

THE ROLE OF EMOTIONAL INTELLIGENCE IN TEAM LEARNING

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Abstract

This study explains how team learning in the workplace reflects emotional intelligence. The research was conducted among different software companies and the respondents were software companies employees. The survey questionnaire structured in Likert 5.0 format and the questionnaire responses ranged from strongly disagree to strongly agree. The structured close-ended questions in the questionnaire consists of two main parts such as employee emotional intelligence and team learning in the workplace. The study used a descriptive survey by structured questionnaires to collect data. Descriptive, Correlation, Regression, t-test and ANOVA were used to collect data. The sample size was 168 in this research. There were 75% male respondents and 25% female respondents. According to sample size, I calculated demographic statistics, mean, standard deviation and other calculations. The study has proved that emotional intelligence will be positively related to the level of team learning in the workplace. There had also shown the conceptual framework of emotional intelligence and team learning factors of the workplace.

Keyword: Emotional intelligence, team learning, teamwork, information technology.

1 Introduction

In the twenty-first century, the presence of personnel with a high intelligence ratio and expanded technical and logical abilities is insufficient to assure rising success, active and productive research, and, as a consequence, customer delight. Furthermore, experts with great emotional and social capacities who can grasp the sentiments of others, identify their own emotions, and manage them are necessary.

According to Acar (2002), Nowadays, employees' incapacity to comprehend their own emotions, communicate them to others, and manage them is at the root of many difficulties in businesses, rather than their technical expertise or cognitive ability. Workers must also have a specific level of Emotional Intelligence (EI) to succeed.

Employees with high EI appear to be more effective at building relationships and connections, increasing performance through instilling team spirit, and making the workplace more cheerful and serene. Even though emotional intelligence is a personal notion, the importance of emotions and emotional intelligence has gained relevance in the study. This new research popularity outlines a requirement included as an extra column for team emotions to team performance study. According to Sala (2005), under the hood of these advancements, study in the field of emotional intelligence shifts from individuals to teams. In reality, the success of an organization is inextricably linked to the performance of a small and independent team.

Team learning is intimately tied to an output element of a learning organization. Learning teams are defined by their capacity to address complex and unexpected problems. Team learning, as distinct from individual and organizational learning, entails developing a solution by progressing step by step to address problems encountered by teams, and it is intimately tied to workers' emotional intelligence and hence the emotions of team members. As emotional intelligence is increasingly associated with improving organizational efficiency on the one hand, and teamwork as a modern form of work on the other. However, because changes happen rapidly, we must be open to new thoughts and ideas that might help improve cooperation efficiency. Emotional intelligence is one such idea, since studies have proven that a high level of emotional intelligence in a team produces the required results and makes the team effective and lucrative.

Employees with high emotional intelligence are better able to regulate their own emotions as well as manage the emotions of others, resulting in more positive relationships and increased performance via corporate citizenship behavior. The objective of the study are:

- To analyze a relationship between employees' emotional intelligence and teamwork among the employees.
- To identify whether any significant differences exist in emotional intelligence between different gender groups.

2 Literature Review

2.1 Emotional Intelligence

Emotional intelligence (EI) is described as the capacity to monitor one's own and other people's emotions, recognize and classify different emotions, and utilize emotional information to guide thought and conduct. Emotional intelligence indicates the ability to combine intelligence, empathy, and emotions in order to improve cognition and knowledge of interpersonal interactions. However, there is a significant dispute on the definition of EI in terms of vocabulary and operationalization. Emotional intelligence is not employed for purposes of profit, control, or the direction of psychology, nor is it concerned with sale fraud or the application of attractive faces to items (Bal and First, 2017). Whether used metaphorically or literally, the word "excitement" simply refers to the core emotion of "activity." At this point, our own potential and aim are following us, and our values and how we view them improve the level of emotional intelligence that we possess (Cooper & Sawaf, 1998: 10).

Salovey and Mayer (1990) were the first to conceptualize and use the phrase "emotional intelligence," drawing their ideas from Gardner's (1983) multi-intellectual framework. The definition of emotional intelligence is then given in a variety of academic works by a variety of scholars. Mayer and Salovey (1997) defined emotional intelligence as having the "ability to accurately perceive, evaluate, and express emotions; the ability to reach and/or create emotions when they think; the ability to understand emotions and knowledge about emotions; and the ability to regulate emotions in order to facilitate emotional and intellectual development." The ability to identify one's own and other people's emotions and utilize them to guide decisions is referred to as emotional intelligence by Goleman (1998). While the team-based approach contends that EI is a characteristic that is better assessed by studying team members' opinions of the team as a whole, EI is an individual capacity that members of a team can share, combine, and use when the team needs it (Druskat et al., 2017). Emotional intelligence is described as "the ability to perceive one's own feelings as well as the feelings of others and to use this awareness to motivate oneself and to regulate one's emotions and relationships" (Phipps et.al., 2014).

EI is a crucial aspect that enhances one's capacity to meet organizational goals and professional objectives and fosters stronger teamwork through cooperation and trust (Arfara and Samanta 2016). Employees that are emotionally intelligent typically exhibit a positive outlook, seem happier and more committed to their work and organization, which fosters an environment that improves job performance (Miao et al. 2017). Being able to control and regulate one's emotions can help reduce burnout at work (Arfara and Samanta 2016). Task-related burnout has been observed to be lower in workers with high EI levels (Sanchez-Gomez and Bresó 2020). Employee engagement is boosted by the absence of burnout while a work is being completed. This allows

for continual focus on the task at hand and boosts motivation levels in performances. According to Guy and Lee (2015), the perceived influence of EI calls for its inclusion in training and development programs. This would enable organizations to increase the level of commitment through improved team performance and individual behavior of emotionally stable and persistently motivated team members (Sithambaram et al. 2021). According to studies by Law et al. (2004), Van Rooy and Viswesvaran (2004), Mayer et al. (2012), and Cuéllar-Molina et al. (2019), EI influences how well employees do at work. A high EI level results in high performances, while a low EI level spawns low performers. Emotional intelligence (EI) is characterized by the ability to control one's emotions, perceptions, adaptations, self-management, interpersonal effectiveness, and discussion abilities (Carnevale et al. 1988; Cherniss 2001; Rathore et al. 2017). Companies that value emotional intelligence (EI) spend money on connection, empathy, and problem-solving training programs. These qualities are used to solve problems and effectively express needs in a clear and organized manner (Pearman 2011).

2.2 Team Learning

According to a historical analysis of the literature, team learning has just recently begun to take off. The groundwork for current team learning research was laid by Edmondson's (1999) key study on team learning and psychological safety. Edmondson describes team learning in it as a behavioral process that represents the iterative cycle of seeking (for example, asking for input), gathering (for example, asking questions), and debating and integrating information (e.g., discussing errors).

Team learning was defined as actions that lead to results using Edmondson's (1999) framework of team learning. With this in mind, Edmondson (1999) combined the parts of process and outcome to form the team-learning construct. A further definition of team learning according to Edmondson is "raising questions, getting feedback, experimenting, reflecting on questions, and sharing errors and unanticipated effects of activities" (1999, p. 353). Team learning comprises a variety of actions, such as investigating concepts and procedures, talking about disagreements, and settling them in order to jointly create new understanding. Important concerns, procedures, and results are shared, discussed, and considered by team members (Erhardt et.al, 2016; Van der Haar et.al., 2015). In a process of constructive conflict, team members also inquire, consider many viewpoints, challenge presumptions, spot weaknesses, and consider unexpected results (Savelsbergh et.al., 2009).

As a result of the shared experiences of the team members, team learning produces "a relatively permanent change in the team's collective level of knowledge and competence (Ellis et.al., 2003). Team members frequently learn from the experiences of their coworkers as well as their own through socio cognitive and interpersonal interaction processes that coordinate and integrate individual cognitions, in contrast to individual learners (Van den Bossche et.al., 2006).

There are two alternative ways to think about team learning: as a process or as an end (Weise and Burke, 2017). We use this distinction, like earlier writers, as a general technique for categorization in order to comprehend team learning. Team learning, is the consequence of learning processes that can be divided into two categories. The term "team learning outcomes" can specifically refer to either (1) changes in the group's knowledge (team learning) or (2) changes in behavior (i.e., learning curves). Similar to this, we discovered that team learning behaviors (also known as team learning processes) may be further divided into intrateam, inter team, and thirdly, fundamental learning behaviors.

2.3 Emotional Intelligence and Team Learning

According to Mayer and Salovey (1997), the four emotional abilities, the ability to perceive accurately, appraise and express emotion; the ability to access and/or generate feelings when they facilitate thought; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions to promote emotional and intellectual growth, have significant positive relationship with some organizational behaviours. Given how important emotions and the processing of emotional information are to social forms of learning, it would seem reasonable that such skills may play a role in group learning.

The fundamental abilities that make up emotional intelligence are more influential on how team members collaborate, how they learn, and what they do, both on an individual and collective level. The growing importance of intellectual capital to an organization's success gives its people a distinct competitive advantage on the job market in terms of how they gain new information, experience, and abilities (Goleman, 1995; Tran, 1998).

It has been discovered by Arfara et.al. (2018) that work-group emotional intelligence is closely related to and has a significant impact on employees' personal growth and development, the process of group learning, the dissemination of information within the group, and the organizational structures involved in that learning process. Emotional awareness and emotional management skills not only help people process emotional data that is then utilized to guide problem solving, but they also appear to help people manage a variety of emotional dimensions resulting from the team learning process (Clarke, 2010). These emotional skills also appear to be linked to focusing reflection on emotional data that later contributed to team identification. This finding in particular shows that the emotional dimension of identification may imply an essential role for emotional intelligence abilities, given the significance of identification as a process related with social learning.

The question of whether organizations that are acting through the work-groups, can achieve optimal performance through a collective learning process is one that many researchers are

exploring. This equation's secret is the development of group-level workplace competencies, and in particular, the development of group emotional intelligence competencies is one of the most important requirements for an organization's individual and group learning processes to be effective. The learning process is now understood to include both a cognitive and an emotional component (Gabriel and Griffiths, 2002; Ghosh et.al., 2012).

Additionally, Ghosh et.al. (2012)'s empirical study further establishes the link between emotional intelligence and the learning process in these work groups at the group level in an organization. While, Ghosh (2015) demonstrates that emotional intelligence is positively correlated with every aspect of a "learning organization" and is one of the major determinants of the establishment of an organizational culture of learning that enables the organization to be able to adapt to ongoing changes in the external environment. The same results have been reported in empirical studies by Singh (2007), Sanjay (2007), and Rafiq et.al. (2007) which support the idea that modern organizations gain a significant competitive advantage in a globalized environment when their members stand out for having high emotional intelligence.

Based on the above literature review following conceptual framework was used in this study:

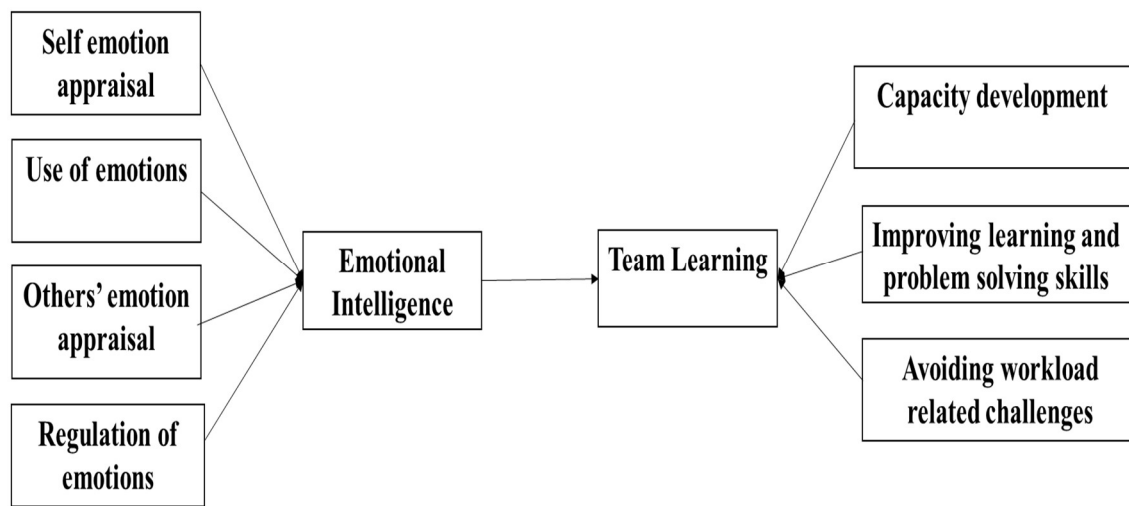


Figure 1: Conceptual Framework

3 Research Methodology

In this study, questions on emotional intelligence and team learning are collected from the journal of (Suehs, 2015) & (Seung Youn (Yonnie) Chyung & Carol M. Sevier, 2017). Respondents were employees from different software companies who were carefully and conveniently chosen. The participants answered a survey questionnaire structure in Likert 5.0 format. The paper was conducted with quantitative research and 28 structured questions in the questionnaire where 16 questions were made for emotional intelligence and the other 12 questions were made for

team learning at the workplace. Here, emotional intelligence is an independent variable and team learning at the workplace is a dependent variable. The questionnaire instrument was divided into some components based on emotional intelligence and team learning at the workplace. These are given below—

Emotional Intelligence measurement

- 1) Self-emotion appraisal.
- 2) Use of emotions
- 3) Other's emotion appraisal
- 4) Regulation of emotion

Team Learning measurement

- 1)Capacity Development
- 2)Improving learning and problem-solving skills
- 3)Avoiding workload-related challenges

The data collected from employees of different software companies through online survey. The sample size was 168 in this research. There were 75% of male respondents and the rest 25% of female respondents of different ages, educational qualification, designation and years of experiences of employees. According to the sample size, quantitative data was analyzed using demographic statistics, mean, standard deviation and other calculations.

The major factors of the questionnaire were emotional intelligence and team learning. Then I gave them a scale of one to five. Here, Strongly Disagree=1, Disagree=2, Neutral=3, Agree=4 and Strongly Agree=5.

4 Research Findings

According to gender basis on demographic factors, 126 respondents (75%) were male and 42 respondents (25%) were female. According to the age of staff, 156 people (92.86%) are 20-30 years old, 12 people (7.14%) are 30-40 years old. According to educational qualification, 108 people (64.29%) were bachelor graduates, 48 people (28.57%) were masters graduates, 6 people (3.57%) were diploma graduates and 6 people (3.57%) were Ph.D. graduates. According to the current designation of the workplace, 90 people (53.57%) are involved in software development, 30 people (17.86%) are involved in accounts officer, 24 people (14.29%) are involved in graphics design, 24 people (14.29%) are involved in others positions. According to years of experience in job, 144 people (85.71%) 0-3 years, 24 people (14.29%) 3-6 year.

Table 1: Demographic information

Demographic Characteristics	Frequency	Percentage
Gender		
Male	126	75
Female	42	25
Age (yrs.)		
20-30	156	92.86
30-40	12	7.14
40-50	0	0
Above 50	0	0
Highest Degree Obtained		
Bachelor	108	64.29
Masters	48	28.57
Diploma	6	3.57
PhD	6	3.57
Functional Area		
Software development	90	53.57
Accounts	30	17.86
Graphics design	24	14.29
Human Resources	0	0
Others	24	14.29
Work experience (yrs.)		
0-3	144	85.71
3-6	24	14.29
6-9	0	0
More than 9	0	0

In Table-2, we identified that the statistical mean ($M=15.79$) & standard deviation is 3.437 of 'Use of emotions' which was higher than all other emotional intelligence factors.

Table 2: Descriptive statistics on emotional intelligence

Sl.	Emotional Intelligence Factors	Mean	Standard Deviation
1	Self-emotion appraisal	3.89	0.86
2	Use of emotions	3.95	0.92

3	Other’s emotional appraisal	3.79	1.02
4	Regulation of emotion	3.54	1.25

In Table-3, we identified that the statistical mean (M=20.57) of ‘Improving learning and problem-solving skills’ which was higher than all other team learning factors.

Table 3: Descriptive Statistics on team learning at the workplace

Sl.	Team Learning Factors	Mean	Standard Deviation
1	Capacity Development	4.23	0.75
2	Improving learning and problem-solving skills	4.11	0.73
3	Avoiding workload-related challenges	2.89	1.18

In Table 4, we find that emotional intelligence is related to team learning at software companies with an R-value of 0.82%. So the R-value indicates that the 82% relationship between emotional intelligence and team learning at software companies is positive and strong. This table illustrates that emotional intelligence is positively and strongly correlated (0.82) with team learning and indicates that they both improve in the same way.

Table 4: Correlations Between Emotional Intelligence and Team Learning at the Workplace

	Emotional Intelligence	Team learning
Emotional Intelligence	1	
Team learning	0.82	1

Table 5 presents the result of regression analysis as emotional intelligence as independent variable and team learning as dependent variable. In Table 5, we find that emotional intelligence and team learning at software companies have been analyzed in regression analysis. According to the coefficient of determination ($R^2= 0.6724$), 67.24% variability in team learning can be accounted for by emotional intelligence.

Table 5: Regression between emotional intelligence and team learning at the workplace

	Coefficients	SE	t	p
Constant	31.653	3.836	8.250	0.000
Emotional intelligence	0.217	0.062	3.472	0.0008

5.2 Discussion

The sampling method was based on different demographic factors and functional units of some software companies. This study analyzed between emotional intelligence of software companies employees and their team learning capabilities.

In emotional intelligence factors at the software company, the highest statistical mean score (M=15.79) for 'Use of emotions', then (M=15.57) for 'Self-emotion appraisal', then (M=15.14) for 'Other's emotional appraisal' and finally the lowest score (M=14.18) for 'Regulation of emotion'. Another way in team learning factors at the software companies, the highest statistical mean score (M=20.57) for 'Improving learning and problem-solving skills', then (M=12.68) for 'Capacity Development' and finally the lowest score (M=11.57) for 'Avoiding workload-related challenges'. So this result denotes the high involvement in 'Use of emotions' for emotional intelligence factors and high involvement in 'Improving learning and problem-solving skills' for team learning factors.

The impact of emotional intelligence on team learning at different software companies was specifically examined in this study. After doing the entire analysis, we identified regression, correlation, and methods of emotional intelligence and team learning. In Table-4, we find that emotional intelligence is related to team learning at software companies with an R-value of 0.82%. So, the R-value indicates that 82% relationship between emotional intelligence and team learning at software companies was positive and strong.

Table 5 presents the regression result using emotional intelligence as independent variable and team learning as dependent variable. In Table 5, it is found that R² value between emotional intelligence and team learning at software companies is 0.6724. This means that 67.24% variability in team learning can be accounted for by emotional intelligence. Following the whole analysis, we have developed methods for regression, correlation and means of emotional intelligence and team learning. It demonstrates the positive effect of emotional intelligence on team learning. Correlation is 82% and the Regression value is 67.24% which is quite significant. So our findings show that hypothesis H1 is accepted and there is the positive effect of emotional intelligence on team learning. It is also found from the Table 5 that there is a significant relationship exists between emotional intelligence and team learning ($r=0.217$, $t= 3.472$, $p=0.000$).

6. Conclusion, Implication, and Research Limitations

6.1 Conclusion

Emotionally intelligent teams are more suited to participate in a collaborative culture because they can comprehend their own emotions as well as the emotions of their teammates, allowing them to control their emotions and behaviors. Emotional Intelligence was considerably positively connected with team trust in terms of managing others' emotions and managing one's own emotions, which encouraged a collaborative team.

Emotional Intelligence within a team helps individuals to be in control of their emotions as well as aware of the emotions of other team members, allowing a trusting connection to evolve. Emotional Intelligence also enables teams to communicate effectively and make decisions that benefit all members. Although Emotional Intelligence does not ensure that a team will perform effectively, it does enhance the team process. An emotionally competent team can regulate their own emotions, understand the emotions of their colleagues, and eventually use this information to assist and guide them through the group process. Emotional Intelligence enhances several areas of the team process, including effective problem solving, high-quality output and performance, trust, commitment, interpersonal connections, and cooperation.

6.2 Implications

The study has theoretical contribution in developing a framework that for promoting team learning through emotional intelligence. This model will help organizational in understanding the factors that regulate emotional intelligence and how employees can develop those emotional intelligence factors that will help them in learning while doing teamwork. Through developing proper emotional intelligence employees can also promote teamwork.

From the managerial point of view this study will give idea to the management to identify appropriate emotional intelligence components and promote right training program to enhance emotional intelligence. Also, this study will be helpful in developing employees to control their emotions under difficult situation. Moreover, the study will help organizations to understand how employees can use emotional intelligence in promoting teamwork. Lastly, this study will help managers to prepare their employees in taking responsibilities to achieve the team goal.

6.3 Research Limitations

The study was conducted on software companies only. Future research can be conducted in other organizations to understand the role of emotional intelligence on team learning. Further studies can be conducted to determine how the changes in emotional intelligence affect team learning through longitudinal study. Lastly, future study can be conducted under different cultural contexts to understand how culture develops emotional intelligence and how difference in emotional intelligence promotes team learning.

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