Competencies of Emotional Intelligence for Managing Occupational Stress among Faculty Members of Private Medical and Engineering Colleges

Indoo Singh

Abstract—Researchers have found significant relationship between emotional intelligence (EI) and occupational stress (OS) among employees of various organizations, but research on this issue in higher education is limited and especially in the field of medical and engineering education it is still sparse. Therefore, the main objective of this study was to explore specific EI competencies significant in managing OS among faculty members of private medical and engineering colleges. Occupational Stress Index (OSI) and Emotional Intelligence Scale (EIS) were used to measure OS and EI respectively. The final sample comprised of 310 faculty members, from seven private colleges (three medical and four engineering) of Uttar Pradesh, India. Among ten competencies of EI assessed in this study, Managing Relations showed the highest correlation and emerged as the best predictor of occupational stress, followed by self motivation, commitment, emotional stability and self awareness. Implications of this research from the perspective of incorporating EI training programme for better stress management among faculty members are discussed.

Index Terms—emotional intelligence, EI competencies, occupational stress, faculty members, private medical and engineering colleges

1 INTRODUCTION

The modern world, which is said to be a world of achievements and competitions, has left no occupation untouched of stress. Traditionally university teaching has been regarded as a low-stress occupation; however with the increased workloads and student-staff ratios, competitive work relationships, lack of resources, control and communication, job insecurity, pressure to attract external funding, poor management, lack of recognition and pressure of producing good results due to high competition this is no longer the case [1], [2], [3]. Stress among university staff affects not only their psychological and physiological wellbeing but has also been identified to affect the quality of education and research [3], [4].

Occupational stress (also termed job stress or work stress) can be defined as the experience of unpleasant, negative emotions such as tension, anxiety, frustration, anger and depression resulting from aspects of work [5]. The primary difference between OS and many other forms of stress is the nature of the stressors and their interaction with the overall stress process [6]. OS may be caused by a complex set of reasons like job insecurity, high demand for performance, meeting deadlines, long working hours, increased workload, personal or family problems, less salary, workplace culture, office politics and conflicts with colleagues [7]. The process of stress is subjective because it depends on the person’s appraisal of the situation. Different individuals react differently to the same stress conditions. Unresolved OS results in poor mental and physical wellbeing, low job satisfaction, poor work performance, psychological distress, absenteeism, unfocused attention and lack of motivation which consequently affect the efficiency of the organizations [8] [9]. It also has an indirect negative effect on organizational commitment [10].

Lazarus [11] suggested that stress and emotions are interdependent – where there is stress there is also emotion. Psychological stress is accompanied by negative emotions like anger, aggression, hostility, depression, anxiety, negative behaviours, mood swings and sleeplessness. Such negative emotions, especially anger, anxiety or a sense of futility, can cause a disruption of work and of the task at hand. Organisational culture has been suggested to play a role in the experience and expression of emotions at work [12] [13]. According to emotion centered occupational stress model proposed by Spector and Goh [14] if the event is perceived as stressful then negative emotions will arise, leading to psychological, physical and behavioural strain. Continual experience of negative emotions in the workplace is likely to induce job dissatisfaction, a decline in organisational commitment and increased withdrawal. Therefore, acknowledging that people work best when they feel good is crucial. It tends to make them feel more optimistic and enhances their mental efficiency, ensuring better understanding of information, flexible thinking and the ability to use good judgement in decision making and creativity [15]. This ultimately leads to long-term sustainability and profit generation of the organisation [16].

If stress and emotions are interdependent, managing emotions may help in managing stress and to manage emotions we need emotional intelligence (EI). Individuals with higher emotional clarity and repair experience fewer negative emotional responses and intrusive thoughts after an acute stressor, which enables them to adapt more readily to the situation [17]. Salovey and Mayer [18] originally used the term "emotional intelligence" and defined it as: A form of intelligence that involves the ability to monitor one's own and others' feelings
and emotions, to discriminate among them and to use this information to guide one’s thinking and actions. According to Bar-On [19] EI refers to the individual differences in the perception, processing, regulation and utilization of emotional information. He defined EI as an array of non-cognitive capabilities, competencies and skills that influence one’s ability to succeed in coping with environmental demands and pressure to promote growth. It includes five components: intrapersonal, interpersonal, adaptability, stress management, and general mood. Individuals with high EI believe that they are in touch with their emotions and they can regulate them in a way that promotes well-being [20].

Goleman's [21] model outlines four main constructs of EI: self-awareness, self-management, social awareness and relationship management. Within these constructs of EI, there are a set of emotional competencies like emotional self-awareness, self-assessment, self-confidence, trustworthiness, conscientiousness, adaptability, achievement drive, initiative, empathy, service orientation, organizational awareness, developing others, influence, communication, conflict management, leadership, change catalyst building bonds, teamwork and collaboration. These EI competencies are independent (i.e. each contributes to job performance), interdependent (each draws to some extent on certain others with strong interactions), generic (different jobs make differing competence demands), hierarchical (the EI competencies build upon one another), necessary, but not sufficient (having an EI doesn’t guarantee that the competencies will be demonstrated). Thus, even with high EI a person may not have all emotional competencies and he may not require same kind of emotional competencies in different jobs [22]. For example, administrative job requires the emotional competency of trustworthiness, adaptability, conflict management, team work and collaboration. Teaching requires self-awareness, self-confidence, self-control, interpersonal skills, communication skills and empathy. In contrast, success in painting or professional tennis requires more of self-discipline and motivation.

The negative effects of stress can be moderated by both individual (i.e. personality, personal stress tolerance levels) and organizational factors (i.e. supervisory support, sense of teamwork) [6]. Teams which develop their EI are likely to have far more initiative in dealing with organisational challenges, are far better at managing stress and conflict and genuinely get more out of work [23]. Employees with high EI are more likely to be able to reduce or transform the potential negative effects of job stress on job performance [24]. Several studies have found that EI is a significant moderator of the relationship between OS and well-being [16]. Study by Darolia and Darolia [25] revealed that subjects with high EI scored significantly high in Adaptive Coping Style whereas subjects with low EI had Avoidance Coping Style. Adaptive coping helps in reducing stress as a person makes necessary changes to suit the environment whereas avoidance coping increases stress as a person either denies the situation or he gives up. Studies conducted on different groups of employees reveal significant negative correlation between EI and stress at work. For instance, study by Nikolaou and Tsaousis [26] on health professionals, Ogińska-Bulik [27] on human service workers, Ramesar, Koortzen, and Oosthuizen [28] on group of managers from South African financial institution and Goswami & Talukdar [29] on engineers at public sector organization in Assam, India found significant negative relationship between EI and job stress. Thus, it can be expected that employees with high levels of EI may experience less stress and less likely to report feelings of ill-health and lowered satisfaction and commitment.

1.1 Rationale and Objective of the study

Although many studies have been conducted to find the relationship between EI and OS among the employees of various organizations, but research on this issue among the faculty members in higher education is limited. Earlier research on teachers’ occupational stress and EI has focussed mainly at school level where the stress level is reported to be generally high [30], [5], [31], [32]. Research on stress among university teaching staff has been focussed only in the last few years and in India it is still sparse, especially in the field of medical and technical education. Adeyemo and Ogunyemi [33] in their study on University academic staff found that EI and self-efficacy contributed significantly to the prediction of OS. Study by Ismail et al. [34] on academic employees working in private institutions of higher learning in Kuching, Malaysia showed that relationship between OS and EI significantly correlated with job performance.

Given the paucity of research that investigated the relationship between OS and EI in Medical and Engineering education in India, there is a need to fill the organizational and geographical gaps by examining the outcomes of EI on OS. Thus the present study set out to explore specific EI competencies significant for managing OS among medical and engineering faculty members in private colleges so that the need for a well developed EI Intervention Programme for the faculty members could be emphasized. Curriculum wise medical and engineering courses are considered to be quite demanding and keeping the competition in view, stress among faculty members in private colleges is expected to be more than the faculty members of the government colleges. Also, functioning of private colleges differs from that of government colleges, therefore, the study focused only on the faculty members of private medical and engineering colleges.

2 METHODS

The present research is exploratory and empirical in nature. The population of reference for this study comprised of the faculty members working in private medical and engineering colleges of Uttar Pradesh, India. With cities like Gaziabad, Meerut, Bareilly, Kanpur and Lucknow having many private professional colleges, Uttar Pradesh becomes a major representative state of professional education in North India. Population wise also it is the largest state in India.

2.1 Participants and Procedure

The important representative cities of Uttar Pradesh, having at least one private medical college and five private engineering colleges were selected through internet. Well established colleges within these cities were then selected on the basis of their
infrastructure and courses offered. Approachability factors were also taken into consideration. The cities selected were Gaziabad, Lucknow, Kanpur, Meerut and Bareilly. Twelve colleges (6 each of medical and engineering) were shortlisted and contacted for seeking permission to conduct the study but only seven colleges (3 medical and 4 engineering) granted permission. Approval for the investigation was acquired from the principal, director and the chairman of these colleges. Faculty members were selected randomly from the various departments of their respective colleges with the help of the HODs and after general introduction the research questionnaires (OSI & EIS) were handed over to them. The confidentiality of the information obtained from the respondents was guaranteed. Completed questionnaires were collected after a few days (in some cases it was more than a month). The final sample consisted of 310 faculty members (137 medical and 173 engineering). Gender wise distribution was 130 females and 180 males.

2.2 Research Tool

2.2.1 Emotional Intelligence Scale (EIS)

EIS [35] was used to measure EI of the faculty members. It is constructed and standardized on Indian population and available at Psychological Corporation of India. The split half reliability coefficient of the scale is 0.88 and its content validity is 0.93. The validation has been done on Indian executives but it can be used for other professions as well. The scale has a total of 34 items, with response categories of strongly agree, agree, neutral, disagree and strongly disagree. Maximum score can be 170 and minimum 34. The scale measures ten EI competencies. Cronbach’s Alpha for total scale in the present study was α=0.944 and for the subscales it was: Self Awareness (α=0.809), Empathy (α=0.849), Self Motivation (α=0.804), Emotional Stability (α=0.811), Managing Relations (α=0.826), Integrity (α=0.714), Self Development (α=0.862), Value Orientation (α=0.818), Commitment (α=0.815) and Altruistic Behaviour (α=0.847). An example of an item is: “I can listen to someone without an urge to say something”.

4.2.2 Occupational Stress Index (OSI, 1984)

OSI [36] was used to measure the occupational stress among faculty members. The reliability of the scale is 0.93 and the validity is 0.79. The scale consists of total 46 items (28 positive and 18 negative) with response categories of strongly disagree, disagree, undecided, agree and strongly agree. The minimum score can be 48 and maximum can be 180. The subscales of the test measure twelve areas of stress in work environment: Role Overload, Role Ambiguity, Role Conflict, Unreasonable group pressure, Responsibility for Persons, Under Participation, Powerlessness, Poor Peer Relations, Intrinsic Impoverishment, Low Status, Strenuous Working Conditions and Unprofitability. An example of an item is: “I get less salary in comparison to the quantum of my work”.

2.3 Data analysis

Data analysis was done using statistical software (SPSS, 16.0 version). Pearson r correlation and regression analysis were used to determine the relationship and predictive values of the variables under study.

3 Results

Table 1 provides the descriptive statistics of EI and Occupational Stress (OS) among faculty members. The respective means of EI and OS scores were 138.64 (SD = 9.52) and 117.30 (SD= 14.87). Statistical analyses revealed the normal distribution of the data.

<table>
<thead>
<tr>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>SEM</th>
<th>Skew</th>
<th>Kurtosis</th>
<th>r</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>EI</td>
<td>115</td>
<td>164</td>
<td>138.64</td>
<td>.541</td>
<td>9.520</td>
<td>.066</td>
<td>.421</td>
</tr>
<tr>
<td>OS</td>
<td>71</td>
<td>156</td>
<td>117.30</td>
<td>.845</td>
<td>14.871</td>
<td>-.066</td>
<td>.421</td>
</tr>
</tbody>
</table>

N=310; **p < 0.01

Table 1 indicates a moderate negative relationship between EI and OS (r = -0.572) which means that the better the EI of faculty members lesser will be their perceived stress. Regression of EI on OS as indicated in Table 1 reveals that EI accounted for 32.7% variance in OS. As indicated in Table 2 all ten competencies of EI were found to have significant negative correlation with OS. Managing Relations (r = -0.449) showed the highest correlation and Value Orientation (r = -0.229) showed the lowest correlation.

<table>
<thead>
<tr>
<th>EI Competencies</th>
<th>r</th>
</tr>
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<tbody>
<tr>
<td>Integrity</td>
<td>-0.449</td>
</tr>
<tr>
<td>Self Development</td>
<td>-0.446</td>
</tr>
<tr>
<td>Empathy</td>
<td>-0.439</td>
</tr>
<tr>
<td>Altruism</td>
<td>-0.417</td>
</tr>
<tr>
<td>Value Orientation</td>
<td>-0.401</td>
</tr>
</tbody>
</table>

Note: all correlations are significant at 0.01level.

In order to explore which of the specific EI competencies were important as predictors of OS among faculty members, a series of stepwise regression analyses were calculated using OS as dependent variable and the ten EI Competencies as the predictors (independent variables). Table 3 reveals that Managing Relations accounted for maximum variance (20.2%) in OS among faculty members and emerged as the best predictor (β = - 0.269) of OS. The variance increased by 15.6% making it to total 36.1% when Self Motivation and Commitment were clubbed with managing relations. After removing these factors in regression analysis, Emotional Stability (β = 0.208) and Self Awareness (β = 0.208) were found to be most significant as predictors of OS. Grouped with Integrity and Self development they accounted for 26.7% of the variance in OS. Empathy, Altruism and Value Orientation were significant as predictors of OS only after removing first seven predictors. These three competencies collectively accounted for only 13.6% of variance in OS.

<table>
<thead>
<tr>
<th>EI Competencies</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managing-Relations</td>
<td>-0.449</td>
</tr>
<tr>
<td>Self Motivation</td>
<td>-0.446</td>
</tr>
<tr>
<td>Commitment</td>
<td>-0.439</td>
</tr>
<tr>
<td>Emotional Stability</td>
<td>-0.417</td>
</tr>
<tr>
<td>Self Awareness</td>
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</tr>
</tbody>
</table>

Note: all correlations are significant at 0.01level.
4 DISCUSSION

The current study revealed a significant negative relationship between EI and OS among faculty members which is convergent with the findings of the earlier studies (on different groups of employees) mentioned in the introduction of this study. This is probably because good EI may help the faculty members in dealing with their occupational stressors more efficiently as EI is a significant moderator of the relationship between OS and well-being [16]. It also helps in adaptive coping [25], better interpersonal relationships and managing organisational challenges and resources to get more out of work [23]. However, stress up to certain level is required to perform a task hence the correlation between EI and OS was found to be moderate in the present study.

Managing Relations emerged as the best predictor for OS among faculty members. With better relations people are willing to help each other. People with emotional stability are able to manage negative emotions, which enables them to maintain better relations with others at work so that they are able to get help from others and manage their resources more efficiently. It also helps in avoiding unnecessary conflicts and creates a pleasant work environment which may considerably help in managing OS. An employee, who has emotional stability feels in control of a situation, is likely to appraise it differently as compared to an employee who lacks this feeling of emotional control [14]. Self Motivation, commitment and self awareness were found to be significant predictors of OS in this study. Self motivation helps a person to remain focused and committed to his job and perform well. A person who is committed to his job works with a positive attitude and does not mind putting extra effort. Self Awareness enables a person to sense negative emotions as a warning that feelings of stress are increasing, and prompts him to take appropriate steps. It also enables a person to understand the effects of emotions (both positive and negative) on self and others.

Predictive significance of empathy, integrity, self development, value orientation and altruism for OS was found to be relatively less, probably because these competencies indirectly help in managing stress by developing other competencies (significant inter correlations were found between various EI competencies in the study). For example, empathy helps in putting oneself in others’ place and understanding their views which creates a cordial work environment and leads to better interpersonal relations. Integrity promotes commitment. Self development enhances self motivation and commitment. Value orientation may develop self awareness. Altruism i.e. helping others without self motives cultivates empathy and helps in building relationships.

The findings of the present study are somewhat convergent with the findings of the study conducted by Gardner [4] when she systematically examined the relationship between EI and the occupational stress process, including stressors, strains (health), and outcomes of stress (job satisfaction and organisational commitment) among employees from different professions like accounts, administration, analysts, consultancy, engineering, information technology, management, and teaching. The results of the study indicated that four dimensions of EI were particularly important in the occupational stress process: Emotional Recognition and Expression, Understanding Emotions, Emotional Management and Emotional Control.

5 IMPLICATIONS AND RECOMMENDATIONS

The findings of this study provide an insight into various EI competencies that contribute significantly in managing overall OS among medical and engineering faculty members. The more one understands the role of EI competencies, the more one gets motivated to practice them. Faculty members and the management need to work collectively in this direction. If they understand these issues they can change cognitively and behaviourally by applying significant competencies in the manner which may reduce the feeling of stress and enhance their work efficiency. As managing relations was found to be the most significant competency for managing stress the authorities must promote a cordial work environment. Providing growth opportunities and promoting healthy competition may develop self motivation and commitment which were found to be the next two important competencies significant for managing stress. Emotional stability and self awareness are the core competencies of EI which help in developing other competencies. This was supported in the present study as they revealed significant correlations with other competencies. Emotional aspects of stress are mostly ignored in stress management programmes, as they focus mainly on managing stress symptoms, hence the effect is of short term. Therefore, based on the findings of this study, Emotional Intelligence Training Programme is also recommended under faculty development programmes. This would enable the faculty members in comprehending and managing emotional aspects of stress not only among themselves but also among their students.
6 LIMITATIONS AND FUTURE SCOPE

This study has certain limitations. Firstly, the study was based on self report measure and social desirability often comes into play in such measures. There were certain sensitive items in the questionnaire like quantum of work, salary satisfaction, conflicting instructions from seniors, working environment etc. which may not have been responded with full honesty by some of the respondents as the questionnaires were mostly collected through the HODs. Keeping this in view the percentage of faculty members with high level of stress could be actually more than the reported percentage. However, many of the faculty members had reported these issues honestly without any hesitation. Secondly, the design of ESI, with only 34 questions for assessing ten components of EI, may limit the thorough assessment of EI. Thirdly, the sample was restricted only to private institutes as the functioning of private colleges differs from that of government colleges. There were geographical constraints as well, because the sample was limited to institutes situated within Uttar Pradesh, India. Therefore, it is suggested that future researchers could conduct this type of study in other states and with the faculty members at government colleges as well to provide more evidence to generalize findings from this study.

7 CONCLUSION

As the world is advancing technologically, organisational expectations are also increasing and due to tough competition the need for meeting these challenges has become vital. With this drive to achieve, many psychological aspects have become apparent and coping with stress is one of them. Stress and emotions are interdependent because emotions play an important role in the perception of stress. Therefore, managing emotions becomes important for managing stress and for managing emotions one needs EI which comprises of various competencies. Different tasks require different EI competencies. The results of the present study provide an insight into specific EI competencies significant for managing stress among faculty members of private medical and engineering colleges. Managing relations was revealed as the most significant competency for managing OS among the faculty members. This was followed by self motivation, commitment, emotional stability and self awareness. The study also revealed significant inter-correlations among EI competencies. Emotional self awareness enables a person to recognize one’s emotions and their effect on others. Emotional stability helps in managing negative emotions, which subsequently helps in managing relations at work place and with good relations one is able to avail required help and resources from others. Faculty members who are self motivated may be more committed to their job and may not mind putting extra effort to accomplish a task. Incorporating Emotional Intelligence Training Programmes for faculty members may help them in understanding and managing emotional aspects of stress on self, as well as, on the students. EI helps teachers identify the feelings and fears of students, recognizing their feelings and see to their unmet emotional needs [37]. However, developing EI competencies needs concerted practice. Using EI in daily interactions with the individuals in real life work situations promote a richer appreciation of the importance of emotion and a more sophisticated repertoire of emotional and social skills because naturally occurring conflicts and arguments represent actual teachable moment [38].

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