Relationship between Hardiness, Self-efficacy and Coping responses among IT employees

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Abstract: Positive organizational behaviour refers to ‘the study and application of positively oriented human resource strengths and psychological capacities that can be measured, developed, and effectively managed for performance improvement in today’s workplace (Luthans, 2002). The present study aimed at finding out the relationship between positive traits such as hardiness, self-efficacy and coping responses among IT employees. A survey method was used whereby the questionnaires were disturbed in three information technology organization. Using convenient sampling method 111 data was collected among which 53 of them were females and 58 of them were males. The mean age of this sample is 33 years. The age ranges between 22-53 years. Dispositional Resilience Scale (DRS) – 30 item scale by Bartone, Ursano, Wright & Ingraham (1989), Self-efficacy- 10 item by Jerusalem and Schwarzer (1995), Coping Response Inventory by Moos (1993) were used to collect the data. Pearson’s product moment correlation was used to find out the relationship between the variables. The findings of this study showed that employees in the IT industry had high levels of hardiness and self-efficacy. They also used approach coping responses predominantly. Thus, they were highly committed in their work and took challenges at ease by taking control of the whole situation.

Key Words: hardiness, self-efficacy, coping, employees, organization

I. Introduction

Over the past several decades, India has developed into an important location in the global software industry. Thousands of new jobs have been created as multinational software firms have established Indian branch operations. As part of this process, an increasing number of Indian women have entered the labour market. The workplace brings together people from different backgrounds, philosophies, cultures and personalities. Diverse workplaces can encourage cooperation, teamwork and creative thinking. Personality differences can mean that individuals take varying approaches to work style and interacting with other employees, managers, clients and competitors. Understanding how personality affects behaviour in the workplace can determine what might be motivating workers to perform or behave in certain ways. The study of organizational behaviour relates to the expected behaviour of an individual in the organization. No two individuals are likely to behave in the same manner in a particular work situation. In social cognitive theory, individual differences in patterns of behaviour across situations reflect such underlying personal variables as the individual’s encoding or construal of their experiences, and their expectations, values, goals and self-regulatory strategies. These relatively enduring person variables within the individual interact with situational characteristics to generate stable but discriminative patterns of behaviour. It is the predictability of a manager about the expected behaviour of an individual. There are no absolutes in human behaviour. It is the human factor that is contributory to the productivity hence, the study of human behaviour is important. The workplace is filled with stress, anxiety, deadlines, pressure, success and failure. The highest individual and organisational performers are able to cope with the fast-changing environment to succeed and achieve high performing results. The individuals play an important role in the functioning of the organization. People tend to identify themselves with the organization in which they participate. In recent times, there is a focus on harnessing the internal strengths and capacity of individuals to face any demands of the work environment. Everyday people experience situations that have the potential to be stressful. This is particularly true in the workplace with turbulent financial times and ever increasing rates of workplace change. However, people react very differently to situations such as these. While some people physically and mentally fall apart when facing major change, others have been shown to flourish in this type of situation. (Kobasa, 1979).

Some of the key internal factors such as hardiness, self esteem, self efficacy, optimism etc., are found to have positive impact on protecting psychological health by withstanding occupational stress. Ciarrochi, Chan and Caputi (2000) highlighted that internal resources may protect people from stress and lead to better adaptation.
II. Need for the study:

Positive organizational behaviour refers to “the study and application of positively oriented human resource strengths and psychological capacities that can be measured, developed, and effectively managed for performance improvement in today’s workplace (Luthans,2002). Positive Organizational Behaviour capacities are open to development and should be something that one can measure, develop, and use to improve performance. Positive Organizational Behaviour may contribute to positive organizational outcomes. Positive Organizational Behaviour has been mainly concerned with individual psychological qualities and their impact on performance improvement. Positive Organizational Behaviour has tended to develop in an inductive way from individual to group to organizational levels of analysis. Thus, understanding the association among hardiness, self-efficacy and coping strategies could prove beneficial to employees of the IT industry. Many undergraduate and graduate students are placed in the technical and non-technical branches of the software industry within a short time after graduation. Increasing hardness and efficacy levels and enhancing coping abilities of the young joiners in the industry would benefit them as well as the organisation that employ them after graduation. The findings may prove beneficial to organizations that are proactively refining or creating employee development programs. For instance, conclusions drawn from this study may assist HR professionals and practitioners plan or design effective training, policy, or assistance programs that help employees develop the ability to remain productive in a threatening and ever-changing work environment. This is especially important when coupled with the knowledge that hardiness and efficacy can be learned.

Hardiness:

Kobasa (1982) defined hardiness as “a constellation of personality characteristics that function as a resistance in the encounter with stressful events”. Bartone (2006) defined hardiness as “a broad personality style or generalized mode of functioning that includes cognitive, emotional and behavioural qualities.” The personality possessing hardness is marked by a way of perceiving and responding to stressful life events that prevents or minimizes the strain that can follow stress and that, in turn, can lead to mental and physical illness. Hardy characteristics are important in occupational settings due to the origins of the construct in Kierkegaard’s existential philosophy (Heidegger, 1962). It appeared that conceptually, the sense of commitment, control and challenge underlying hardiness are important cognitions that appear to moderate the impact of daily work and life stress on well-being (Nowack 1988). Hardy people tend to see change as an opportunity for personal growth. Rather than trying to preserve the status quo, hardy individuals strive for new challenges (Kobasa, 1979; Maddi&Kobasa, 1984).Judkins (2005) conducted a study on hardiness, stress and coping strategies among mid-level nurse managers and found that the study supported the theoretical suppositions of lower stress if hardness and specific coping strategies are high. Also, the study showed that the potential exists for work related stress could be reduced by increasing hardness and adaptive coping strategies.

Hypothesis 1: Hardiness would be significantly related to various coping responses such as logical analysis, positive appraisal, problem solving, seeking guidance and support, cognitive avoidance, acceptance or resignation, seeking alternative rewards, emotional discharge.

Self-efficacy

Bandura’s theory describes self-efficacy, which plays a central role in stress reactions, as “a belief in one’s own competence in handling the demands of a situation successfully in order to achieve a desired outcome”. Jerusalem (2009) defined self-efficacy as “beliefs in their capabilities to organize and execute the courses of action required to produce given attainments”. Operating as a cognitive mechanism through which controllability affects stress reactions, self-efficacy impacts the resulting coping response (Bandura, 1988). Inherent in self-efficacy theory is one’s perception of the ability to exercise control over potentially threatening events. It is therefore the perception of environmental threats as exceeding one’s coping abilities that become the primary source of stress (Wiedenfeld, O’Leary, Bandura, Brown, Levine,&Raska 1990). Koeske and Koeske (1989) also argue that self-efficacy is a way of coping that moderates the effects of exhaustion on mental distancing. Hence, low levels of self-efficacy are indicative of burnout. Those who are self-efficacious are also more likely to reject negative thoughts about themselves or their abilities than those with a sense of personal inefficacy. Andrews, Ainley and Frydenberg (2004) conducted a study on the role of coping style, self-efficacy and emotions among adolescents. They found that self-efficacy is positively related to coping styles of the individual.

Hypothesis 2: Self-efficacy would be significantly related to various coping responses such as logical analysis, positive appraisal, problem solving, seeking guidance and support, cognitive avoidance, acceptance or resignation, seeking alternative rewards, emotional discharge. Kittredge (2010) conducted a study to predict work and organizational engagement with work and personal factors which included hardness and self-efficacy. She found that self-efficacy was significantly correlated with overall hardness.

Hypothesis 3: Hardiness would be significantly related to self-efficacy

Coping responses:

Coping is defined as “constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of a person” (Lazarus &Folkman,
1984), Lazarus and Folkman (1984) model of psychological stress takes a cognitive view of how we engage the world. Although the areas of appraisal and coping processes are rather complex, there is a striking congruence in much of the literature. This congruence is based on two basic orientations toward coping with stressful work and life events, approach and avoidance (Roth and Cohen, 1986). But approach and avoidance refer to cognitive, emotional and behavioural activity that is oriented either toward or away from perceived harm, threat, or challenge.

III. Procedure, participants and methodology
The present study is an ex-post facto research. Using Convenience sampling procedure, data were collected from 130 individuals among whom 111 questionnaires were only completely filled and used for the study, among which 53 of them were females and 58 of them were males. The mean age of this sample was 33 years.

**Measures:**
1. The dispositional resilience scale was developed by Bartone et al (1989) is a 45 item instrument designed to measure dispositional resilience. It is based on a four point Likert format scale. A short version of the DRS of 30 items was used which has demonstrated strong correlation with scores on the 45-item version (Bartone, et al., 1989). The hardness construct is composed of three subscales: commitment, control, and challenge. Associations can be computed with subscale individually and/or collectively. Reliability alpha coefficients have been demonstrated by Bartone, et al. (1989) at .62, .66 and .82 for the challenge, control and commitment subscales respectively. Principal component factor analysis supported the three subscales. Scores are sensitive to measuring change due to levels of stressful events.
2. This tool was developed by Jerusalem and Schwarzer (1995) consists of 10 items to measure the self-efficacy level of the individuals. Each item refers to successful coping and implies an internal-stable attribution of success. The author established reliability on samples from 23 nations, Cronbach’s alphas ranged from .76 to .90, with the majority in the high .80s. Criterion-related validity is documented in numerous correlation studies where positive coefficients were found with favourable emotions, dispositional optimism, and work satisfaction.
3. The coping response inventory – Adult Form (CRI-Adult) is a measure of eight different types of coping responses to stressful life circumstances. These responses are measured by eight scales– Logical Analysis (LA), Positive Reappraisal (PR), Seeking Guidance and Support (SG), Problem Solving (PS), Cognitive Avoidance (CA), Acceptance or Resignation (AR), Seeking Alternative Rewards (SR) and Emotional Discharge (ED). The reliability coefficients of the CRI-Adult range from .58 to .74, indicating moderate to high internal consistency for the test. Content and face validity were established by formulating definitions for each specific domain. Items were then prepared to fit the construct definitions.

<table>
<thead>
<tr>
<th>variable</th>
<th>Mean</th>
<th>SD</th>
<th>S-E</th>
<th>LA</th>
<th>PR</th>
<th>SGS</th>
<th>PS</th>
<th>CA</th>
<th>AR</th>
<th>SAR</th>
<th>ED</th>
</tr>
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<tbody>
<tr>
<td>Hardiness</td>
<td>84.73</td>
<td>7.18</td>
<td>0.63**</td>
<td>0.26**</td>
<td>0.14</td>
<td>0.04</td>
<td>0.26**</td>
<td>-0.28**</td>
<td>-0.21*</td>
<td>-0.10</td>
<td>-0.27**</td>
</tr>
<tr>
<td>S-E</td>
<td>30.21</td>
<td>4.61</td>
<td>0.16</td>
<td>0.27**</td>
<td>-0.40</td>
<td>0.25*</td>
<td>-0.26**</td>
<td>-0.25*</td>
<td>0.01</td>
<td>-0.24*</td>
<td></td>
</tr>
</tbody>
</table>

*0.05 level of significance; **0.01 level of significance
S-E – Self-Efficacy
LA – Logical analysis
PR – Positive reappraisal
SGS – seeking guidance and support
PS – problem solving
CA – cognitive avoidance
AR – acceptance/resignation
SAR – seeking alternative avoidance
ED – emotional discharge

IV. Results

Table 1: correlational matrix – hardiness, self-efficacy and coping responses

V. Discussion

In the present study, we found that hardiness was positively related to few coping responses. As we know, hardiness contributes to potentially demanding situations and thus generates personal growth and development. It was found that there was a positive relationship between hardiness and logical analysis as a coping response. As we know that hardy individuals are highly challenged, they define events as stimulating and analyse the whole thing to transform and grow for the better. In the IT industry, the raw material for production is the individual himself. So they have to analyse things logically and deal with it. There was no relationship between
hardiness and positive reappraisal. This may be due to the fact that hardy individuals tend to take the situation as a challenge and deal with the stressor directly rather than restructuring the whole thing and positively attempting to accept it. There was no relationship between hardiness and seeking guidance and support as a coping response. Hardy individuals believe that they can control and influence the events of their experience. Hardy people rely on their own resources when facing challenging situations, perhaps considering the use of social support as a failure or weakness (Kobasa, 1982). There was a positive relationship between hardiness and problem solving as a coping response. This may be due to the fact that high hardy individuals usually deal with the stressor directly and resolve issues. Analysing the relationship between hardiness and the avoidance coping responses, it was found that there was a negative relationship between hardiness and cognitive avoidance. Hardy individuals in the IT industry tend to deal with the stressor directly by challenging the situation and they do not try to avoid thinking about the issue. There was a negative relationship between hardiness and acceptance or resignation. Hardy individuals do not try to accept the situation immediately or take it as threatening. They challenge the situation and take control of it. IT industry is at a rapid development and it is essential for the employees to take control of the situation when the demands are too high. Also, they try to be committed to the action plan and work it through. There was no relationship between hardiness and seeking alternative rewards. Hardy individuals are highly committed in their work. They do not try to avoid doing things that deal in solving the problem. Their control perceptually indicates that the consequence of any state is due to their actions. The negative implies that hardy individuals do not compromise their responsibility and seek other rewards. Thus, it shows that high hardy individuals seek low alternative rewards. As the work load and time constraint exists more in this industry, there would not have enough time to seek other rewards from other activities. Finally, hardiness had a negative relationship with emotional discharge as a coping response. The competition is high in the industry, so the hardy individuals cannot afford to explicitly show their negativity to the co workers and the superiors. They generally take control of the situation in a calm manner. The personality style of hardiness is proposed to have a moderating effect on this process by encouraging effective mental and behavioural coping. Hence, hypothesis 1 is partially accepted. The next analysis in the present study was the relationship between self-efficacy and the coping responses. Operating as a cognitive mechanism through which controllability affects stress reactions, self-efficacy impacts the resulting coping response (Bandura, 1988). It was found that self-efficacy has no relationship with logical analysis. There is no need that highly efficacious individuals should be logical in their thinking. There was a positive relationship between self-efficacy and positive reappraisal. When faced with adverse events, highly efficacious individuals tend to restructure the whole situation and be positive about it. They retain the belief that they will be able to exert control over their thoughts and deal with the situation positively. Especially in the IT industry where multitasking is essential and too many programmes to prepare by the technical workers, they tend to be positive and reframe the whole thing from the beginning with a different perspective. There was no relationship between self-efficacy and seeking guidance and support. Only when there is a need to seek support from others do individuals do it. Being high or low in self-efficacy does not influence if they have to seek support from others or not. There was a positive relationship between self-efficacy and problem solving as an approach coping response. Highly self-efficacious individuals are capable of self-regulation. They have the ability to anticipate and develop expectations to use past knowledge and experience and deal with the problems. Analysing the relationship between self-efficacy and the avoidance coping responses, it was found that there existed a negative relationship between self-efficacy and cognitive avoidance. Those who are self-efficacious are also more likely to reject negative thoughts about themselves or their abilities than those with a sense of personal inefficacy. Thoughts and beliefs that are directly related to self-efficacy, known as “efficacy beliefs” are positive in highly efficacious people. So they do not tend to avoid thinking of issues and deal with them directly. Individuals in the IT industry, as mentioned earlier, do not have the time to avoid thinking about the issue as they usually have less time to solve them and move on to the next programme. So these individuals believe that they can do it and restructure the thoughts rather than avoiding it. There existed a negative relationship between self-efficacy and accepting or resignation as a coping response. Self-efficacious individuals in the IT industry tend to take up work as a challenge and control the situation through actions influenced by their past experiences. They do not accept or reject the problem quickly but instead believe in themselves that they can take control and resolve the problem. There existed no relationship between self-efficacy and seeking alternative rewards. IT employees get good salary, good working conditions and promotions even though tend to experience high amount of work pressure and deadline target of the assignments may or may not let them take a break and seek rewards from other activities even if they want to. There was a negative relationship between self-efficacy and emotional discharge. Individuals low in self-efficacy could be associated with negatively biased thinking and irrational thoughts (Beck, Rush, Shaw & Emery, 1979). People working in IT industry who are high in self-efficacy are low in emotional discharge. They tend to have rational thoughts and deal with the situations with more positivity. Hence the hypothesis 2 is partially accepted. In the study, it has been revealed that hardiness was highly correlated with self-efficacy. Individuals who are highly efficacious are also highly hardy in nature. Individuals high in both hardiness and efficacy can cope and adapt with organizational changes quickly. With the rise of
demands due to technological changes and globalization has resulted in people to be more committed to their work and take things as a challenge to bring in better results for further personal growth and development. This finding was supported by earlier studies, which indicated that hardiness and self-efficacy were positively related to each other. (Azar, Vasudeva, and Abdollahi, 2006). Hence hypothesis 3 is accepted.

VI. Conclusion

The purpose of the present study was to gain insight about relationship between hardiness, self-efficacy and the coping responses among the employees of the IT industry. There has been increasing interest in individuals’ responses in managing life’s adversities. The findings of this study showed that employees in the IT industry had high levels of hardiness and self-efficacy. They also used approach coping responses predominantly. Thus, they were highly committed in their work and took challenges at ease by taking control of the whole situation. It was revealed that the level of hardiness and efficacy tend to moderate the adoption of types of coping strategies significantly.

Limitations of the study:
1. Self-report questionnaires are susceptible to answers tinged with social desirability. Results of this study should, therefore, be interpreted with caution.
2. Also the data presented here are correlational and a causal link between hardiness, self-efficacy and coping responses cannot be concluded from this study.
3. The study did not include other positive psychological variables like optimism, hope, self-esteem etc.
4. The study did not find out the level of stress experienced by the IT employees.
5. The study did not find out the psychological well-being among the IT employees.

Implications:
Implementing suitable interventions early in the developmental stage, particularly at primary and secondary school level will help build adequate internal resources like hardiness and self-efficacy and in turn enrich these cognitive self-regulatory and interpersonal capacities, which may help to promote the development of more adaptive coping strategies. Organizations may benefit by including hardiness, self-efficacy and coping concepts in training and assimilation programs for employees and supervisors. Even during the recruitment of middle level and top level management, measuring these internal resources will aid the organization to select the appropriate candidate as their work involves handling various problematic situations. Recognizing hardiness, self-efficacy and coping as potential targets for intervention raises the issue of whether it is possible to change an individual’s general tendencies, which are by nature difficult to change. It is possible to modify such characteristic responses through increasing awareness of those that are maladaptive and training individuals in alternate patterns of responding that are more effective.

References