seem to move beyond the Self Protective stage, whilst most self protective individuals do seem to adjust quite successfully to societal norms (Hy & Loevinger, 1996).

#### **2.9.5.5 Conformist Stage (I-3)**

The transition from the self-centred Self Protective Stage to the group-centred Conformist stage usually occurs at some stage during the school years (Hy & Loevinger, 1996). The individual in the Conformist Stage acts in accordance with group-accepted rules because disapproval is feared and as a result, individuality is underrated in favour of group norms. Stereotypical thinking, moralistic clichés and dismissing groups who do not fall within the rigid boundaries of the conformist’s group thinking are common. Stereotypical conceptions of sex roles are particularly common and other valued characteristics include politeness, helpfulness and co-operation from others. These sets of rules that define actions as either right or wrong are all-important and the consequences of actions only play a subsidiary role (Loevinger, 1976). The primary focus of an individual in this stage appears to be external and the inner life is not seen in much depth as banal terms such as ‘sad’,

'glad', 'joy', 'sorrow', 'love' and 'understanding' dominate. The value system that provides the individual in the Conformist stage with security includes belonging to a group, social acceptance, external appearance, reputation and material possessions (Hy & Loevinger, 1996; Loevinger, 1976).

#### 2.9.5.6 Self-Aware Level: Transition from Conformist to Conscientious Stage

Loevinger refers to this as a level, but it remains an open question as to whether it constitutes a stage in itself or a transition between stages. In addition the Conformist stage and the Conscientious stages share commonalities and one may therefore also refer to this transitional phase as the *Conscientious-Conformist Level* (Loevinger, 1976). In terms of research it is still not clear as to how the transition between these two levels are made, and it is important to understand that its transitional nature is mainly theoretical as this level appears to be both stable and prevalent (possibly even most common) in adult life (Hy & Loevinger, 1996).

During the Self-Aware Level there is an increase in self-awareness coupled with an allowance for the acceptance of individual differences and so-called 'grey areas' in emotions and opinions (Bee, 1994). These seem to be the two most salient differences that distinguish the Conscientious-Conformist Level from the Conformist Stage. This could potentially be a time for disillusionment as the stereotypes that the individual clinged to in the Conformist Stage start dissipating as self-awareness increases. The realisation dawns that not everyone, including the individual him/herself can conform to the rigid categories so characteristic of the stereotypes of the Conformist Stage (Hy & Loevinger, 1996). It is only once the person makes the distinction between what he/she is and what he/she ought to be, that true growth can take place as the inner life broadens. At this point it is important to state that although this growth occurs, it is still primarily seated within a vagueness of feeling that can usually be traced back to the relation of the individual in terms of other people (Loevinger, 1976).

The Self-Aware Stage is in a sense a version of conformity as stereotypically based categories are to a large degree still the basis upon which judgements are made (Bee, 1994). Such an assertion may appear quite confusing at first glance, but put simply, categories still exist - these are just more encompassing than before in the sense that they are defined in terms of broad demographic terms. At this stage individual differences still do not stand central (Hy & Loevinger, 1996). An example in illustration of the differences between this level and the next stage (Conscientious Stage) may be the following: A person on the Self-Aware Level would be likely to comment that 'only married couples should have children.', whilst an individual in the Conscientious Stage would be likely to

attach certain conditions such as ‘... unless they really want to have children or unless the parents have been together for a long time and really love each other’ (Loevinger, 1976). Although alternatives therefore do exist at this level, it is only in the next stage that the first few real steps are taken to capture the true complexity of life situations. One may thus conceptualise this Conscientious-Conformist Level as a level in which “pseudotraits” (Loevinger, 1976; p. 20) are prevalent with characteristics from both the Conformist and Conscientious Stages present.

#### **2.9.5.7 Conscientious Stage (I-4)**

The primary elements that make up an individual’s superego or conscience are present at this stage. Goals and aspirations are seen in the long-term and are self-evaluated, whilst self-criticism and a sense of responsibility are distinctive characteristics of this stage (Hy & Loevinger, 1996; Loevinger, 1976). Not only are rules individually created and internalised, but the individual attempts to live by his/her self-evaluated standards (Bee, 1994).

The element of *choice* features very strongly during this stage. The Conscientious individual chooses his/her own rules, chooses to live by these and chooses not to apply his/her set of rules indiscriminately to others. The guilt that is felt by the Conformist when a rule is broken is largely absent and rather connected to hurting another person even if the rule is obeyed in the process. Rules in themselves are thus subsidiary to overarching motives and consequences, and individuals are now viewed in multidimensional terms. Other’s views are taken into account as far as possible and the rich inner life of the person in this stage contributes to a more mature conscience and a sense of the ‘global’ within which this individual strives to function in an individualistic manner. The Conscientious person may however experience a heightened sense of responsibility towards other people and feel obliged to assume a ‘protective’ function in order to prevent others from making mistakes. The danger lies in this responsibility-becoming excessive to the degree that it becomes overbearing. These individuals’ aspirations are pointed toward identifying and realising opportunities. Achievement is valued and as long as work is not experienced as boring, it provides the opportunity for the attainment of individualistically set goals (Loevinger, 1976).

The person in the Conscientious stage is therefore no longer the “plaything of fate” (Shakespeare, 1987, p. 48) but becomes the author of his/her own destiny.

#### **2.9.5.8 Individualistic Level: Transition from Conscientious to Autonomous Stages (I-4/5)**

The Individualistic level as does the Self-aware level, again represents a transition between two stages, namely from the Conscientious stage to the Autonomous stage (Loevinger, 1976). This stage

is marked by an increased awareness of inner conflict and an emphasis on the independence/dependence dilemma (Bee, 1994). Although one may argue convincingly that the question of dependence versus independence is prevalent throughout the lifespan, this whole issue is highlighted in the Individualistic level as the person has to make sense of the possibility that emotional dependence can continue although dependence in concrete, physical ways may end (e.g. financial/physical dependence). In order for an individual to grasp and deal with the complexity of such a paradox, tolerance of the self and others needs to be developed as people are seen to possess different roles (Hy & Loevinger, 1996).

This level is however not a conflict free zone. There is an increased realisation of the presence of inner conflict and the paradox of excessive moralism and an almost overbearing responsibility towards others so characteristic of the Conformist and Conscientious stages, is now questioned. It is this recognition of inner conflict that gradually becomes a substitution for the excessive moralism of the preceding two stages. The person in the Individualistic level thinks predominantly along the lines of psychological causality and psychological development and at this level, more so than at any previous stage, individual differences are acknowledged. (Hy & Loevinger, 1996; Loevinger, 1976).

#### **2.9.5.9 Autonomous Stage (I-5)**

When the transition to the Autonomous stage has been made, the inner conflict that the individual had become aware of in the Individualistic level is now acknowledged as part of the human condition. There is a realisation that needs on the one hand and duties on the other will at times clash, but instead of making attempts to avoid such conflict, the person in the Autonomous Stage acknowledges its presence and directs his/her efforts at dealing with the inner conflict. The Autonomous person furthermore differs from the person in the Conscientious Stage in that there is a movement away from perceiving the world in terms of extremes. Reality now becomes multidimensional as its complexity is captured and moral dichotomies fall by the wayside. Whereas individuality was accepted at the Individualistic Level, it is now cherished. Seemingly incompatible ideas or alternatives are integrated and the "tolerance for ambiguity" is higher at this stage than at any other previous stage (Frenkel-Brunswik in Loevinger, 1976).

Possibly the most prominent characteristic that marks the Autonomous Stage is the recognition of other's need for autonomy. This realisation in a way eases the inner conflict as the individual accepts the paradox surrounding dependence/independence. Emotional interdependence is now

perceived as inevitable, and the excessive sense of responsibility that the individual once felt is diminished as responsibility is now 'returned' to people. There is thus an acknowledgement that others need to find their own way in life, learn from their own mistakes and that each individual has his/her own unique motive that stems from unique past experiences. Self-fulfilment supplants achievement as the Autonomous person's goal. Important values are often encompassed by abstract social ideals such as justice and objectivity and life is now viewed in broad terms with a wide-ranging spectrum of feelings available that are expressed vividly. Existential humour accompanies an increased respect for others as the complexity of life is grasped (Hy & Loevinger, 1996).

#### **2.9.5.10 Integrated Stage (I-6)**

The Integrated Stage is extremely rare and accordingly, very difficult to study. Hy and Loevinger (1996) report that less than 1% of the population studied in the United States appear to reach this stage. Apart from the low frequency with which this stage presents itself, the psychologist or theorist who attempts to study this stage must be aware of his/her own strengths and weaknesses in order to fully grasp its involved nature, and accordingly the Integrated stage seems to be combined best with the Autonomous Stage. In addition to the transcendence of inner conflict, this stage is characterised by the consolidation of a sense of identity, thereby sharing characteristics with Maslow's Self-Actualisation stage (Loevinger, 1976).

#### **2.9.5.11 Conclusion and Summary of Stages**

It is at this point again important to illuminate the idea of growth in terms of Loevinger's stages. There is simply no one straight line according to which growth takes place, and more advanced levels are not necessarily 'better' than less developed levels. The movement is along a 'stairway' (Bee, 1994; p. 70) of increased complexity, and along this stairway there are many "way stations" (Loevinger, 1976; p. 26) of equal importance.

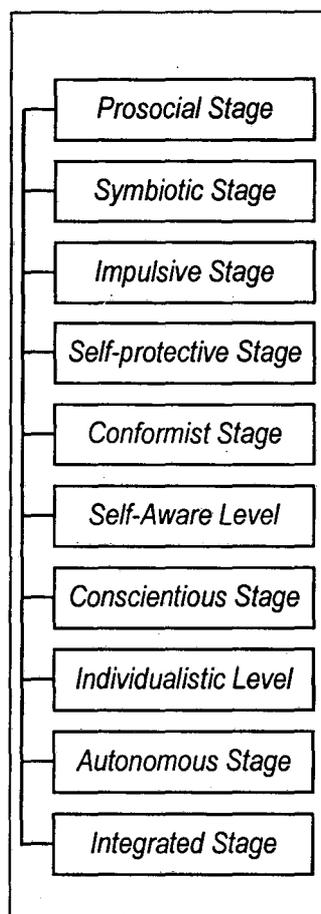


Figure 3. Loevinger's ten stages of ego development.

There are no shortcuts to growth and development in Loevinger's theory of ego development, and the 'higher' of the ten stages depicted in Figure 3 simply open up new dimensions not readily available to the 'lower' stages. Figure 3 provides a schematic overview of the *continuum* along which Loevinger's stages of ego development is located, and should under no circumstances be read as a rank ordered diagram. In order to fully grasp the contribution that Loevinger intends to make to adult development, one needs to move away from hierarchical thinking in terms of the stages of ego development as such a conceptualisation will amount to no more than an underestimation of the theory in its' entirety. It is the *range* of stages and individual differences that is of concern.

The question of a definition of ego development is thus answered by Loevinger in terms of its stages. Loevinger herself states that the search for a formal definition of ego development will prove to be futile because "ego development is something that occurs in the real world" (Loevinger, 1976,

p. 54), and for this theorist it will therefore remain as it stands: the “master trait” with, at its core an organising function that acts as a “rudder” in directing this aspect of personality development (Thorne, 1993, p. 53).

## **2.10 In search of understanding: Integrating theories**

### **2.10.1 Introduction**

In the preceding section eight theorists who are deemed to have furthered an understanding of the ego and ego development were discussed. The purpose of this section of the script is not to repeat what has already been said about their contributions, but to contextualise their theories within the larger domain of a general theoretical framework. This script has furthermore never made the pretence of offering an all inclusive view of all that has ever been written on the subject of the ego and ego development, but an attempt has been made to include at least the main theorists. The first part of the current discussion will thus focus on contextualising these theorists, whilst the second part will attempt to compare and contrast their views on the ego to achieve a sense of wholeness in an understanding of the construct.

### **2.10.2 Contextualising theories of ego development**

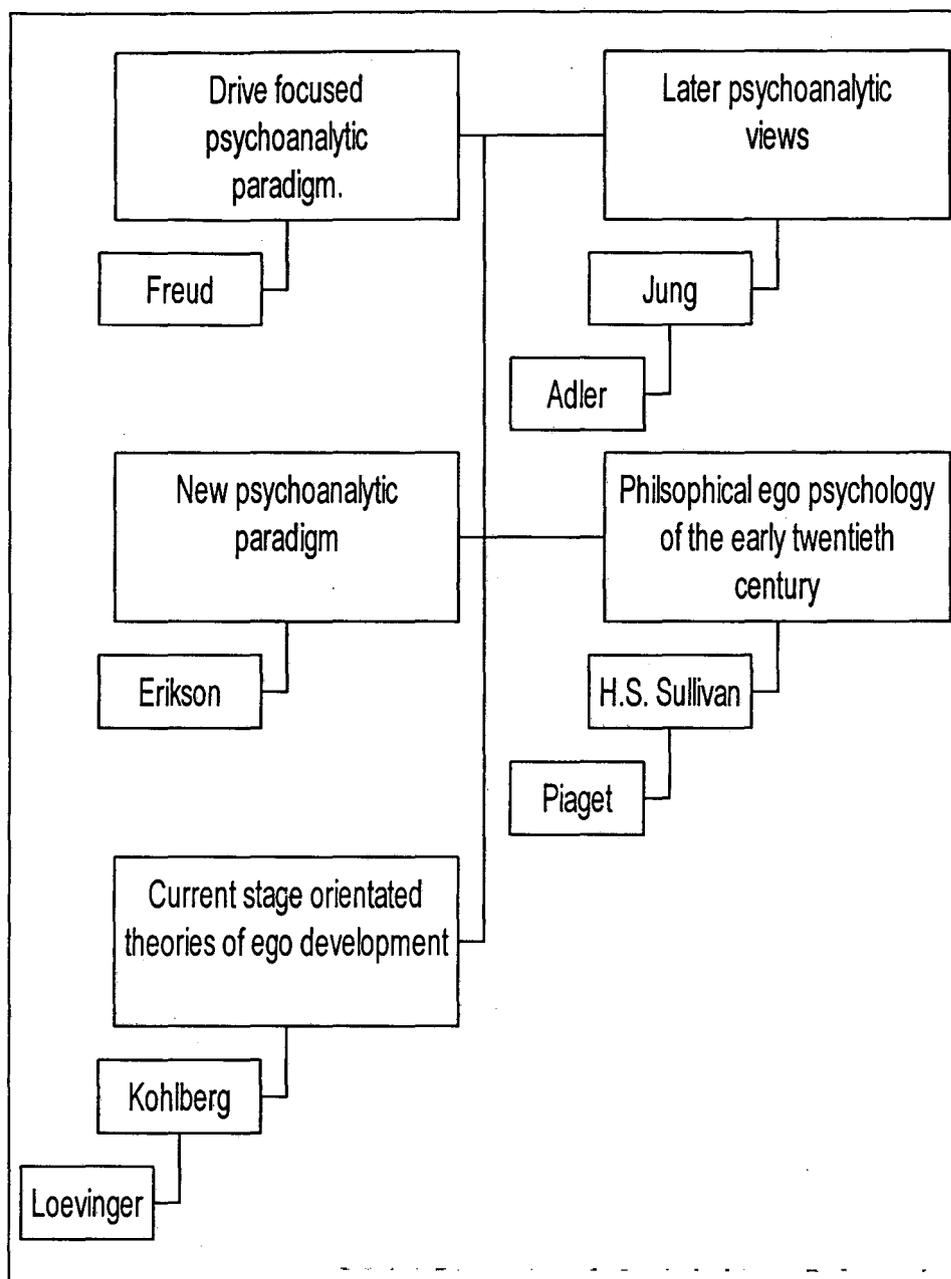
Perhaps a good starting point in understanding ‘what goes where’ would be to turn to a graphic representation provided by the author in Figure 4 which outlines the scope of theorists discussed in this script. Figure 4 illustrates how the views on ego development expressed in this paper may be partitioned into five main domains, namely the drive focused psychoanalytic paradigm (Freud), the later psychoanalytic views (Jung & Adler), the new psychoanalytic ego paradigm (Erikson), the philosophical ego psychology of the early twentieth century (Piaget & Sullivan) and modern conceptions of ego development that are stage-orientated (Kohlberg & Loevinger) (Costa & McCrae, 1993; Polansky, 1982).

The field of ego development is however a constantly evolving one and many more theorists can and will be included within these broad structures, and more than likely new structures in themselves may be added. A basic understanding of where the theorists dealt with in this discussion are to be found on merely such an elementary ‘map’ is however crucial before one attempts to understand how respective views are to be compared and contrasted with each other.

## 2.11 Comparing and contrasting theories of ego development

### 2.11.1 The organisatory capacity of the ego

The idea that the ego is bestowed with an organising function is still as prevalent today as it was when both Sigmund Freud (Freud, 1950) and Anna Freud (Freud, 1937) expressed the beginnings of this perception. The context within which the ego is seen to possess an organising function that strives for coherence does however differ amongst various theorists. Freud (S. Freud, 1950) for example connected the ego's capacity to organise stimuli within a principally structural context, whereas Erikson's (1963) conception of the ego as an organising structure focuses mainly on the integration of the ego through the developmental stages that he posits. Sullivan was very specific in his view that the ego has at its core an organising function and connected this closely to the ego's attempts at avoiding anxiety (Sullivan, 1953). The Piagetian notion of ego development again differs from the aforementioned theories in that the organisation of ego processes take place at three levels namely affective, social and intellectual (Gruber & Vonèche, 1982), whereas Kohlberg's formulation regards the organisatory striving for coherence as a continuous redefinition of both intrapsychic and external environmental factors.



**Figure 4.** Contextualising theorists within the broad framework provided by five primary domains.

Jane Loevinger's concept of ego development too stresses this coherence strongly and she regards this process as one in which individuals organise their worlds to differing degrees of complexity (Loevinger, 1976).

### 2.11.2 The ego as both process and structure

It seems as if all the theorists discussed in this script acknowledge the existence of a developmental component, whilst some acknowledge an additional structural component in their understanding of

the ego. Freud (1950) for example goes to great lengths to provide an exposition of the structural view: the ego is part of a topographical triad (id, ego and superego), whilst to a lesser degree than some other theorists he acknowledges the developmental nature of the process that involves the organism's distinguishing the ego from the non-ego. Adler's ego appears slightly more difficult to place, but it does seem as if his emphasis is more process orientated in nature, especially when one considers the developmental nature of his notion known as 'style of life'. The way in which structure functions in Adler's theory is in terms of the ego providing a structure or framework within which individuals perceive the external reality of the surrounding world (Adler, 1964). Sullivan too regards the ego and its development as both process and structure, for although the ego functions developmentally in terms of intrapsychic, interpersonal and environmental processes, its structural component is to be found in the self-system that is the potential bearer of both 'unfortunate' and 'fortunate' aspects (Sullivan, 1953). Kohlberg (Kegan, 1985) is another theorist who sees ego development as both process and structure with his emphasis on both a lifelong developmental process that involves organising one's social-personal world, and structure which focuses mainly on the mind's capacity to make sense of and redefine such a process. For Loevinger (1976) too ego development is both structure and process, although one could argue that the emphasis in her theory of ego development falls strongly on the process. This fits into her stage-conception of ego development situated on a continuum.

Carl Jung's (Singer, 1994) emphasis was essentially developmental and involved a lifelong process of growth that he termed 'individuation'. At the centre of the individuation process lies the attainment of self-awareness, and at its centre, the ego that facilitates such a lifelong journey. Jung's ego development is thus essentially of a process nature, and so too is ego development in Eriksonian terms. One need look no further than Erikson's stage formulation that includes the ego to be convinced of its essentially process nature. The notion of structure is present in Erikson's theory, but mainly in terms of his attempts to isolate the components relevant to ego identity. Piaget's contribution fits into the category of having mainly made a process type contribution to an understanding of ego development. He believed that the ego consists of a mobile organisation of processes with the focus being his well-known intellectual developmental process (Gruber & Vonèche, 1982).

### **2.11.3 In search of a workable conception of the ego**

At this point in the investigation into the nature of the ego and ego development one is entitled to ask the question as to which definition of the ego one should decide to adhere to. As the previous

two sections clearly illustrated, no single theorist can be singled out as the absolute authority in this field, and yet one needs to find a workable conception of the ego if one is to conduct research within the field. Even Jane Loevinger (1976) who has always made it clear that the search for formal definitions within such a progressive field will prove to be futile, provides an approximation of what she understands by the terms ego and ego development. The way in which Loevinger arrived at her present conception of ego development was by conducting a very thorough investigation into the work of several personality theorists and philosophers, and it was only once she had taken cognisance of the main tenets of their theories that she dared to formulate an own understanding. This has always been the approach taken in this script too. Only now that one has an awareness of the work of some of the most prominent theorists in this field, can one attempt to draw it all together and can one be as bold as to state that one's own understanding of the ego and ego development has been catapulted into a process of understanding.

What then is the current understanding of ego development in this script? What is known at this point is the following: inherent to the ego is a core organising function, the ego is a continuously evolving concept, it attempts to integrate experiences in both the external and intrapsychic worlds into a state of coherent wholeness, its inherent tendency involves the striving to create meaning in both the external and internal worlds and it is both a process and a structure. Given then what is understood as constituting the ego, attending to its development is of crucial importance and the research in the field of ego psychology is a testimony to the increasing number of researchers who share this sentiment. The purely theoretical component of the current discussion is thus concluded as a shift in focus is made to examine some of the available research findings in this field of enquiry.

## **2.12 Research findings in the field of ego psychology**

In this section research findings will be discussed under five main categories, namely ego development and gender differences (section 2.12.1), ego development and the five-factor trait theory (section 2.12.2), ego development and personality development (section 2.12.3), the ego and adjustment and/or psychopathology (section 2.12.4) and the ego and mechanisms of defence (section 2.12.5). The decision to include research findings arrived at through methods other than the Washington University Sentence Completion Test (WUSCT) developed by Loevinger and her co-authors (Loevinger, Wessler & Redmore, 1970) is based on the following two assumptions. Firstly, an appreciation of the scope of research in the field of ego psychology can only be attained if one is aware of as many related research findings as possible and secondly, as far as the author could ascertain, the five research categories presented in this section seem to be representative of the main

research categories according to available research findings. Although an attempt is thus naturally made to include as many of the available research findings as possible relating to the WUSCT, research findings related to the ego obtained by means of other research instruments are included too in order to give an overall impression of the scope of research in this field.

### **2.12.1 Ego development and gender differences**

A series of research findings indicate a difference in the level of ego development between adolescent boys and adolescent girls (Bailey & Cohn in Loevinger, Cohn, Bonneville, Redmore & Streich, 1985; McCammon, 1981). Other research findings have only pointed toward a very slight difference in level of ego development in terms of gender (Loevinger & Cohn in Loevinger et. al., 1985; Redmore & Loevinger, 1979) but it does seem as if adolescent girls are positioned at a slightly higher level of ego development than boys during this developmental phase. This alleged gender difference seems to disappear by adulthood (Nettles & Loevinger, 1983) with the implication being that ego development between the two genders in adulthood is positioned at the same level. Support for this view is lent by Cohn (1991) in a recent study which found that the initial gender differences decline rapidly during middle to late adolescence, disappearing by adulthood.

### **2.12.2 Ego development and the Five-Factor trait theory**

A lively debate has highlighted the importance of comprehending the relationship between ego development and the Five-Factor trait theory (Digman in McCrae & Costa, 1991) which holds that there are five major personality factors namely Neuroticism (N), Extraversion (E), Openness to Experience (O), Agreeableness (A), and Conscientiousness (C). The research instrument designed by Costa and McCrae (in McCrae & Costa, 1991) to operationalise these five factors is the NEO Personality Inventory (NEO-PI). In their research into the potential link between ego development and these five factors, no relationship between level of ego development and Neuroticism or Extraversion could be established with the implication being that individuals who score high on ego development have an equal chance of being either introverted or extraverted. A small relationship was however found between the level of ego development and Openness to Experience, and this finding appears logical within the context of regarding both the ego and the Openness trait as involving the organisation of one's experiences. Furthermore, no relationship appears to exist between the Agreeableness and Conscientiousness factors although Costa and McCrae strongly point out that additional research in this field is needed (Costa & McCrae, 1993). Loevinger's (1994) reply that the meaning of the term 'Conscientious' is problematic is acknowledged by Costa

and McCrae, and until a common ground is established in terms of conceptualising this trait, one cannot for one instant assume that Loevinger's Conscientious Stage is similar to that of the 'Conscientious' trait. Apart from merely employing the NEO-PI to conduct research on each of the Five Factors, more general research relates to personality development across the lifespan. Costa and McCrae, along with other researchers, have made a contribution to an understanding of how ego development relates to personality development and it is to this type of research that this discussion now turns. One may however ask the question as to how one could reconcile trait theory with ego development. Perhaps until further research is conducted one should adopt Loevinger's stance that these two theories can co-exist and are in fact to be seen as complementary to each other - a view which is also affirmed by Costa and McCrae (Costa & McCrae, 1993; Loevinger, 1994). The current view is thus that trait theory and factorial theories both contribute to an understanding of personality development and should not be seen as opposing theoretical approaches.

### 2.12.3 Ego development and personality development

If one is to adhere to the developmental view of the ego, it naturally follows that individuals should continue to organise their worlds in increasing degrees of complexity throughout adulthood. Helson and Roberts (1994) conducted research into the relationship between ego development and personality change in adulthood in a longitudinal study involving 90 women spanning 18 years. It was found that the level of ego development at age 43 was related to specific patterns of personality change. Verbal aptitude during the high school years, psychological mindedness during the college years and stimulation between the ages of 21 and 43 years all had an impact on the level of ego development at age 43. Those women who constructed new schemas that enabled them to deal with the more difficult times were more likely to exhibit higher levels of ego development. One of the most relevant findings in terms of the current investigation lies in the fact that Helson and Roberts (1994) found strong evidence in support of the assumption that ego development is indeed ongoing during the adult years. This finding is supported by Hauser and Allen (in Hauser, 1993) who found a strong correlation ( $r = 0,66$ ) between ego development levels over a decade pointing to an ongoing process of ego development in adulthood. The research findings that point toward ongoing ego development do not necessarily imply far-reaching changes in the adult personality. In fact, it was found that after approximately age 30, few changes in personality take place (McCrae & Costa, 1991) implying that some sort of stabilising of the basic personality takes place around this age. What seems to be happening is that the ego, as a *dimension of personality* that affects the interpretation of experiences, continues to develop.

#### 2.12.4 The ego and adjustment/psychopathology

The relationship between ego development and adjustment or psychopathology is complex with many factors influencing potential connections. Whilst recognising this complexity, some of the available studies indicate the following: Wingate and Christie (1978) found anorexia nervosa to be associated with lower levels of ego strength compared to the control group. Bursik (1991) hypothesised that divorce or separation could impact either positively or negatively on ego development and her study provided support for the relationship between changes in ego level paralleled with changes in adjustment. It was furthermore found that the women in her study who adapted successfully to such a life change, showed a mean increase in the level of ego development, whereas those women who were low on adjustment showed a significant decrease in the level of ego development. Nettles and Loevinger (1983) also investigated ego level in relation to problem marriages. Fifty-two couples in problem marriages were compared to 55 couples not experiencing serious marital problems. The criteria for a problem marriage in their study were firstly the perception by the couple that all was not well in their marriage, secondly seeking counselling or a separation and thirdly, a brief questionnaire that included questions related to how serious the couple perceived their problems to be and the likelihood that the marriage would end in divorce. No relationship between marital problems and individual or couple differences in ego level could be established, which quite clearly points toward the importance of taking cognisance of other factors that contribute to marital difficulties.

Given more or less the same life event one may thus expect either growth, or regression and disorganisation. A study that concurs with this view is one conducted by Jennings and Armsworth (1992) that investigated the relationship between ego development and women with histories of sexual abuse. The abused group showed slightly higher levels of ego development than the group who had not been abused, which may indicate that this form of trauma need not necessarily debilitate the victim's capacity for ongoing personality growth. The main value of this study is thus its rebuttal of previous studies conducted in the eighties by Sgroi and others (Scott & Stone in Jennings & Armsworth, 1992; Sgroi, 1982) that posited an inevitable delay or arrest in ego development as a result of abuse. Ellenson (in Jennings & Armsworth, 1992) and Shatan, Ulman and Brothers (in Jennings & Armsworth, 1992) also provide a more hopeful view in their belief that individuals who have undergone some form of trauma have the ability to organise their ego defenses to function as a way of coping rather than being at the mercy of a damaged ego.

A further interesting study (Silver, Bauman, Coupey, Doctors & Boeck, 1990) examined the effects of chronic illness on ego development amongst 50 teenagers. Findings suggested that lower levels of ego development are associated with more severe forms of illness and a higher verbal IQ. Potential explanations cited by these authors suggest that those individuals with more severe forms of illness may be less able to mobilise their verbal IQ as a coping resource, or that chronic illness may lead to a level of self-involvement that impedes progression to the higher and less self-involved stages of ego development.

Research in the area of ego development and chronic illness is however conflicting with some studies finding that chronically ill adolescents are more at risk for developing adjustment problems than their healthy peers (Drotar & Bush, 1985; Orr, Weller, Satterwhite & Pless in Silver et al., 1990), and other studies finding no differences in the risk for developing emotional problems between chronically ill and healthy adolescents (Lindemann in Silver et al., 1990). At this stage in the ongoing research into this area, possibly the only deduction that one may really make is that higher levels of ego development may provide an individual with the cognitive and emotional resources to deal more effectively with the demands of having a chronic illness, whilst a lower level of ego development may indicate an increased vulnerability in terms of dealing with such an illness (Silver et al., 1990).

In terms of psychopathology, Vincent and Castillo (1984) conducted a very interesting study that investigated the link between ego development and DSM-III Axis II personality disorders employing Loevinger's WUSCT. Findings suggested that seven eighths of individuals displaying Antisocial personality disorders functioned below the conformity level and one third of patients meeting the criteria for the Histrionic personality disorder also functioned below the conformity level. A further finding suggested that 44% of individuals who fell within the DSM III personality disorder categories of Dramatic, Emotional and Erratic were also found to be well below the Conformity level. There was also no evidence of higher level ego functioning amongst the psychiatric patients in the sample as a whole. The authors concede that several possible explanations exist for their findings, but their results concur with other studies in the field such as Waugh and McCauley (in Vincent & Castillo, 1984) that also found lower levels of ego functioning amongst psychiatric patients at the time that their evaluation was done. In terms of the view of the ego as having an organising function, the disorganisation that often accompanies psychiatric disorders could be seen as further support for the presence of lower levels of ego development amongst this population.

### 2.12.5 The Ego and Mechanisms of Defence

Although this script does not deal implicitly with the defence mechanisms of the ego, it is nonetheless regarded as important to an understanding of the ego and its development seeing that defences represent an aspect of ego development (Levit, 1993). A few studies (Haan, 1973; Bond, Gardner, Christian & Sigal in Levit, 1993; Levit, 1993) have in fact explored the relationship between ego development and preferred ego defence mechanisms. A brief exposition of these and other findings will hopefully contribute further to an understanding of how mechanisms of defence and ego development can be related to each other. The best starting point would however be to clarify what it is meant by the term 'defence mechanisms'.

Polansky (1982) defines a defence as any 'manoeuvre' that an individual may engage in an attempt to keep something that the person cannot bear to deal with consciously, out of awareness. A defence can furthermore be employed in attempts to control impulses deemed as forbidden and may be thought of as reflex-like actions used by individuals to avoid dealing with aversive emotional stimuli. Possibly the main function of defences is the eternal quest to avoid anxiety. Anna Freud (1937) whose main work entitled *The Ego and Mechanisms of Defence* is widely regarded as one of the most valuable contributions to the field, outlined nine principal defence mechanisms. These are repression, projection, rationalisation, reaction formation, regression, displacement, sublimation, self-abasement and compulsions. A full exposition of each of these defence mechanisms lie outside the scope of this discussion and considering that Loevinger's method of assessing ego development is employed in this study, it is perhaps sufficient to conclude the search for a general understanding of what it is that denotes defence mechanisms with her view.

According to Loevinger, the main function of ego defences is to master the instinctual life, and in terms of her views on ego development, two types of ego defences are emphasised, namely identification with the aggressor and altruism. An identification with the aggressor is an ego defence already very much present in childhood as the child anticipates punishment as a result of a wrongful action or thought committed by him/her. Instead of engaging in self-criticism, guilt is projected onto the person from whom punishment is expected. This therefore represents part of the process during which the superego or conscience is formed, and according to Loevinger, this is a very relevant defence in terms of her theory as some individuals never reach the 'developmental' stage of self-criticism. Altruism, being the second defence relevant to Loevinger's developmental view of the ego is viewed as having a selfish origin. Instead of remaining the rejected, one assumes the role of benefactor and again the primary task of ego defences in Loevinger's view comes to the fore,

namely that of mastery. Loevinger's overall view on the relation between ego defences and ego development is that there is a decrease in the use of defences as developmental transitions are made (Levit, 1993; Loevinger, 1976).

Defence mechanisms seem to fall into two 'categories', namely mature defences and less mature defences. Mature defences include humour, altruism, intellectualisation and suppression, whereas those defences deemed less mature include acting out, avoidance, denial, displacement and projection (Jacobson, Beardslee, Hauser, Noam & Powers, 1986). In an interesting study relating to the maturity or not of ego defences, Bond et al. (in Levit, 1993) found a positive correlation between ego development and mature defences such as humour and a negative correlation with less mature defences such as projection and acting out. These findings are consistent with those of Jacobson et al. (1986) which found that acting out and displacement were negatively correlated with ego development. It should however be stated that no direct relationship between overall level of ego development and mature defences has been established, a rather unexpected finding which clearly indicates that more research in this area is needed (Vaillant & McCullough in Levit, 1993).

In this paper, ego defences are thus conceptualised as having a two-tier purpose, namely that of avoiding anxiety and the striving for mastery. Within the developmental context within which this paper views the ego, defences have a place too as preliminary hypotheses suggest that more mature defences are to be found mainly at the higher end of the ego development continuum.

### **2.13 Summary**

This chapter provided a theoretical overview of different authors' conceptions of the ego and ego development with a particular emphasis on Jane Loevinger's (1976) theory. In the theoretical synthesis that followed, attempts were made to draw together the main contributions made by these theorists to gain a holistic understanding of the construct. Five primary areas of research in the field of ego psychology were also identified in order to promote an awareness of the possibilities and importance of future research. The next chapter of this script deals with Antonovsky's (1987a) SOC construct.

## CHAPTER THREE

### An introduction to the Sense of Coherence construct

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#### 3.1 Aaron Antonovsky and the search for a new paradigm

Aaron Antonovsky formally introduced his approach to the psychology of health and well-being in his well-known work, *Health, Stress, and Coping* (1979), and as the title suggests, his focus is on the relationship between these three components. The approach that Antonovsky has taken to explain the interrelationships between health, what he refers to as ‘omnipresent’ stressors (Antonovsky, 1979, p.70) and coping skills implies the converse of the medical term pathogenesis and is known as salutogenesis.

The creation of such a so-called ‘new’ term has important implications precisely because it forces one to consider a different view of health and disease. Traditionally the pathogenic paradigm views health and disease in absolutist terms - individuals are located at extreme points which position them as either healthy or ill. Antonovsky’s argument is that there seems to be something missing, as if a gaping chasm is left open between two such extreme views, and accordingly he suggests that health and disease be viewed on a continuum to take full cognisance of the complexity of why people are situated on different points along the health-disease continuum and why individuals seem to move along this continuum. It is thus here where Antonovsky’s enquiry into salutogenesis has its starting point: the very term ‘salutogenesis’ (*salus* meaning health and *genesis* meaning *origin*) implies an inquiry into the origins of health. Perhaps Antonovsky’s approach is furthermore extremely valuable precisely because he acknowledges the presence of stressors in everyday living and he states simply that: “Stressors are omnipresent in human existence” (Antonovsky, 1979, p.70). Antonovsky’s primary concern is how and why some individuals manage these ever present stressors more effectively than others, and this brings one to what Antonovsky (1987a, p. 4) refers to as the “mystery of health”. What factors are involved in making sense of one’s world in such a way that one is able to neutralise - or not neutralise stressful life circumstances and incidents? One of the ways in Antonovsky attempts to unravel this mystery is by positing the concept of Generalised Resistance Resources (GRRs). GRRs will be discussed more fully in section 3.3 of this script, but essentially these represent an inquiry into those relevant characteristics or resources owned by an individual, environment or group that enable them to deal with stressful life events and/or circumstances. Systemically, GRR’s are related to the concepts of positive and negative entropy

(also to be discussed separately in section 3.5.2). It is from this enquiry into what it is that constitutes a GRR, that Antonovsky's (1979) Sense of Coherence (SOC) construct emerges. If GRRs are in place, and if these function over a prolonged period of time thus contextualising and coping with life's stresses, a SOC will emerge. Antonovsky initially defines his SOC construct in the following way:

A global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that one's internal and external environments are predictable and that there is a high probability that things will work out as well as can be reasonably expected. (Antonovsky, 1979; p.10)

The progression in the refinement of Antonovsky's construct is however evident when one moves toward his later (1987a) definition of SOC:

A global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that (1) the stimuli deriving from one's internal and external environments in the course of living are structured, predictable, and explicable; (2) the resources are available to one to meet the demands posed by these stimuli; and (3) these demands are challenges, worthy of investment and engagement. (p. 725)

Antonovsky's question in terms of what the GRRs have in common is thus answered through his SOC construct. It is through this construct that he hopes to counteract the narrow pathogenic approach that 'blinds' us to the complexity of illness. For Antonovsky, pathogenesis represents a 'magic bullet' approach that advocates one cure for one disease (Antonovsky, 1979), an approach which he clearly finds hopelessly inadequate. It is at this point therefore necessary to make a paradigm shift that asks of the reader not to consider the question as to what it is that cause stress and illness, but what it is that promotes coping and wellness. For almost two decades Antonovsky made the study of health, stress and coping his primary focus, and it is to the main tenets and concepts related to this comprehensive theory that the discussion now applies itself.

## **3.2 The main tenets of Antonovsky's theoretical approach**

### **3.2.1 Introduction**

In order to gain a firm grasp of Antonovsky's (1979) theory, one needs to explore the main concepts upon which he has built his theory. This section of the script will thus deal with salutogenesis and the interaction between GRRs and stressors that constitute the building blocks of the SOC construct.

A substantial section of this discussion will then be devoted to the SOC construct in itself before the discussion will then move to the systemic plain postulated by Antonovsky which includes the cybernetic constructs of entropy and negentropy.

### **3.2.2 Salutogenesis**

Although some time was spent on the salutogenic construct in section 3.1., a few more remarks need to be made in this regard. It has already been pointed out that salutogenesis differs from pathogenesis in that the emphasis is on the origins of health, not illness. The salutogenic approach requires one to move away from an almost exclusive search for causal factors in disease. In his first principal work, Antonovsky (1979) explains why it is imperative to move away from the pathogenic approach. Firstly, pathogenesis is a reductionist view in that it focuses on the illness itself at the expense of the unique human being involved, secondly, it excludes other approaches with its emphasis on cause-and-effect relationships, and thirdly, it ignores the health/disease continuum with its extremist approach that views individuals as either ill or healthy. Whilst reading Antonovsky's work, one is struck by a sense that he finds the pathogenic approach too cut and dried, as if the matter of health, stress and coping is more complex than what pathogenesis views it to be. Antonovsky is not so much interested in the reasons why a person may enter a state of pathology, but rather in those factors that cause a person to move toward the health or disease ends of the continuum that he postulates (Antonovsky, 1979).

Pathogenesis for Antonovsky implies an almost exclusive focus on pathogens - harm-causing agents in the environment that include the chemical, physical, psychological and social realms. Considering such an overwhelming pathogenic intrapsychic and external environment, it is a 'miracle' that people survive at all. The question that Antonovsky is therefore asking, is why we survive at all and he answers this seemingly rhetorical question in terms of GRRs, the building blocks for a SOC.

### **3.3 Generalised resistance resources (GRRs)**

Antonovsky's enquiry into GRRs stems from his ardent belief, first expressed a few years before his 1979 work that postulates that there are common facets to all the different types of diseases and stressors (Antonovsky, 1973). Moreover, as was mentioned in section 3.1, stressors are omnipresent (Antonovsky, 1979) and almost any event in day to day living that the individual experiences as threatening may be classified as a stressor, however trivial it may seem to the outside observer. It is the individual's response to that stressor that will determine the severity thereof. The implication is thus that individuals will develop general resources in order to cope with a wide variety of

calamities that may befall them, and it is with these generalised resistance resources that Antonovsky's interest lies.

The natural response for an individual when confronted with a certain stressor is to enter a state of tension. It is however the manner in which such a state of tension is dealt with that is of the utmost importance, and Antonovsky postulates three types of consequences for such tension management, namely pathological, neutral or salutary consequences. The implication is clearly that the implementation of well developed GRRs will favour salutary consequences, and potential consequences are mediated by three further characteristics known to be associated with coping, namely flexibility, farsightedness and rationality (Antonovsky, 1979). A valuable contribution is therefore made by Antonovsky in that tension in itself is not viewed as a harmful state - the consequences can in fact be salutary. Tension does however have the potential to lead to stress, and it is the resulting stress that becomes a contributing factor in pathogenesis. In this way then, Antonovsky makes a subtle, yet important distinction between tension and stress (Antonovsky, 1979).

At this point in the discussion it is necessary to take a closer look at how Antonovsky defines GRRs. Principally a GRR is a characteristic that is employed in order to combat and/or avoid a wide array of stressors. These characteristics may furthermore be owned by an "individual, primary group or subculture" (Antonovsky, 1979; p. 103) with the primary function being that of making sense of the countless stimuli with which the individual is confronted on a daily basis: "But if anything has been learned in the study of stressful life events, it is that what is important for their consequences is the subjective perception of the meaning of the event rather than its objective character" (Antonovsky, 1974; p. 246). The value of such a 'making sense' conceptualisation lies therein that individuals are given credit for being active agents in their coping processes through their innate ability to ascribe meaning to life events.

Antonovsky posits eight broad categories of GRRs that appear to be quite involved, namely physical, cognitive, emotional, interpersonal-relational, valuative-attitudinal, macrosociocultural, biochemical and artifactual-material. Antonovsky's later expositions of potential sources of GRRs seem to be more specific, although cognisance is taken of the fact that such an involved definition acknowledges the complex interaction between human beings and their environment. More specific sources of what it is that constitutes GRRs are posited by Antonovsky as cultural stability, social support, ego strength and wealth (Antonovsky, 1993a) as well as factors that enable the development of GRRs such as intelligence, child rearing patterns, social class position and ego

identity (Antonovsky, 1979). This list is by no means complete and Antonovsky admits this. The point is simply that human beings are capable of developing and implementing a myriad of resources that enable them to deal with an almost infinite array of life experiences, and it is when these GRRs accumulate and establish a consistent nature that the SOC orientation to life emerges.

### **3.4 The Sense of Coherence (SOC) construct, its three main components and sources**

#### **3.4.1 Defining the SOC construct**

In the introductory section (3.1) of this discussion, the SOC construct was briefly defined. Antonovsky (1987b) describes SOC as an ‘orientation’ that is pervasive, enduring and dynamic. Stimuli encountered by the individual in his/her interaction with the environment and others, are perceived as structured and predictable and the available resources are adequate to meet such environmental demands - moreover, demands are seen as positive. It is imperative to realise from the outset that SOC does not refer to a specific coping mechanism, but to those factors that constitute the foundation for successful coping. Both one’s inner and outer worlds are involved in this ‘global orientation’ that positions one in a state of flux somewhere along the health-disease continuum.

Carstens (1995) in a very useful exposition outlines three core concepts derived from Antonovsky’s (1987b) definition, namely that the SOC construct is *generalised*, *dynamic* and *predictable*. This script has already touched on the generalised nature of SOC in that cognitive and emotive components are geared toward potentially dealing with a whole array of stressors and situations. The second important point made by Carstens (1995) is that the SOC represents the culmination of numerous environmental influences, and accordingly it is unlikely that the SOC will change unexpectedly or rapidly.

The SOC construct as being dynamic in nature implies a developmental character. The development of a SOC is a process that occurs throughout the lifespan and is shaped by various influences. Significant life events such as the birth of a child, a change in marital status or moving e.g. may impact significantly on one’s SOC (Antonovsky, 1979).

The aspect of predictability that is associated with the SOC construct brings one back to the formal definition of SOC offered by Antonovsky (1993a; p. 725): “...the stimuli are structured, predictable and explicable...”. In order for an individual to feel that life events make sense in terms

of his/her framework, there must be a sense that despite adversity, the resulting consequences will somehow be manageable and predictable. Stimuli received from the external environment and stimuli generated by the individual should be viewed by the person as bearing a certain meaningfulness. Without such an overall sense of predictability, or 'faith' in finding meaning, it is unlikely that individuals will be able to deal effectively with adversity when it does present itself. Antonovsky states that the person with a stronger developed SOC is much more likely to expect favourable outcomes in the face of adversity than those individuals with a weaker developed SOC. Once again one becomes aware of the interaction between the human being and his/her environment. Appraising events, internalising these, making sense of these events and projecting the consequences of events back into the environment renders the individual part of a cycle that has implications for general wellbeing. This idea brings the discussion to the three main components of the SOC concept, namely *comprehensibility*, *manageability* and *meaningfulness* (Antonovsky, 1979).

### **3.4.2 Comprehensibility, Manageability and Meaningfulness: The Three Components of SOC**

Part of Antonovsky's (1979) definition is his exposition of the three main components that characterise SOC. The Orientation to Life Questionnaire which is the measuring instrument for determining SOC, incorporates these three components in three subscales that indicate comprehensibility, manageability and meaningfulness. The importance of these related constructs can thus not be underrated and accordingly this discussion will attend to these three components separately.

#### **3.4.2.1 Comprehensibility**

In a nutshell, comprehensibility implies that the individual will view stimuli as predictable and making sense. This is not to say that nothing unexpected will ever happen to a person high on the SOC measure, but rather that when unexpected events do present themselves, the person will be able to derive some form of cognitive order out of a potentially chaotic situation. The actual event therefore becomes subsidiary to the sense that the person is able to make of that event. The reality of the situation is therefore appraised and the sense that despite adversity, life events will remain manageable is thus maintained (Antonovsky, 1979).

#### **3.4.2.2 Manageability**

This component refers to an awareness of one's available resources and the sense that such resources will be adequate in terms of dealing with life's demands. Antonovsky (1987a) cites as

examples of such resources God, a network of friends, colleagues, even government institutions, medical aids or a strong cultural sense as potential mediators in coping. It is this belief that, combined with one's own inner resources and sources outside oneself, one will be capable of shaping an orientation to life that will enable one to deal with stressors that bestows a sense of manageability. According to Antonovsky (1987a) the individual with a heightened sense of manageability will be less likely to assume the role of victim when adverse events occur.

#### **3.4.2.3 Meaningfulness**

In order to attain a sense of meaningfulness, the individual perceives stimuli as being motivationally meaningful - even as welcome challenges that are to be engaged in to promote emotional richness and diversity. Individuals who have a strong SOC will devote a fair amount of time to find meaning in important areas of their lives and are likely to view the effort invested in this endeavour to be well worth it. Adverse events are acknowledged and dealt with in a way that makes sense to that particular person on an emotional level (Antonovsky, 1979; Antonovsky, 1987a). The meaningfulness component is extremely important in Antonovsky's theory, for without this emotional dimension, high levels of comprehensibility and manageability are likely to be transient (Antonovsky, 1987b).

#### **3.4.3 Contextualising the three components of SOC in terms of its unidimensional nature**

The question that one may want to ask at this point, is whether one should view the SOC construct as essentially consisting of three separate components, or whether one should adhere to the view of the SOC construct as an inseparable whole that has contained within it three separate components. Recent research answers this question by suggesting that the initial stringent delineation of the three subscales should be revised. Frenz, Carey and Jorgensen (1993) found that SOC is best understood as being unidimensional, a view which has been reiterated by Holm, Ehde, Lamberty, Dix and Thomson (in Frenz et al., 1993), Antonovsky (1993b), and Margalit (1985). The general consensus at this stage in the research findings seems to be that the scale is a unidimensional instrument. In his later research Antonovsky (1993b) himself states that the three components are interrelated and not to be separated empirically. It is nonetheless important to take cognisance of Antonovsky's earlier views of the three separate subscales to give one a sense of the progression made in our understanding of this construct.

In his earlier formulations it seems as if each of the three components of the SOC construct represent different dimensions. The comprehensibility component represents the cognitive

dimension of the SOC construct, the manageability component represents the resource dimension and the meaningfulness component represents the emotive dimension (Antonovsky, 1987a). The 'meaningfulness' component in particular features strongly in Antonovsky's exposition of how individuals move along the postulated continuum. According to Antonovsky (1987a), it is the meaningfulness component that provides the catalyst for movement towards the health end of the continuum, and if both comprehensibility and meaningfulness is high, the potential for increasing manageability is present. In fact, for Antonovsky the meaningfulness component is so crucial that he states that even in the event of a person having a high measure of comprehensibility, a low measure of meaningfulness will be highly unlikely to promote a strong manageability component.

In the light of research findings quoted earlier (e.g. Frenz et al. 1993; Margalit, 1985) that view the SOC measure as a unidimensional construct, the search for a 'hierarchy of importance' as such seems rather pointless at present. Antonovsky (1987a) initially regarded meaningfulness as the most important subscale, followed by comprehensibility and manageability.

Despite the fact that the three subscales seem to comprise a global measurement, taking cognisance of the three subscales separately may nonetheless prove to be a valuable endeavour. Firstly, it delineates which factors may be involved in making sense of adversity, secondly it aims to provide a comprehensive theoretical exposition of how individuals move along the health-disease continuum, and thirdly it is nonetheless useful for research endeavours that aim to explore the relationship between SOC and other variables such as Carstens' (1995) study that explored the relationship between SOC and depression where each subscale was separately correlated with depression. For the purposes of the current research endeavour too the three subscales will be retained in order to include separate correlations with ego level, although the expectation is that the SOC measure will retain what appears to be its essential unidimensional properties.

#### **3.4.4 Sources of the SOC construct**

GRRs are not simply acquired by chance but are derived from a number of sources that may provide the individual with reinforcing experiences that contribute to the development of a strong SOC. Antonovsky (1979) identifies four primary sources of SOC, namely *psychological sources*, *social-structural sources*, *cultural-historical sources* and *situational sources* and it is to these variables that this discussion now turns to.

#### 3.4.4.1 Psychological sources

Antonovsky (1979) quotes various authors who he deems to have identified potential sources of SOC. These include Frank (in Antonovsky, 1979) who identified ambiguity, alarmist rumours, perceived threats to survival, as well as the well-known theorist Seligman (in Antonovsky, 1979) who focused on the theory of learned helplessness and its relation to external locus of control. Antonovsky regards Seligman's work as similar to his notion of SOC, particularly Seligman's statement that if learned helplessness is to be counteracted, the environment should be "comprehensible, ordered and consistent" (Antonovsky, 1979; p. 140). Wertheim (in Antonovsky, 1979) also features strongly with his emphasis on the lifelong process of integrating and contextualising autonomy and control and the influence of early childrearing practices.

#### 3.4.4.2 Social-structural sources

The identification of social-structural sources of SOC seems to be clearer than the psychological sources as they include everyday variables such as marital status, having a social support network, family support, emotional support, etc. Other principal social-structural variables include social class and substantive complexity at the workplace (Kohn, in Antonovsky, 1979). In general, a high degree of what Antonovsky refers to as "status integration" - i.e. fulfilling a social role that is acceptable and of congruous norms will be conducive towards the fulfillment of a strong SOC. Antonovsky clarifies the social-structural variable further by outlining three related dimensions of social climate, namely *relationship dimensions*, *personal development dimensions* and *systems-maintenance and systems-change dimensions*. Antonovsky derived these dimensions from Kiritz and Moos (in Antonovsky, 1979). Carstens (1995) offers a succinct summary of what is included in each of these dimensions: the relationship dimension includes involvement, peer cohesion, affiliation as part of a group or subgroup, and the freedom to express oneself within such a group or subgroup. Under personal development dimensions fall autonomy, responsibility and a practical orientation, whereas order, a sense of control, innovative ideas and clarity as well as work pressure are included as components of systems-change and systems-maintenance dimensions (Antonovsky, in Carstens, 1995).

#### 3.4.4.3 Cultural-historical sources

The main assertion in this regard is that cultural and historical situations may promote a strong SOC. Antonovsky quotes Kardiner in this regard: "The basic personality type for any society is that personality configuration which is shared by the bulk of societies' members as a result of the early

experiences which they have in common” (Kardiner in Antonovsky, 1979, p. 8). In the cultural-historical environment, people seem to work on the solutions to life’s challenges in a collective manner and find their answers in structures such as the prototypical family structure or tried and tested methods of childrearing. A common ideology can therefore serve as a source that can potentially promote a strong SOC. Further examples of cultural variables include disruptions in living patterns such as having to forcibly leave one’s domicile, attaining refugee status (even if a large part of the culture has been subjected to this) or sudden cultural transitions that have to be made.

#### **3.4.4.4 Situational sources**

These sources enable individuals to cope effectively with life changing events. The *degree* of change necessary for successful adaptation is however relevant. Holmes and Rahe (in Antonovsky, 1979) is quoted extensively by Antonovsky in this regard with their main assertion being that: “The greater the life change or adaptive requirement, the greater the vulnerability or lowering of resistance to disease. Thus, the concept of life change appears to have relevance to the causation of disease” (Holmes & Masuda, p. 67 in Antonovsky, 1979).

Antonovsky’s response to this hypothesis lies in his conception of the high SOC person. Such a person will be able to deal effectively with life change precisely because a strong SOC will enable him/her to mobilise the resources to make sense of such life experiences. The person with low SOC will however battle to integrate life changes and such a person’s inability to make sense of changes will render these as adverse events. It is of course a mistake to assume that the high SOC person is ‘untouchable’, for certain life events do have the potential to impact negatively on even a person with a very high SOC. This is acknowledged and brings the discussion back to one of the essential elements of Antonovsky’s initial definition, namely that it denotes a “global orientation” to life (Antonovsky, 1979; p. 10). All in all though, the high SOC person is deemed to have a predisposition in terms of being able to deal more effectively with life events that present themselves unexpectedly or adversely.

#### **3.4.4.5 Overview of the characteristics of individuals with a strong SOC**

At this point a short summary is needed to consolidate an understanding of the general characteristics of the strong SOC individual. The strong SOC is more likely to define a stimulus as a non-stressor than the weaker SOC person. If however a stressor does present itself, the strong SOC person is more likely to appraise this stressor as less antagonistic than the lower SOC person. The

strong SOC person has the ability to prevent tension from becoming actual stress and is not threatened by the awareness of emotions, even if these emotions are unpleasant for a period of time (Fouchè, 1999). The range of resources available to the strong SOC person is diverse and expansive and from this range of resources the strong SOC person is able to choose the most appropriate resource to match the presenting stressor. The strong SOC person is furthermore unlikely to engage in dispensing inappropriate blame - instead there is a willingness to deal and cope with the stressor by introducing order and meaning into the potentially stressful situation at hand (Fouchè, 1999). In a nutshell then, the strong SOC person is far more likely to utilise adaptive coping strategies, which in the long term may become positive coping habits when confronted with stressors.

### **3.5 Exploring Antonovsky's systemic orientation to SOC**

#### **3.5.1 Introduction**

Ludwig von Bertalanffy (1968) led psychology into a new era with the application of a General Systems Theory. The emphasis is no longer on a mechanistic, reductionist approach as concepts of importance become 'wholeness', 'interrelatedness' and 'complexity'. If one is then to consider the whole question of health and disease as a system, one has to take cognisance of all the component parts and forces acting upon and within this system as a whole and the relation of all these component parts to the human being, which is by its very nature an open system. How may one describe a system? The main features seem to be the following: A system forms an integrated whole and is autonomous, and although one may discern parts of a system, these parts cannot be functionally divided (Becvar & Becvar, 1996). Within the integrated whole that forms the system, the system consists of subsystems that are hierarchically organised and exist in a state of dynamic interaction. Finally, systems are not static, but develop, grow and change continually (Durkin, 1989). Antonovsky's later work is characterised by his acknowledgement of the systemic properties of the SOC construct (Antonovsky, 1987a). He has already rejected the "magic bullet" approach to health that posits an almost purely cause-and-effect relationship between health and disease and replaced it with systemic ideas that include looking at various sources from which resistance to adversity may be derived (see section 3.3 on GRRs and section 3.4.4 on sources of SOC). It is at this time thus appropriate to attend to further systemic concepts that will contribute to a more comprehensive understanding of what it is that denotes SOC. The following sections will therefore include the main systemic constructs outlined by Antonovsky (1987a) in relation to SOC known as *entropy*, *negentropy*, *boundaries* and *continua*.

### 3.5.2 Entropy and negentropy

Whereas entropy is related to heterostasis in Antonovsky's (1979) theory, negentropy is related to homeostasis. The homeostasis view is favoured by the pathogenic orientation which holds that if one is to understand disease, one needs to partake in the search for the cause of the illness that throws the homeostasis of the organism into disarray. Heterostasis on the other hand urges one to take cognisance of the whole picture of human existence, and this includes the acknowledgement of intrapsychic processes as well as the workings of the external environment. A heterostatic world view therefore moves away from causal relationships and examines the complex interaction of a whole array of variables that interact with each other. One of the primary variables that may potentially introduce negative entropy into a system, is the absence of GRRs. If negative entropy remains in the system for a prolonged period, the whole system may become contaminated, thereby causing mass disorganisation within the various subsystems. GRRs thus decrease the potential for disorder within the system. Whereas stressors are to be seen as essentially entropic, GRRs are to be viewed as negatively entropic (Antonovsky, 1979).

The underlying cybernetic perspective that characterises the salutogenic theory includes the quest for potential inputs from various systems that may aid the well-being and successful adaptation of the organism. Such potential inputs may be found in the search for meaning, imagination, love, play, will and the social structures within which these may be contained (Antonovsky, 1987a). None of these subsystems operate in isolation but continuously influence one another. It is perhaps here that the most important contribution of systems theory in relation to SOC may be found - potential answers lie locked away in numerous potential sources, and this necessitates a movement away from pathogenesis.

### 3.5.3 The role of boundaries in SOC

It is highly unlikely that the high SOC person will perceive *all* areas of his/her life as comprehensible, manageable and meaningful, and Antonovsky allows for this by positing that an individual may set boundaries. By attending to e.g. one highly important area in life, the individual may get away with not attending to all areas of his/her life with the same tenacity, and still retain an overall high SOC (Antonovsky, 1987a). Boundaries exist between subsystems and suprasystems and naturally interaction across boundaries take place that may influence the entire system. These boundaries have the ability both to open and close, and it is precisely this opening/closing phenomenon that distinguishes living systems from non-living systems (Durkin, 1989). There is

however an exclusionary clause posited by Antonovsky that holds that there are four areas where the system needs to remain open and where closed boundaries would be inappropriate. These areas are in the sphere of one's interpersonal relations, one's major interest/activity, the intrapsychic world involving inner feelings, and the fundamental existential issues that characterise life such as suffering, mortality, loneliness, failure etc. Antonovsky cautions furthermore that even if one adheres to such guidelines, attempts to isolate oneself from the outer realities of the prevailing social order may negatively impact on the development of a strong SOC. Antonovsky (1987a) summarises his position on boundaries best when he states that:

One of the most effective ways a person with a strong SOC maintains her or his view of the world as coherent is to be flexible about the life areas included within the boundaries considered to be significant. Sensing that the demands in a given area are becoming less comprehensible or manageable, one can temporarily or permanently contract the scope of the boundary of concern - always with the proviso that this does not apply to the four crucial spheres mentioned above. (p. 22)

The implication is thus that the strong SOC person will allow for a certain measure of flexibility in terms of boundaries and that such an individual will remain confident that a measure of balance will be retained despite adverse life events. The high SOC person recognises when it is appropriate to temporarily close a boundary, but at the same token has a sense that closing any one of the crucial four boundaries would be inappropriate. Information entering through open boundaries are perceived as manageable, meaningful and comprehensible and is treated by the high SOC individual as an active agent who provides feedback in terms of the source of the stimuli presented. A strong SOC can therefore never be equated to a rigid SOC.

#### **3.5.4 Resistance resources, resistance deficits and continua**

The idea of continua is very prevalent in Antonovsky's (1979) theory. On various occasions during this script the point has been made that this theorist views health and disease as opposite ends of a continuum. In Antonovsky's later work (1987a) another continuum emerges, namely one that positions resistance resources at one end, and what he refers to as resistance deficits on the opposite end. The term that Antonovsky chooses for this continuum is known as "major psychosocial resistance resources-resistance deficits" (Antonovsky, 1987a; p. 28). Individuals situated at the higher end of this continuum will be more likely to encounter life experiences that may promote a strong SOC than those who find themselves at the lower end (Carstens, 1995).

In Antonovsky's (1987a) view, stressors introduce a state of entropy into the open system that characterise human existence. Becvar and Becvar (1996) point out that entropy which tends toward maximum disorder and disintegration is itself situated on a continuum indicative of the severity of dysfunction within the organism. Antonovsky applies this continuum-based systemic perspective to the three primary stressors identified in research and the outcome is a revised view of major life events, chronic stressors and day to day hassles. He now perceives the boundaries between these stressors to be open and almost inseparable in the essential meaning that these may denote to the individual's SOC.

### 3.5.5 Chronic stressors

SOC is strongly influenced by the potential effects of chronic stressors. These are stressors for which short term solutions are not always available and with which individuals often have to cope with for prolonged periods of time. Examples include chronic medical conditions, famine, poverty or extended emotional abuse.

### 3.5.6 Major life events

These do not necessarily become stressors as the individual is again strongly positioned as an active agent in making sense of such experiences. The inevitable tension that result from major life changes/events may, in accordance with the salutogenic model yield salutary consequences. It is, to a large degree up to the individual person whether or not such events will become stressors or remain neutral, and it is thus the *perception* of the life event rather than the actual event that may or may not move a person to a different position along the health-disease continuum.

### 3.5.7 Day-to-day hassles

Antonovsky (1987a) does not afford much prominence to such daily occurrences in terms of the potential impact on SOC, simply because again it is the person's perception thereof that denotes the potential impact. Systemically this contention makes sense and one may hypothesise that the perception of daily hassles as intolerable actually has its origin in other supra- or subsystems that impact on this particular subsystem (Antonovsky, 1987a). At this point it is very clear that different individuals may view the same event in different ways, and the question of why some individuals cope better than others when confronted with the same life event, may be partially answered by the three types of appraisal outlined by Antonovsky.

### 3.6 The question of coping: Primary, secondary and tertiary appraisal of events

Carstens (1995) refers to appraisal as “the cognitive and emotive aspects of coping” (p. 32) and systemically this is consistent as both the brain and the intrapsychic domains of the individual are involved in judging whether or not a stimulus is perceived as threatening. The following brief exposition of the three primary types of appraisal will shed light onto this dualism.

#### 3.6.1 Primary appraisal

Three subtypes of appraisal are outlined by Antonovsky (1987a), namely primary appraisal I, II and III.

*Primary appraisal I* focuses on the role that the brain plays in the assessment of stimuli. According to Antonovsky, individuals who are situated toward the higher end of the SOC continuum will be more likely to assess stimuli as being non-threatening than the low SOC person. Although the high SOC may therefore recognise the stimuli as potentially producing tension, it is unlikely that it will be mentally perceived as a stressor (Antonovsky, 1987a).

*Primary appraisal II* denotes the assessment of the essential character of the stimulus. The stressor may be perceived as either a threat to one’s well-being, as having positive potential, as being benign or simply of no consequence (Carstens, 1995). Quite clearly the higher the person is on the SOC continuum, the more likely he/she will be to appraise the stressor as bearing positive potential or deem it to be irrelevant. The core idea behind this type of appraisal is that the individual with a strong SOC will employ his/her enduring feeling of confidence to this end in that he/she will retain faith that some sense will be made of the tension-causing stimulus when it presents itself.

*Primary appraisal III* is an engaging component of the coping paradigm in that it denotes the emotional component of the appraisal of potentially threatening stimuli. Antonovsky (1987a) makes a distinction between what he refers to as ‘focused’ emotions and ‘diffused’ emotions, where focused emotions are motivationally based and diffused emotions have the potential of paralysing the person precisely when coping mechanisms are direly needed. The assertion is thus that the low SOC and the high SOC individual may react to exactly the same stimuli in two different ways, thereby denoting differential sets of consequences. The strong SOC person will not only be likely to exhibit mobilising focused emotions that include “sadness, fear, pain, anger, guilt, grief and worry”, but will be more likely to be capable of recognising and ‘labelling’ his/her emotions. In contrast, the person with a weak SOC is likely to exhibit paralysing diffuse emotions that may include “anxiety, rage, shame, despair, abandonment and bewilderment” (Antonovsky, 1987a, p. 136) that are often

difficult to control. Focused emotions thus have the added advantage of being more manageable. Carstens (1995) cites the example of anger versus rage where, quite clearly anger is more easily regulated whereas rage often loses sight of its initial object.

Antonovsky (1987a) moves his discussion in regard to emotional coping strategies to an interesting plain when he makes reference to defence mechanisms (see section 2.2) in relation to coping skills: “Moreover, the focused emotions are more likely to lead to coping mechanisms, while the diffused emotions will lead to unconscious defence mechanisms” (p. 136). The way in which Antonovsky puts forward this argument gives one the impression that he regards defence mechanisms as a negative coping strategy and purely as an aside, clearly such a view is debatable especially in the light of adaptive defence mechanisms such as humour etc. This is a potential criticism that may be levelled if one reads Antonovsky’s work out of context, for the distinction that he makes between adaptive and maladaptive coping mechanisms is motivationally based. Even the mature defence immobilises the individual for a certain amount of time.

The individual who has a strong SOC may be said to be ‘emotionally skilled’ in the appraisal of potentially threatening stimuli. Primary appraisal as a whole therefore denotes both a cognitive and an emotive skill in making sense of unwelcome stimuli.

### 3.6.2 Secondary appraisal

Three important steps seem to be involved in the secondary appraisal process. First the seemingly chaotic *status quo* needs to be ordered into a situation that makes some sense, secondly an awareness of available coping resources need to be attained, and thirdly the most appropriate resource for the particular situation needs to be selected (Antonovsky, 1987a). Secondary appraisal is therefore essentially about combining resources in the best possible way to match the situation in the best way possible. The person with a weak SOC will however struggle with such a process and is in fact highly unlikely to even enter the process as little or no sense is to be made of the presenting stimuli. The low SOC person lacks the pervasive feeling of confidence in being able to order his/her world, and this in itself may potentially exclude the individual from entering into a process of secondary appraisal.

### 3.6.3 Tertiary appraisal

It is a mistake to assume that the strong SOC person will always have a ready-made set of coping resources at his/her disposal that enables him/her to deal effectively with just about any situation. The very fact that the high SOC person sets flexible boundaries (discussed in section 3.5) increases

the repertoire of potential resources. Tertiary appraisal therefore allows for the mobilisation of 'new' resources if existing resources are inappropriate or inadequate in attempts to deal with a given situation. Carstens (1995) cites examples of such resources as role modification, the mobilisation of previously unknown resources and a shift in perception, and clearly many more of these type of resources exist (Antonovsky, 1987a).

Appraisal and its three subtypes stand central to Antonovsky's (1987a) theoretical exposition as to how individuals cope with potentially adverse stimuli. Seen as a whole, appraisal incorporates not only the cognitive and emotive components of coping, but allows for the creative process of mobilising 'new' or previously unknown resources in attempts to meet life's challenges. The notion of appraisal gives credit to the agency that is owned by the human being as an open system - capable of selecting stimuli in attempts to maintain the homeostasis of the system and able to mobilise the resources to act accordingly. This brings one to the question as to how individuals during adulthood manage and mobilise such sources.

## **3.7 SOC throughout the lifespan**

### **3.7.1 Introduction**

The participants selected to partake in the current investigation are all age 30 or above (discussed in section 4.3.1) and one of the main reasons for this is Antonovsky's (1987a; Antonovsky & Sagy, 1986) contention that SOC only stabilises during adulthood: "Individuals develop a more or less generalised way of looking at the world as coherent by age 30" (p. 214). This is not to say that the earlier development of SOC is ignored by Antonovsky (1987a), on the contrary, he offers a comprehensive exposition of the development of SOC during infancy, childhood and adolescence. The focus of this discussion is however adulthood, and accordingly only a very brief summation of the early development of SOC is offered.

### **3.7.2 SOC during infancy and childhood**

SOC does not feature strongly at all during infancy and childhood although Antonovsky does concede that favourable environmental influences will enable the young child to perceive the world as consistent, contributing to a pervasive feeling of comprehensibility. Comprehensibility in infancy and early childhood is connected with the child's emerging awareness that his/her social relations bear some consistency and continuity. If a child's circumstances are characterised by a reasonable measure of security and predictability, the perception of the world as comprehensible takes root (Antonovsky, 1987a).

According to Antonovsky (1987a), the process of deriving meaningfulness during infancy and childhood is an interactive process involving both the child and the primary caregiver. The young child is a proactive participant in this process by exerting pressure on the environment to react to his/her needs. The example that Fouchè (1999) quotes is that of the child who cries, forcing the caregiver to respond, albeit positively or negatively. In this way the child shapes and becomes an active participant in the process of assigning meaning to his/her experiences. Antonovsky (1979; 1987a) stresses that the nature of the response is of extreme importance. Positive responses to the child send reaffirming messages of the child's worth which will enhance the perception that incoming stimuli are motivationally meaningful, whereas negative responses communicate messages of disempowerment and alienation, thereby impacting negatively on the derivation of meaning through this type of feedback.

The third component of SOC, namely manageability implies the search for power. Seeing that the young child is vulnerable and to a large extent still dependent on the external environment and others for meeting his/her needs, this very vulnerability may provide a catalyst for the acquisition of power that would bestow a sense of agency on the child in terms of the often hostile environment. Antonovsky's (1987a) main contention in this regard seems to be that the environment has an enormous influence on the child at this time, simply because it is so difficult to acquire agency during this time. The young child as an open system furthermore runs the risk of a systemic overload and Antonovsky outlines four types of responses that may be elicited from the environment at this time, namely being ignored, refused, channelled, encouraged or approved. If any one of these responses are dominant, the system will be thrown off balance and the development of a strong SOC will be inhibited.

### 3.7.3 SOC during adolescence

Antonovsky (1987a) positions adolescence in terms of four potential contexts where the adolescent is likely to find him/herself during the journey to adulthood. These are the *complex, open society, isolated cultures and subcultures, devastating, confusing contexts* and *the fundamentalist apocalypse*. The potential for the development of a strong SOC is most likely to be found in the complex, open society context where a healthy and balanced exchange of information takes place from a wide variety of reliable sources such as parents, current technology, the media etc. Somewhat controversially Antonovsky furthermore posits that isolated cultures and subcultures (e.g. the Amish, Mormons etc.) foster a strong SOC because of a strong tradition of homogeneity and age old familiar practices. Carstens (1995) makes a very valid point when he argues that even if one is to

assume that a strong SOC is prevalent within such groupings, it is highly likely to be situation specific and that a movement out of such a society and all the challenges that it will present may affect even the strong SOC adversely.

The third type of context posited by Antonovsky (1987a), namely the devastating, confusing context is very much a part of modern living and includes drug subcultures, violent contexts or any other situational influence deemed to be an escape from reality. Such an environment will not be conducive towards the development of a strong SOC. The final context, known as the fundamentalist apocalypse appears to be mainly theoretically based as it presupposes a context in which a strong leader provides all the answers to the essential questions that may complicate everyday living. In such a society, ready made answers in terms of dealing with violence, poverty etc. will be provided. The potential in terms of the development of a SOC is twofold: one may either develop a strong SOC (if this authority is perceived as absolute), or a rigid SOC wherein is contained closed boundaries that may threaten the resistance resources of the system.

#### **3.7.4 SOC during adulthood**

Antonovsky (1987a) views adulthood as the actual time when SOC is consolidated. At approximately the end of the first decade of adulthood, the SOC of the adult will stabilise at some point along the health-disease continuum and although movement along this continuum is still very possible, it is unlikely that major shifts will take place (Antonovsky, 1987a; Antonovsky & Sagy, 1986). Major life changes e.g. bereavement or natural disasters, etc., may of course impact on the SOC, but the adult who has a consolidated SOC with a whole array of GRRs in place, should be able to mobilise the resources to deal in the best way possible with life's adversities. The individual him/herself therefore becomes an active agent in the restoration of the system's homeostasis.

The individual who however enters adulthood with a weaker SOC will not have the resources at hand to cope effectively with adversity, and may thus become part of a snowball effect where the unresolved consequences of adversity are exacerbated by further adverse events, leading to what Antonovsky (1987a) refers to as a downward spiral. Antonovsky's argument in this regard is quite convincing as he is not denying that the SOC is able to fluctuate at different points in the lifespan. He is however convinced that such fluctuations are merely temporary. After a time, the individual will return to his/her original orientation to life. This means that the low SOC person is entirely capable of viewing the external environment as comprehensible, manageable and meaningful for a time or that the high SOC individual may experience a time during which life is not perceived as

coherent at all, but such perceptions are all temporary and individuals will return to their mean level of SOC after a time.

Carstens (1995) expresses a discomfort with what he deems to be a pessimistic view of the low SOC young adult. This is a view that is reiterated in this script, for such an almost fatalistic view of human potential is not consistent with the present author's belief in the capacity of human beings to overcome adversity. Perhaps this whole issue should rather be expressed in terms of the degree to which individuals are able to deal with stressors, moving away from the contention that the low SOC person is doomed to exist within a downward spiral. Schafer (1996) points out that a strong SOC is principally the result of a social learning process within a favourable set of social circumstances. If one accepts this premise it may be possible for an individual's SOC to improve if the circumstances within which he/she functions improves and remains relatively stable for a prolonged period of time. The question of at which point on the continuum the SOC stabilises then, becomes extremely important: "There should be a critical level of the SOC above which there is a strong tendency to stabilise, or even an upward trend, and below which there seems to be a downward pull" (Carstens, 1995; p. 31).

It is at least part of this question that the current investigation is attempting to answer in determining whether SOC stabilises in accordance with the individual's level of ego development., or whether lower levels of ego development are indeed related to a potential 'downward pull'.

## **3.8 Other salutogenic constructs**

### **3.8.1 Introduction**

The main reason for including a section on coping constructs related to SOC is to contextualise SOC as a unique process. Whereas the numerous other conceptualisations related to coping describe the coping process in terms of single domains such as either a personality pattern, or cognitive process, or an emotive or behavioural pattern, the SOC construct is an embodiment of three domains which include the cognitive, behavioural, emotive and motivational aspects of coping. This section will briefly examine six other salutogenic constructs within which one may contextualise the SOC construct. These include Kobasa's 'personality hardiness' (Kobasa, 1979), Thomas's (in Strümpfer, 1990) and Colerick's (1985) 'stamina', Boyce's (1977) 'sense of permanence', Bin-Sira's (in Strümpfer, 1990) 'potency', Moos' (in Carstens, 1995) 'domains of social climate' and Meichenbaum (1977) and Rosenbaum's (in Strümpfer, 1995) 'learned resourcefulness'.

### 3.8.2 Kobasa's construct of 'personality hardiness'

Personality hardiness is an extremely well-known concept in psychology and was developed by Suzanne Kobasa, based on existential personality theory. Essentially, hardiness denotes a “global personality construct which moderates stress-health relationships” (Kobasa in Strümpfer, 1990; p. 270). Hardiness is comprised of three components, namely *commitment*, *control* and *challenge*. Commitment (vs. alienation) denotes a belief in truth and a perception in the value of what one is doing. It is also related to the tendency to an active involvement in many spheres of life such as family, work, friends etc. Individuals who exhibit hardiness dismiss the notion of chance and adhere to the perception that they are active agents in their lives, capable of interpreting and shaping their destiny. These individuals adhere to a personality style characterised by welcoming challenges, a strong sense of commitment and an equally strong sense of control (Maddi & Kobasa, 1984).

### 3.8.3 Thomas and Colerick's notion of stamina

Caroline Thomas (in Strümpfer, 1990) first used the term 'stamina', defining it as both a physical and moral endurance and strength capable of withstanding disease, fatigue and hardship. Thomas' central belief involved viewing human beings as being born with different potentialities and susceptibilities. Life experiences would then mould these into a protective sheen that serves to protect the individual against future disease. The term was also subsequently used by Elisabeth Colerick (1985) who related the construct to ageing. Colerick asked the question as to why older people who continuously experience the ageing process and the losses that often accompany this process remain emotionally resilient. She concludes that older people have learnt to view change not as threatening, but as inevitable and challenging. As the individual is constantly confronted with change, change is perceived as manageable, and accordingly these individuals are continuously looking for new ways that will enable them to make use of their energy.

### 3.8.4 Boyce's 'sense of permanence'

Boyce's (1977) construct is built around the belief that there are certain valued elements present in life that are stable and enduring. The movement towards health is powered by three components according to Boyce, namely worthwhile aspects of life experience, repetitive (tried and tested), behaviours and self-awareness. Antonovsky (1987a) incorporated Boyce's work in his search for an understanding of the salutogenic model.

### 3.8.5 Ben-Sira's construct of 'potency'

Potency, in Ben-Sira's (in Strümpfer, 1990) view is a coping mechanism that prevents tension from becoming stress. Successful life experiences contributes to potency, whilst unsuccessful coping experiences leads to weak potency. As was Antonovsky's (1979) belief, Ben-Sira too believed in the concepts of meaningfulness and order. The high potency person will view the world as such, whereas the weaker potency individual will be likely to struggle with making sense of his/her world. Not only does the high potency individual have an enduring confidence in his/her own personal capacities, but moreover this person displays a confidence in and commitment to the social environment within which he/she functions. Strümpfer (1990) quotes Ben-Sira and points out that Ben-Sira's and Antonovsky's theories are quite similar. When one takes account of how potency is defined by Ben-Sira (in Strümpfer), this becomes very clear:

a person's enduring confidence in his own capacities as well as confidence in and commitment to his/her social environment, which is perceived as being characterised by a basically meaningful and predictable order and by a reliable and just distribution of rewards.  
(p. 399 in Strümpfer, 1990)

### 3.8.6 Moos and the domains of social climate

The way in which an individual perceives the external environment stands central in Moos' theory. It is this perception that shapes the resources to deal effectively with life's challenges (Moos in Carstens, 1995).

### 3.8.7 Rosenbaum, Meichenbaum and the learned resourcefulness construct

Meichenbaum (in Strümpfer, 1990) first used the term 'learned resourcefulness'. The implication is that people can be 'innoculated' against life stress. Rosenbaum (1988) however took this idea further to include self regulation not only in terms of emotions, but also in terms of actual self-control behaviours. Strümpfer (1990) summarises the notion of learned resourcefulness well when he states that: "To Rosenbaum (1988), learned resourcefulness is not a personality trait, but a 'personality repertoire', which is a set of complex behaviours, cognitions and affects that are in constant interaction with the person's physical and social environment" (p. 273).

All stressful events need to be coped with through exercising self-control through the processes of representation (being aware of a certain reaction in oneself towards the environment), evaluation (evaluating such changes) and action (coping in order to minimise potentially adverse effects). The resourceful person will draw on a wide variety of potential sources to determine the best course of

action when confronted with a complex situation, whereas the person low on resourcefulness will employ ineffectual strategies to cope with such a situation (Strümpfer, 1990).

### **3.9 Research findings related to SOC**

Research findings in this section will be discussed in four broad categories to ensure that the most important areas of relevance will be covered. These include SOC in relation to gender differences, life stress and adjustment, substance abuse and finally, SOC in the workplace.

#### **3.9.1 SOC in relation to gender differences and age**

Antonovsky and Sagy (1986) confirmed that SOC increased with age during adolescence. Boys in this study were shown to have a higher SOC than girls, and the authors hypothesise that this could be explained by socialisation skills that may be more developed in adolescent boys than in adolescent girls. Younger adolescents in general tend to exhibit a weaker SOC than adults because of the maturation process that they undergo at this stage. Age differences however seem to disappear by approximately age 30, by which time the individual has developed a generalised way of viewing the world. This finding is affirmed in a study by Wissing, De Waal and De Beer (1992) which found that individuals between the ages of 20 and 30 years had significantly lower mean SOC scores than individuals in the 40-50 and 50-60 year age groups. In addition, Van Eeden's (1996) study also found no significant gender differences in the SOC sample. It is however a mistake to assume that a strong SOC is entirely stable during adulthood as major life-changing events and suprasystem variables may impact significantly on the stability of the SOC.

In a further interesting study, it was found that the emotional impact of life events is significantly greater amongst women than men (Carmel, Anson, Levenson, Bonnef & Maoz, 1991). The authors argue that this is mainly because women are faced with more exposure to chronic stress than men, and accordingly, when major life events present themselves, women are not as able to effectively and judiciously mobilise resources to deal with such a situation. Women also tended to appraise recent life events more severely than did men in this study. Men are thus more likely to deal with significant (especially negative) life events by utilising inner resources, whereas women tend to rely on external resources such as social support.

#### **3.9.2 SOC and life stress/adjustment**

Flannery and Flannery (1990) investigated the relationship between SOC and life stress and associated symptoms. Their findings indicated a negative correlation between SOC and life stress

and SOC appeared to be a mitigating factor in the potential impact of life stress. SOC was not however found to be a buffer variable in itself, but was found to denote a more global orientation - a finding which is consistent with Antonovsky's basic theoretical position. Findings by Antonovsky and Sagy (1986) and Margalit (1985) also support this contention that a fair measure of SOC is associated with better overall functioning.

In a very interesting related study, McSherry and Holm (1994) examined individuals' psychological and /or physiological responses in a controlled stressful situation. Low SOC subjects were found to report more anxiety and distress during the experiment when confronted with the threatening stimuli, in contrast to high SOC subjects who exhibited less symptoms of stress and anxiety during the test situation. Furthermore, low SOC subjects showed no physiological changes during the anticipation stage, whereas high SOC individuals' pulse rates decreased during this anticipatory time. Their findings thus supported the main tenet of Antonovsky's theory, namely that SOC is related to how individuals assess and cope with stressful events.

In terms of life changes that would require a large measure of adjustment, Feigin, Sherer and Ohry (1996) investigated couple's adjustment where one partner was disabled due to either spinal cord injury or cerebrovascular disease. A significant relationship was found between SOC and disability adjustment, for both parties involved, leading the authors to conclude that SOC plays a pivotal role in coping with disability stressors, psychological and social functioning and a general state of health.

The long-term effects of testicular cancer on marital relationships was also examined through the administration of the SOC questionnaire in combination with other measures (Gritz, Wellisch, Siau & Wang, 1990). Patients' outlook on life in terms of the SOC measure was found to be within the normal range despite such an acute stressor, nonetheless perceiving the world as comprehensible, manageable and meaningful.

SOC was also found to be positively correlated with coping in primary caregivers of chronically ill family members (Gallagher, Wagenfeld, Baro & Haepers, 1994). Those caregivers with a stronger SOC were found to cope in situationally appropriate ways and displayed a range of realistic coping mechanisms. At this point it should be mentioned that Antonovsky and Sourani (in Carstens, 1995) developed a family SOC scale based on the original OLQ to assess family adaptation as a whole.

In conclusion of this section, two other studies related adjustment with SOC. SOC was found to be a significant explanatory variable in a study by Dahlin, Cederblad, Antonovsky and Hagnell (1990) which investigated the successful coping of individuals with a high-risk childhood. Another study

examined the relationship between SOC and the potential for suicidal ideation. Findings indicated that the manageability and comprehensibility subscales of SOC was a good predictor of suicidal ideation and that, on admission, low scores on the meaningfulness subscale could be interpreted as a high risk predictor variable (Petrie & Brook in Carstens, 1995).

### **3.9.3 SOC and substance abuse**

Midanik, Soghikian, Ransom and Polen (1992) investigated the relation between SOC and alcohol problems in a sample of 952 older members of a health maintenance organisation. Findings indicated that SOC was a negative predictor of alcohol problems and that higher SOC scores were associated with a subsample of individuals who had been alcohol-free for the preceding year, compared to heavier drinkers who reported at least one alcohol problem during the same time. In a further study, Nyamathi (1991) found that women with a stronger SOC were far less likely to engage in high-risk behaviours such as substance abuse and were also shown to have higher self-esteem and reported less emotional distress.

### **3.9.4 SOC and the workplace**

Kalimo and Vuori (1990) administered the OLQ in a longitudinal study related to job factors, life satisfaction and competence. Findings indicated that those individuals with high life satisfaction and competence also had favourable working conditions, more personal resources and more social support than individuals with low life satisfaction. The coping strategies of individuals with high life satisfaction, including high job satisfaction were mostly problem-focused, whilst persons with lower levels of job and general life satisfaction, exhibited mainly emotion-focused coping strategies. Antonovsky (1987b) furthermore found that coping in the workplace is both the product of individual and group sense of coherence. SOC has also been shown to mediate the relationship between organisational climate and well-being (Feldt, Kiñnunen & Muño, 1997). A good organisational climate was associated with a strong SOC and low levels of psychosomatic symptoms and emotional fatigue. In the same study, changes in organisational climate and leadership relations were related to changes in SOC, which were in turn associated with changes in general psychological well-being. Strümpfer (1998) reviewed available South African data that relate SOC to job satisfaction. Twenty eight out of the 30 studies that he reviewed showed a significant correlation between SOC and job satisfaction. Results such as these are hard to ignore in terms of the potential implications for productivity in the workplace and Strümpfer's suggestion that the SOC scale could be applied in selection processes in industry seems to make a lot of sense. Finally,

Waitzkin (1993) found that adequate award for effort at work to be a promoting factor in cardiovascular health, whereas a continuous imbalance between effort and reward in the workplace, in the long run, may adversely affect cardiovascular health.

### **3.9.5 SOC and trait theory**

Wissing and Du Toit (1994) investigated Costa and McCrae's (1993) 'Big 5' personality traits in relation to SOC and found global constructive thinking to be related to SOC. Carsten's (1995) view that cognitive resilience is deemed to be an aspect of psychological well-being therefore makes good sense. Bernstein and Carmel (1987) examined the relationship between trait anxiety and SOC and found a strong negative relationship between SOC and trait anxiety as measured by the State-Trait Anxiety Inventory. Support was thus found for the hypothesis that individuals who score high on SOC will conversely score low on trait anxiety.

### **3.9.6 A word on South African research on SOC**

There seem to be only three main published authors in the research field of SOC in South Africa, namely Wissing, De Waal and De Beer (1992); Wissing and Du Toit (1994) and Strümpfer (1989; 1990; 1998), and accordingly, where relevant, these research findings have been incorporated into the body of the research findings section of this script to delineate the main research areas within the wide field of SOC.

## **3.10 Conclusion**

The SOC construct has been researched extensively and has been connected to fields such as personality theory, medical psychology, social psychology and many other areas in psychology. A comprehensive and exhaustive review and discussion of this construct could represent a separate thesis on its own, and accordingly this discussion should not be viewed as representative of the entire field surrounding Antonovsky's work. The main aim of the current research investigation remains that of connecting ego development to SOC and it is hoped that this chapter provided a good introduction to core concepts relevant to the SOC construct.

Chapter three concludes the literature review section of this script. In chapters four and five the hypotheses and method (chapter four) and results (chapter five) of this research investigation will be presented and then discussed in chapter six.

## CHAPTER FOUR

### Hypotheses and Method

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#### 4.1 Introduction

The purpose of this chapter is twofold; firstly to outline the hypotheses connected to this investigation, and secondly to provide an exposition of the method used in the execution of this study. The hypotheses presented here will naturally be related to the general research question regarding the potential relationship between ego development and SOC.

#### 4.2 Statement of hypotheses

##### *Hypothesis I*

*A significant positive relationship will exist between subjects' global SOC scores and level of ego development.*

##### *Hypothesis II*

*A significant positive relationship will exist between the level of ego development and the 'comprehensibility' sub scale on the OLQ.*

##### *Hypothesis III*

*A significant positive relationship will exist between level of ego development and the 'manageability' sub scale on the OLQ.*

##### *Hypothesis IV*

*A significant positive relationship will exist between ego level and the 'meaningfulness' sub scale on the OLQ.*

##### *Hypothesis V*

*Of these three sub scales, 'manageability' will exhibit the strongest positive correlation with ego development.*

In connection with hypothesis V it needs to be explained that the reason for isolating the 'manageability' sub scale in relation to the intrapsychic process of ego development, is because this sub scale too denotes an awareness of available inner resources as potential mediators in coping with stressful life events (Antonovsky, 1987a).

In order to ensure the thoroughness of this study, hypotheses VI to IX were included even though these do not have a direct bearing on the research question that deals with the potential relationship between ego development and SOC.

#### ***Hypothesis VI***

*A significant positive relationship will exist between ego development and level of education.*

#### ***Hypothesis VII***

*A significant positive relationship will exist between ego development and socio-economic status.*

#### ***Hypothesis VIII***

*A significant positive relationship will exist between SOC and education.*

#### ***Hypothesis IX***

*A significant positive relationship will exist between SOC and socio-economic status.*

### **4.3 Method**

#### **4.3.1 Participants**

Forty five participants, 30 years and older took part in the study. Criteria were that the participants be literate and able to understand and read English although being native English speakers was not a criteria. Participants had to be 30 years or older in order to partake in the study as research have shown that both the SOC construct and ego development on average stabilises at approximately this age (Antonovsky & Sagy, 1986; Loevinger, 1993). Fifty five questionnaires in total were distributed and accordingly, 10 participants did not respond. Reasons for this non-response will be explored in the discussion in chapter six. Descriptive statistics with regard to the participants in this study will be provided in section 5.2 of this script.

#### **4.3.2 Procedure**

Subjects were obtained via the snowballing technique (Oppenheim, 1992) for two main reasons. Firstly, simple random or cluster sampling would have proved to be far too costly considering the fact that raters had to be trained over a long period of time in order to analyse the WUSCT - in itself a very costly endeavour. Secondly it was anticipated that the availability of subjects willing to complete the two questionnaires, one of which is quite lengthy and personal may have been a problem. Participation was thus voluntary and anonymous. Ten individuals were contacted and asked for the names and telephone numbers of five other individuals who met the sampling criteria

of 30 years and older. Subjects were required to return the completed questionnaires anonymously within one week to a designated mailbox. In the event of subjects not responding, one reminder follow-up phone call which proved most useful in the event of non-response was placed to subjects (Oppenheim, 1992).

Both the OLQ and the WUSCT were coded prior to being given to subjects (Both questionnaires are available from the author of this script on request). Biographical information required from subjects included gender, age, socio-economic status, marital status and highest level of education.

## **4.4 Measuring instruments**

### **4.4.1 Washington University Sentence Completion Test (WUSCT)**

The primary motivation for the construction of the WUSCT according to Loevinger, is to “deepen knowledge of personality” (Hy & Loevinger, 1996, p. ix). The full form of the WUSCT (Hy & Loevinger, 1996) consisting of 36 items was used to measure subjects’ overall level of ego development. Other shorter forms of this test are available (the short forms consisting of 18 items), but the most reliable results have been obtained through the use of the full forms (Hy & Loevinger, 1996). Respondents were requested to complete the given statements in English. The WUSCT has formats for males and females respectively and subjects therefore completed the appropriate form in terms of their gender.

Loevinger, Wessler and Redmore (1970) developed the method of scoring the WUSCT in order to measure ego development. The scoring system has evolved since its early days when only responses from women and adolescent girls could be rated. Studies now include responses from men and boys and the WUSCT is widely used and has been translated into several languages.

Known validity coefficients for the WUSCT show a positive correlation with other developmental stage theory tests of personality. Sutton and Swensen (in Loevinger, 1993) found a correlation of  $r = 0,8$  in relation to the Thematic Apperception Test, whilst correlations of 0,4 and 0,6 has been found in relation to Kohlbergh’s Moral Maturity Instrument (Colby & Kohlberg, 1987; Sullivan, McCullough & Stager, in Loevinger, 1993). The validity of the WUSCT has also been confirmed by Holt (1980) as well as by Cohn (1991) in his investigation into the relation between sex differences and ego development.

In terms of reliability, Loevinger reports correlations between self-trained raters and ‘composite trained raters’ as ranging from 0,76 to 0,85 (Loevinger, et. al., 1970) whilst Holt (1980) too reports

general reliability, also in relation to the male and female short forms consisting of twelve items. The reliability of the WUSCT is directly related to the individuals who act as raters in scoring protocols and the scoring manual stands central to this process. Hy and Loevinger (1996) state in no uncertain terms that attempts to rate protocols without the manual will prove to be perilous in terms of reliability, especially to the inexperienced rater. Loevinger's scoring manual is by nature a self-teaching instrument but despite this reliability is deemed to be very good. Holt (1980) regards Loevinger's WUSCT as the only sentence completion instrument of its kind that has a highly developed and reliable scoring system.

The scoring system is not only reliable but also quite involved and requires a great deal of effort and time on the part of more than only one rater. It is to this process of rating and finally scoring the WUSCT that this discussion will now apply itself, and with such an exposition, the direct link between the reliability of this instrument, the rating procedures and the raters themselves should become clear.

#### **4.4.1.1 Using the WUSCT: Step one: The selection and training of raters**

No known experienced raters could be located within South Africa, and accordingly Loevinger's self-training manual was relied on for mastering the scoring procedure. Training as a rater took approximately two weeks during which practice examples were completed. Two raters were trained, one of which has a postgraduate qualification in the natural sciences and a qualification in psychology, and another rater (the researcher) with graduate experience in psychology. Loevinger (Hy & Loevinger, 1996) recommend that at the very least two raters should be involved in the scoring procedure, so the minimum criteria in this regard have been met. Ideally one would want at least one more trained rater to be involved in the scoring process, but the availability of raters in terms of the time that it takes to train as-a rater-and the cost involved proved to be constraining factors. Despite such restrictions however, training was thorough, the raters were highly motivated and overall protocol rating proved to be reliable in terms of available research findings that situate the majority of respondents on the fifth level of ego development (Hy & Loevinger, 1996; Loevinger, Wessler & Redmore, 1970).

The reason for Loevinger's insistence on at least two trained raters is to ensure the reliability of ratings, thereby guarding against clerical errors. Consensus on every item between the two raters need to be reached before a score to any item may be assigned and the reciprocal criticism of potential ratings in the event of doubt proved most useful throughout. Experienced raters spend

approximately 20 minutes rating a protocol (Hy & Loevinger, 1996). In this investigation the time was extended to approximately 35 minutes per protocol due to the relative inexperience of the raters.

#### **4.4.1.2 Scoring the WUSCT**

Every response is rated as a whole and responses are taken as they are presented. Raters are not to make inappropriate inferences or infer deep underlying meaning from responses. Responses are to be matched to the scoring manual and five sequential rules within which every response will fall are to be applied. The first rule requires raters to match the given completion with one of the category titles found in the manual under each item. Rule two makes provision for compound responses, i.e. responses where two or more elements are present, in which case the score assigned will be based on the level of the highest element in the response. In the event that a meaningful response is given, but no appropriate category seems to apply and the second and third rules also do not apply, rule four holds that the general theory may be employed to assign a rating. This rule should obviously be used sparingly as it is, in a sense an intuitive rating. Rule five provides for instances where item responses have been omitted. Such responses will then be rated E4 by default (Hy & Loevinger, 1996).

#### **4.4.1.3 Calculating the global level of ego development**

After the aforementioned procedure has been followed for every item on every questionnaire, the overall level of ego development is calculated. Each protocol is read through again as a whole and an impressionistic ego level is formed. A frequency distribution of each protocol for items is then drawn up (e.g. E4 occurred three times) after which the cumulative frequency distribution is jotted down. Once the ogive and the item sum for each protocol is known, the total protocol rating (TPR) is looked up in the appropriate table. If the TPR and the impressionistic ego level corresponds, this value is taken as the TPR and raters may continue with the next protocol. In the case of discrepancy preceding steps should be double checked for clerical errors and failing this, the overall item distribution of a protocol needs to be attended to in conjunction with nonpsychometric signs outlined in the scoring manual (Hy & Loevinger, 1996).

Hy and Loevinger (1996) outline a comprehensive list and procedures for taking into account nonpsychometric signs when deriving the TPR. Examples of important nonpsychometric signs include the repetition of words or phrases in three or more different responses which will usually be indicative of an E4 overall protocol rating or perhaps even lower. The originality and depth of responses are usually associated with the higher levels of ego development. A further

nonpsychometric sign is the repetition of the same theme throughout the protocol which could indicate a preoccupation with a particular theme. Hy and Loevinger (1996) uses the example of a drinking theme which would fall under the lower level indicators according to the scoring manual (Mainly E2 and/or E3 responses). Another nonpsychometric indicator relates to the higher TPRs. In most samples for example, no participants will attain a TPR of E9. A participant can only become a candidate for an E9 TPR once more than half of the item ratings are E6 or higher. Where only a few E9 ratings are thus present, the E9 ratings fall under the E8 item rating category. A TPR of E8 in turn can only be assigned if at least three E8 responses or at least three different E8 themes are present in the participant's protocol. What may thus at first appear to be a rather 'unscientific' measure of ego development in actual fact proves to be a thorough endeavour with an emphasis on reliable scoring that employs both comprehensive psychometric and nonpsychometric indicators.

#### **4.4.2 Orientation to Life Questionnaire**

The OLQ consisting of 29 items was developed by Antonovsky (1987a) and is a self-report measure that has as its aim the measurement of a global orientation to life and the stresses that it often presents. It is the potential relation of ego development as a whole to such a global orientation that is the focus of this investigation. Antonovsky's OLQ is the instrument of choice precisely because it is such a global measure and because it is not restricted to the measurement of a unidimensional construct.

##### **4.4.2.1 Validity and reliability**

In terms of validity, Wissing, De Waal and De Beer (1992) confirmed the construct validity of the OLQ related to the SOC construct. These authors investigated the construct validity of the SOC scale in four separate studies and in all four instances validity was confirmed. Dana, Hoffmann, Armstrong and Wilson (1985a) also investigated the validity of the OLQ and found a correlation of 0.72 between the SOC construct and the 22 item SOC developed by Rumbaut (Rumbaut et al., 1988). Other authors who have also confirmed the validity of this instrument are Frenz, Carey and Jorgensen (1993) who administered the OLQ to a group of undergraduate students. Antonovsky himself (1987a) regards the SOC scale as a valid reflection of the construct as a whole.

Twenty six studies referred to by Antonovsky in his 1993(b) paper where the OLQ was used yielded internal consistency with the average Cronbach alpha coefficient ranging from 0,85 to 0,91. Internal consistency for the SOC construct has been confirmed by its administration to a wide range of

populations in different languages (the OLQ has to date been administered in 14 languages) (Antonovsky, 1993b).

Antonovsky's scale also seems to be reliable as found by a number of studies. Du Toit, Wissing and Randall (1997) obtained a Cronbach alpha coefficient of 0.94 whilst Frenz's et al. (1993) study with a one week interval yielded a high test-retest coefficient of  $r = 0,92$ . Wissing et al. (1992) reported a test-retest reliability coefficient of  $r = 0,97$  after a time lapse of six weeks. In a study with a time lapse of three weeks between test and retest, a reliability coefficient of 0,80 was found (Antonovsky, 1993a).

#### 4.4.2.2 Scoring the OLQ

Respondents choose a number from 1 to 7 on a Likert-scale format that best expresses their response in terms of an agree/disagree continuum to each individual item. The scoring procedures for the OLQ are quite simple. Some items are reverse scored and all scores on the 29 items are then added to yield the global score. The total score ranges from 29 to 203. There are also three subscales namely comprehensibility (scores ranging from 11 to 77), manageability (scores ranging from 10 to 70) and meaningfulness (scores ranging from 8 to 56) and different items are added in order to calculate these scores separately. (The scoring key is included in Appendix C).

### 4.5 Overview of statistical procedures

The nature of the current study is exploratory and accordingly the statistical procedures followed focused mainly on correlations, i.e. the potential relationships between variables. A statistical adviser assisted with the 'Statistical Package for the Social Sciences; Version 8.0 for Windows (SPSS) software computer programme that was used to calculate correlations. Since the distribution of scores on some of the variables did not meet the assumption of normality, it was decided to use distribution-free statistical procedures. The levels of ego development, SOC, socio-economic status and education level of subjects were ranked and the Spearman correlation coefficient for ranked data ( $r_s$ ) was employed to establish whether a relationship between these variables on the two research instruments existed (hypotheses VI, VII, VIII and IX). Correlations were also calculated between the global ego development level of subjects and SOC (hypothesis I), and between global ego level and the three sub scales of the OLQ separately (hypotheses II, III, IV and V). In addition, the Mann-Whitney test was used. This test is, as is the case with the Spearman correlation procedure, a distribution-free test that was applied to the two independent gender groups in this study to identify potential gender differences regarding global SOC scores and overall levels of ego development.

## 4.6 Synopsis

This chapter outlined the method and statistical procedures followed in the exploratory investigation of the potential relationship between ego development and SOC. The hypotheses stated at the beginning of this section represents a culmination of the information presented in the preceding literature review and the unique properties of each of the measuring instruments used during this study. The next chapter is devoted to either confirming or negating the nine hypotheses presented in this chapter by presenting the research findings.

## CHAPTER FIVE

### Results

#### 5.1 Introduction

Research findings will be presented in two sections. Firstly the relevant descriptive statistics will be presented, followed by a section wherein the results for each hypothesis will be presented separately in keeping with the foregoing chapter. Results will be presented in table form as well as graphically to provide a comprehensive picture of the distribution of scores.

#### 5.2 Descriptive statistics

Twenty seven female and 18 male subjects responded by completing the questionnaires. The total number of participants is 45 ( $n = 45$ ). The demographic details of female participants ( $n = 18$ ) are presented in Table 1 whilst Table 2 outlines the demographic details of male participants ( $n = 27$ ). In both cases the distribution of subjects in terms of age class, socio-economic status, marital status and level of education are included.

For the purposes of statistical analysis, the above mentioned variables were ranked in the following manner:

<u>Age class:</u>	30-35 [1]	<u>Socio-economic status:</u>	< R 40 000 [1]
	36-40 [2]	(income p/a)	R40 - R65 000 [2]
	41-50 [3]		R65 - R 100 000 [3]
	51-60 [4]		R120 000 [4]
	61-74 [5]		
	75 + [6]		
<u>Marital status:</u>	single [1]	<u>Gender:</u>	female [1]
	married [2]		male [2]
	divorced [3]		
	widowed [4]		
	living together [5]		

Table 1.

Demographic Details of Female Participants

Subject	Age class	Socio-Economic class	Marital status	Total years of Education
1	51-60	< R40 000 p/a	married	10
2	51-60	< R40 000 p/a	married	10
3	30-35	< R40 000 p/a	married	11
4	41-50	R40 - R65 000 p/a	married	20
5	30-35	< R40 000 p/a	married	16
6	36-40	< R40 000 p/a	divorced	4
7	36-40	R65 - R100 000 p/a	married	12
8	61-74	< R40 000 p/a	widowed	12
9	41-50	R120 000 + p/a	married	12
10	36-40	< R40 000 p/a	single	15
11	41-50	< R40 000 p/a	married	10
12	41-50	< R40 000 p/a	married	7
13	30-35	R40 - R65 000 p/a	divorced	14
14	51-60	R120 000 + p/a	divorced	12
15	41-50	< R40 000 p/a	widowed	12
16	30-35	R40 - R65 000 p/a	single	16
17	36-40	< R40 000 p/a	divorced	7
18	30-35	< R40 000 p/a	divorced	2
19	41-50	< R40 000 p/a	married	6
20	36-40	< R40 000 p/a	married	12
21	51-60	< R40 000 p/a	married	13
22	51-60	R120 000 + p/a	married	15
23	41-50	< R40 000 p/a	married	15
24	36-40	< R40 000 p/a	married	12
25	30-35	< R40 000	married	9
26	30-35	< R40 000	married	10
27	30-35	R65 - R100 000 p/a	single	16

From Table 1 it is clear that the majority of female participants are married ( $n = 17$ ) and fall in the < R40 000 per annum income group ( $n = 19$ ). The average level of education in years is 11,48 years. In accordance with what the literature demands, all subjects are 30 years and older. The demographic details of male participants are presented in Table 2.

Table 2.

Demographic Details of Male Participants

Subject	Age class	Socio-Economic class	Marital status	Years of Education
1	30-35	R65 - R 100 000 p/a	married	19
2	41-50	R120 000 + p/a	married	17
3	30-35	R65 - R100 000 p/a	divorced	16
4	36-40	R40 - R 65 000 p/a	widowed	12
5	61-74	< R40 000 p/a	widowed	3
6	30-35	R 65 - R 100 000 p/a	single	19
7	30-35	< R40 000	married	12
8	36-40	R40 - R65 000 p/a	married	12
9	36-40	R65 - R100 000 p/a	divorced	12
10	51-60	R120 000 + p/a	married	16
11	41-50	R65 - R100 000 p/a	married	15
12	41-50	R120 000 + p/a	married	20
13	30-35	< R40 000 p/a	single	13
14	30-35	R65 - R100 00 p/a	single	16
15	30-35	R40 - R65 000 p/a	married	12
16	36-40	R65 - R100 000 p/a	married	15
17	41-50	R40 - R65 000 p/a	married	15
18	30-35	R40 - R65 000 p/a	married	16

From Table 2 it can be seen that the majority of male participants are married ( $n = 11$ ) and fall into the R65 000 to R100 000 per annum income group ( $n = 7$ ). The average level of education in years is 14,4 years. Once again, in accordance with the literature all participants are 30 years and older.

In terms of the sample as a whole, 60% of respondents are female, whilst 40% are male. In terms of *age* groupings, 35,6% of all respondents fell within the 30-35 year age class, 22,2% within the 36-40 year group, 24,4% within the 41-50 year group, 13,3% within the 51-60 year old group and 4,4% within the 61-74 year age cohort.

The *socio-economic class* of respondents varied from less than R40 000 p/a to over R120 000 p/a. The majority of respondents were located within the < R40 000 class (48.9%), whilst the minority of respondents fell within the R120 000 + group (13,3%). A further 17,8% of participants fell in the R40 000 to R65 000 range, whilst 20,0% of subjects fell within the R65 000 to R100 000 class.

In terms of *marital status*, the majority of respondents (62,2%) were married, 15,6% were divorced, 13,3% were single and 8,9% were widowed.

The mean level of education in years for the combined sample was 12,73 years (SD 4,17).

### 5.3 Testing of hypotheses

#### *Hypothesis I*

*A significant positive relationship will exist between subjects' global SOC scores as measured by the OLQ and overall level of ego development as measured by the WUSCT.*

To test this hypothesis, the Spearman rank correlation coefficient for ranked data ( $r_s$ ) was calculated between global SOC scores and global level of ego development for the sample as a whole. The results appear in Table 3:

Table 3

#### Correlation between Total SOC Scores and Level of Ego Development

Groups	N	M	SD	r
Global SOC	45	130.13	24.52	0.243
Ego level	45	4.96	0.80	

From Table 3 it can be seen that the correlation between global SOC and ego development was not significant ( $r = 0,243$ ,  $p > 0,05$ ).

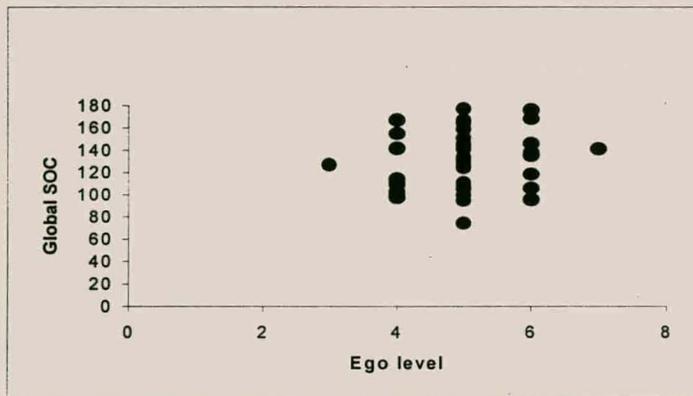


Figure 5. Ego level vs global SOC

From Figure 5 it can be deduced that the majority of respondents are situated on the fifth level of ego development ( $M = 4,96$ ) whilst the majority of respondents have a score of approximately 130 on the OLQ.

### ***Hypothesis II***

*A significant positive relationship will exist between level of ego development and the 'comprehensibility' sub scale on the OLQ.*

To test this hypothesis, the Spearman correlation coefficient ( $r_s$ ) was calculated. Results appear in Table 4:

Table 4

#### Correlation between Ego Level and the Comprehensibility Sub Scale

Groups	N	M	SD	r
Ego level	45	4,96	0,80	0,092
Comprehensibility	45	43,62	10,10	

From Table 4 it can be seen that the correlation between ego level and the comprehensibility sub scale was not significant ( $r = 0,092$ ,  $p > 0,05$ ).

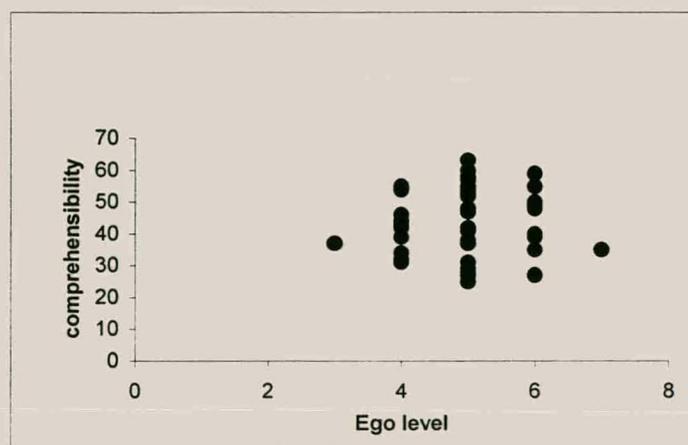


Figure 6. Ego level vs comprehensibility sub scale

From Figure 6 it can be deduced that the majority of respondents are located on the fifth ego level ( $M = 4,96$ ) whilst the mean score of respondents on the comprehensibility sub scale is 44 ( $M = 43,62$ ).

### **Hypothesis III**

*A significant positive relationship will exist between level of ego development and the 'manageability' sub scale on the OLQ.*

The Spearman correlation coefficient ( $r_s$ ) for ranked data was calculated to test hypothesis 3. Results are reported in Table 5:

Table 5

#### Correlation between Ego Level and the Manageability Sub Scale

Groups	N	M	SD	r
Ego level	45	4,96	0,80	0,299 *
Manageability	45	46,53	10,18	

\*  $p < 0,05$

From Table 5 it can be seen that the correlation between ego level and the manageability sub scale was significant ( $r = 0,299$ ,  $p < 0,05$ ).

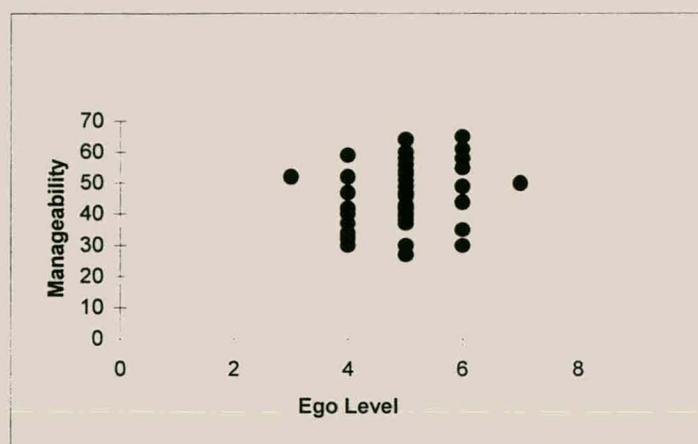


Figure 7. Ego level vs manageability

From Figure 7 it can be deduced that the majority of respondents are located on the ego level 5 ( $M = 4,96$ ), whilst the mean score for respondents on the manageability sub scale is 47 ( $M = 46,53$ ).

#### *Hypothesis IV*

*A strong positive correlation will exist between level of ego development and the 'meaningfulness' sub scale on the OLQ.*

Results are presented in Table 6:

Table 6

#### Correlation between Ego Level and the Meaningfulness Sub Scale

Groups	N	M	SD	r
Ego level	45	4,96	0,80	0,193
Meaningfulness	45	39,98	9,52	

From Table 6 it can be seen that the relationship between ego development and the meaningfulness sub scale was not significant ( $r = 0,193$ ,  $p > 0,05$ ).

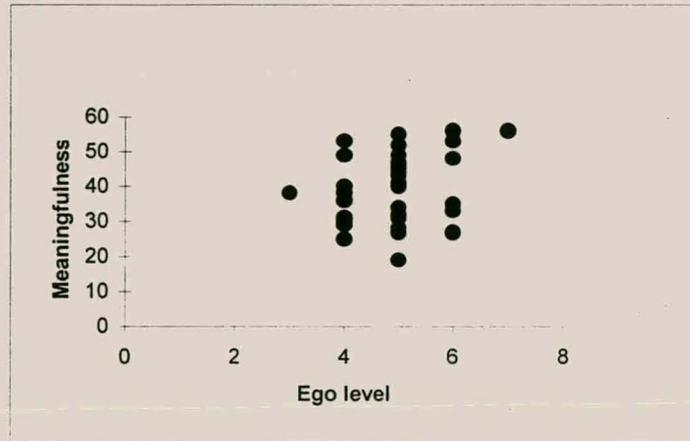


Figure 8. Ego level vs meaningfulness sub scale

From Figure 8 it can be deduced that the majority of respondents are located on ego level 5 ( $M = 4,96$ ) whilst the mean score for respondents on the meaningfulness sub scale is 40 ( $M = 39,98$ ).

#### ***Hypothesis V***

*Of the three sub scales, 'manageability' will exhibit the strongest positive correlation with ego development.*

Hypothesis V was confirmed in that the manageability sub scale shows the strongest positive correlation with ego development ( $r = 0,299$ ) compared to the comprehensibility sub scale ( $r = 0,092$ ) and the meaningfulness sub scale ( $r = 0,193$ ).

#### ***Hypothesis VI***

*A significant positive relationship will exist between ego development and level of education.*

This hypothesis was tested by means of the Spearman rank correlation coefficient ( $r_s$ ). Results are presented in Table 7 and Figure 9:

Table 7

Correlation between Ego level and Level of Education (n=45)

Groups	N	M	SD	r
Ego level	45	4,96	0,80	0,467 *
Level of education	45	12,73	4,17	

\*p &lt; 0,01

From Table 7 it can be deduced that the correlation between ego level and level of education was significant ( $r = 0,467$ ,  $p < 0,01$ ).

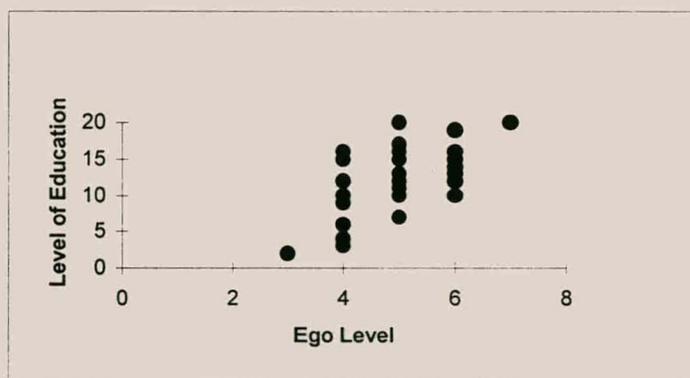


Figure 9. Ego level vs level of education

From Figure 9 it can be deduced that the majority of respondents are located on ego level 5 ( $M = 4,96$ ) whilst the mean level of education in years is 13 years ( $M = 12,73$ ).

***Hypothesis VII***

*A significant positive relationship will exist between ego development and socio-economic status.*

This hypothesis was tested by the Spearman correlation coefficient ( $r_s$ ) for ranked data. Results are presented in Table 8 and Figure 10.

Table 8

Correlation between Ego Level and Socio-economic Status

Groups	N	M	SD	r
Ego level	45	4,96	0,80	0,169
Socio-economic status	45	1,98	1,12	

From Table 8 it is clear that the correlation between ego level and socio-economic status was not significant ( $r = 0,169$ ,  $p > 0,05$ ).

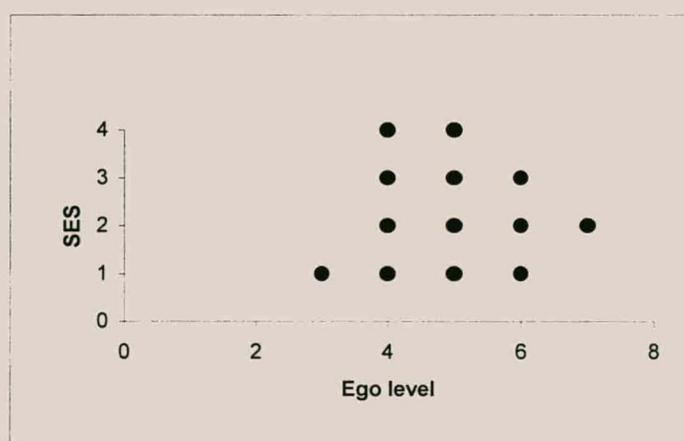


Figure 10. Ego level vs socio-economic status

From Figure 10 it can be deduced that the majority of participants are distributed between ego levels 4 and 5 ( $M = 4,96$ ) whilst the mean distribution of participants' income is at level 2 ( R40 000 - R65 000 p/a).

***Hypothesis VIII***

*A significant positive relationship will exist between SOC and level of education.*

This hypothesis was tested by the Spearman correlation coefficient ( $r_s$ ) for ranked data. Results are presented in Table 9 and Figure 11:

Table 9

Correlation between SOC and Level of Education

Groups	N	M	SD	r
Global SOC	45	130,13	24,52	0,416*
Level of education	45	12,73	4,17	

\*p &lt; 0,01

From Table 9 it can be seen that the correlation between SOC and level of education was significant ( $r = 0,416$ ,  $p < 0,01$ ).

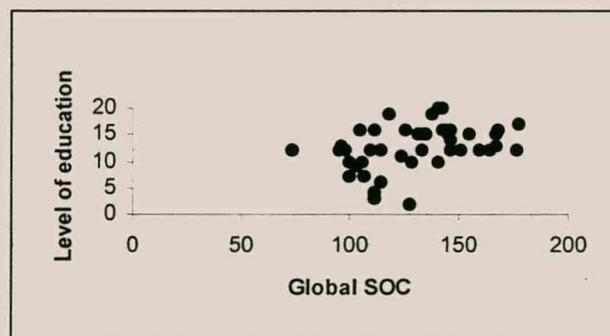


Figure 11. SOC v level of education

From Figure 11 it can be deduced that the majority of respondents have a score of approximately 130 on the OLQ. Higher scores on the OLQ are also associated with the higher levels of education whilst lower scores on the OLQ are associated with the lower levels of education.

***Hypothesis IX***

*A significant positive relationship will exist between ego development and socio-economic status.*

This hypothesis was tested by the Spearman correlation coefficient ( $r_s$ ) for ranked data.

Results are presented in Table 10 and Figure 12:

Table 10

Correlation between SOC and Socio-economic Status

Groups	N	M	SD	r
Global SOC	45	130,13	24,52	0,301*
Socio-economic status	45	1,98	1,12	

\*p &lt; 0,05

From Table 10 it can be seen that the correlation between SOC and socio-economic status was significant ( $r = 0,301$ ,  $p < 0,05$ ).

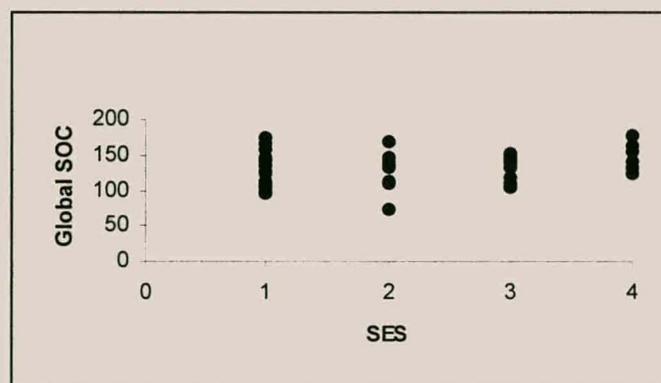


Figure 12. SOC v socio-economic status

From Figure 12 it can be seen that the mean distribution of participants' income is at level 2 (R40 000 - R65000 p/a) whilst the majority of respondents have a score of approximately 130 on the OLQ.

#### 5.4 Additional Findings

Although the available research findings do not indicate that significant gender differences in adulthood exist in either the WUSCT findings (Loevinger, 1976; Nettles & Loevinger, 1983; Redmore & Loevinger, 1979) or findings related to SOC (Carmel et al., 1991; Carstens, 1995), potential gender difference in these two instruments were explored to ensure a comprehensive

statistical overview of the data. The non-parametric Mann-Whitney test was used to assess potential gender differences in both ego level and SOC. Results are presented in Tables 11 and 12:

Table 11

Ego level and Gender Differences

Groups	M	SD	N	Mean rank	Sum of ranks	Mann-Witney U	Z	p
Female	4,85	0,86	27	21,26	574,00	196,000	-1,185	0,236
Male	5,11	0,68	18	25,61	461,00			

From Table 11 it can be seen that gender differences between the male and female participants were not significant with regard to ego level ( $z = -1,185$ ,  $p > 0,05$ ).

Table 12

SOC and Gender Differences

Groups	M	SD	N	Mean rank	Sum of ranks	Mann-Witney U	z	p
Female	130,41	25,75	27	22,54	608,50	230,500	-0,290	0,772
Male	129,72	23,28	18	23,69	426,50			

From Table 12 it can be seen that gender differences between the male and female participants were not significant with regard to SOC ( $z = -0,290$ ,  $p > 0,05$ ).

The results of this research will be discussed in the following chapter.

## CHAPTER SIX

### Discussion of Results

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In this chapter the results presented in the preceding chapter will be discussed and in doing so the two primary constructs that this study investigated, namely ego development and SOC will be drawn together one final time. This chapter will be structured in the following way: firstly the significant relationships that have been found will be discussed, followed by a discussion of those relationships that were not significant. In the final section of this chapter an attempt will be made to draw together findings and to contextualise these within the research endeavour as a whole.

In Chapter three the unidimensional view of the SOC construct was discussed and several authors (Frenz et al., 1993; Margalit, 1985) who support the view that the three subscales of the OLQ essentially denote the same overall construct were quoted. In fact, the latest research findings on the SOC construct view the OLQ as a unidimensional instrument that measures a unidimensional construct, and authors such as Frenz et al. (1993) and Antonovsky (1993b) feel that separating the three sub scales is a futile exercise in terms of its empirical value. Whilst this view is acknowledged and whilst the three components of SOC undoubtedly contribute in equal measure to the construct as a whole, in terms of the current research investigation this 'equality of components' in terms of a specific developmental sequence such as ego development was not summarily assumed.

#### **6.1 Discussion of significant relationships that could be established**

##### **6.1.1 The relationship between level of ego development and the 'manageability' sub scale**

The fact that a relationship between level of ego development and the 'manageability' sub scale on the OLQ was significant makes a lot of sense if one revisits the essential meaning of each of these constructs. 'Manageability' according to Antonovsky (1987a) refers to the extent to which one is aware of the resources (inner and outer resources) available to oneself. It essentially embodies a confidence that life events will be manageable and that resources will be adequate to meet the demands posed by such events. Ego development on the other hand attempts to trace the process by which individuals strive for coherence in meaning through their interpretation of life events. One may thus argue that the relationship between ego development and manageability exists precisely because these constructs have the same aim. The ego makes sense of the world through organising, interpreting and ascribing meaning to events, and the manageability component of Antonovsky's SOC construct makes sense of the world only when a feeling of confidence is achieved and only

once resources have been contextualised, organised and made available by the well developed ego. The argument in this regard is therefore that a significant positive relationship between ego development and 'manageability' exists because it represents two components of the same process, namely that of making sense of experience. It is this combination of inner resources and sources outside oneself that is neatly captured by the relationship between ego development and the manageability component of SOC, helping the individual to make sense of his/her existence. Further potential explanations for this relationship will be contextualised in section 6.2.1 of this discussion that deals with potential reasons for an absence of a relationship between ego development and global SOC but the presence of the relationship between ego development and this sub scale.

### **6.1.2 The relationship between ego level and level of education**

A significant positive relationship between ego level and level of education was found, a finding which is consistent with Loevinger's (1976) statement that cognitive complexity is an aspect of ego development. Verbal aptitude for example is one aspect of cognitive development that may prove to be beneficial when completing the WUSCT (Helson & Roberts, 1994). It is however imperative to realise that the potential correlation between intelligence and/or level of education should not simply be assumed, for such a relationship is far more complex and not a linear phenomenon. Both Loevinger (1976) and Helson and Roberts (1994) caution against such linear thinking. Verbal aptitude (Westenberg & Block, 1993), education and intelligence should rather be viewed as 'tools' that one may assume to be conducive to the development of the ego. The fact that an individual has attended university for example, does not immediately presuppose a high level of ego development. As Loevinger (1976) points out, university environments can be very restrictive in terms of peer group conformity rules and may in fact lead to a temporary stagnation in ego development until new and challenging life experiences are presented.

Other factors that may have contributed to such findings stem from the fact that participants from historically disadvantaged groups' responses to the WUSCT may have been influenced by a historically poorer education system. Such members' responses to the word stems on the WUSCT may therefore not have been accurate reflections of level of ego development seeing that vocabulary and verbal aptitude are connected to level of ego development as measured by this instrument. In sum then, although a correlation between ego development and level of education was established in this research study, the interpretation of such a correlation should be undertaken with caution.

### **6.1.3 The relationship between SOC and level of education**

A significant positive relationship between SOC and level of education was found. Attempts to explain the existence of such a relationship in this discussion is based on the premise that education may be viewed as a fortigenic factor (Strümpfer & Wissing, 1998), thereby representing a source of strength that enables the individual to view life as comprehensible, manageable and meaningful. Another possibility is that education denotes a cognitive GRR which is related to Antonovsky's (1993b) contention that intelligence is a GRR. In this line of thought then, education as a GRR becomes a building block for SOC. Another possibility for the statistically significant correlation between level of education and SOC relates to the completion of the OLQ itself. One may hypothesise that level of education could have influenced the way in which subjects completed these questionnaires. Numerous variables such as reading ability, task orientation or familiarity with the Likert-type scales may have influenced results.

### **6.1.4 The relationship between SOC and socio-economic status**

The significant positive correlation that was found between SOC and socio-economic status is not surprising in light of Antonovsky's (1987a, 1993a) research. Antonovsky (1979) posits wealth and social class position as potential factors that encourage the development of GRRs, that in turn encourage a strong SOC. At this point one could also draw on the work of Abraham Maslow (1962) and argue that human beings' deficiency needs that include physiological needs (e.g. food), security needs (eg safety) and acceptance needs (love) should be fulfilled before the person will be able to view life as comprehensible, manageable and meaningful. As long as a person's energy is directed toward basic survival it seems highly unlikely that he/she will exhibit a "...pervasive, enduring though dynamic feeling of confidence..." (Antonovsky, 1987a, p. 725) that characterises the strong SOC person.

## **6.2 Discussion of relationships that were not significant**

### **6.2.1 The definitions of overall level of ego development and SOC revisited**

No significant relationship between the overall level of ego development and global SOC was found. In order to find potential reasons underlying such a finding, it is necessary to briefly revisit the core definitions of each of these constructs. On the one hand the levels of ego development yielded by Loevinger's WUSCT is the embodiment of a lifelong process that involves not only one, but a number of components including interrelated patterns of cognitive, interpersonal and intrapsychic processes that has as its end goal the attainment of a "unified, successive and

hierarchical world view” (Weathersby, 1981, p. 52). The SOC construct on the other hand deals with the perception of stimuli, the perception and location of available resources and the ultimate engagement with demands posed by such stimuli that has as its end goal the perception of the world and the stimuli contained therein as comprehensible, manageable and meaningful. From the outset of this paper it has been argued that it would be a reductionist approach to equate either SOC or ego development solely with coping. Loevinger herself states that ego development is “...the whole attitude toward life...” (Hy & Loevinger, 1996, p. 3), whilst Antonovsky in his well-known definition of SOC refers to a “global orientation to life” (Antonovsky, 1987a, p. 725). There can be no doubt that the construct of the ego is somewhat more elusive in its definition than the SOC construct, hence the comprehensive theoretical view in Chapter two of this thesis.

### **6.2.2 Explanations for the absence of a significant relationship between ego development and SOC but a significant relationship between ego development and ‘manageability’**

In chapter five results of this research project indicated that although no significant relationship between ego development and SOC as a whole was found, ego development was significantly related to the manageability sub scale on the OLQ. Three main arguments in terms of offering explanations for these findings are presented in this discussion. Firstly, one may hypothesise that the SOC construct as a whole measures a more clearly delineated construct that engages the notion origins of adjustment in a more direct manner than the notion of ego development does. The possibility seems to exist that the essential ‘orientation to life’ and related patterns of coping measure only a component of ego development, and not the construct as a whole. It is therefore highly unlikely that the WUSCT yielding different ego levels and Antonovsky’s OLQ measure the exact same construct. Rather, in the current investigation it seems as if though global ego development is related to a more specific component of the SOC construct, namely the degree to which individuals are aware of available resources than coping per se. It therefore does not follow that individuals with highly developed egos necessarily cope better with life circumstances than those individuals who exhibit lower levels of ego development. From the current investigation’s research findings it rather seems as if individuals with highly developed egos have a heightened awareness of the resources that are available to them. This does not however imply that such resources will necessarily be implemented by the individual, thereby indicating more adaptive patterns of adjustment. The point is simply that higher levels of ego development are not insurance policies against life’s adversities. If anything, the individual with a highly developed ego may potentially view the world as more complex than those individuals on other parts of the continuum,

thereby perceiving environmental demands as much greater. This in turn would mean that more resources would have to be mobilised in order to deal with such increased environmental demands.

The second explanation for the research findings under discussion centres around the fact that the ego is an interpretative structure that searches for more complex assimilative schemas during a lifelong process. Life experience can influence the development of the ego significantly (Helson & Roberts, 1994) and the way in which individuals cope with major life events both *reflects* and *affects* ego development. Higher levels of ego development in itself is not a guarantee of happiness or adjustment, nor does a linear causal relationship exist between ego development and coping. Stated in these terms, the current research finding is consistent with the research findings of Helson and Wink (in Helson & Roberts, 1994), McCrae and Costa (1991), and Noam (1993) which found no direct relationship between coping and ego development. Also in support of this notion, Silver, Bauman, Coupey, Doctors and Boeck (1990), in a study that investigated the relationship between ego development and chronic illness in adolescents found that severe chronic illness *affects* ego development. At this point in the current discussion one may summarise the relationship between ego development and the more narrow interpretation of SOC as a 'coping' construct by stating that ego development is influenced by coping patterns, or put differently, ego development is a *reflection* of a component of the SOC construct, namely manageability. The final argument is built around this notion.

The third potential explanation for the absence of an overall significant relationship between ego development and SOC, but a significant relationship between the manageability sub scale and overall ego development centres around the degree to which an individual is aware of the resources available to him/her. It seems as if though such an awareness of resources may be construed as a reflection of his/ her level of ego development. The individual with a well-developed ego will therefore be more aware of the resources available to him/her, and vice versa. A person's ego level determines how he/she construes the world, especially the interpersonal world, and the manageability sub scale denotes the availability of resources in this world (Nettles & Loewinger, 1983, p. 679). Once again, the *availability* of resources cannot summarily be equated with the *mobilisation* of resources and subsequent adaptive coping patterns. No linear assumptions in terms of causality can be made here.

### **6.2.3 The relationship between ego development and the 'comprehensibility' and 'meaningfulness' sub scales**

No significant relationship could be established between ego development and either the 'comprehensibility' or 'meaningfulness' sub scales on the OLQ. Such a finding is problematic in view of current literature which suggests that the OLQ is a unidimensional instrument and that the three sub scales essentially measure the same construct (Antonovsky, in Frenz et al., 1993; Margalit, 1985). The current view that the three sub scales are not to be separated empirically and the fact that these components seem to be interrelated does not necessarily imply that they may be used interchangeably or that each of these sub scales bear the same meaning. To the contrary, in this research endeavour the relationship that was found between ego level and the 'manageability' sub scale has raised the question as to whether each of the three components of the SOC construct do not nevertheless individually have a contribution to make in terms of our understanding of the SOC construct as a whole. Such a view should not be misconstrued as a futile search for a 'hierarchy of importance' that Antonovsky (1987a) refers to, but rather an acknowledgement of the need for further investigation in terms of the relationship between each of the three sub scales and ego psychology.

In terms of finding an explanation for the absence of a significant relationship between level of ego development and the 'comprehensibility' sub scale one needs to remind oneself that in Antonovsky's definition (1979), comprehensibility essentially embodies the capacity to view stimuli as predictable and making sense. The reality of a situation is thus cognitively appraised. The core function of the ego is organisatory and the fact that no relationship between level of ego development and this sub scale could be established makes sense when one argues that individuals who display higher levels of ego development organise their environments in increasing degrees of complexity versus those located at the other end of the continuum. Such increased complexity will inevitably lead to situations where life circumstances may appear so involved that stimuli are no longer viewed as predictable or necessarily making sense. According to Loevinger (1976), the higher levels of ego development are characterised by increases in a sense of responsibility towards oneself, achievement via independence, psychological mindedness and tolerance as well as a decline in the sense of responsibility that one feels towards others as they are granted autonomy. Whilst the aforementioned characteristics are viewed as hallmarks of the mature personality (Helson & Roberts, 1994), these also have the potential of contributing to complexity when one tries to deal with stressors. The realisation that one is almost entirely responsible for one's emotional and

behavioural functioning, the realisation that independence becomes the vehicle for self-actualisation and the awareness of the complexity in one's inner workings that is bestowed by a psychological mindedness, are all factors that may potentially bring new and stressful challenges to one's life. Furthermore, as one affords others autonomy by levelling off in responsibility, it is likely that a new, more complex cycle of intrapsychic examination aimed at the self may be initiated. Perhaps it is here where one acquires a true sense of what Loevinger (1976) means when she repeatedly emphasises that 'more is not necessarily better'. Perceived increased complexity in situations often characteristic of the higher levels of ego development therefore do not necessarily imply that the individual will be able to derive some form of order out of this potentially chaotic situation. Conversely, individuals at the lower end of the continuum may not be imbued with the well-developed organisatory capacity characteristic of the well-developed ego to organise the often overwhelming stimuli that they may be presented with. In sum, no direct relationship between ego development and the perception of stimuli as being predictable could be established.

Whereas the 'comprehensibility' sub scale includes the cognitive component of SOC, the 'meaningfulness' sub scale is representative of an emotional element (Wissing & Du Toit, 1994) that includes a motivational component. The implication in this regard is that once an adverse event has been dealt with, it will make sense on both an emotional level and the effort expended will be appraised as having been worthwhile. Once again the degree of complexity to which an individual organises the stimuli that he/she is confronted with does not seem to bear any direct relation to the perception that such stimuli are motivationally meaningful. Stimuli do furthermore not necessarily make sense on an emotional level, and the same argument in terms of the organisatory capacity of the ego applies: those individuals who organise stimuli in more complex ways may derive little emotional comfort from their efforts, whilst those individuals at the lower end of the ego developmental continuum may simply not view stimuli as motivationally meaningful. The perception of stimuli as being quite uninvolved may not necessarily prompt them to make such efforts, nor will they inevitably derive meaning through adversity.

#### **6.2.4 The relationship between ego level and socio-economic status**

No significant relationship was found between subjects' level of ego development and their socio-economic status. Although Loevinger (1976) makes mention of the possibility that lower levels of ego development may be found amongst the lowest income groups, she also warns that such a finding is heavily dependent on the sample used. One may only draw such an inference if the sample is homogenous, i.e. if one works with a sample that is drawn from either a very high or very low

income group. The sample used in the current research was not homogenous, with subjects distributed mostly towards the middle income groups. The fact that no relationship between ego level and socio-economic status could be established is therefore consistent with Loevinger's view that such a hypothesis can only be tested if the sample is homogenous, and she herself states that no significant differences in ego levels are to be found in the midrange income groups.

### **6.3 Additional variables that may have influenced research findings**

At this point it is necessary to consider other factors that may have influenced research findings. Mention has already been made of the discrepancies in verbal ability that may have existed between those historically advantaged and disadvantaged groups who benefited from a better education system and the possibility that this may have influenced how such individuals completed the sentence stems on the WUSCT. The fact that the sample was also not homogenous in terms of socio-economic status or level of education could also have had an impact on research findings.

A second consideration stems from the use of the scoring manual which is essentially a United States measuring instrument. Whilst 'marking' the responses given by subjects it was at times clear that obvious cultural differences in responses existed, not only in terms of language usage but also in terms of cultural norms such as the view that a wife's place is at home - a view that is perfectly acceptable in certain cultures. This raises a whole separate issue that is far beyond the scope of this discussion, but in future studies one has to consider potential differences in the responses between urban and rural populations for example, or that which is the norm in one culture, but possibly completely unacceptable in another.

The third consideration involves the two questionnaires used in this study. Respondents seem to have completed the OLQ with far greater ease than the WUSCT. A number of respondents commented on the length of the WUSCT, stating that they found this measure to be too lengthy. In at least two instances subjects returned WUSCT questionnaires with quite a few responses on the last 10 stems omitted. The fact that the full 36 item WUSCT was used could therefore have influenced results in terms of test fatigue and in future one may consider the use of the shortened version of the WUSCT. Other items proved too intrusive for some subjects and were left blank in a few instances, for example items 14 and 33 that deal with attitudes toward sex. Additionally, the length of time and financial cost in terms of interpreting the sentence stems were enormous seeing that a second rater had to be trained in the scoring method and paid per hour. These factors

furthermore hindered the use of a larger sample size that could have been beneficial to this investigation.

The OLQ yielded no significant difficulties. Subjects completed all of the items, understood the instructions and items well and completed the questionnaire within a reasonable amount of time. The scoring of the OLQ also proceeded without any difficulties.

In sum, the length of the WUSCT, cultural variables potentially related to the non-response on some of the more intrusive items as well as a sample that was not homogenous in terms of socio-economic status or educational background may have influenced results.

## CHAPTER SEVEN

### Conclusion and Suggestions for Further Research

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#### 7.1 Conclusion

It transpired from this research investigation that no significant relationship between ego development and SOC could be established. This finding, combined with the strong positive correlation that emerged between level of ego development and the 'manageability' sub scale forces one to acknowledge the existence of the conceptual problem that one is confronted with when conducting research in the field of ego development. Loevinger's theory embodies both complexity and maturity in one stage model, as each move towards the upper end of the continuum produces the possibility of increased complexity. Such a developmental process may in turn lead to either an internalised confused state, or the opportunity to create mature adaptive processes. Higher levels of ego development therefore do not necessarily provide a protective sheen that guards against life's adversities.

The question as to how one should view the conceptually complex relationship between ego development and SOC may be answered in the following way. The SOC concept embodies far more than 'coping' per se. It is a world view that engages the individual in his/her external environment and intrapsychic processes in a very real way. It requires of the individual a perception of incoming stimuli as making sense, an awareness of available resources to deal with and organise such stimuli and the perception that such efforts are, though challenging, worthy of engagement. It is these processes inherent in the SOC construct that may both reflect and affect ego development, but no linear causal relationship between these two constructs is to be assumed.

Whilst the ego is thus imbued with a core organising function it does not necessarily follow that the well developed ego will always and in all circumstances have the capacity to organise incoming stimuli of a complex nature effectively, nor are there any guarantees that stimuli will be perceived as motivationally meaningful. Ego development and the SOC construct remain two distinct entities as well-adjusted individuals may be found at all stages of ego development.

Possibly the most important finding to emerge from this study is the correlation between the 'manageability' sub scale and ego development. This finding illuminates the possibility that the *awareness* of potential coping resources does not necessarily imply the *mobilisation* of such resources by individuals further along the ego developmental continuum. A further implication of

such a finding is related to the unidimensional view of the SOC construct. The fact that no significant positive relationship between ego development and any of the other sub-scales could be established confronts one with the possibility that, despite acknowledging the view that 'comprehensibility', 'manageability' and 'meaningfulness' are not to be separated empirically, each of these sub-scales do reflect subtle nuances in meaning, contributing to an understanding of the SOC construct in a significant way.

The nature of this study has been exploratory with the implication being that it represents only the beginning of an inquiry into the perception of availability of resources vs. the mobilisation of such resources. The potential for future research in the field is great, especially in terms of the therapeutic value of the clinician contributing to the mobilisation of both external and intrapsychic resources which will ultimately lead to more adaptive processes in response to life's adversities. The following section provides an outline of research that may contribute to an understanding of the nature of the relationship between ego development and adaptive processes.

## **7.2 Suggestions for further research**

The following areas should be addressed by further research in terms of ego development and the SOC coherence construct:

- A re-evaluation of the current view that the SOC construct in its three components is entirely unidimensional in nature (Frenz et al., 1993).
- The specific relationship between each of the three sub-scales of the OLQ and the WUSCT on a larger and more homogenous sample.
- Further research on the effects of major adverse events such as war or natural disasters on ego development in terms of movement along the continuum.
- A thorough investigation into potential explanations for why some individuals manage to mobilise the resources available to them and others do not.
- The current perception amongst a number of researchers that despite the fact that well-adjusted people are found at all stages of ego development one can reasonably expect high levels of ego development to be reflected in an augmented ability to adapt to life changes (Bursik, 1991) should be revisited.

- An investigation into the levels of ego development of individuals who have already managed to deal effectively with severe life stresses in order to gauge any progression or regression along the continuum.
- A longitudinal study that follows ego development across the life span to determine whether any significant changes along the continuum are evident.

## REFERENCES

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- Adler, A. (1964). *Social interest: A challenge to mankind*. New York: Capricorn.
- Antonovsky, A. (1973). The utility of the breakdown concept. *Social Science and Medicine*, 7, 605-612.
- Antonovsky, A. (1974). Delay in the detection of cancer. *Health Education Monographs*, 2, 98-128.
- Antonovsky, A. (1979). *Health, stress and coping*. San Francisco: Jossey-Bass.
- Antonovsky, A. (1987a). *Unraveling the mystery of health: How people manage stress and stay well*. San Francisco: Jossey-Bass.
- Antonovsky, A. (1987b). Health promoting factors at work: The sense of coherence. In R. Kalimo, M.A. El-Batawi & C.L. Cooper (Eds.), *Psychosocial factors at work and their relation to health*. Geneva: World Health Organisation.
- Antonovsky, A. (1991). The structural sources of salutogenic strengths. In C.L. Cooper & R. Payne (Eds.), *Personality and stress: Individual differences in the stress process*. New York: Wiley.
- Antonovsky, A. (1993a). Complexity, conflict, chaos, coherence, coercion and civility: Rejoinder. *Social Science and Medicine*, 37(8), 980-981.
- Antonovsky, A. (1993b ). The structure and properties of the Sense of Coherence Scale. *Social Science and Medicine*, 36(6), 725-733.
- Antonovsky, A. (1996). The salutogenic model as a theory to guide health promotion. *Health Promotion International*, 11(1), 11-18.
- 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.
- Becvar, D.S., & Becvar, R.J. (1996). *Family therapy: A systemic integration*. (3 ed.). Boston: Allyn & Bacon.
- Bee, H.L. (1994). *The journey of adulthood*. New Jersey: Prentice-Hall.
- Bernstein, J., & Carmel, S. (1987). Trait anxiety and the sense of coherence. *Psychological Reports*, 60, 1000.

Bertalanffy, L. von (1968). *General system theory*. New York: George Braziller.

Boyce, W.T. (1977). Influence of life events and family routines on childhood respiratory tract illness. *Pediatrics*, *60*, 609-615.

Bursik, K. (1991). Adaptation to divorce and ego development in adult women. *Journal of Personality and Social Psychology*, *60*(2), 300-306.

Carmel, S., Anson, O., Levenson, A., Bonne, D.Y., & Maoz, B. (1991). Life events, sense of coherence and health: Gender differences on the Kibbutz. *Social Science and Medicine*, *34*(1), 43-48.

Carstens, J.A. (1995). *The relationship between sense of coherence and ego development*. Unpublished master's thesis, University of Stellenbosch.

Cohn, L.D. (1991). Sex differences in the course of personality development: A meta-analysis. *Psychological Bulletin*, *109*(2), 252-266.

Colerick, E.J. (1985). Stamina in later life. *Social Science and Medicine*, *21*, 997-1006.

Corey, G. (1996). *Theory and practice of counselling and psychotherapy*. Pacific Grove: Brooks/Cole.

Costa, P.T., & McCrae, R.R. (1980). Influence of extraversion and neuroticism on subjective well-being: Happy and unhappy people. *Journal of Personality and Social Psychology*, *38*(4), 668-678.

Costa, P.T., & McCrae, R.R. (1993). Ego development and trait models of personality. *Psychological Inquiry*, *4*(1), 17-19.

Dahlin, L., Cederblad, M., Antonovsky, A., & Hagnell, O. (1990). Childhood vulnerability and adult invincibility. *Acta Psychiatrica Scandinavica*, *82*, 228-232.

Dana, R.H., Hoffman, T., Armstrong, B., & Wilson, J. (1985). *Sense of coherence: Examination of the construct*. Poster presented at the meeting of the Southwestern Psychological Association, Austin, Texas.

Durkin, J.E. (1989). Mothergroup-as-a-whole formation and systemic boundarying events. *Group*, *13*(3), 198-211.

Du Toit, M.M., Wissing, M.P., & Randall, P.B. (1997). *Sense of coherence, personality and mental health*. Poster presented at the 3<sup>rd</sup> Annual Congress of the Psychological Society of South Africa.

Erikson, E.H. (1959). *Identity and the life cycle*. New York: International Universities Press.

Erikson, E.H. (1963). *Childhood and society*. (2<sup>nd</sup> ed.). New York: Norton.

Erikson, E.H. (1964). *Insight and responsibility, lectures on the ethical implications of psychoanalytic insight*. New York: Norton.

Feigin, R., Sherer, M., & Ohry, A. (1996). Couple's adjustment to one partner's disability: The relationship between sense of coherence and adjustment. *Social Science and Medicine*, 43(2), 163-171.

Feldt, T., Kinnunen, U., & Muano, S. (1997). *The mediating role of sense of coherence between work characteristics and well-being: A one-year follow-up study*. Poster presented at the 5<sup>th</sup> European Congress of Psychology, Dublin, Ireland.

Fouchè, J.P. (1999). *The life of Jan Christiaan Smuts: A psychobiographical study*. Unpublished dissertation, University of Port Elizabeth.

Frenz, A.W., Carey, M.P., & Jorgensen, R.S. (1993). Psychometric evaluation of Antonovsky's Sense of Coherence Scale. *Psychological Assessment*, 5, 145-153.

Freud, A. (1937). *The ego and the mechanisms of defence*. London: Hogarth Press.

Freud, S. (1949). *Outline of psychoanalysis*. New York: Norton.

Freud, S. (1950). *Beyond the pleasure principle*. New York: Liveright.

Gallagher, T.J., Wagenfeld, M.O., Baro, F., & Haepers, K. (1994). Sense of coherence, coping and caregiver role overload. *Social Science and Medicine*, 39(12), 1615-1622.

Gritz, E.R., Wellisch, D.K., Siau, M.S., & Wang, H.J. (1990). Long-term effects of testicular cancer on marital relationships. *Psychosomatics*, 31(3), 301-312.

Gruber, H.E., & Vonèche, J.J. (1982). *The essential Piaget*. London: Routledge.

Haan, N. (1977). *Coping and defending: Processes of self-environment organisation*. New York: Academic Press.

- Hauser, S.T. (1993). Loevinger's model and measure of ego development: A critical review. *Psychological Inquiry*, 4(1), 23-30.
- Heady, B., & Wearing, A. (1989). Personality, life events, and subjective well-being: Toward a dynamic equilibrium model. *Journal of Personality and Social Psychology*, 57(4), 731-739.
- Helson, R., & Roberts, B.W. (1994). Ego development and personality change in adulthood. *Journal of Personality and Social Psychology*, 66(5), 911-920.
- Holt, R.R. (1980). Loevinger's measure of ego development: Reliability and national norms for male and female short forms. *Journal of Personality and Social Psychology*, 39(5), 909-920.
- Hy, L.X., & Loevinger, J. (1996). *Measuring ego development*. Mahwa: Erlbaum.
- Jacobson, A.M., Beardslee, W., Hauser, S.T., Noam, G.G., & Powers, S.I. (1986). An approach to evaluating adolescent ego defence mechanisms using clinical interviews. In G.E. Vaillant (Ed.), *Empirical studies of ego mechanisms of defence* (pp. 47-59). Washington DC: American Psychiatric Press.
- Jennings, A.G., & Armsworth, M.W. (1992). Ego development in women with histories of sexual abuse. *Child Abuse and Neglect*, 16(4), 553-565.
- Jung, C.G. (1953). *Two essays on analytical Psychology*. New York: Pantheon.
- Jung, C.G. (1993). *Memories, dreams, reflections*. London: Fontana.
- Kalimo, R., & Vuori, J. (1990). Work and sense of coherence - Resources for competence and life satisfaction. *Behavioural Medicine*, 16(2), 76-89.
- Kegan, R. (1985). Kohlberg and the psychology of ego development: A predominantly positive evaluation. In S. Modgil & C. Modgil (Eds.), *Lawrence Kohlberg: Consensus and controversy* (pp. 163-181). Philadelphia and London: Falmer.
- Klopfer, B., Ainsworth, M.D., Klopfer, W.G., & Holt, R.R. (1954). *Developments in the Rorschach technique*. San Diego: Harcourt.
- Kobasa, S.C. (1979). Stressful life events, personality, and health. *Journal of Clinical Psychology*, 44, 516-526.
- Levit, D.B. (1993). The development of ego defenses in adolescence. *Journal of Youth and Adolescence*, 22(5), 493-512.

- Loevinger, J. (1969). Theories of ego development. In L. Breger (Ed.), *Clinical-cognitive psychology: Models and integrations*. Englewood Cliffs, New Jersey: Prentice-Hall.
- Loevinger, J. (1976). *Ego development*. San Francisco: Jossey-Bass.
- Loevinger, J. (1985). On Kohlberg's contributions to ego development. In S. Modgil & C. Modgil (Eds.), *Lawrence Kohlberg: Consensus and controversy* (pp. 183-193). Philadelphia and London: Falmer.
- Loevinger, J. (1993). Measurement of personality: True or false? *Psychological Inquiry*, 4(1), 43-48.
- Loevinger, J. (1994). Has psychology lost its conscience? *Journal of Personality Assessment*, 62(1), 2-8.
- Loevinger, J., Cohn, L.D., Bonneville, L.P., Redmore, C.D., & Streich, D.D. (1985). Ego development in college. *Journal of Personality and Social Psychology*, 48(4), 947-962.
- Loevinger, J., Wessler, R., & Redmore, C. (1970). *Measuring ego development*. (Vols.1-2). San Francisco: Jossey-Bass.
- Lowis, M.J. (1989). *Ego integrity or despair: A study of elderly men*. Unpublished master's thesis, Rand Afrikaans University, Johannesburg.
- Maddi, S.R., & Kobasa, C.S. (1984). *The hardy executive: Health under stress*. Homewood, IL.: Dow Jones-Irwin.
- Margalit, M. (1985). Perception of parent's behaviour, familial satisfaction, and sense of coherence in hyperactive children. *Journal of School Psychology*, 23, 355-364.
- Maslow, A.H. (1962). *Toward a psychology of being*. Princeton: Van Nostrand.
- McCammon, E.P. (1981). Comparison of oral and written forms of the sentence completion test for ego development. *Developmental Psychology*, 17, 233-235.
- McCrae, R.R., & Costa, P.T. Jr. (1991). The NEO Personality Inventory: Using the Five-Factor model in counseling. *Journal of Counseling and Development*, 69, 367-371.
- McSherry, W.C., & Holm, J.E. (1994). Sense of Coherence: Its effects on psychological and physiological processes prior to, during, and after a stressful situation. *Journal of Clinical Psychology*, 50(4), 476-487.

Meichenbaum, D. (1977). *Cognitive-behaviour modification: An integrative approach*. New York: Plenum.

Midanik, L.T., Soghikian, K., Ransom, L.J., & Polen, M.R. (1992). Alcohol problems and sense of coherence among older adults. *Social Science and Medicine*, 34(1), 43-48.

Möller, A.T. (1980). *Inleiding tot die persoonlikheidsielkunde*. Durban: Butterworth.

Nettles, E.J., & Loevinger, J. (1983). Sex role expectations and ego level in relation to problem marriages. *Journal of Personality and Social Psychology*, 45, 676-687.

Noam, G.G. (1993). Ego development: True or false? *Psychological Inquiry*, 4(1), 43-48.

Noam, G., Kohlberg, L., & Snarey, J. (1983). Steps toward a model of the self. In B. Lee & G. Noam (Eds.), *Developmental approach to the self*. New York: Plenum.

Nyamathi, A.M. (1991). Relationship of resources to emotional distress, somatic complaints, and high-risk behaviour in drug recovery in homeless minority women. *Research in Nursing and Health*, 14, 269-277.

Oppenheim, A.N. (1992). *Questionnaire design, interviewing and attitude measurement*. London and New York: Pinter.

Orgler, H. (1963). *Alfred Adler: The man and his work*. London: Sidgwick and Jackson..

Piaget, J. (1960). *The child's conception of physical causality*. New Jersey: Littlefield,

Polansky, N.A. (1982). *Integrated ego psychology*. New York: Aldine.

Redmore, C.D., & Loevinger, J. (1979). Ego development in adolescence: Longitudinal studies. *Journal of Youth and Adolescence*, 12, 301-306.

Rosenbaum, M. (1988). Learned resourcefulness, stress and self regulation. In S. Fisher & J. Reason (Eds.), *Handbook of life stress, cognition and health* (pp. 483-496). Chichester: Wiley and Sons.

Rumbaut, R.G., Anderson, J.P., & Kaplan, R.M. (1988). Stress, health and the sense of coherence. In M.J. Magenbaum (Ed.), *Geriatric medicine and the social sciences*. Philadelphia: Saunders.

Shafer, W. (1996). *Stress management for wellness* (3 ed.). Fort Worth: Harcourt Brace College.

Shakespeare, W. (1987). *Romeo and Juliet*. In S. Orgel (Ed.), *The Oxford Shakespeare*. Oxford: University Press.

Silver, E.J., Bauman, L.J., Coupey, S.M., Doctors, S.R., & Boeck, M.A. (1990). Ego development and chronic illness in adolescents. *Journal of Personality and Social Psychology*, 59(2), 305-310.

Singer, J. (1994). *Boundaries of the soul. The practice of Jung's Psychology*. Dorset: Unity.

Strümpfer, D.J.W. (1989). Do white South African managers suffer from exceptional levels of job stress. *South African Journal of Psychology*, 19(3), 130-137.

Strümpfer, D.J.W. (1990). Salutogenesis: A new paradigm. *South African Journal of Psychology*, 20(4), 265-276.

Strümpfer, D.J.W. (1995). The origins of health and strength: From 'salutogenesis' to 'fortigenesis'. *South African Journal of Psychology*, 25(2), 81-89.

Strümpfer, D.J.W. (1998). *Sense of coherence and job satisfaction: Review of South African data*. Paper presented at the Annual Congress of the Psychological Society of South Africa, Cape Town.

Strümpfer, D.J.W., & Louw, D.A. (1989). *Stress among farmworkers in Western Cape agribusiness organisations*. Paper presented at annual congress, South African Psychological Association, Durban.

Strümpfer, D.J.W., & Wissing, M.P. (1998). *Review of South African data on the sense of coherence scale as a measure of fortigenesis and salutogenesis*. Paper presented at annual congress, South African Psychological Association, Cape Town.

Sullivan, H.S. (1953). *The interpersonal theory of Psychiatry*. New York: Norton.

Thorne, A. (1993). On contextualising Loevinger's Stages of ego development. *Psychological Inquiry*, 4(1), 53-55.

Van Eeden, C. (1996). *Psigologiese welstand en koherensiesin*. Unpublished doctoral dissertation, Potchefstroom University.

Vincent, K.R., & Castillo, I.M. (1984). Ego development and DSM-III Axis-II: Personality disorders. *Journal of Clinical Psychology*, 40(2), 400-402.

Von Franz, M.L. (1980). *Projection and re-collection in Jungian Psychology*. La Salle and London: Open Court.

Waitzkin, H. (1993). Comments: A good word for the “young man [or woman] with a gun”: Whose violence? Whose “salutogenesis”? *Social Science and Medicine*, 37, 978-979.

Way, L. (1950). *Adler's place in psychology*. London: Allen and Unwin.

Weathersby, R.P. (1981). Ego development. In A.W. Chickering (Eds.), *The modern American college* (pp. 51-75). San Francisco: Jossey-Bass.

Westenberg, P.M., & Block, J. (1993). Ego development and individual differences in personality. *Journal of Personality and Social Psychology*, 65(4), 792-800.

Wingate, B.A., & Christie, M.J. (1978). Ego strength and body image in anorexia nervosa. *Journal of Psychosomatic Research*, 22, 201-204.

Wissing, M.P., & Du Toit, M.M. (1994). *Relations of the NEO-PI-R dimensions (NEO-FFI) to sense of coherence (SOC) and other measures of psychological wellbeing*. Paper presented at the 23<sup>rd</sup> International Congress of Applied Psychology, Madrid, Spain.

Wissing, M.P., De Waal, M., & De Beer, I. (1992). *Sense of coherence and stress symptomatology*. Paper presented at the 25<sup>th</sup> International Congress of Psychology, Brussels, Belgium.

## APPENDIX A: LETTER OF INFORMED CONSENT

Dear Respondent

It would be greatly appreciated if you could find a few moments to complete the two attached questionnaires. By completing these, you will be making a valuable contribution towards an understanding of how adults develop across the lifespan. All responses will be treated with the utmost confidentiality and will be used for research purposes only, so at no stage are you required to disclose identifying particulars such as your name. Please also complete the informed consent section at the bottom of this page to enable me to add your responses to my data pool.

I thank you for your participation.

Kind Regards  
(Ms) S.E. Nortier

(Masters student: Psychology)

I hereby consent to make available the responses provided by me on the following two questionnaires for research purposes only. I understand that my identity remains anonymous, signed at this place \_\_\_\_\_ on the \_\_\_\_ day \_\_\_\_\_ year.

**APPENDIX B: BIOGRAPHICAL INFORMATION**

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**Please complete the following biographical information for research purposes only before commencing. Where appropriate, mark with an X.**

**Gender:**

male	female

**Age in years:**

30-35	
36-40	
41-50	
51-60	
61-74	
75+	

**Marital Status:**

single	
married	
divorced	
widowed	
living together	

**Highest level of education: Please specify:** \_\_\_\_\_

**Socio-Economic Status:**

less than R40 000 p/a	
R40 000 - R65 000 p/a	
R65 000 - R100 000 p/a	
R120 000 + p/a	

## APPENDIX C: SCORING THE OLQ

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The OLQ is a Likert style questionnaire consisting of 29 items that requires a 7-point selfrating. A participant's total score is the sum of the numerical values chosen and then weighed by the scorer. Reverse scoring applies to certain items. The total score ranges from 29 to 203 and the higher scores indicate a higher SOC.

Individual items are scored as follows where R indicates reversal:

1. C R
2. MA
3. C
4. ME R
5. C R
6. MA R
7. ME R
8. ME
9. MA
10. C
11. ME R
12. C
13. MA R
14. ME R
15. C
16. ME R
17. C
18. MA
19. C
20. MA R
21. C
22. ME
23. MA R
24. C