

Research article

Psychological Performance at Work: Theoretical Framework

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Abstract

In spite of an increasing number of studies in the field of organizational behavior, little is known about the antecedents of individual performance and its final influence on the organizational outcomes. A lot of factors with physical and psychological contents influence the behaviour of members in an organization. This study examines the literature on psychological performance and its influences upon work. Psychological performance is a new theme in the field of organizational behavior. It is proposed that a lot of factors influence the individual performance which in turn effects the organizational outcomes. Specifically, psychological performance of the members has an important role in working environment. However, no significant research conducted on the subject can be found in the available literature. In view of this, the importance of psychological performance for organizations and its members is presented in this paper. **Copyright © AJSSAL, all rights reserved.**

Keywords: psychology, performance, psychological performance, psychological well-being, mental toughness, self-efficacy, self-esteem, positive and negative affectivity, hardiness, dispositional optimism.

Introduction

Human beings have a complex nature with a number of distinctive features. Among these features, the personality factor is one of the important cores of human beings. Human nature is multi-dimensional, which means that we have not only physical features but also psychological, cognitive and social features. All these features complement one another and constitute our whole nature.

In this highly competitive era, which has transformed from classical management period to knowledge management period, human beings have become the most important factor for organizations and societies. Because of the scarcity of skilful human resources, organizations are striving to establish healthy working conditions, which comprise enabling physical and psychological factors for its members to ensure long-term working and efficient outcomes. While doing this, they consider ergonomics conditions for physical environment, as well as the psychological factors that can influence their members. The reason for such consideration is the fact that mental and emotional factors can affect members' performance in their working environment. A human can be understood by his/her emotion, thought, behavior, and physical condition as a whole (Leahey, 2000). Because of the presence of these multi-dimensional factors, if organizations cannot have a long term efficiency in a highly competitive sector, if they expect such efficiency by taking care of only the physical conditions of its members. Therefore, all possible factors that can influence the physical and psychological conditions of the members need to be considered.

Organizations want to have long term sustainable success in their markets. In realizing this desire in practice, organizational applications, as the physical and psychological conditions, are becoming more and more difficult for the members of these organizations. In such a difficult and tough working environment, organizations, therefore, need to establish better applications to ensure healthy and peaceful working environment, increase the efficiency of their members and, ultimately, access sustainable growth. For this reason, besides physical performance, psychological performance of its members is an important issue for an organization. Because of the technological improvement, the issue of sustainable growth has become more important than anything else in the 21st. century. To keep up with this improvement, organizations have to make innovations in production or processes. In making these innovative movements, individual performance is an essential factor to be considered by organizations. In these innovation processes, psychological performance of the members, which immensely influences organizational outcomes, becomes a critical input. Therefore, organizations need to care about this individual input in working environment.

The role of managers and their behavior play a critical role in providing a framework for better job performance to the members of their organizations (Grojean et al., 2004; Mendonca, 2001) and in shaping the collective character of an organization (Moore, 2005; Wright and Goodstein, 2007). The behaviour of managers is also an important factor for organizations because organizational climate has serious influence on the psychology of members, and ultimately, on the organizational goals. Managers, therefore, need to improve their knowledge in the field of psychology which can help them establish a healthy working environment at group or organizational levels.

The relations between performance and individual or organizational outcomes have been subject to research by many researchers in the field of organizational behavior. However, there is no research on psychological performance and its influences on members and organizations at work. To be aware of the needs and expectations of members and the factors that satisfy these needs (such as increasing the productivity and finally the strategic superiority of the organizations) is very important for organizations. However, more clarification is required on this subject, and this is the reason for commencing the present study.

Against the above background, the objective of this study is to examine the concept of psychological performance of organizational members and the relevant literature on this topic, and to develop a new scale for computing and measuring psychological performance at work.

Theoretical Frameworks

Sustainable growth is an important matter for organizations. There are a lot of factors that influence organizational outcomes, which, consequently, affect the sustainable growth. An important factor in this process is the individual performance. For a proper measurement of individual performance, both the physical and psychological performances of organizational members in given working conditions are required to be evaluated. In order to enhance physical performance, organizations can establish and provide ergonomic working conditions, which make it easier for their members to carry out all the physical activities. However, in order to have more efficient working conditions and, ultimately, to have a sustainable growth by enhancing overall performance, they also need to take care of the psychological conditions of their members. In this connection, the concept of psychological performance and related topics are elaborated on in the following sections.

Psychological Performance

Psychology is the science of the intellects, characters and behavior of animals including human beings. It shares its sphere with anatomy, physiology, sociology, anthropology, history and other sciences that are concerned with the changes in a human's body or mental condition. A complete science of psychology would explain every fact about one's intellect, character and behavior, as well as the cause of every change in human nature (Phillips, 2004).

Behavioral science is a discipline that interacts with psychology and sociology. It has emerged as an independent academic discipline in order to have a better understanding and explanation about how psychological factors affect the behaviors and decisions of organizational members at work (Bodie, Kane & Marcus, 2007). Humans are social creatures, but traditional management ignored the need to examine the behavioral and psychological dimensions in individual decisions (Shiller, 2003). We learn a lot from our interactions with others, especially by talking and listening. Human nature is multi-dimensional, which means that we have not only physical features but also psychological, cognitive and social features. Therefore, the psychological condition of the members is important for organizations to have a sustainable growth. If organizations wish to manage their human resources effectively and efficiently, they need to establish healthy working conditions and organizational climates. Everyone exhibits different behaviors in similar circumstances because their psychological, mental, intellectual and social thinkings are different. Thus, organizational members' attitudes towards different events and their performance differ according to their physical and psychological conditions at work.

Performance can be described as carrying out or completion of a given task in the manner as expected. (Demirtaş, 2009). Normally, a positive performance reflects the degree to which a person's efforts advance important organizational goals (Hogan & Shelton, 1998). Organizations base some of their most important decisions on information they gather from the performance evaluations that take place within the organization. Researches have shown that performance evaluation could contribute to employee development (Wexley, 1979) and improvement of future job performance (Murphy & Cleveland, 1995; Jawahar, 2006). For a performance evaluation system to be effective within an organization, it should accurately reflect the performance of

employees. For this to happen, the performance indicators used for evaluation should be valid, reliable, accurate and free from rating biases (Thornton, 1980). It can be, therefore, argued that that individual cognition holds an important place in performance appraisal researches.

Cognitive processing can be defined as any activity that involves the mental manipulation of information stored. Many contemporary approaches to appraisal are concerned with social and cognitive aspects of it (Landy & Farr, 1980; Spicer & Ahmad, 2006; Fletcher, 2001). Feldman (1981) emphasized that cognitive, psychological, social, motivational and organizational factors affect the performance of members. Ilgen and Favero (1985) also indicated that cognition, mood, positive/negative affection, similarity, liking, emotions, personality, and individual differences influence the performance of members.

Psychological performance theory is based on human motivation, development, well-being, self-esteem, self-efficacy, affectivity, hardiness and mental toughness. It can be defined as a psychological mood of organizational members towards individual job performance in their working environment. The theory focuses on types, rather than just amount, of motivation of a person to his/her job, paying particular attention to autonomous motivation, controlled motivation, and amotivation as predictors of performance, relational, well-being and other outcomes (Deci & Ryan, 2008). This performance theory addresses the social conditions of an individual in a working environment. It also examines people's life goals or aspirations, showing differential relations of intrinsic versus extrinsic life goals to performance and psychological health.

As a macro-theory of human motivation in organizational context, the psychological performance theory addresses such basic issues as personality development, self-regulation, universal psychological needs, life goals and aspirations, energy and vitality, non-conscious processes, the relations of culture to motivation, and the impact of social environments on motivation, affect, behaviour, well-being, self efficacy, self esteem, hardiness, and mental toughness of a person (Deci & Ryan, 2008).

The available literature suggests that the effects of cognition, liking, mood, and personality on the performance ratings have all been of great concern for the researchers interested in revealing the underlying mechanisms under performance systems. Research has examined the link between performance and the personality (Borman & Hallam, 1991; Tziner & Kopelman, 2002; Bernardin, Cooke & Villanova, 2000), self esteem and neuroticism (Hojat, 1982), cognition (Spicer & Ahmad, 2006; Woehr, 1992), state affect (Murphy & Cleveland, 1995; Tsui & Barry, 1986), liking (Decotiis & Petit, 1978; Antonioni & Park, 2001; DeNisi, Cafferty & Meglino, 1984) and mood (Sinclair, 1998). Similarly, self-esteem was found to be related to successful handling of jobs with ambiguous roles (Jex & Elacqua, 1999), acceptance of change (Wanberg & Banas, 2000), motivation and organizational commitment (Hui & Lee, 2000), and resistance to influence (Brockner, 1988). In addition, self-efficacy was found to have relationship with overall job performance and organizational commitment (Gardner & Pierce, 1998). Finally, emotional stability was found to be correlated with job performance (Ployhart, Lim & Chan, 2001). However, the link between the psychological performance of members and its outcomes does not seem to have been fully explored yet.

In this context, it is interesting to note that Loehr (1986) has developed a psychological performance inventory for sportsmen. He proposes a scale to measure the mental ability of the athletes. This scale consists of 7 subscales on the basis of psychological – skills, which include; (a) self-confidence, (b) negative energy control, (c) attention control, (d) visualization and imagery control, (e) motivation, (f) positive energy, and (g) attitude control.

Self-confidence constitutes an important aspect of psychological wellness. It refers to an individual's trust in his/her capabilities. Self-confidence seems to result in positive outcomes for performance (Schmidt et al., 2005; Pervin & John, 2001; Bandura, 1999). Individuals, who have greater intrinsic interest and deep engrossment in activities, set themselves challenging goals and maintain strong commitment to them, and heighten and sustain their efforts in the face of failure (Pajares & Schunk, 2002). *Negative energy control* refers to handling emotions such as fear, anger, anxiety, and frustration, and coping with externally-determined events. Removing negative thoughts often makes it possible to break the link that leads to negative feelings and behaviors (Diamond & Aspinwall, 2003). *Attention control* can be described as remaining fully focused on the task at hand. If there is a sufficient level of attention, then the time movements could be done properly and rapidly (Loehr, 1986). *Visualization and imagery control* can be described as thinking positively in pictures rather than words, and being able to control the flow of mental pictures and images in positive and constructive directions (Schmidt et al., 2005). *Motivation* describes the ability to set meaningful goals and be willing to persevere with training schedules and to endure the pain, discomfort, and self-sacrifice associated with forward progress. Motivation has two aspects: intrinsic motivation (i.e. self-recognition, satisfaction level) and extrinsic motivation (i.e. social acceptance, rewards, physical stress) (Brief & Aldag, 1977). *Positive energy* describes the ability to become energized from such sources as fun, joy, determination, positiveness, and team spirit. These emotions have the high level of frequency and give energy to a person, which in turn affects the pleasure from work. These emotions are higher also in circumstances where the person is looking his/her environment happily. (Kent & Shapiro, 2009). *Attitude control* can be described as reflecting a performer's habits of thoughts, with particular emphasis on being unyielding and showing obstinate insistence on finishing rather than conceding defeat. Humans firstly perceive the stimulus, then determine the feature of the stimulus, and lastly make a decision on whether or not to put the behavior into practice. In this process, attitudes to the events have an important role (Loehr, 1986).

Apart from the psychological performance inventory proposed by Loehr, the Psychological Skills Inventory for Sport (PSIS; Mahoney, Gabriel & Perkins, 1987) has also been used widely for the assessment of psychological skills. The PSIS was developed by Mahoney and co-workers (Mahoney et al., 1987) in an attempt to assess the psychological skills relevant to exceptional athletic performance. The original PSIS consisted of 51 true-or-false questions developed to identify differences in the use of psychological skills by elite, pre-elite and collegiate-standard athletes.

Drawing on the methods applied in the field of sports psychology, this study proposes using psychological well-being, self-esteem, self efficacy, positive and negative affectivity, hardiness, and mental toughness as predictors of psychological performance at work.

Psychological Well-Being

Wellness is multidimensional, and it has different perspectives. Nakamura (2000) defines wellness as a process for the continuous self-renewal that is needed for a fulfilling life. Wellness also reflects a person's attitude and his/her unique response to living. Psychological well-being is the psychological dimension of wellness (Harrington & Loffredo, 2007).

Ryff (1989) summarizes psychological well-being as the dimensions of self-acceptance, personal growth, purpose in life, environmental mastery and positive relations with others. Fraillon (2004) describes well-being as the prevalence of positive attributes and lists features of well-being as the active pursuit of well-being, a balance of attributes, positive affect or life satisfaction, pro-social behaviour, multiple dimensions and personal optimisation.

Well-being is the state of successful performance throughout the life course integrating physical, cognitive and social-emotional functions that results in productive activities deemed significant by one's cultural community, fulfilling social relationships, and the ability to transcend moderate psychosocial and environmental problems. Well-being also has a subjective dimension in the sense of satisfaction associated with fulfilling one's potential. Schmutte & Ryff (1997); Deci & Ryan (2008) view self-acceptance, resilience and self-efficacy as the aspects of well-being.

A growing movement seeking to understand and facilitate cognitive-behavioral model (Cox, 2002), which describes the mental skills that reflect areas related to personal development and subjective well being as well as performance enhancement, is positive psychology (Seligman & Csikszentmihalyi, 2000). Positive psychology is related to personality styles (mental toughness, hardiness, dispositional optimism), positive self-concept (self-esteem, self-efficacy), and positive emotions and moods (positive/negative affectivity) (Carr, 2004; Snyder & Lopez, 2005). In addition to these findings, researches have demonstrated that there are some positive relationships between superior performance and, mental toughness (Golby & Sheard, 2004); hardiness (Maddi & Hess, 1992); self-esteem (Aidman & Bekerman, 2001); self-efficacy (McAuley & Blissmer, 2002); and positive affectivity (Crocker, 1997).

Self-Esteem

Self-esteem is a dimension of psychological well-being. It can be described as the evaluative component of self-image, or the positive or negative manner in which a person judges herself/himself (Page & Page, 2003). Self-esteem lays the foundation for the sense of self-worth, which follows from being open to experience and from valuing the self for who one is (Reeve, 2005). It is associated with how an individual regards himself/herself in relation to his/her life experiences and relations with others. The sense of self-esteem cultivates positive feelings and behaviours in people. Individuals with high self-esteem are willing to take initiative and independent action, whereas those with low self-esteem tend to give easily in the face of a difficulty (Derlage, Winstead & Jones, 2005).

Tremayne and Tremayne (2004) have identified successful implementations of the goal setting, imagery, relaxation, and stress management in order to improve physical fitness, and self-esteem. Other researches have also demonstrated positive relationships between self-esteem and performance outcomes (Morrow et al., 2000; Aidman & Bekerman, 2001).

Self-Efficacy

Self-efficacy is the expectations that are based on four principal sources of information. These sources are; performance accomplishments, vicarious experiences, verbal persuasion, and physiological states or

emotional arousal. (Bandura, 1997). Bandura (1986) in his Social Cognitive Theory defines four processes that underlie the nature of the relationship between self-efficacy beliefs and performance outcomes. An individual's judgments of self-efficacy for a specific task may improve or impair actual performance through cognitive, motivational, affective, and selection processes. Through cognitive processing, self-efficacy beliefs affect people's anticipation of future outcomes and shape the goals that they set for themselves. Through motivational processes, they encourage or discourage people when they decide on how much effort they should put on or how long they should persevere on a task. Efficacy beliefs may also initiate emotional responses that give rise to stress and depression through affective processes (Pintrich & De Groot, 1990). In addition, self-efficacy has influence on goal setting, choice of behavior, self-motivation and successful performance (Bandura, 1997).

In the literature, Multon, Brown & Lent, (1991) reported a range of correlations between self-efficacy and corresponding academic performance. Pajares (2003) in his review of literature on self-efficacy beliefs and achievement in writing reported a significant positive relationship between writing self-efficacy and writing outcomes. In their meta-analysis of 114 studies, Stajkovic & Luthans (1998) found a significant correlation between self-efficacy and work performance. Thus, many studies support the view that self-efficacy and performance outcomes are significantly related.

Positive and Negative Affectivity

Positive affectivity and negative affectivity are the activation of positively and negatively valenced affects (Watson, Clarke & Tellegen., 1988). Positive affectivity (PA) represents the extent to which an individual experiences pleasurable engagement with the environment. Thus, emotions such as enthusiasm indicate the high positive affectivity, and emotions such as anxiety or depression indicate the low positive affectivity (Watson & Clark, 1997).

Positive affectivity and negative affectivity reflect dispositional dimension. High negative affectivity (NA) indicate distress and unpleasurable performance. By contrast, PA represents a pleasurable engagement to the working environment and emotions such as alertness and enthusiasm indicate a high PA (Watson & Clarke, 1984).

There are a lot of studies in the literature that have emphasized that positive affectivity and negative affectivity are associated with individual performance outcomes. Kaplan et al. (2009) indicate that PA and NA predict task performance. The analyses in their study document that PA positively and NA negatively affect the task performance of an organizational member. Cropanzano, James & Konovsky, (2006) emphasize that PA predicts job performance in such a manner that PA and job performance are positively related. Watson et al. (1999) also found a similar relationship between positive affectivity and performance outcomes.

Hardiness

Hardiness is a personality construct that is accepted as one of the most important indicators of psychological health. The hardiness concept was originally developed by psychologist Suzanne Kobasa (1979). Hardiness can be defined as a constellation of personality characteristics that functions as a resistance resource in the encounter with stressful life events (Kobasa, Maddi & Kahn, 1982).

It has been revealed in many researches that hardiness is composed of three basic interrelated elements (Maddi & Khoshaba, 1994; Maddi, 1998). It involves a high sense of commitment to life and to work (dimension of commitment), a strong belief in one's ability to control events and influence outcomes (dimension of control), and a greater openness to changes and challenges in life (dimension of challenge).

Hardiness is consistently negatively related to experienced stress. It is also consistently positively related to objectively assessed performance throughout the course and in the subsequent course, and to the first on-the-job performance appraisal a year later (Westman, 1990). In the same way, many researches emphasize a positive relationship between hardiness and individual performance outcomes (Westman, 1990; Maddi et al. 2006; Maddi et al. 2007; Maddi et al. 2012).

Mental Toughness

Mental toughness is defined as a collection of values, attitudes, emotions, and cognitions that influence the way in which an individual approaches, respond to, and appraises demanding events to consistently achieve his/her goals (Gucciardi, Gurdan & Dimmock, 2009).

To assess mental toughness, the Psychological Performance Inventory (PPI; Loehr, 1986) is used. Loehr (1986) indicated the relationship between performance and mental toughness. However, the available literature does not indicate that any study has so far been conducted to assess the relationship between mental toughness and performance outcomes at work. This topic is studied mainly in sports science. For example, the PPI has demonstrated acceptable psychometric properties when used on athletes performing at a high level (Golby & Sheard, 2004; Golby, Sheard & Lavallee, 2003). Similarly, the Psychological Skills Inventory for Sport (PSIS; Mahoney et al., 1987) has been used for the assessment of psychological skills in sports. The PSIS was developed by Mahoney and co-workers (Mahoney et al., 1987) in an attempt to assess the psychological skills relevant to exceptional athletic performance. In addition, there are other studies that emphasize the relationship between mental toughness and psychological performance (Jones, Hanton & Connaughton, 2002; Kuan & Roy, 2007). It is, therefore, argued in this work that mental toughness can be a predictor of psychological performance of an organizational member at work.

Even though the psychological and sociological phenomena that affect human behavior are widely discussed in terms of behavioral science, psychological performance at work is relatively new in the field of organizational behavior. In view of such a scenario, an extensive literature review on this subject has been made in this paper.

Discussion

Organizations pursue long term sustainable presence in their markets. In such endeavors, organizational applications, as well as the physical and psychological conditions, are becoming more and more difficult as in physical and psychological conditions for members of these organizations. Therefore, organizations have to establish a better working environment, which involves a psychological supportive feature for the reason that human capital is an important input of production in this technologically highly changing environment, and in this process managers have to consider that their performance is influenced by psychological factors.

Behavioral science is a discipline that interacts with the psychology and sociology. It has emerged as an independent academic discipline in order to have a better understanding and explanation about how psychological factors affect the behaviors and decisions of organizational members at work.

A number of studies related to organizational behavior can be found in the literature, but little is known about the antecedents of individual performance and its final influence on the organizational outcomes. A lot of factors with physical and psychological contents influence the behaviour of members in an organization. In this context, the purpose of this study is to examine extensively the available literature about psychological performance and its influences at work. In this study, the theory of psychological performance is based on human motivation, development, wellness, self-esteem, self-efficacy, affectivity, hardiness and mental toughness. The concept of psychological performance can be defined as the psychological mood of a member of an organization to his/her jobs performance in a particular working environment. This study strongly supports the claims that positive psychological environment can significantly increase the work performance of an individual when the members of an organization are carefully managed in a proper psychological term. The increase in work performance can be established empirically by measuring the performance before and after the implementation of psychologically supportive programs. However, not significant research study conducted in the field of psychological performance at work can be found in the available literature. The main purpose of this study is to create an awareness about the importance of having a psychological perspective of performance at work.

In addition, this study has several notable strengths. First of all, this is the first study that examines the literature on psychological performance at work. Second, this study attempts to integrate the psychological performance of a member into the discipline of organizational behavior.

This study also has some limitations which need to be mentioned here. This study depends upon the available literature on psychology in general and sports psychology in particular. In this study, psychological well-being, self-esteem, self-efficacy, positive and negative affectivity and mental toughness have been used as the predictors of psychological performance at work. These predictors need to be further explored, expanded and elaborated on in order to establish their positive psychological tenets.

Future researchers should also consider the weaknesses indicated above. For example, this study could be further expanded by including additional variables. Other researches should also develop scientific indicators to measure psychological performance at work.

In conclusion, an extensive literature review on psychological performance at work is provided in this study. This subject is relatively new in the field of organizational behavior. Therefore, new empirical researches on this subject would offer more practical framework.

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