THE THEORETICAL-EMPIRICAL FIT BETWEEN THREE
PSYCHOLOGICAL WELLNESS CONSTRUCTS: SENSE OF
COHERENCE, LEARNED RESOURCEFULNESS AND
SELF-ACTUALISATION

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ABSTRACT

The aim of this research was to investigate the theoretical-empirical fit between three psychological well-being constructs, namely sense of coherence, learned resourcefulness and self-actualisation in the work situation. Significant intercorrelations were found. Confirmatory factor analysis indicated a two-factor structure consisting of (1) self-actualisation and (2) sense of coherence / learned resourcefulness. The results confirm that, of these three concepts, self-actualisation forms a separate construct within the psychological well-being (and salutogenic) paradigms, but the results did not indicate a good fit between the theoretical model and the empirical reality of psychological well-being. It is hoped that awareness of this information will facilitate more effective labour relations and handling of disputes in organisations.

1 INTRODUCTION

Psychology, and more specifically Industrial/Organisational and Growth Psychology, is increasingly focusing on psychological well-being to complement the more traditional focus on pathology. According to Wissing (2000; Wissing & Van Eeden, 1994; 1997a; 1997b), this presents a challenge to be explicated and clarified for the purposes of future research and practice. The construct "psychological well-being" is referred to by different names, as was evident from a volume of the American Psychologist (55, number 1) published in 2000 and devoted to this topic. Seligman and Csikszentmihalyi (2000) refer to "positive psychology", the science of positive subjective experience. Snyder and Lopez’s handbook on this field of study (2002) includes constructs such as quality of life, happiness, autonomy, resilience, flow, self-regulation / deter-
minism, optimism, hope, wisdom, talent and creativity. Whereas this primarily
North American research discusses many diverse viewpoints and behavioural
constructs, research in South Africa seems to focus more closely on coping
behaviour from the salutogenic viewpoint (Strümpfer 1995; 1998). This
paradigm for studying stress and coping behaviour was introduced by
Antonovsky (1979; 1984; 1987). The central thesis is that stressors are
omnipresent in human existence, and even with a high stressor load, many
people survive and even cope well, which brings us to the salutogenic question:
Why do some people cope with difficulty while others cope successfully in spite
of omnipresent stressors? If this is applied in the field of labour relations, it
could be argued that when positive psychology is brought to bear on labour
disputes, this facilitates an understanding of the amount of stress and the types
of stressors involved in this very troubled scenario.

In a significant South African factor analytical study, Wissing and Van Eeden
(2002) found wellness to be multidimensional with regard to the facets of the
self (cognition, affect and behaviour) as well as the domains of life in which
these facets manifest themselves (the intrapersonal, interpersonal, social and
contextual domains, as well as in work behaviour and in love). This study on
550 adults revealed three strong factors of general psychological well-being,
namely, sense of coherence, satisfaction with life and affect balance. In trying
to clarify the construct further, the current study endeavours to ascertain a
relationship between two of the main constructs used and measured in the
Wissing and Van Eeden (2002) study, namely sense of coherence and self-
actualisation, as well as an additional construct (namely learned resource-
fulness). As far as could be ascertained, these constructs have never been
researched within the field of labour relations.

2 THE SALUTOGENIC MODEL

In an attempt to explain the perceived differences in coping abilities,
Antonovsky (1979) presented the salutogenic model of health, referring to a
cyclical process to explain an individual’s position on what he termed the health
ease/dis-ease continuum. Antonovsky (1979; 1987) argues that through life
experiences, individuals develop generalised resistance resources (GRRs),
which he defines as any characteristic of the individual that facilitates the
avoidance or combating of a wide variety of stressors. When the individual
regularly experiences the availability of GRRs, personality constructs develop
which prevent the individual from being subjected to some stressors.
Subsequently, individuals view stressors as “welcome” inputs after which the
personality construct will decisively determine the extent to which the individual
will move on the health ease/dis-ease continuum. A feedback loop is formed
from the GRRs to the salutogenic constructs. Depending on previous
experience of overcoming stressors, the GRRs will enhance the strength of the
salutogenic constructs, which in turn will enhance the strength of the GRRs. It
could be argued that human resources practitioners working in the field of labour relations are exposed regularly to high levels of stress. The stronger their GRRs, the more effective their coping with difficult interpersonal and intergroup situations will be.

Although salutogenic thinking started with Antonovsky’s (1979) concept of sense of coherence (SOC), the literature identifies a range of personality characteristics and skills which are known or believed to combat stress and are associated with stressful events and their outcomes. All of these are seen as constructs of employee psychological well-being. Strümpfer (1990) considers, among others, sense of coherence (SOC) and learned resourcefulness (LR) as the most important primary constructs and self-actualisation (SA) as an important secondary construct. His argument serves as the motivation for the inclusion of these three constructs in this research. Furthermore, this choice represents a balanced combination of cognitive (SOC), affective (SOC, SA), motivational (SOC, SA) and self-mastery (LR) behaviour as part of the theoretical profile of well-being.

The above view on psychological well-being and positive methods of coping with stressors can also be applied to the workplace. The assumption is that a certain level of stress is necessary for effective performance (Antonovsky 1979; 1987), which lead to a focus on the relationship between coping behaviour and various constructs (Strümpfer 1990; 1995). These include biographical variables (Wilmans 1996), personal characteristics (for example anxiety, depression, neuroticism), work-related characteristics (for example stress, self-esteem, extroversion, conscientiousness and social support), and organisational constructs such as sick leave (Motshele 2001), shift work (Potgieter 1996), training effectiveness (Cilliers 1995), job involvement (Viviers 1997), conscientiousness (Strümpfer & Mlonzi 2001), commitment (Strümpfer & Wissing 1999), satisfaction (Strümpfer 1998; Strümpfer & Mlonzi 2001), climate, performance (Kossuth 1998), change management (Marais 1997; Segaloe 1991) and coping with organisational mergers (Ludik 1996). Kossuth (1998) found high reliability between sense of coherence (SOC), self-efficacy and locus of control and Viviers and Cilliers (1999) between sense of coherence (SOC), hardness and learned resourcefulness (LR). No research could be traced investigating a larger number of variables identified by Strümpfer (1990) as core constructs of the salutogenic paradigm. Nor could any research be traced focusing on labour relations and the associated stressors.

Although the widely used instruments for the measurement of these constructs - as suggested by Strümpfer (1990) - exhibit the necessary psychometric qualities of reliability and validity, it is not clear whether their measurement confirms the underlying theoretical model used in explaining coping with stress
in the various organisational settings in which they are used. Information about their intercorrelation and factor structure could help in understanding the nature of the general salutogenic construct as well as individual’s and organisation’s coping behaviour.

3 RESEARCH QUESTION AND AIM

The question being investigated is whether the measurement of the three chosen salutogenic constructs relating to employee wellness - namely sense of coherence (SOC), learned resourcefulness (LR) and self-actualisation (SA) - confirms the findings of the literature on the model. The aim of this research was to investigate the theoretical-empirical fit among three psychological well-being constructs namely, sense of coherence, learned resourcefulness and self-actualisation.

4 THE SALUTOGENIC CONSTRUCTS

4.1 Sense of coherence (SOC)

This construct is defined by Antonovsky (1987; 1993a; 1993b) as a global orientation that expresses the extent to which an individual has a pervasive, enduring, though dynamic feeling of confidence that, (a) the stimuli deriving from the internal and external environments in the course of living are structured, predictable and explicable (comprehensibility), (b) the resources are available to the individual to meet the demands posed by these stimuli (manageability) and (c) these demands are challenges, worthy of investment and engagement (meaningfulness).

4.2 Learned resourcefulness (LR)

This construct is defined by Rosenbaum and Jaffe (1983), Rosenbaum and Palmon (1984) as an acquired repertoire of behavioural and mostly cognitive skills. According to them an individual self-regulates internal responses (such as emotions, pain and cognition) that interfere with the smooth execution of target behaviour. Learned resourcefulness can thus be seen as a set of well-learned behaviours and skills by which a person control his/her behaviour (Rosenbaum 1990).

4.3 Self-actualisation (SA)

This construct is still defined today with reference to Goldstein’s (1963) 1934 definition and Maslow’s (1954) description (Sasoon, 1988; Snyder & Lopez, 2002), although new behavioural characteristics have since been added. It is defined as a natural and dynamic life-long process of growth (Maslow 1954;

5 THE SALUTOGENIC PERSONALITY PROFILE

The above literature is integrated into the following personality profile of the salutogenic person, (see Ludik 1996; Marais 1997; Viviers 1999) forming the behavioural basis of this research.

- **Cognitive characteristics.** The individual’s internal responses are regulated by means of cognitive control mechanisms, exercised in a flexible way and realising choices between possibilities. This leads to external stimuli being experienced as ordered, structured and consistent and to perceptions making cognitive sense. External stimuli are interpreted, evaluated and incorporated in such a way that they fit into the individual’s life plan. This facilitates understanding and comprehension of life and the role of the self in the world in an interesting and positive light.

- **Affective characteristics.** The individual experiences life as emotionally meaningful. He or she is sensitive towards his or her own feelings, and expresses these on the one hand, in a natural and spontaneous manner, in full awareness in the here-and-now of the experience and on the other hand, through cognitive control. He or she has a positive self-regard and level of self-acceptance. The individual is committed to life through his or her humanistic value systems. The individual believes that there is a purpose in all of life’s happenings and is able to experience synergy, integrating so-called opposites such as good and evil, introversion and extroversion.

- **Motivational characteristics.** The individual manages life events in an independent and self-directed way by means of a successful repertoire of coping mechanisms such as self-control and regulation. Adapting to various demands in the here-and-now in a flexible manner and experiencing change as a challenge leads to an easy way of life, while at the same time the individual has a high level of task orientation and is effective in evaluation and action.
• Interpersonal characteristics. The individual is committed to developing and being involved in effective and intimate interpersonal relationships. Being interdependent makes it possible to own his or her behaviour, especially feelings of anger and aggression. Making use of social support systems helps in times of intense stress and strain.

6 METHOD

6.1 Population and sample

The research was conducted among middle managers (N=403) in a semi governmental organisation in South Africa. A sample of convenience (N=200) was used, representing all the operational divisions of the organisation. Geographically 47% (N=94) were from the head office in Pretoria, 14.5% (N=29) from the rest of Gauteng, 10% (N=20) from the Northern Province and Mpumalanga, 7% (N=14) from the Free State and Northern Province, 6.5% (N=13) from KwaZulu-Natal, 5% (N=10) from the Eastern Cape and 10% (N=20) from the Western Cape. In terms of the Paterson job grading system, 74% (N=148) functioned on the D3 level, 11.5% (N=23) on the D4 level and 14.5% (N=29) on the D5 level. The gender distribution was 97% (N=195) male and 3% (N=5) female. The age distribution was as follows: 2% (N=4) between 21 and 30 years of age, 35% (N=69) 31-40, 37% (N=75) 41-50 and 26% (N=52) between 51 and 60 years of age. Educationally 21.5% (N=43) had a school-leaving qualification up to grade 12, 37% (N=74) a diploma, 21.5% (N=43) a first degree and 20% (N=40) an advanced degree.

6.2 Measuring instruments

• The Orientation to Life Questionnaire (Antonovsky 1987) measures SOC in three sub scores, namely (1) comprehensibility, (2) manageability and (3) meaningfulness as defined above. Antonovsky (1993a; 1993b) reports an internal consistency of between 0.82 and 0.95, a construct validity of between 0.38 and 0.72, a test-retest correlation of 0.54 over a 2-year period and good content and criterion validity. Strümpfer and Wissing (1999) confirm the reliability and validity in various South African studies.
• The Self-control Schedule (Rosenbaum 1980) measures learned resourcefulness in a single score as defined above. Rosenbaum and Palmon (1984) report test-retest reliability after 4 weeks involving 600 subjects (r=0.96).
• The Personal Orientation Inventory (POI) (Knapp 1976) measures values and behaviour seen to be of importance in the development of the self-actualising individual (Knapp 1976). It measures the following 12 scales (Knapp 1976):
(1) Time competence - managing time in a purposeful and realistic orientation towards the present, perceiving past experiences and expectations of the future as part of a meaningful continuum.

(2) Inner directedness - autonomy, independence and taking decisions in terms of own motivation and internalised principles, transcending and integrating the two extremes of being self-directed and other-directed in an optimal balance.

(3) Self-actualising value - adhering to the primary values of self-actualising persons.

(4) Existential living - behaviour in accordance with the demands of the situation, without rigidly adhering to principles and/or values.

(5) Feeling reactivity - reacting with sensitivity towards own feelings and needs.

(6) Spontaneity - expressing feelings freely, true to the self and without fear.

(7) Self-regard - affirmation of the self in terms of own worth or personal strength.

(8) Self-acceptance, despite weaknesses or shortcomings.

(9) Nature of man constructive - a positive view of human beings as being essentially good, and able to resolve the good/evil dichotomy.

(10) Synergy - achieving synergy by transcending dichotomies, connecting and integrating seeming opposites such as masculinity/femininity, selfishness/unselfishness.

(11) Accepting aggression - experiencing own anger as natural or as a voluntary response.

(12) Intimate contact - the capacity to develop meaningful relationships with others, without undue emphasis on expectations and obligations.

Knapp (1976) and Shostrom (1964, 1973, 1974, 1976) report extensive reliability and validity studies, confirmed by Tosi and Lindamood (1975) and Jones (1977). According to Weiss (1991), the measurement of self-actualisation is an exclusive quest that cannot succeed until the extensive fragmentation and conflict about its theory and construct definition are resolved. Ray (1986) claimed that there is insufficient data on the reliability of the POI scales and that the data available shows the scales to be vastly less reliable than is usually required for an instrument used for individual diagnosis or even for research into group characteristics. Hattie (1986) differs from this view and claims that the POI has generally good psychometric properties - the factor structure is well-identified and meaningful and the construct validity is convincing. Fogarty (1994) measured change in student self-actualisation with the use of the POI and the findings indicated that despite the criticism surrounding its psychometric properties, it does appear to measure dimensions that are related to self-actualisation. Schulz (1994) provided proof of reliability and validity among South African students. Wissing and Van Eeden (1997b)
found that an African group (N=258) obtained low reliability coefficients (0.18 - 0.48) on all of the subscales of the POI except for inner directedness and self-regard. The Caucasian group (N=298) obtained unsatisfactory reliability coefficients on the subscales of self-actualising value, feeling reactivity, spontaneity, nature of man constructive and synergy. Fouché and Rothman (2000) confirmed these results and also found unsatisfactory alpha coefficients on the subscales of feeling reactivity, spontaneity, self-regard, nature of man constructive and synergy in a study of South African university students. They conclude that the POI can only be accepted as internally consistent with regard to certain scales but that it has a reasonable degree of construct validity for their particular availability sample.

6.3 Data gathering

The three measuring instruments and a biographical questionnaire with clear instructions about how to complete them, a letter from the head of the Personnel Division of the organisation giving permission for the research to be done and a request to complete the required information, contact numbers of the researchers in case any questions should arise, and a self-addressed envelope were packaged and hand-delivered to each member of the population (N=403). Within two weeks 200 completed packages were returned and checked for completeness. In spite of various requests, the outstanding 203 were not received back and it was decided that a sample of 200 would suffice within the boundaries of this research project.

6.4 Data processing

- Descriptive statistics were calculated for the 16 variables. The raw scores were used for all three instruments.
- Pearson product moment correlations (Winer 1971) were computed between the 16 variables by means of the SAS programme (SAS Institute 2000).
- Exploratory factor analysis (Kerlinger 1986) was computed on the 16 variables, using the SAS Institute (2000) programme.
- Confirmatory factor analysis (Cureton & Stanley 1975; Stevens 1992) was computed on the three constructs, using the Ramona programme (Browne & Mels 1990).
7 RESULTS

7.1 Descriptive statistics

Descriptive statistics for the three constructs are shown in table 1.

**TABLE 1: DESCRIPTIVE STATISTICS FOR THE THREE CONSTRUCTS (N=200)**

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>MEAN SCORE</th>
<th>STANDARD DEVIATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SENSE OF COHERENCE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total score</td>
<td>156.735</td>
<td>15.954</td>
</tr>
<tr>
<td>Comprehensibility</td>
<td>54.425</td>
<td>7.081</td>
</tr>
<tr>
<td>Manageability</td>
<td>55.075</td>
<td>6.081</td>
</tr>
<tr>
<td>Meaningfulness</td>
<td>47.285</td>
<td>5.318</td>
</tr>
<tr>
<td><strong>LEARNED RESOURCEFULNESS</strong></td>
<td>42.730</td>
<td>18.902</td>
</tr>
<tr>
<td><strong>SELF-ACTUALISATION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time competence</td>
<td>16.585</td>
<td>2.568</td>
</tr>
<tr>
<td>Inner directedness</td>
<td>80.120</td>
<td>8.662</td>
</tr>
<tr>
<td>Self-actualising value</td>
<td>19.820</td>
<td>2.451</td>
</tr>
<tr>
<td>Existential living</td>
<td>16.785</td>
<td>3.776</td>
</tr>
<tr>
<td>Feeling reactivity</td>
<td>14.205</td>
<td>2.584</td>
</tr>
<tr>
<td>Spontaneity</td>
<td>12.130</td>
<td>2.240</td>
</tr>
<tr>
<td>Self-regard</td>
<td>12.410</td>
<td>1.547</td>
</tr>
<tr>
<td>Self-acceptance</td>
<td>14.660</td>
<td>2.922</td>
</tr>
<tr>
<td>Nature of man constructive</td>
<td>11.570</td>
<td>1.685</td>
</tr>
<tr>
<td>Synergy</td>
<td>6.945</td>
<td>1.312</td>
</tr>
<tr>
<td>Accepting aggression</td>
<td>15.245</td>
<td>3.047</td>
</tr>
<tr>
<td>Intimate contact</td>
<td>17.610</td>
<td>3.060</td>
</tr>
</tbody>
</table>

7.2 Pearson product moment correlations

Table 2 indicates the intercorrelations between the three constructs. Significant correlations exist between SOC (the total score as well as all three dimensions) and LR. These results show correspondence with the findings by Kossuth (1998), Marais (1997) and Viviers (1999).
Significant correlations also exist between SOC and six POI scales, namely time competence, inner directedness, self-actualising value, spontaneity, self-regard and intimate contact. These results confirm those obtained by Wissing and Van Eeden (1997b), who reported moderate correlations between the SOC and the same six sub-scales of the POI mentioned above. Additionally they found a moderate correlation between SOC and the subscales nature of man constructive and synergy (Wissing & Van Eeden 1997b). In this study, the SOC subconstructs, namely manageability and meaningfulness, correlate significantly with the POI scales of synergy and accepting aggression, but show no resemblance to existential living, feeling reactivity, self-acceptance or nature of man constructive. Learned resourcefulness shows a correlation with only three POI scales, namely self-regard, nature of man constructive and synergy.

**TABLE 2: CORRELATIONS BETWEEN THE THREE SALUTOGENIC CONSTRUCTS (N=200)**

<table>
<thead>
<tr>
<th>SALUTOGENIC CONSTRUCT</th>
<th>SOC TOTAL</th>
<th>SOC COM</th>
<th>SOC MAN</th>
<th>SOC MEA</th>
<th>LR</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time competence</td>
<td>0.273*</td>
<td>0.209*</td>
<td>0.278*</td>
<td>0.235*</td>
<td>0.062</td>
</tr>
<tr>
<td>Inner directedness</td>
<td>0.206*</td>
<td>0.137***</td>
<td>0.222*</td>
<td>0.181*</td>
<td>0.042</td>
</tr>
<tr>
<td>Self-actualising value</td>
<td>0.157**</td>
<td>0.027</td>
<td>0.233*</td>
<td>0.181**</td>
<td>0.042</td>
</tr>
<tr>
<td>Existential living</td>
<td>0.023</td>
<td>0.023</td>
<td>0.051</td>
<td>-0.021</td>
<td>-0.056</td>
</tr>
<tr>
<td>Feeling reactivity</td>
<td>0.094</td>
<td>0.085</td>
<td>0.101</td>
<td>0.055</td>
<td>-0.0001</td>
</tr>
<tr>
<td>Spontaneity</td>
<td>0.287*</td>
<td>0.207*</td>
<td>0.292*</td>
<td>0.252*</td>
<td>0.111</td>
</tr>
<tr>
<td>Self-regard</td>
<td>0.397*</td>
<td>0.321*</td>
<td>0.421*</td>
<td>0.298*</td>
<td>0.202*</td>
</tr>
<tr>
<td>Self-acceptance</td>
<td>0.085</td>
<td>0.032</td>
<td>0.108</td>
<td>0.089</td>
<td>-0.074</td>
</tr>
<tr>
<td>Nature/m constructive</td>
<td>0.062</td>
<td>0.032</td>
<td>0.031</td>
<td>0.099</td>
<td>0.139**</td>
</tr>
<tr>
<td>Synergy</td>
<td>0.089</td>
<td>0.005</td>
<td>0.130***</td>
<td>0.120***</td>
<td>0.223*</td>
</tr>
<tr>
<td>Accepting aggression</td>
<td>0.114</td>
<td>-0.006</td>
<td>0.185*</td>
<td>0.133***</td>
<td>0.054</td>
</tr>
<tr>
<td>Intimate contact</td>
<td>0.219*</td>
<td>0.181*</td>
<td>0.181*</td>
<td>0.200*</td>
<td>0.085</td>
</tr>
<tr>
<td>LR</td>
<td>0.470*</td>
<td>0.358*</td>
<td>0.397*</td>
<td>0.485*</td>
<td>-</td>
</tr>
</tbody>
</table>

*p<0.01 / **p<0.05 / ***p<0.10
COM = Comprehensibility
MAN = Manageability
MEA = Meaningfulness
7.3 Exploratory factor analysis

Table 3 indicates the Varimax rotated factor analysis. Factor 1 consists of nine POI scales. These mainly represent affective behaviour, namely the interpersonal characteristics of positive esteem (regard and acceptance), sensitivity towards own feelings and the spontaneous expression thereof, living existentially according to the values of self-actualisation focused in the here-and-now and the interpersonal characteristics of accepting own aggression and having the capacity to form intimate and meaningful relationships. This result excludes the three POI scales of inner directedness, nature of man constructive and synergy, representing a locus of control element (possibly with cognitive elements) and a philosophical orientation towards life.

Factor 2 consists of the three SOC dimensions and learned resourcefulness. These represent cognitive behaviour, specifically making sense out of demands, which are seen as manageable and having meaning, while the individual has the skill to self-regulate in order to cope effectively.

**TABLE 3: EXPLORATORY FACTOR ANALYSIS**

<table>
<thead>
<tr>
<th></th>
<th>FACTOR 1</th>
<th>FACTOR 2</th>
<th>EIGEN VALUES (h)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accepting aggression</td>
<td>0.77131</td>
<td></td>
<td>0.59492</td>
</tr>
<tr>
<td>Spontaneity</td>
<td>0.76854</td>
<td></td>
<td>0.59065</td>
</tr>
<tr>
<td>Intimate contact</td>
<td>0.76491</td>
<td></td>
<td>0.58509</td>
</tr>
<tr>
<td>Feeling reactivity</td>
<td>0.67050</td>
<td></td>
<td>0.44957</td>
</tr>
<tr>
<td>Existential living</td>
<td>0.66813</td>
<td></td>
<td>0.44639</td>
</tr>
<tr>
<td>Self-actualising value</td>
<td>0.66775</td>
<td></td>
<td>0.44589</td>
</tr>
<tr>
<td>Self-acceptance</td>
<td>0.59707</td>
<td></td>
<td>0.35649</td>
</tr>
<tr>
<td>Time competence</td>
<td>0.58062</td>
<td></td>
<td>0.33712</td>
</tr>
<tr>
<td>Self-regards</td>
<td>0.47164</td>
<td></td>
<td>0.22244</td>
</tr>
<tr>
<td>Manageability</td>
<td></td>
<td>0.76043</td>
<td>0.57825</td>
</tr>
<tr>
<td>Meaningfulness</td>
<td></td>
<td>0.75055</td>
<td>0.56332</td>
</tr>
<tr>
<td>Comprehensibility</td>
<td></td>
<td>0.72500</td>
<td>0.52562</td>
</tr>
<tr>
<td>Learned resourcefulness</td>
<td></td>
<td>0.62418</td>
<td>0.38960</td>
</tr>
<tr>
<td><strong>FACTOR VARIANCE</strong></td>
<td>4.02856</td>
<td>2.05679</td>
<td></td>
</tr>
</tbody>
</table>
FIGURE 1: CONFIRMATORY FACTOR ANALYSIS

Parameter Estimations

- 0.80* Accepting aggression 1.0 E1 0.76
- 0.71* Spontaneity 1.0 E2 0.68
- 0.78* Intimate contact 1.0 E3 0.57
- 0.72* Feeling reactivity 1.0 E4 0.48
- 0.65* Existentiality 1.0 E5 0.50
- 0.75* Self-actualising value 1.0 E6 0.88
- 0.58* Self-acceptance 1.0 E7 0.66
- 0.49* Time competence 1.0 E8 0.37
- 0.34* Self-regard 1.0 E9 0.39
- 0.50* Manageability 1.0 E10 0.75
- 0.72* Meaningfulness 1.0 E11 0.48
- 0.69* Comprehensibility 1.0 E12 0.21
- 0.79* Self-control 1.0 E13 0.38

7.4 Confirmatory factor analysis

Figure 1 is a graphical representation that confirms the above factor analysis result. Table 4 gives the fit between the theoretical model and the empirical reality. Four goodness-of-fit statistics were used. The value for the sample discrepancy index should be as close as possible to zero and a score below 0.05 for the other three measures indicates a good fit (Byrne 1998). It can be seen from these results that the model fails to fit the empirical reality on the grounds of all four fit statistics.

TABLE 4: FIT BETWEEN THE THEORETICAL MODEL AND EMPIRICAL REALITY

<table>
<thead>
<tr>
<th></th>
<th>90% TRUST INTERVAL</th>
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<td>Sample discrepancy value</td>
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<td>Population discrepancy value</td>
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<td>Steiger-Lind: RMSEA</td>
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<td>Expected cross validation index</td>
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<td></td>
<td>1.891</td>
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8 DISCUSSION

The correlations indicated that the individual’s dynamic feeling of confidence in the experience that stimuli are structured, predictable and explicable (defined as comprehensibility), that resources are available to meet life’s demands (defined as manageability) and that these demands are seen and experienced as challenges worthy of investment and engagement (defined as meaningfulness), are all supported by the following characteristics: the individual is living in the present (rather than focusing on the past or the future), has an independent lifestyle, lives according to self-actualising values as listed by Maslow (1971), acts spontaneously, acts out feelings in a responsible manner, has a positive regard of own worth and the ability to develop meaningful and intimate interpersonal relationships. The individual’s ability to meet and experience of meeting the demands of life and his or her experience of meaningfulness of life are supported by the ability to integrate opposites and to accept his/ or her own anger and aggression as a natural experiences. The individual has the cognitive skill of self-regulating his or her internal responses, which could interfere with his or her coping. This is supported by a positive regard for the self, the ability to integrate opposites and the belief that the self
is essentially good just by being human. As no previous research focusing on the relationship between these constructs was found, this finding can be seen as showing some evidence that the individual’s SOC, LR and SA all represent aspects of his or her psychological wellness.

Coping with life’s demands thus entails that an individual who sees the environment as understandable, manageable and meaningful will firstly possess certain intrapersonal characteristics (such as a realistic orientation towards the present, the ability to act autonomously and seek support from others in a balanced manner, to live according to self-actualising values, to be spontaneous with regard to own emotions and to regard the self as worthy), and secondly the interpersonal capacity to form meaningful relationships with others, as well as the skill to self-regulate internal thoughts and feelings.

- The understanding component of coping behaviour can be associated with the intra- and interpersonal characteristics and self-regulatory skills mentioned above, but it cannot be associated with living according to self-actualising values.

- The manageability component of coping behaviour entails that an individual who sees the environment as manageable by the self or the significant other will, apart from the characteristics mentioned above, also possess the ability to integrate apparent opposites and to accept his or her own aggression.

- The meaningfulness of coping behaviour entails that an individual who views stressors as challenges worthy of spending energy on will probably possess the intrapersonal and interpersonal characteristics and self-regulatory skills mentioned above, be able to see dichotomies as not mutually exclusive and will be able to accept his or her own aggression.

This finding supports the results reported by Wissing and Van Eeden (2002), which showed a general psychological wellness factor, consisting mainly of intrapersonal behaviour, namely affect, cognition, behaviour and self-concept.

The exploratory and the confirmatory factor analysis distinguished between the same two highly intercorrelated factors, namely (1) self-actualisation, consisting of the affective experience of coping and (2) SOC / learned resourcefulness, consisting of the cognitive component of coping with demands.

This research confirmed the following about the three salutogenic constructs.

- Self-actualisation can be seen as the stronger construct. This indicates that the affective component (which includes, sensitivity to, acceptance
and spontaneous expression of emotions on an intrapersonal and interpersonal level, having a constructive view of the self, living according to self-actualising values and focusing on the present), acts as an important and unique moderator in the coping abilities of individuals. The exclusion of three POI scales could indicate that these measure some cognitive component in the sense of control (inner directedness), and a philosophical orientation to life.

- SOC and LR can be seen as supportive factors, indicating that cognitive behaviour (meaning that the individual will be able to cognitively make sense of his environment, view stressors as manageable and meaningful and regulate internal responses that might interfere with smooth functioning), will help the individual to understand his or her environment and control his or her reactions to stressors, and to see these as worthy challenges. This cognitive component can be seen as a separate construct in an individual’s coping responses. It also acts as a support function to the affective component. These results are in accordance with the conclusion drawn by Wissing and Van Eeden (1997a), namely that psychological well-being seems to be multidimensional with regard to facets of the self.

In terms of the fit of the theoretical model with empirical reality, it can be concluded that the factor structure obtained in this study cannot be used to explain the underlying variables of self-actualisation, sense of coherence and learned resourcefulness satisfactorily in this population.

It is suggested that self-actualisation on the one hand and sense of coherence and learned resourcefulness on the other be seen as two different constructs within the salutogenic paradigm. These results should be confirmed with other sample groups. It is not suggested that these two factors can solely describe the salutogenic profile of an individual, but rather that these two constructs cannot be seen as similar or interchangeable within the salutogenic paradigm or multi dimensionality of psychological well-being.

In the field of labour relations, where human resources officers are continuously confronted with omnipotent stressors, the results suggest an alternative way of looking at their work situation and coping style. It would seem that coping can be enhanced by studying and stimulating their salutogenic strengths, with the focus firstly on self-actualisation and the optimising of its mainly affective intra- and interpersonal behavioural characteristics, and secondly on their cognitive understanding and internal locus of control (as part of SOC and LR).

The weak psychometric properties of some of the POI scales can be seen as a limitation of this study. More research should be done on the intercorrelations and factor structure of the core and secondary constructs of the salutogenic paradigm. It is also suggested that the salutogenic model is applied in the
training of labour relations and human resources officers, which could enhance their resilience in coping with stressors.

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