Examining the Relation between Emotional Intelligence and Occupational Role Stress among Extensionists Working in Krishi Vigyan Kendras in India

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ABSTRACT

Extension professionals dealing with one of the most underprivileged clientele (farmers) in India, undergoes a lot of stress. Emotional intelligence (EI) is among the variables that appear to be associated with stress. Thus, this study aims to investigate the relationship between Emotional Intelligence (EI) and organizational role stress (ORS) among the Extensionists working in Krishi Vigyan Kendras (KVK's) in India. A total sample size of 240 Extension professionals were selected by simple random sampling technique from the four zones viz., Agricultural Technology Application Research Institute (ATARI) Zone I, Zone II, Zone IV and Zone VII. The result of the study revealed that the respondents were having average level of emotional intelligence and high level of organizational role stress. Regression analysis showed that the EI factors explained approximately 34 per cent of the variance of ORS levels of the extension professionals. Individuals with high EI have less ORS. Therefore, it is recommended that short-term training courses be scheduled and designed for enhancing the EI and thus reducing the role stress of the Extensionists.

Keyword: Emotional Intelligence; Extension professional; Krishi Vigyan Kendra; Organizational Role Stress;

With the ever-increasing pressures at work, within the community, and at home, the ability of individuals to deal with the daily environmental demands and pressures has become challenging. *Selye (1936)* made the first reference to Stress in humans which was conceptualized as a nonspecific response of the body to any demand made upon. In psychology, stress is defined as being under psychological pressure. Stress is the physical, mental and chemical response of the human being body to the events, causing feelings of fear, excitement, anxiety, danger or anger in the individual. Agriculture sector is more pronounced to the stress condition owing to its weather dependent nature. Extensionists are subjected to enormous demands both from the clientele and their organization. They have to deal with the clients, fulfilling various roles and at the same time, respond to their administrative duties within the organization. These conditions may lead to development of stressful situation for the Extensionists. All over the world, occupational stress researchers have agreed that stress has become a serious problem in many organizations (*Ornelas and Kleiner 2003*). According to the International Labor Organization (ILO) report, inefficiencies arising from occupational stress may cost up to 10 percent of a country's GNP (*Midgley, 1997*). In *Kentucky, Fetsch et al., (1984).* noted that extension professionals had higher mean stress level score than normal adult and that prolonged exposure to such high stress levels make them susceptible to physiological and emotional stress-related problems.

Stress is felt by individual differently as it is dependent on the individual assessment of the situation and the resources in hand to face the stressful situation. There are different factors that have influence on the selection and effectiveness of coping strategies. Coping strategies are of two types: externally (problem focused)

and internally (emotion focused). Problem-focused coping (externally) is attempting to manage or change the problem which causing the stress, whereas emotion-focused coping (internally) attempts to diminish emotional distress. In other words, problem-focused coping include problem-solving activities and seeking information related to problem, whereas emotion focused coping include managing own emotion related to stress. Therefore, coping of stress is depending on the individual capabilities and strategies.

Emotional intelligence (EI) is another mechanism that could reduce stress (*Edward & Warelow, 2005*). Emotional Intelligence (EI) is a set of qualities and competencies that captures a broad collection of individual skills and dispositions, usually referred to as soft skills or inter and intrapersonal skills, that are outside the traditional areas of specific knowledge, general intelligence, and technical or professional skills. EI is defined as individual ability to perceive, understand and express emotions *(Mayer & Salovey, 1997).* Several studies have showed that teaching emotional intelligence skills significantly reduced psychological stress in the adolescents *(Sehryan, 2007)*. These studies showed that emotional intelligence should be considered in predicting job stress and other stresses as well.

Extension professionals are continuously working with a diverse and complex set of personalities and backgrounds both at the field and administrative levels. It is important that they must be able to develop and apply their emotional and social skills (*Rohit et al., 2017*). EI training is well established and widely used in western countries. However, Asian countries such as India are lagging behind from EI perspective. Therefore, this study helps human resource practitioners to use the results of the study and implement the training sessions for better organizational environment. Considering the significance of the organizational role stress and emotional intelligence which affects the Extensionists productivity, the present investigation was formulated to study the relationship between emotional intelligence and organizational role stress among the Extension professionals working in the ICAR-Krishi Vigyan Kendras in India.

METHODOLOGY

Four zones of ICAR-KVK were selected randomly. Hence, four zones were selected viz., zone I, zone II, zone IV and zone VII. From each zones, 60 Extension Professionals from the Krishi Vigyan Kendras were selected using simple random sampling technique for the study. Thus, the total sample size was 240.

For the analysis of organizational role stress, *Pareek* (1983) scale with slight modification was used. This scale is widely used in the analysis of role stress (*Kairanna and Suresh, 2014*). This scale has accepted reliability and validity (*Pareek, 1983*). It evaluates the individual's quantum of stress in terms of ORS and it also measure the intensity on ten stressor which contributes to the total stress. This scale uses a five point Likert scale with the value ranging from 0 to 4. Each component of the ORS scale consist of five items, hence a total of 50 statements. The total score ranges from 0 to 200. Norms table was used to analyse the data by *Khanna (1986)* cited in *Pareek (1993).*

EI, for the present study, has been operationalized as the ability of the extension professionals to understand the feeling of oneself and of others, to empathize, maintain and develop interpersonal relationship and understand one's own motivation. Emotional Intelligence Scale (EIS) developed by *Hyde et al., (2001).* was modified for the study and was administered to the Extensionists. The scale is a self-administering, consisting of 34 items and measuring emotional intelligence through 10 factors – self-awareness, empathy, self-motivation, emotional stability, managing relation, integrity, self-development, value orientation, commitment and altruistic behavior. The reliability of the original scale was determined by calculating reliability coefficient on a sample of 200 managers. The split-half reliability co-efficient was found to be 0.88. Besides face validity, as all items were related to the variable under focus, the scale has high content validity. The responses were recorded, on a 5 point continuum i.e. strongly agree, Agree, Uncertain, Disagree and strongly disagree. High total score on the scale showed high emotional intelligence, while low total score represented low emotional intelligence. The Cronbachs Coefficient alpha of the scale for the present study was 0.884

An Extensionist, for the present study, was operationalized as an Extension Professional having acquired a specialised degree in agricultural sciences or allied sciences and directly in contact with the clientele/ farmers.

RESULTS AND DISCUSSION

Mean and standard deviation on the ten sub scale of emotional intelligence is presented in Table 1. The overall mean of emotional intelligence scale was 113.7 which indicate that the respondents were having average level of emotional intelligence.

Table 1. Means, standard and deviation of EI

Measure	Mean	Std dev
Self-awareness	13.52	1.61
Empathy	16.22	1.77
Self-motivation	20.04	2.13
Emotional stability	13.43	1.36
Managing relation	13.34	1.43
Integrity	9.82	1.15
Self-development	6.74	0.84
Value orientation	6.85	1.00
Commitment	6.9	0.89
Altruistic behavior	6.80	0.86
Emotional intelligence	113.7	8.99

The level of organizational role stress was analysed using *Khanna 1996* norms. It is clear from the Table 2 that the mean of organizational role stress is quite high. The high score of Extensionist may be due to the nature

Table 2. Organizational role stress score of extensionists

ORS component	Mean	Remark
Inter-Role Distance (IRD)	11.30	High
Resource Inadequacy (RIn)	10.54	High
Role Isolation (RI)	10.51	High
Role Overload (RO)	9.91	High
Role Expectation Conflict (REC)	9.09	High
Role Stagnation (RS)	6.85	Moderate
Role Erosion (RE)	9.52	Moderate
Personal Inadequacy (PI)	7.98	Moderate
Self-Role Distance (SRD)	8.16	Moderate
Role Ambiguity (RA)	6.50	Moderate
Organizational Role Stress (ORS)	91.41	High

of their work as they have to deal directly with the clienteles one hand and do the administrative work at the organization on other hand. Extensionists perceived high level of stress on Inter Role Distance, Role Expectation Conflict, Role overload, Role Isolation and Resource Inadequacy while moderate level of role stress on the dimensions of Role Stagnation, Role Erosion, Personal Inadequacy, Self-Role Distance, and Role ambiguity.

Correlation between emotional intelligence, occupational role stress and demographic variables is shown in Table 3. It is evident from the Table that the

Table 3. Correlation between emotional intelligence, occupational stress and demographic variable

Parameters	Age	Experience	Gender	Education	Current position
Self-awareness	.421**	-.014	.275**	.267**	.133*
Empathy	.418**	-.029	.227**	.236**	.149*
Self-motivation	.422**	-.109	.176**	.225**	.074
Emotional stability	.362**	.029	.134*	.197**	.084
Managing relation	.314**	-.001	.202**	.212**	.056
Integrity	.284**	-.032	.182**	.176**	.139*
Self-development	.289**	.017	.124	.146*	.079
Value orientation	.304**	-.089	.086	.156*	.050
Commitment	.147*	-.084	.117	.078	.074
Altruistic behavior	.224**	-.014	-.040	-.002	.069
Emotional intelligence	.503**	-.061	.245**	.272**	.143*
Inter-Role Distance (IRD)	.092	.089	-.051	.126	.028
Resource Inadequacy (RIn)	.032	.023	.115	.004	.005
Role Isolation (RI)	-.021	-.013	.039	-.021	.012
Role Overload (RO)	.171**	.194**	-.001	.031	.132*
Role Expectation Conflict (REC)	-.008	.012	.106	.094	-.042
Role Stagnation (RS)	-.054	-.058	.145*	-.023	.010
Role Erosion (RE)	-.044	-.033	.102	.036	-.007
Personal Inadequacy (PI)	-.057	-.069	.168**	-.008	-.063
Self-Role Distance (SRD)	.028	-.001	.098	-.076	-.028
Role Ambiguity (RA)	-.046	-.026	.038	.096	-.026
Organizational Role Stress (ORS)	-.225**	.000	.142*	.031	-.011

*Significant at 0.01 per cent level;　** Significant at 0.05 per cent level

relation between age and emotional intelligence shows significant positive correlation along the all the sub parameter and total emotional intelligence (0.503**, p<0.01) while the relation between age and occupational role stress (-0.225**, p<0.01) showed significant negative correlation. This may be due to as age increases ability of recognizing and regulating emotions according to situation increases, which leads in reduction of job stress. This finding is concurrent with the results of *Shukla and Srivastava (2016).* Gender, education and the current position held by the extensionists in KVK were significantly correlated with the overall emotional intelligence of the respondents. *Dey (2009)* examined that there is close relation between emotional intelligence and educational level in various age groups and the result was educational level has reciprocal relationship with emotional intelligence. *Karani et al., 2017* also indicated that emotional intelligence was positively correlated with gender and education. It is clear from the Table 3 that the total organizational role stress showed significant correlation with age ((-0.225**, p<0.01)) and significant positive correlation with gender (0.142*, p<0.05). The result is in line with the finding of *Bak et al., (2012).*

Table 4. Correlation between emotional intelligence and occupational role stress

Parameters	Spearman correlation coefficient (r)
Self-awareness	-.047**
Empathy	-.045**
Self-motivation	-.002**
Emotional stability	-.104**
Managing relation	-.015**
Integrity	.027**
Self-development	-.027**
Value orientation	-.094**
Commitment	-.048**
Altruistic behavior	.014**
Emotional intelligence	-.038**

*Significant at 0.01 per cent level
** Significant at 0.05 per cent level

　　The aim of this study was examining relationship between emotional intelligence and perceived stress. Table 4 shows correlation between that EI and its subscales with occupational role stress. It is evident from the Table 4 that there is significant negative correlation between total emotional intelligence and organizational role stress (.038*, p<.05). In other words, As EI of the extensionists increases they are able intervene job stress.

This result is supported by previous studies (*Nikolaou & Tsaousis, 2002; Mikolajczak et al, 2007; Oginska-Bulik, 2005).* The subscales of emotional intelligence were also having significant negative correlation with organizational role stress. *Byrne (2012)* in his study on "relationship between emotional intelligence and stress management in the Irish workforce", also found that there was a strong negative significant relationship between EI and its subscale with perceived stress. The results go on to back up the findings of *Ramesar et al. (2009),* who maintained that coping with stress is a component of EI, that stress (such as worry) has an impact upon levels of EI, and indeed that EI affects levels of stress. These findings would support the idea that EI may be associated with more effective confrontation with stress, promoted by a greater emotional understanding of oneself and others and, therefore, a better prediction of the results of coping attempts (*Cejudo, 2018).* Furthermore, these results support the idea that EI could act by reducing the frequency and duration of negative emotions that appear as a consequence of certain stressful events and social interactions (*Rey, 2011).* This is because if an individual understands his own feelings and knows them according to the concepts of emotional intelligence, then he/she can make better choices in his/her life regarding his/her job, friends, etc.

Table 5. Regression analysis between Emotional intelligence and Organizational Role stress

Parameter	R	R²	SE	F value	sig
Emotional intelligence	.585	.342	.559	11.04	.002*

*Significant at 0.01 per cent level

　　The result of regression analysis is depicted in Table 5. The R^2 value was 0.342 which means that there was around 34 percent influence on occupational role stress was predicted by emotional intelligence. The F values found to be significant at .05 level of significance. So it can be interpreted that emotional intelligence significantly influenced the occupational role stress level among the Extensionists working in Krishi Vigyan Kendras in India. Similar results were found by *Goswami & Talukdar (2013).* As it can be seen, the components of self-awareness, empathy, self motivation and self development were better able to predict stress-related changes (Table 6). The results of this study are in line with the results of the study conducted by

Table 6. regression analysis with the sub parameters of organisational role stress and emotional intelligence

Variable	Predictor variable	Regression coefficient	T ratio	Level of significance
ORS	Self-awareness	-.22	-2.127	.003*
	Empathy	.29	2.346	.002*
	Self-motivation	.170	2.006	.003*
	Emotional stability	.009	.103	.918
	Managing relation	-.006	-.077	.939
	Integrity	.22	2.87	.005
	Self-development	.149	1.747	.002*
	Value orientation	-.028	-.402	.688
	Commitment	-.025	-.335	.738
	Altruistic behavior	-.012	-.127	.899

*Significant at 0.01 per cent level

Yamani et al., 2014 and *Maki Poor et al., (2011).* Individual with high emotional intelligence can better manage and understand the stress and thus can avoid the negative emotions such as hopelessness, anxiety and irritability. As stress can occur when an individual is confronted with a specific event or situation that he/she finds challenging to his own abilities, thus stress is further related to the beliefs, attitudes and inner side of the individuals. These individuals face fewer difficulties in their lives or they can immediately return to favorable conditions when faced with problems and uncomfortable situations.

CONCLUSION

The aim of the study was to examine the relationship between emotional intelligence and occupational role stress among the Extensionists working in KVK's in India. The overall results showed that the individuals with higher emotional intelligence had less job stress. Extensionists with higher emotional intelligence experience less stress which was subsequently reflected in their behavior. The study also highlighted the relationship between demographic variables and emotional intelligence (EI) along with occupational (ORS) role stress. Considering all these parameters training course can be designed for extension professionals for enhancing their EI. Moreover, it is recommended that, in addition to academic qualifications, the personality and emotional characteristics be considered in the selection procedure of faculty members, as well. EI questionnaire can be included in the psychometric test used in recruitment and selection seems very effective technique in order to improve the accuracy in selection methods and may decrease the attrition rate. Training institutes can develop and offer a combination of EI and stress management training according to the demographic characteristics of the extension professionals, provide them opportunity to acquire necessary skills, in order to deal with the farmers and other stakeholders.

REFERENCES

Bak, C. K.; Tanggaard Andersen; P., Bacher, I. and Draghiciu Bancila, D. (2012). The association between socio-demographic characteristics and perceived stress among residents in a deprived neighbourhood in Denmark. *The European J. of Public Health*, **22** (6) : 787-792.

Cejudo, J.; Rodrigo-Ruiz, D.; López-Delgado, M. L. and Losada, L. (2018). Emotional intelligence and its relationship with levels of social anxiety and stress in adolescents. *Intl. J. of Envi. Res. and Public Health*, **15** (6) : 1073.

Dey, N. (2009). Influence of emotional intelligence on academic self- efficacy and achievement. *Psycho-lingua*, **39** (2) :171-174

Edward, K. L. and Warelow, P. (2005). Resilience: When coping is emotionally intelligent. *J. of the American Psychiatric Nurses Association,* **11** : 101–102. *http://dx.doi.org/10.1177/1078390305277526*

Goswami, K. and Talukdar, R. R. (2013). Relation between emotional intelligence and job stress among engineer's at managerial level at public sector organization. *IOSR J. of Humanities and Social Sci.*, **7** (3) : 44-47.

Hyde A., Pethe S. and Dhar U. (2001). *Emotional intelligence scale. Lucknow: Vedant Publication.*

Kairanna, S.S. and Suresh, R. (2014). A study on organisational role stress among women working in private colleges in mangalore using ORS scale. *IOSR J. of Humanities and Social Sci.* **19**(10) : 25-28

Karani, A.; Rajput, H. and Panda, R. (2017). Determining relationship between emotional intelligence and demographic variables. *Asian J. of Research in Social Sciences and Humanities*, **7**(2) : 908-918.

Khanna, B.B. (1986). Relationship between organizational culture and organizational role stress and their impact upon organizational effectiveness: A case study. Doctoral dissertation in management, B.H.U., Varanasi.

kolajczak, M., Menil, C. and Luminet, O. (2007). Explaining the protective effect of trait emotional intelligence regarding occupational stress: Exploration of emotional labour processes. *J. of Research in Personality,* **41** : 1107–1117. *http://dx.doi.org/10.1016/j.jrp.2007.01.003*

Makipour, S.; Shafiabadi, A. and Soudani, M. (2011). The effectiveness of stress inoculation group training (SIT) on reducing job stress of employees of RAZAK pharmaceutical company in Tehran. *Iran Occupational Health*, **7**(4) : 9-10.

Mayer, J. D., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey & D. Sluyter (Eds.), *Emotional development and emotional intelligence: Educational implications* (pp. 3–31). New York, NY: Basic Books.

Midgley, S. (1997). Pressure points (managing job stress). *People Management*, **3**(14) : 36-39.

Nikolaou, I., & Tsaousis, I. (2002). Emotional intelligence in the workplace: Exploring its effects on occupational stress and organizational commitment. *The Intl. J. of Organizational Analysis,* **10** : 327–347.

Oginska-Bulik, N. (2005). Emotional intelligence in the workplace: Exploring its effects on occupational stress and health outcomes in human service workers. *Intl. J. of Occupational Medicine and Environmental Health,* **18** : 167–175.

Ornelas, S. and Kleiner, B. H. (2003). New development in managing job related stress. *J. of Equal Opportunities International,* **2** (5) : 64-70.

Ramesar, S.; Koortzen, P. and Oosthuizen, R. (2009). The relationship between emotional intelligence and stress management. SAJIP: *South African Journal of Industrial Psychology*, **35** (1) : 39-48. doi:10.4102/sajip.v35i1.443. Retrieved March 23rd, 2010, from academic search complete database.

Rey, L.; Extremera, N. and Pena, M. (2011). Perceived emotional intelligence, self-esteem and life satisfaction in adolescents. *Psychosocial Intervention*, **20** (2) : 227–234.

Rohit, J.; Singh, P.; Satyapriya; Sangeetha, V. and Kumbhare, N.V. (2017). An analysis of emotional intelligence as a component of competency mapping for the extensionists of krishi vigyan kendra in India. *Annals of Agri. Res.* New Series, **3** (4) : 472-479.

Sehryan F. (2007). The impact of emotional intelligence skills training on how to deal with psychological stress. *Academic- Res. Psychology J. of Tabriz University*. **2**(8) :70-84. Persian.

Selye, H. (1936). A syndrome produced by diverse nocuous agents. *Nature,* **138** (3479) : 32.

Yamani, N.; Shahabi, M. and Haghani, F. (2014). The relationship between emotional intelligence and job stress in the faculty of medicine in Isfahan university of medical sciences. *J. of Advance Medicine Education,* **2**(1) : 20-26.

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