

# Psychofortology: Explaining Coping Behavior in Organizations

Sanet Coetzee and Frans Cilliers  
University of South Africa, Pretoria

I-O psychology has been concerned with stress and its effects on the workforce for many years (Selye, 1956; 1974). This focus on disease and the vulnerabilities of the individual, studied from a pathogenic paradigm, was gradually replaced by a new focus on the individuals psychological wellbeing and skills to cope with the demands of stress, studied from a health and growth psychology perspective. We would like to explore how this movement developed, which constructs form part of it, what research outcomes exist within I-O psychology, its application within the field of I-O psychology, and give direction towards future research.

## The Development of Psychofortology

In 1979 Antonovsky wrote that despite being bombarded by multiple stressors in everyday living and undergoing severe traumatic experiences, there are individuals who are coping quite well and staying healthy. In trying to answer the question of why people stay healthy (instead of why people get sick, as in the case of the dominant pathogenic orientation), he developed the new paradigm of salutogenesis (meaning the origin of health).

Some researchers believe that the pathogenic view and salutogenesis can be described in terms of a health disease/ease continuum, implying that the individual will function between the two poles of terminal illness and total wellness (Strmpfer, 1990). It could be proposed that the criteria for psychological wellbeing and the criteria for psychopathology are to a great extent independent and that wellbeing and pathology are not just the endpoints of the same continuum. The absence of psychopathology does not necessarily indicate wellbeing or the presence of psychological strengths. In the same sense, low scores on measures of wellbeing or psychological strengths do not necessarily indicate pathology.

Strmpfer (1995) argued on the basis of Antonovskys writings that this is a much more encompassing problem than that of factors that influence physical health, and proposed that the paradigm be broadened to include sources of strength and named fortigenesis (the origin of strengths), which can be seen as more embracing and holistic than salutogenesis. Wissing and Van Eeden (1997) further argued that the focus should not only be on origins of psychological strengths, as implied by the names salutogenesis and fortigenesis, but also on the nature, dynamics and enhancement of psychological wellbeing. They suggested that the term psychofortology (the science of psychological strengths) be used for the domain of psychology in which psychological well-being is studied. Within this new domain, a better understanding of psychological strengths will point to new directions for capacity building, the prevention and enhancement of the quality of life of individuals, in their private as well as work lives.

## Constructs Within Psychofortology

Many constructs have been proposed to conceptualize aspects of psychological wellbeing, including processes involved in the coping of individuals and the enhancement of wellness. Strmpfer (1990) identified six of these, which supposedly describe the core of salutogenic and fortigenic functioning, namely the sense of coherence, locus of control, self-efficacy, hardiness, potency, and learned resourcefulness. Research results indicate high intercorrelations between these (Kossuth, 1998; Viviers & Cilliers, 1999).

**Sense of coherence.** Sense of Coherence (SOC; Antonovsky, 1987) is defined as a global construct that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that ones internal and external environments are predictable and that there is a high probability that things will work out as well as can reasonably be expected. The individual will perceive the stimuli from the external and internal environment as structured and predictable (referred to as comprehensibility), he/she will perceive that resources are available to meet the demands posed by these stimuli (referred to as manageability), and that these demands are challenges worthwhile spending his/her energy on (referred to as meaningfulness). This construct can be measured with a high level of reliability and validity by the Sense of Coherence Scale (Antonovsky, 1987). The scale consists

of 29 items, measuring the sense of coherence in general (total score) as well as the three mentioned core components.

**Locus of control.** Locus of Control (LOC) describes the extent to which individuals believe that their behavior has a direct impact on events that follow. Rotter (1966) described individuals who believe that they can control what happens to them as having an internal locus of control (internals). Those who tend to think about what happens to them as a function of luck, fate, or powerful others, have an external locus of control (externals). Several measures for this construct are used in research, of which the Internal-External Control Scale (Rotter, 1966) is probably the most well known. However, the Locus of Control Questionnaire (LCQ; Schepers, 1995) is used more frequently in South African research because of its favorable psychometric qualities. The LCQ consists of three scales, namely external control, internal control, and autonomy. It is important to note that, where the scale of Rotter viewed internal and external locus of control as dependant variables on a continuum, Schepers postulates that internal and external control are not bipolar opposites but independent variables instead. It is therefore possible for an individual to achieve a high score on external as well as internal control on this questionnaire.

**Self-efficacy.** Self-efficacy refers to individuals belief that they can successfully perform the behavior required for a specific task. It is a relatively enduring set of beliefs that one can cope effectively in a broad range of situations (Bandura, 1982). Self-efficacy expectations determine what activities people engage in, how much effort they will expend and how long they will persevere in the face of adversity. Well known measuring instruments for self-efficacy are the Self-Efficacy Scale (Sherrer & Maddux, 1982) indicating generalized self-efficacy beliefs and the Eight-Item Self-Efficacy Scale developed by Thoms, Moore, and Scott (1996), measuring self-efficacy beliefs regarding a specific task or situation, such as participation in self-managing work teams.

**Hardiness.** The construct of hardiness evolved out of the stress and coping literature to explain individual differences in stress resiliency (Kobasa, Maddi & Kahn, 1982). The concept of hardiness is considered a personality style consisting of three interrelated factors, namely commitment (individuals who involve themselves in whatever they are doing), control (individuals who believe and act as if they can influence the events shaping their lives), and challenge (individuals who consider change not only as a threat but also as an opportunity for development). The construct can be measured by using the 50-item Personal Views Survey (Kobasa et al., 1982).

**Potency.** In a situation where the resources at the disposal of a person are inadequate for meeting certain demands and this causes tension (a disturbance in homeostasis), potency will enable the individual to restore this homeostasis and thus prevent the tension from turning into lasting stress. Potency refers to a persons enduring confidence in his/her own capacities resulting from successful coping experiences in the past as well as confidence in and commitment to the social environment, which is perceived as basically ordered, predictable and meaningful (Ben-Sira, 1985). This construct emphasizes that coping has to be considered as a product of interaction between the person and the environment. Potency as described above, can be measured effectively by the Potency Scale (Ben-Sira, 1985), which contains 19 items measuring self-confidence, mastery, commitment to society, as well as the perceived meaningfulness and orderliness of society.

**Learned resourcefulness.** Learned resourcefulness refers to a set of well-learned behaviors and skills by which individuals self-regulate or control their behavior. It is seen as a personality repertoire that includes mainly three functions for example, regressive self-control, reformative self-control, and experiential self-control (Rosenbaum, 1990). Regressive self-control helps the individual to regulate internal responses, such as pain, emotions, and cognition that interfere with the smooth execution of an ongoing task. Reformative self-control enables individuals to change their current behavior in the hope of achieving a greater reward in the future by using planning skills, problem-solving strategies, and the delay of immediate gratification. Experiential self-control enables individuals to experience and enjoy unknown and pleasurable activities to the fullest. Learned resourcefulness can be measured by the Self-Control Schedule (SCS), consisting of 36 items that covers (a) the use of cognition and self-instruction to cope with emotional and physiological responses, (b) application of problem-solving strategies, (c) ability to delay immediate gratification, and (d) a general belief in ones ability to self-regulate internal events (Rosenbaum, 1990).

Other constructs relating to the maintenance and enhancement of psychological wellness are constructive thinking, satisfaction with life, emotional intelligence, reality orientation, self-actualization, resilience, toughness, coping, social support, dispositional optimism, personal causation, self-directedness, social interest, and sense of humor. All

of these show some kind of conceptual resemblance to the above six defined constructs.

### **Research on Psychofortology Within an I-O Psychology Context**

A vast amount of psychofortology research has already been done in the field of I-O psychology in South Africa, Israel, Europe, and the United States. A few examples of research projects undertaken on different levels within the organization will be highlighted (a complete list of references is available from the authors).

At the individual level, for example, adaptation in the integration process of the South African National Army has been researched. At the group level, teamwork and comparisons between factories that make specific interventions in team petitions and its impact on efficacy, self-efficacy, responsibility, motivation, and job satisfaction have been investigated. At the organizational level, salutogenesis has been tested as a paradigm in change management.

Research findings are available including the impact of teams on managers, executives, supervisors, and blue-collar workers. Different occupational fields have also been studied including farm workers, nurses, air cabin attendants, police officers, data processing personnel, and industrial operatives in the chemical industry. Data is also available with relation to different aspects of an employees career, for instance organizational entry, career maturity, career advancement, career development, and career self-efficacy expectations.

The effect of the above constructs has also been investigated in terms of certain outcomes in the organization such as job performance, organizational commitment, and job satisfaction and with relation to certain experiences of employees like occupational burn-out, role ambiguity and role conflict, role strain and guilt, job insecurity, and job stress. The relationship between the constructs and coping with certain working conditions has been researched, for instance, work schedule stress and wellness in female air cabin attendants, the influence of hardiness and tenure in shift work as predictive variables for coping with shift work, and the relationship between locus of control and attitudes towards flextime.

Interpersonal relations in the organization can also be influenced by salutogenic/fortigenic functioning as studies on peer support, supervisory support, and participative management indicate. Current research efforts are also being undertaken with respect to the influence of some of these constructs on the quality of life amongst retrenched workers and the unemployed.

### **Application in the Field of I-O Psychology**

With work occupying such a prominent place in the lives of most people, it is an important area for the development of and research on psychofortology (see Strmpfer, 1995). From the known research results, it is clear that many insights relating to coping behavior have come to the fore, which already have had a profound impact on the understanding of the organization and its effectiveness.

From an organizational diagnosis point of view, quality of work life can be predicted by identifying the psychofortological functioning amongst employees. As part of an organization development strategy, the stimulation and enrichment of employees coping repertoires will enhance this quality as well as work performance. Equipped with the relevant skills and coping mechanisms, employees will experience the work environment as comprehensible, manageable, and meaningful, resulting in greater commitment toward the organization, thus fostering the development of the above-mentioned constructs.

This integrated process can start with the selection and recruitment of new employees and continue into the organizational socializing mechanisms such as induction and performance appraisal. In terms of organizational design, wellness can be fostered by presenting information in an ordered, structured, and predictable fashion linking to the comprehensibility aspect of sense of coherence.

Training and development interventions planned and presented from this paradigm will help to diminish and prevent organizational diseases such as stress, burn-out, and alcohol abuse and at the same time enhance psychological

and physical wellness. Career planning and the advancement of personnel can also be addressed in accordance with career self-efficacy beliefs. By focusing on the mentioned resources of employees, an alternative viewpoint to implementing and facilitating adaptation to organizational and environmental change comes to light that could help organizations and individuals to cope with the dynamic working environment.

### **Future Research**

Past research has focused on enabling resources and protective environmental factors as well as intrapersonal factors and characteristics of wellness (Wissing, 2000). Future research should focus more on processes that facilitate wellness.

One example might be to investigate how the different components of well-being—namely the cognitive, emotional, physical, and social—interact in order to manifest wellness. Future research could also explore the possibility that individuals do not only differ with regard to their degree of psychological well-being, but that they may also differ in their particular manifesting strengths and patterns of wellness.

In terms of organizations, the aspect of collective well-being might be explored further as well. The question to be answered here is what is the balance or mix of individual and collective wellness, and how will this emerge within different units or departments, teams, and the organization as a whole?

Future research might also explore the possibility of the existence of salutogenic/fortigenic profiles within different occupational groups or professions. For example, does the profile of a sales representative differ from that of a nurse or an executive?

The relationship between organizational culture and the profile of the workforce might also be examined to determine if culture hinders or facilitates the psychological well-being of its members and how this in turn might influence the effectiveness of the organization overall.

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