

## Hardiness Personality, Self-Esteem and Occupational Stress among IT Professionals

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Preoccupation with tight work schedules, offering time bound business solutions to varied and complex problems within deadline etc are a typical work life characteristic of IT professionals. Enhancing the strength of individuals' internal resources such as hardiness and self-esteem are assumed to act as buffer while encountering any stressful events in occupational life. Present study was conducted to examine relation among hardiness personality, self-esteem and occupational stress index among IT professionals. Data were collected from 140 IT professionals employed in four computer software organizations. The results of correlation showed that hardiness and self esteem tend to have negative and significant correlations with role overload, role ambiguity, low status and strenuous working conditions. The implications of results are discussed with possible intervention to improve the internal resources among the IT professionals so that their perceived levels of occupational stress can be minimized to the maximum extent possible.

**Keywords:** Hardiness Personality, Self-Esteem, Perceived Occupational Stress, Interventions Strategies.

Unreasonable job demands with tight deadlines, fear of making mistakes, undue blame on machine failure, lack of participation in decision affecting their work, difficulty in getting adjusted to team work etc are some of the common stressors among IT professionals (Agarwal, 2001; Bhattacharya & Basu 2007; Sanderlin, 2004; and Taylor & Cooper, 2006). Though fancy pay structure along with globalized life style, chances of serving national and multinational corporate clients, keeping abreast of advanced information technology etc attract remarkable number of job aspirants into IT field, the job incumbents are subjected to have occupational stress adversely affecting their physical and mental health. Research studies on resilience highlighted that the association between life stress and coping resources to feelings of ill being and well being are the function of internal strength of the individuals (Dohrenwend, 2000; Funk, 1992; Greene & Nowack, 1996;

Heckman & Clay, 2005). In recent times, there is a focus on harnessing the internal strengths and capacity of individuals to face any demands of the work environment. 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 et al (2000) highlighted that internal resources may protect people from stress and lead to better adaptation. Bar-On (2003) found that there was a moderate yet significant relationship between internal strength factors (emotional competencies and hardy personality) and psychological health. The aspects of internal competencies that were found to have a significant influence on psychological health are (a) the ability to manage emotion and cope with stress, (b) the drive to accomplish personal goals in order to actualize one's inner potential and lead to a more meaningful life

and (c) the ability to verify feelings and thinking.

**Occupational stress among BPOs:**

Jobs in the Business Process Outsourcing (BPO) industry undoubtedly involve high levels of stress in the form of tight target deadlines, monotonous nature of job and night shifts. Further, outbound calls are more difficult as they have targets for call duration, wrap time and more call volume. Added to this are the sales or completion targets, which are closely monitored and upon which payment scheduled are partially based.

This sector is very volatile and faces the problem of lack of job security and constant up gradation of skills to remain market able. Though pay structure is relatively higher comparing to other sectors, the working conditions in the Information System Profession is becoming very stressful (Vowler, 1995, Thong & Yap, 2000) with average working hours extended to 50 hours per week. Due to long working hours and monotonous work the call centre jobs have been equated to electronic sweat shop, battery hens, electronically trapped prison (Shanawaz, 2006). The most significant stressors are work overload, career opportunities, role ambiguity role conflict and working with diversified personalities. Conditions of changing technology, redundancy and inadequate resource also place a high demand along with financial pressure, budget constraints and other resource inadequacy problems (Vowler, 1995, Engler, 1998, Aziz, 2003, 2004).

The human-computer interaction factors also has an effect on work exhaustion (Rajeswary & Anantharaman, 2005). The widespread nature of stress in IT has given rise to the term "techno-stress", which is used to explain the phenomena of stress arising due to usage of computers.

**Hardiness personality:**

Emerging from the medical literature, the concept of Hardiness was first identified by

Kobasa (1982) as a resistance factor in the early 1980's. Preliminary findings revealed that individuals, who experience high levels of stress, but remain healthy, had a different personality structure than individuals who experience high levels of stress and became ill. The central domain of this personality structure, labeled as Hardiness, was subsequently defined as "the use of ego resources necessary to appraise, interpret and respond to healthy stressors". Although it continues to be employed most frequently in the contexts of medicine and illness, researchers are beginning to conceptualize Hardiness as a General Health promoting factor, which enables the individual to remain both psychologically and physically healthy despite confronted by stressful situations or experiences (Maddi & Kobasa, 1984; Maddi Harvey, & Khoshaba, 2006). Employees who tend to possess high hardy attitudes showed the action pattern of coping with stressful circumstances by facing them (rather than being on denial) and struggling to turn them from potential disaster into opportunities (rather than avoiding them or blaming others). Socially, the hardy employees were more involved in building patterns of interaction with their significant others that emphasized mutual assistance and encouragement (rather than undermining competition or over protection). The debilitating process such as mental health breakdown and performance inadequacies which may arise due to exposure of threatening stressful situation may not affect much if the person has high level of hardiness. The hardy personality, an inherent internal attribute, provides the courage and motivation to engage in the different but essential tasks of socially supportive interactions, transformational coping and facilitating self care. Through hardy coping action, the stressfulness of events can be minimized by turning changes into advantage and resolving conflicts. Through hardy social interaction, one can deepen relationships with significant others by giving and getting assistance and

encouragement. The end result of such a hardy orientation includes overtime, the full expression of one's capabilities, learning from both positive and negative experiences and growing in vitality, fulfillment and wisdom (Maddi et al., 2006; Maddi et al., 2008, Creed & Evans, 2002). According to Kobasa (1982), the effects of hardiness on mental health are mediated by the individual's cognitive appraisal of a stressful situation and his/her repertoire of coping strategies. Specifically, hardiness alters two appraisal components – it reduces the appraisal of threat and increases one's expectation that coping efforts will be successful (Maddi et al., 2006). Hardiness has also been shown to be associated with the individual's use of active, problem focused coping strategies for dealing with stressful events (Gentry & Kobasa, 1984; Kobasa, 1984). These two mechanisms are, in turn, hypothesized to reduce the amount of psychological distress one experiences and to contribute to the long term psychological well being of an individual. Like hardiness, another internal resource contributing to overcoming occupational stress is self esteem.

#### **Self-esteem:**

Self esteem is another aspect of good health which immensely helps to withstand stress. The term, "self-esteem" refers to the evaluation a person makes and customarily maintains with regard to him or herself. Self-esteem expresses an attitude of approval or disapproval and indicates the extent to which a person believes him or herself capable, significant, successful and worthy. Wells and Marwell (1976) postulate that positive health practices are an outcome of self-esteem. Individuals with high self esteem are more functional and self-accepting and therefore more likely to perform healthy behaviors. Researchers have shown positive relationship between self-esteem and positive health practices in adults (Gentry & Kobasa, 1984, Jex et al., 2001; Williams et al., 1992) and in

adolescents (Baldwin et al., 1993). Therefore, self esteem enhances health of an individual.

#### **Objective:**

To find out the extent to which hardiness and self esteem are related to the various dimensions of perceived occupational stress.

#### **Method**

##### **Participants:**

The sample comprises of 140 IT professionals who were working in four BPO organizations situated in Coimbatore city, Tamil Nadu, 80% (112) female and 20% (28) male with mean age of 27.2 years (SD = 5.2). Professional experience varied between 4 and 9 years with a mean of 6.2 years (SD = 3.1). Among them, 70.7%, (99) are graduate, 26.4 (37) are post graduate and 2.8% have completed their M.Phil degrees. All the respondents were subjected to have shift work. A brief description of duties and responsibilities of the IT professionals and the nature of business operations of BPO organizations is given as below.

##### **Job Description of BPO Personnel**

A callcenter personnel is responsible for answering the queries of the customers. They are responsible for satisfying customer and maintain good image for the company. The main responsibility of call center personnel is to give support and provide superior service through phones, e-mails, web-based text-chat services, customer interaction channels, backroom processing and knowledge services. The routine work of the persons to handle special telephone task like call transfers, taking messages, call backs, deals with angry callers and annoyed customers. Additionally they have variable work shifts based on day and week and the work content will be a monotonous in nature.

##### **Business Operation of Four BPO Companies**

Company A focuses service in the healthcare industry and BPO services in the

field of legal/business/media/general and medical transcription, back office accounting, back office outsourcing, data entry, and non – voice based support and other BPO services.

Company B specializes in outsourcing of data entry services, involve in professional graphics designing, providing e-commerce solution to small to medium size businesses, and converting text document into readable electronic formats.

Company C working on web design projects, school data base systems, multimedia works especially in graphics, design website in particular for handle online sales and purchases, and involve in various type of soft ware developments.

Company D contemporary working in software product development, e-commerce solutions, web design, largely involve in software testing, SEO (Search Engine Optimization) consultations with companies, and e-commerce in field of online marketing.

#### **Measures:**

**Occupational Stress:** Occupational Stress Index developed by Srivastava and Singh (1981) was used (46 items) to measure perceived occupational stress. Each item has to be rated on the five point scale (0 = strongly disagree; 5 = strongly agree). Out of 46 items 26 are true keyed and rest 18 are false keyed. The items are related to almost all relevant components of the work life which cause stress in some way. Occupational Stress Index covered 12 dimensions:

(i) **Role over load** covers job situation like workload, staff insufficiency, lack of time to care for personal problems, job dissatisfaction etc, one of the examples of an item is “owing to excessive workload I have to manage with insufficient number of employees and resources”.

(ii) **Role Ambiguity** is characterized by vague and insufficient information related to job role, poor planning of job, vague expectations of colleague and supervisors, for

example, “the objectives of my work-role are quite clear and adequately planned”.

(iii) **Role Conflict** measures contradictory instructions from higher officers, interference of officials onto working conditions, vague instructions and insufficient facilities regarding new assignments (e.g., “my different sub-ordinates are of ten given contradictory instructions regarding my work.”).

(iv) **Group and Political Pressures** covers the difficulty to adjust with the political or group pressure and formal rules and instructions, violation of formal procedures and policies, for example, “I am compelled to violate the formal and administrative procedure and policies owing to group/ political pressure”.

(v) **Responsibility for Persons** measures the thrust of responsibility of other persons, the responsibility of other employees’ future, and responsibility for the progress of the organization (e.g., “I am responsible for the future of a number of employees”.

(vi) **Under Participation** covers job areas such as the position of the person in the organization, high or low power, the acceptance of suggestion of the person, for example, “my opinion is sought in changing or modifying the working system, implementing and improving conditions”.

(vii) **Powerlessness** measures the acceptance of decisions taken by the person among employees’, coordination of interests and opinions in making appointments for important posts, one of the examples of an item is “our interest and opinion are duly considered in making appointments for important posts”.

(viii) **Poor Peer Relations** measures colleagues’ cooperation in solving administrative and industrial problems, colleagues attempt to defame and malign the employee as unsuccessful (e.g., “some of my colleagues and subordinates try to defame and malign me as unsuccessful”.



(ix) **Intrinsic Impoverishment** covers monotonous nature of assignments, opportunity to utilize abilities and experience independently, place of suggestion in problem solving, for example, “*my assignments are of monotonous nature*”.

(x) **Low status** measures nature of the job in enhancing social status, the due significance given by higher authorities to the post and work, (e.g., “*Higher authorities do care for my respect*”.

(xi) **Strenuous Working Condition** measures circumstances in which work has to be done, risky and complicated assignments, for example, “*I often feel that this job has made my life cumbersome*”.

(xii) **Unprofitability** covers about low salary, absence of rewards, and lack of motivation (e.g., “*I get less salary in comparison to the quantum of my labor / work*”.

**Hardiness Personality:** Eighteen item Hardiness questionnaire developed by Maddi and Kobasa (1984) was used to measure hardiness personality (ability of individual to turn stressful circumstance into growth inducing experiences). All the items are rated on a four point scale (0= not at all true; 3= very true). The scale consists of three dimensions

(i) **Commitment** measures the extent to which individuals seek involvement rather than withdrawal. Commitment contains a vital motivational quality that compels the individual to persist in pursuing a goal even in the face of repeat obstacles, for example, “*By working hard, you can always achieve your goal*”.

(ii) **Control** deals with the extent to which individual strives to exert over their circumstances rather than feeling powerless. Perception of control or the degree to which a stressor is seen as under an individual's control are thus important in the appraisal of threat (e.g., “*Most days, life is really interesting and exciting for me*”.

(iii) **Challenge** measures the extent to which individuals strive to learn from experiences rather than feeling threatened, one of the examples of an item is “*My mistakes are usually difficult to correct*”.

**Self-Esteem:** Rosenberg Self - Esteem Scale (Rosenberg, 1965) was used to assess the self esteem of the subjects. It consists of 10 items requiring a general evaluation of the respondents self. One example of an item is “*I am able to do things as well as most other people*”. Respondents mark their level of agreement or disagreement on a four point scale from “strongly agree” to “strongly disagree”. The total score may range from 0 - 30.

## Results

The correlation between all possible pairs were computed by applying Pearson Product Moment method. The obtained Inter-correlation among all the variables are reported in table 1. The inter-correlation among measures of perceived organizational stress are generally low to moderate and positive. Low correlation among these variables indicated that all of these subscales tap different components of perceived occupational stress. The inter-correlation among the sub components of Hardiness measures (commitment, control and challenge) are significantly correlated in positive direction. Similarly, overall hardiness and its sub components are significantly correlated in positive direction with self - esteem.

Further, the four dimensions of perceived occupational stress such as role overload, role ambiguity, low status and strenuous working conditions were negatively correlated with hardiness and self esteem. Only one dimension responsibility for others' is significantly correlated in positive direction with Hardiness. It is inferred that those who tend to have high level of hardiness and self esteem were subjected to have low levels of ill effect of occupational stressors. This

**Table 2: Product Moment Intercorrelation among variables Hardiness, Self esteem and Perceived Organizational Stress (N=140)**

Sl.No	Variables	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Commitment	0.52**	0.36**	0.48**	0.31**	0.34**	-0.27**	-0.14	-0.11	0.24**	-0.16	-0.17*	-0.12	-0.19*	-0.31**	-0.29**	0.09
2	Control	-	0.39**	0.41**	0.39**	-0.37**	-0.26**	-0.13	-0.15	0.23**	-0.14	-0.13	-0.15	-0.12	-0.28**	-0.27**	0.11
3	Challenge	-	-	0.43**	0.33**	-0.38**	-0.24**	-0.12	-0.1	0.27**	-0.12	-0.1	-0.11	-0.09	-0.29**	-0.31**	-0.12
4	Hardiness (overall Score)	-	-	-	-0.31**	-0.36**	-0.26**	-0.11	-0.08	0.25**	-0.09	-0.07	-0.12	-0.08	-0.27**	-0.31**	-0.13
5	Self esteem	-	-	-	-	-0.36**	-0.24**	-0.12	-0.07	0.11	-0.08	-0.08	-0.06	-0.09	-0.25**	-0.29**	-0.11
6	Role Overload	-	-	-	-	-	0.36**	-0.11	0.39**	0.29**	-0.16	-0.25**	0.17*	0.22**	0.1	0.21**	0.13
7	Role Ambiguity	-	-	-	-	-	-	0.16	0.06	0.19*	0.13	0.29**	0.08	0.14	0.06	0.04	0.09
8	Role Conflict	-	-	-	-	-	-	-	0.15	0.12	0.14	0.26**	0.09	0.11	0.08	0.07	0.11
9	Unreasonable group and Political Pressure	-	-	-	-	-	-	-	-	0.14	0.13	0.16	0.1	0.13	0.1	0.08	0.12
10	Responsibility for Persons	-	-	-	-	-	-	-	-	-	0.12	0.14	0.12	0.11	0.09	0.12	0.14
11	Under participation	-	-	-	-	-	-	-	-	-	-	0.26**	0.29**	0.27**	0.25**	0.14	0.07
12	Powerlessness	-	-	-	-	-	-	-	-	-	-	-	0.12	0.14	0.18*	0.06	0.09
13	Poor Peer Relations	-	-	-	-	-	-	-	-	-	-	-	-	0.12	0.19*	0.16	0.12
14	Intrinsic Impoverishment	-	-	-	-	-	-	-	-	-	-	-	-	-	0.11	0.07	0.06
15	Low status	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.08
16	Strenuous working Condition	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.05
17	Unprofitability	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

\* p&lt; = 0.5 level

\*\* p&lt; = 0.1 level

showed that the internal strength factors such as hardiness and self esteem tend to have a significant impact on their perceived occupational stress at work environment. The other seven dimensions of perceived occupational stress such as role conflict, unreasonable group and political pressure, under participation, powerlessness, poor peer relations, intrinsic impoverishment, and unprofitability tend to have very low correlation with Hardiness personality and Self esteem.

Though all the respondents who tend to have more or less similar type of duties and responsibilities in BPO field, some showed lower levels of perceived occupational stress, perhaps, due to the strengthening of their inherent internal characteristics such as hardiness personality. The results revealed that the level of hardiness is more likely to moderate their cognitive process and able to cope the stressors at reasonably better level.

This is meaningful in the sense that the hardy individual lay much emphasis on his/her own resources to deal with various perceived occupational stressors and tend to have higher levels of self esteem comparing to those who have lower levels of hardiness.

### **Discussion**

It is expected that the same cohort, which had an exposure of a homogeneous nature of work environment may likely to exhibit more or less similar level of perceived occupational stress. But, it is revealed that the strong internal characteristics such as hardiness and self-esteem tend to have negative correlation with the some dimensions' of perceived occupational stress significantly. This information can be of much importance in determining the purpose and content of the assistance. For example, the internal resources of individual can be enhanced remarkably through some intervention, which will facilitate to overcome the impact of perceived occupational stress and subsequently in facilitating the adoption of more adaptive coping strategies to deal with

various stressors.

The proper analysis of the types of perceived occupational stress experienced by IT professionals in adverse stressful situations will facilitate to take up appropriate remedial corrective measures to put them in the right track and to enhance their psychological well being. Further, it is quite obvious that, whoever had encountered some adverse occupational stressors are likely to adapt either adaptive (functional) or non-adaptive (dysfunctional) coping strategies to overcome such stressors. But the functional strategies facilitate to balance the mental health and prevent people to get into more depressive or aggressive states.

The findings of this study revealed that the internal strength factors such as Hardiness and Self-esteem mediate the perceived occupational stress by altering the individual's cognitive appraisal process, such that individuals are able to reframe or reinterpret stressful situations at work environment. Consequently, it is expected that the level of psychological distress experienced by them may likely to be reduced. Further, hardy individuals have the ability to cope in a way that is adaptive, once occupational stress is perceived or encountered.

### **Implications**

A number of implications have emerged from the results of the present study. First, when a stressful situation arises in the workplace, preventive strategies can be infused by enhancing employees' internal resources. For instance, helping IT professionals to acquire hardiness, self esteem, emotional and social intelligence may have a buffering effect on the occupational stress. Developing human relations skills for harnessing and enriching the internal strengths and capacities may help people remarkably to regulate emotions in a positive direction and try to establish intimacy with people around. (Schutte et al, 1998). Such behavior may lead to closer relationships and

yield greater social support which could be of psychological benefits in terms of stress and crises in the workplace. Also, implementing suitable interventions early in the developmental stage, particularly at primary and secondary school level will help build adequate internal resources (Hardiness and Self-esteem) and in turn enrich these cognitive self-regulatory, academic and interpersonal capacities, which may help to promote the development of more adaptive coping strategies. IT industries can take initiative to redesign jobs of BPOs in such a way facilitating to reduce role overload and role ambiguity in their job. Adequate role clarification and role adjustment process can be resorted to eliminate role ambiguity which is one of the major perceived occupational stressors. A series of HRD interventions addressing to stress alleviation activities can be organized at periodical intervals, particularly providing a regular counseling sessions to those who are weak in internal strength on work related or personal related issues which may help remarkably to cope stressors at work.

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