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RESEARCH ARTICLE

ASSOCIATION OF EMOTIONAL INTELLIGENCE AND ORGANIZATIONAL ROLE STRESS: A STUDY AMONG POST-GRADUATE STUDENTS

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Abstract

The study aims to evaluate the association of Emotional Intelligence (EI) with Organizational Role Stress (ORS) among post-graduate students of public health and healthcare management at various institutes in India. Evidence indicates a depletion and exhaustion of mental and physical energies due to the numerous demands on both post-graduate students' personal and professional fronts. Long-term exposure to such demands has been shown to have dysfunctional consequences on students, which can cause stress in their roles. Individuals with higher emotional Intelligence have been perceived to use stress-coping mechanisms effectively. A total of 157 students in post-graduate degree programs in public health and healthcare management were surveyed for data. The 50-item Organizational Role Stress scale and 33-item emotional intelligence scale were used to collect the required data. The findings demonstrate an insignificant correlation between organizational stress and emotional Intelligence. However, among the ten role stressors, inter-role distance and role erosion exhibit a significant positive correlation with emotional Intelligence.

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Introduction:-

In India, 31.7% of health students grapple with stress, underscoring a prevalent issue in the academic world (Ragab et al., 2021). Stress is a biological and natural component of human life that manifests in response to challenges posed by environmental threats, persistent worries, or underlying tensions (Alsulami et al., 2018). Its multifaceted influence fosters positive and negative outcomes contingent on individual responses and coping mechanisms. Positive stress, often referred to as eustress, emerges when tasks are managed systematically. At the same time, the loss of momentum in the same work can give rise to negative stress, also known as distress. Thus, stress reveals its dual nature, capable of being a driving force in one context and a detriment in another.

Folkman (1984) defined stress as a mental or physical phenomenon that arises through an individual's cognitive appraisal of stimuli resulting from their interaction with the environment. The presence of stress hinges on the presence of a stressor. External and internal factors contribute to stress at both personal and professional levels. While internal factors largely depend on an individual's ability to manage increasing pressures, certain external factors go beyond an individual's control. The external factors are often linked to organizations or institutions and encompass aspects such as the environment, policies, tasks, responsibilities, control, accountability, atmosphere, colleagues, superiors, and more (Pestonjee, 1992).

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Academic institutions are not immune to the influence of stress, as noted by Stevenson & Harper (2006), who highlighted that stress within academic institutions can yield both positive and negative consequences if not effectively managed. Furthermore, Goodman (1993) identified stressors affecting students, categorizing them into academic, financial, time-related, health-related, and self-imposed stressors. Left unaddressed, elevated stress levels can lead to increased anxiety among students, resulting in reduced participation and engagement within the college environment (Malathi & Damodaran, 1999).

Ashkanasy et al. (2003) developed a model for the effect of Emotional Intelligence on coping with stress. They described that managing one's emotions (a component of emotional Intelligence) leads to better coping against the aggravating effects of stress. Emotional Intelligence is a form of social Intelligence that describes the ability of an individual to monitor one's feelings and emotions and perceive and empathize with others while effectively regulating emotions among themselves and others to guide actions (Salovey & Mayer, n.d.). The EI imparts the ability to understand the attitudes, objectives, and concerns of those around, comprehend others' emotions, and the skills to manage and regulate emotions, which plays a vital role in guiding individuals toward desired actions. The model proposed reconceptualizes EI as an essential component in coping with stressful events rather than merely a precursor to the stress levels experienced, emphasizing its integral role in the broader context of stress management.

The study aims to identify the level of role stress, emotional Intelligence, and their association among medical and non-medical post-graduate students studying public health and hospital administration degree courses. Distinguishing from prior research, our investigation delves into the diverse backgrounds, demographics, and varying levels of experience these students bring to the table, often necessitating frequent engagement in complex social interactions. As we unfold the findings of this research journey, we explore insights that will enhance our understanding of this dynamic interplay and offer valuable guidance for students, educators, and institutions seeking to foster healthier, more productive academic environments.

Literature Review:-

Academic stress, stemming from heightened emotional and academic pressures, adversely impacts students' mental health and overall well-being (Reddy et al., 2018). In their study, Dunkel and Lobel (2001) highlighted that academic demands, interpersonal issues, financial concerns, and sexuality constitute primary stressors during student life. The collective impact of these circumstances becomes evident as students manage their study time, adhere to college schedules, and meet project deadlines, all while pursuing personal growth and academic excellence. Research further suggests that post-graduate students frequently confront substantial stress (Abraham et al., 2019; Shetty et al., 2020; Spangenberg & Orpen-Lyall, 2000).

Bar-On was a pioneer in integrating stress management through emotional regulation within his framework of "non-cognitive intelligence." Alongside stress control, his model encompasses other facets of stress management, such as interpersonal capability, interpersonal skills, adaptability, motivation, and overall mood factors (Bar-On et al., 2000). Subsequently, Bar-On and colleagues conducted statistical analyses that unveiled a direct, negative correlation between levels of stress tolerance and emotional Intelligence (Bar-On, 2010). Similarly, to investigate the relationship between EI and stress, Slaski and Cartwright (2002) conducted a cross-sectional survey among managers on the effect of EI in moderating stress levels and enhancing resilience. After this research, they devised a program aimed at augmenting Emotional Intelligence, which effectively demonstrated that improvements in Emotional Intelligence correspondingly reduced the experienced levels of stress (Slaski & Cartwright, 2003).

In their study, Joseph et al. (2015) established a negative correlation between EI and stress among medical college students. While emphasizing the importance of EI in improving social relations, an essential aspect of managing stressful situations through EI is highlighted in the study (Joseph et al., 2015). Doyle et al. (2021) studied EI's impact on stress and highlighted a negative correlation among medical students. Jahan et al. (2022) in their scoping review on the association between EI and stress among dental students conducted a qualitative and quantitative research method. From 15 different countries, the data revealed that EI and stress showed an inverse relation between them. Training to improve EI among students showed a reduction in levels of stress and similar findings by Khorasani et al. (2023) indicated that developing self-awareness, self-management, social awareness, student relationships, and other aspects of EI can help reduce stress originating in academics.

Hence, we hypothesize:

H₁: There is a negative association between EI and ORS among post-graduate students.

H₂: The level of EI and ORS experienced is significantly different between students with Bachelor' Degrees in Medical and Non-Medical majors.

H₃: People with different years of work experience show differences in their level of EI and experience of ORS.

The literature review unequivocally indicates that heightened levels of emotional Intelligence (EI) are associated with improved health and well-being and reinforce individuals' abilities to excel in academia, effectively manage stress, and enhance cognitive abilities. After extensively reviewing the existing literature on PubMed, Scopus, and Google Scholar and cross-references from the research articles, it became evident that more research needs to be conducted on public health and hospital administration students. This void in knowledge prompted us to undertake the present investigation, aiming to contribute valuable insights to this specific domain. It is noteworthy that the type of stress under analysis in our study is highly contextual and domain-specific.

Methodology:-

Participants and Data Collection: The study utilized an institution-based cross-sectional design using a convenience sampling method on the students of two groups- Masters of Public Health and Masters of Hospital Administration. An email with detailed instructions to complete an online questionnaire using Google Forms was sent to 200 students from the first and second years of students from various medical and non-medical backgrounds. In the instructions, to encourage participation, it was also mentioned that the data collected would be confidential and utilized for this study. The participation was voluntary, and consent was recorded through the online form using a check box. A total of 157 responses were received, which were further analyzed for this study.

Instruments:

The ORS Scale (Pareek, 1983) measured organizational role stress using ten stressors sub-scales (Table 1). These stressors are inter-role distance (IRD), self-role distance (SRD), role stagnation (RS), role ambiguity (RA), role expectation (RE), role overload (RO), role erosion (RE), resource inadequacy (RI), personal inadequacy (PI), and role isolation (RI). All these sub-scales have five questions each and are taken together for a total of 50 questions. Emotional Intelligence was measured by the 'Schutte Self-Report Emotional Intelligence Test (SSEIT)' (Nicola et al., 1998) consists of 33 questions. The responses were measured on a 5-point Likert scale for both instruments. The final value for the ORS scale ranges between 0 to 20 for each sub-scale, and the total of all 50 questions ranges between 0 to 200. The higher the value was directly related to higher role stress experienced and an individual's Emotional Intelligence.

Collected data were analyzed using Pearson's correlation and ANOVA test to understand the association between study variables. The statistical package for social sciences (SPSS-25.0 version) was used for analysis.

Results and Discussion:-

The responses received were checked for errors and duplication. We removed the responses with more than ten subsequent questions with identical scores in either scale to eliminate bias. A total of 7 out of 157 were removed, and finally, 150 responses were analyzed for this study.

Most (77%) of the students were from medical backgrounds, while the remaining belonged to life sciences, social sciences, and other non-medical backgrounds. Nearly a quarter of students had one year or less experience, while the proportion of students having one to two years of experience, two to five years of experience, and more than five years was 15%, 6 %, and 3%, respectively (Table 2).

Internal reliability (Cronbach's Alpha) of the organization role stress scale and emotional intelligence scale in this study was 0.951 and 0.804, respectively (Table 3). The mean values of organizational role stress and emotional Intelligence were 90.23 (33.82) and 115.44 (13.43).

H₁: There is a negative association between EI and ORS among post-graduate students (Table 4)

Pearson's correlation coefficient value of 0.09 ($p= 0.228$) indicated an insignificant association between ORS and EI. Further evaluation of sub-scale stressors of ORS showed that EI was related to inter-role distance (at 95%) and correlated with role erosion (at 99%). The data shows an insignificant correlation between EI and ORS, which is consistent with other studies showing no association between EI and ORS (Dwiputra&Astika, 2019; Krishnakumar

& Lalitha, 2014; Sarangi et al., 2017). On the other hand, these results contradicted other studies which showed a significant correlation between EI and ORS (Goswami, 2013; Khorasani, 2023; Singh & Singh, 2008) (Darvish, 2011).

H₂: Students with bachelor's degrees in medical and non-medical significantly impact their EI and ORS levels (Table 5)

The students from non-medical backgrounds experienced higher role stress (94.94) compared to medical backgrounds (88.85). Medical students undergo five years of extensive training under stressful conditions, there is constant pressure to perform efficiently and provide empathetic patient care while maintaining personal life. Singh and Singh (Singh & Singh, 2008) stated that consistently tending to individuals afflicted with a range of physiological issues places doctors under increased role-related stress.

The Emotional Intelligence of students with medical backgrounds (115.63) also varies from non-medical backgrounds (114.79). Learning to manage emotions is a self-learned process through social interactions and has little or no space in the education system. As stated by Singh and Singh (Singh & Singh, 2008) people from medical backgrounds exhibit emotional intelligence or receive assistance in enhancing their emotional intelligence, there is a likelihood that this can reduce the experienced role stress to an optimal level, enabling them to operate efficiently and effectively.

H₃: There is a difference in the level of EI and experience of ORS in students with different work experiences (Table 6)

Following the completion of undergraduate studies, students either seek to acquire practical experience or directly enrol in a master's program. Evaluating the effect of work experience on ORS and EI, the fresher students who had one to two years of work experience suffered more from role stress (88.7). With increasing experience, students showed less role stress. A study by Balakrishnamurthy and Shankar (2009) showed that the level of experience significantly impacts the level of stress experienced and that work experience can improve resilience to stress. However, 3% of students with more than five years of experience showed increased levels of stress (95), wherein increased experience does not affect stress levels.

We conducted a correlation analysis for all ten stressors of ORS with EI. A significant positive correlation of EI with Inter-role distance (.202*) and Role erosion (.247**) was seen. This result contradicts other studies stating a significant negative association between EI and the ten stressors of ORS (Darvish & Nasrollahi, 2011; Singh & Singh, 2008). Students with high EI face stress due to conflicts arising due to the multiple roles they assume. Having multiple roles – inter-role distance - makes individuals manage emotions from different roles. Students in less challenging environments face role erosion, which shows students with higher EI need to have an environment challenging enough to utilize their Intelligence, which may lead to feeling worthless or unaccomplished.

Conclusion:-

Our study reveals that students specializing in public health and hospital administration experience lower levels of organizational role stress while scoring high on emotional Intelligence.

Emotional Intelligence undoubtedly plays a crucial role in managing stress-inducing situations, yet its significance remains prominent only up to a certain threshold. Beyond this point, individual internal factors such as resilience and adaptability are essential for navigating stressful circumstances. Further investigation into stress contributors becomes imperative to discern which factors can be modulated across diverse contexts to enhance stress tolerance.

Recommendation:-

Understanding students' experiences is crucial for educators and course administrators. This life stage is critical, and intentionally introducing manageable stressors can motivate students to achieve their goals. By reducing stressors, we can improve students' focus, leading to a healthier and more productive future workforce. Implementing training programs for emotional intelligence and screening procedures to identify suitable activities can help nurture empathetic and efficient individuals. By identifying sources and addressing student issues, we can create a more satisfying and enriching learning experience.

Tables**Table 1:-** Parameters of Organization Role Stress Scale (ORS).

Sr. no.	Parameter	Explanation
1	Inter-Role distance	Inadequacy in managing multiple roles such as a friend, partner, and child at home.
2	Role Stagnation	Feeling of being stuck at same level, no new learnings or future growth in career.
3	Role Expectation Conflict	Responsibilities unsuited to the extent that compliance is difficult
4	Role erosion	Feeling of worthlessness and low self-esteem in a less challenging environment- causes lose interest and motivation
5	Role Overload	Inadequate time provided to perform a task effectively and efficiently.
6	Role Isolation	The designation and views of an individual if seen as less important, isolates the individual from their role
7	Personal Inadequacy	Lack of adequate capabilities to complete the responsibilities and tasks allocated
8	Self-Role Distance	Inconsistency between values of an individual and the role causing stress to perform activities not in balance with their ethics or principles.
9	Role Ambiguity	State of unclear directions about the role and the capacity to conduct the expected activity
10	Role Inadequacy	Absence of resources to perform the role efficiently

Table 2:- Demographic details.

DEMOGRAPHIC DETAILS	N (%)
Gender	
Male	25 (16.7)
Female	125 (83.3)
Qualification	
Medical	116 (77.33)
Non-Medical	34 (22.67)
Experience	
Fresher/Less than one year of experience	113 (75.3)
One to two years of experience	23 (15.3)
Two to five years of experience	9 (6)
Five years of experience and above	5 (3.3)

Table 3:- Internal Consistency of the Scales.

Internal Consistency	Cronbach's Alpha	N. of Items
Organization Role Stress Scale	0.951	50
Emotional Intelligence scale	0.805	33

Table 4:- Correlation coefficient of EI and ORS.

Correlations	Organizational Role Stress	
	Pearson Correlation	Sig. (2-tailed)
Emotional Intelligence	0.099	0.228

Table 5:-Educational Background Compared with EI and ORS.

Educational Background	Organizational Role Stress	Emotional Intelligence
	Mean (Standard deviation)	
Medical	88.85 (35.05)	115.63 (11.41)
Non-Medical	94.94 (29.21)	114.79 (18.97)
Total	90.23 (33.82)	115.44 (13.43)

Table 6:- Experiences (in years) with EI and ORS.

Experience levels	Organizational Stress	Role	Emotional Intelligence
	Mean (Standard deviation)		
Fresher/Less than one year experience	88.74 (32.61)		115.27 (14.52)
One to two years of experience	88.78 (34.15)		114.96 (10.72)
Two to five years of experience	79 (37.82)		116.44 (7.1)
Five years of experience and above	95.4 (42.96)		119.6 (7.33)
Total	90.23 (33.82)		115.44 (13.43)

Table 7:- Association of EI with Organizational role stress.

Role stressors	Emotional Intelligence	
	Pearson Correlation	Sig. (2-tailed)
Inter-role distance	.202*	0.013
Role stagnation	-0.06	0.466
Role expectation conflict	-0.029	0.728
Role erosion	.247**	0.002
Role overload	0.021	0.795
Role inadequacy	0.12	0.145
Personal inadequacy	0.094	0.253
Self-role distance	0.094	0.253
Role ambiguity	-0.028	0.733
Role Inadequacy	0.123	0.134
Organizational role stress	0.099	0.228

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