

**AN EXAMINATION OF THE RELATIONSHIP
BETWEEN EMOTIONAL INTELLIGENCE, LEADERSHIP
STYLES, AND LEADERSHIP EFFECTIVENESS**

Synopsis of the Thesis to be submitted in fulfillment of the requirement for the

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1. INTRODUCTION

1.1 BASIC INTRODUCTION

Effective leadership is essential for an organization's success; hence, the ability to identify and define effective leadership is crucial. Technical expertise, superior performance, and established experience are no longer only criterion of effective leadership. Today effective leaders are defined by inspiring and motivating others, promoting a positive work environment, understanding and managing emotions, building bonds, communications, and influence, and so forth.

Emotional Intelligence (EI) has an emerging track record of being linked to leadership performance [1]. Emotional intelligence connects a leader's cognitive abilities with their emotional state [2]. The ability for leaders to recognize the impact of their own emotions on their decision making is paramount if a leader is to make sound decisions based on the best interests of the organization. A leader must be able to read emotions in his/her peers and employees in order to be as effective as possible. Stogdill originated this notion with linkages of leader personality and control over emotions to employee perception of leader effectiveness [3].

Due to the complexity of organizational change and the role emotions play in changes such as global expansion, job eliminations, leadership changes, as well as stressors of day to day responsibilities, the EI of managers and how they manage their associates is an element that leadership needs to consider while moving their organizations forward.

Organizations everywhere need now to realize the benefits of primal leadership by cultivating leaders who generate the emotional resonance that lets people flourish [4].

1.2 NEED FOR THE STUDY

In today's global economy where outsourcing, downsizing and acquisitions are common place, companies must compete to find, attract, develop, and retain the best talent. Since

personnel turnover can directly impact a corporation's bottom line, it has now become an important concern of organizational leaders.

Strong leadership is the backbone of an organization. Leaders create the vision, support the strategies, and are the catalysts for developing the individual bench strength to move the organization forward. Therefore developing leaders to their full potential remains one of the great challenges for organizations today [5].

The priority placed on leadership is evidenced by the billions of dollars spent on leadership development each year [6] [7] [8]. Goleman et al. [4] posited that leaders use emotional intelligence to develop relationships that are in-sync with their organization by forming "emotional bonds that help them stay focused even amid profound change and uncertainty." Boyatzis concluded that emotional, social and cognitive intelligence competences predict effectiveness in professional, management and leadership roles in many sectors of society [9].

Research has also shown a positive correlation between EI and transformational leadership behaviours, which indicates that developing a leader's emotional intelligence competencies could be a predictor of that leader's ability to engage in transformational leadership behaviours. [10] [11] [12] [13].

In the past decade many studies of emotional intelligence and leadership have been conducted using different constructs of emotional intelligence and of leadership effectiveness. The review of literature gives a mix of findings of relationship between EI and leadership effectiveness and between EI & leadership styles. Some researchers have found significant positive relationships between these variables. And other researchers are doubtful about the predicting ability of emotional intelligence construct. Despite widespread application, there are few published studies of the empirical link between emotional & social competencies and performance [9]. In India a few studies have been conducted using these variables. As concluded by Srivastav et al. [14] it will be premature to draw any conclusion about emotional intelligence research in India. It will require many more researches to be conducted in India in different industries to reach to any specific conclusions.

1.3 CONCEPTUAL MODEL OF RESEARCH

A conceptual model of research has been proposed which incorporates relationship between EI and leadership styles and between EI and leadership effectiveness. Conceptual model of research is shown in Figure 1.

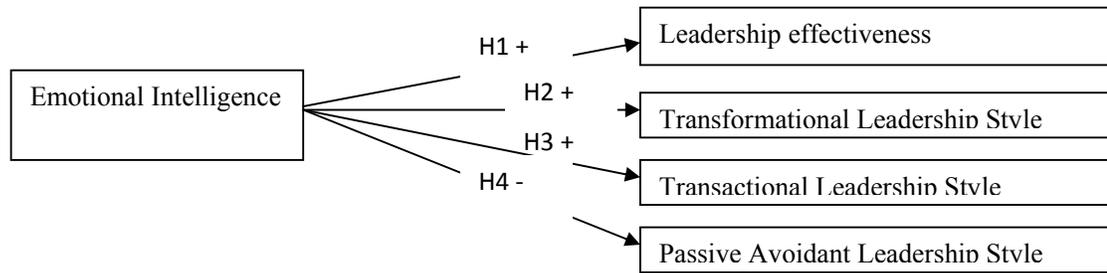


Figure 1: Conceptual Model

1.4 OBJECTIVES OF THE STUDY

1. To study the relationship between Emotional Intelligence of leaders and Leadership Effectiveness.
2. To study the relationship between Emotional Intelligence of leaders and Transformational Leadership Style.
3. To study the relationship between Emotional Intelligence of leaders and Transactional Leadership Style.
4. To study the relationship between Emotional Intelligence of leaders and Passive Avoidant Leadership Style.

1.5 RESEARCH METHODOLOGY

Based on a detailed discussion and literature review, the objectives of the study were chalked out. This was followed by comprehensive interviews and discussions with academicians of the related areas and senior executives of software organizations to select appropriate tools for conducting the survey.

Based on literature and discussions, two research instruments were identified and obtained from the publishers. The Emotional and Social Competence Inventory (ESCI) rating version was used for measuring the manager's emotional intelligence. The Multifactor Leadership Questionnaire (MLQ) 5x (Rater Form) was used for measuring the manager's leadership styles and leadership effectiveness. Paper-pencil versions of ESCI and MLQ 5x were used in the study. All the managers and their nominated subordinates of participating software organizations were invited to participate in the study. The managers were given the demographic surveys, which were returned by them along with names of two of their subordinates. The subordinates of each manager completed above two surveys. ESCI assesses 12 competencies. Each of these competencies is further organized into four clusters [15]. ESCI contains a total of 68 questions and the respondents rated their supervisors on a 6-point

Likert scale ranging from 1 (never) to 5 (consistently) with the 6th selection being don't know. The test has been shown to have desired reliability and validity [43]. The test also has been shown to have good model fit, and convergent and divergent validity at the scale level [44]. MLQ-5x is considered widely accepted measurement of transformational, transactional, and laissez-faire leadership styles and leadership outcomes [45].

1.6 RESEARCH DESIGN

The research design used in the study was descriptive. A quantitative method is appropriate for the study because the research seeks to establish a measurable relationship between variables. The survey data was analyzed with a two-step structural equation modeling (SEM).

1.7 SAMPLING

The population for the study is organizational managers who are employed at different software organizations in National Capital Region, India. The sample consisted of managers who have employees who report directly to them. A list of software organizations from National Association of Software and Services Companies (NASSCOM) directory was used for inviting the software organizations for participating in the research. The population is stated in vague terms to honor the request and to protect the confidentiality of the organizations participating in the study. From the NASSCOM List, E-mails were sent to the software organizations, which were employing minimum 100 employees, purposely so that sufficient & appropriate groups of managers and their subordinates are available to participate in the research. ESCI rating version requires at least two subordinates to rate the manager. These subordinates and manager must have been working together at least from six months. Participants in the study were not limited by gender, age, ethnicity or religion.

Software organizations that showed interest were approached for the detailed discussions of the research study. Senior executives of these organizations were briefed about the research objectives and participation requirements. The senior executives connected the researcher to their human resources (HR) departments for identifying participants for completion of research questionnaires. The HR department of each organization made a pool of managers, who fit in to the above requirement. All the managers of the pool were invited to participate in the study and give the names of minimum 2 subordinates who could rate their managers. The managers' and subordinates' participation was voluntary. The final sample for the study was 156 managers and 312 subordinates.

1.8 SIGNIFICANCE OF THE STUDY

The study is significant to two fields of study, leadership and EI. The study provided an opportunity to add new knowledge to the emotional intelligence concept as it applies to organizational leadership. Development of effective leaders is a high priority for business organizations. The issue of leadership effectiveness is core to the field of human resource development. The understanding may be of use for organizational leadership development practitioners to integrate EI with transformational/ transactional behaviors in the design and development of their leadership development programs.

If EI is an important entity for effective leadership, having an understanding of the behaviors in which EI leaders engage, may help leadership development practitioners refine and perfect their leadership development programs [16]. In addition to leadership development benefits, the study may also add important knowledge to the continued emergence of the EI construct in academic, psychology, and business applications. The significance of the study to leadership is that it might provide a baseline for linking emotional intelligence to transactional leadership behaviors, which may complement the existing knowledge concerning emotional intelligence and transformational-leadership behaviors. The role that emotional intelligence plays in the transformational and transactional-leadership paradigm might be better understood.

2. LITERATURE REVIEW

Thorndike defined social intelligence as “the ability to understand and manage men and women, boys and girls – to act wisely in human relations” [17]. Gardner included interpersonal and intrapersonal intelligences that are closely related to social intelligence in his theory of, multiple intelligences [18]. In 1990, Salovey and Mayer [2] first formally identified the term Emotional Intelligence (EI) and defined it as ‘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’.

Goleman popularized EI through his works *Emotional Intelligence* (1995) and *Working with Emotional Intelligence* (1998) [19] [20]. Goleman defined emotional intelligence as “the capacity for recognizing our own feelings and those of others, for motivating ourselves and for managing emotions well in ourselves and in our relationships” [20]. Since then, three primary models of EI have emerged [21]. First, the Bar-On [22] [23] model is a trait approach to EI wherein traits are related to adaptation and coping. Second, the Salovey-Mayer model

[24] defines EI as the skills to perceive, understand, manage and utilize emotions, measured by a baseline capacity. This ability model conceptualized EI as mental skill assessed through a performance test (Mayer- Salovey-Caruso Emotional Intelligence Test [MSCEIT]) [25]. Finally, the Goleman model defines EI as set of emotional and social competencies that lead to effective performance. Competencies have been defined as learned capabilities that contribute to effective performance at work [26] [27].

Transformational leadership theory is based primarily on Bass's work [38], although Burn's earlier work [39] influenced the thinking behind its development. The dynamics of transformational leadership involve strong personal identification with the leader, joining in a shared vision of the future, or going beyond the self-interest exchange of rewards for compliance. Transformational leaders, therefore, aim at reaching followers' emotional drivers to achieve results [40]. An effective transformational leader understands the needs and motivations of others and tries to help them reach their full potential [41].

Goleman finds that truly effective leaders are distinguished by a high degree of emotional intelligence [20]. Barling et al. conducted an exploratory study on the relationship between EI and transformational leadership [21]. Their results suggest that EI is associated with three aspects of transformational leadership, namely, idealized influence, inspirational motivation, and individualized consideration. The leaders who report exhibiting these behaviors were assumed to be more effective in the workplace.

Goleman, Boyatzis and Mckee conclude that the fundamental task of leaders is to prime good feelings in those they lead. [4]. Gardner and Stough conclude that EI is correlated highly with all components of transformational leadership, with the components of understanding of emotions and emotional management the best predictors of leadership style. A positive relationship between contingent reward (a component of transactional leadership) and emotional intelligence was also predicted [46]. Weinberger [47] conducted a study in a single organization and found that relationships between EI, leadership styles, and leadership effectiveness do not exist.

Mandell and Pherwani [48] conducted a small study and found an overall significant positive relationship between the total EI scores and transformational leadership scores of the managers. Prati et al. [50] proposed that the emotionally intelligent team leader will induce collective motivation in team members and the emotionally intelligent leader uses charismatic authority and transformational influence in order to improve team performance.

Antonakis J wrote a critique of the article by Prati et al. He concludes that excitement over the use of EI in the workplace is premature [49]. Antonakis J underline contradictions and inconsistencies which may cast doubt on the necessity of EI for understanding and predicting leadership effectiveness [28].

Leban & Zulauf [29] studied 24 project managers and their associated projects in six organizations from varied industries. The results of the study found that a project manager's transformational leadership style has a positive impact on actual project performance, that EI ability contributes to a project manager's transformational leadership style and subsequent actual project performance. Rahim & Psenicka studied the relationship of EI-empathy and social skills and found that supervisors need to acquire and use their social skills and empathy competencies to enhance their own effectiveness of leader role [30]. Leaders that demonstrate more EI than their peers outperform and advance quicker in their career [31].

Kerr et al., found that half of the MSCEIT scores may act as a strong predictor of leadership effectiveness [1]. Rosete and Ciarrochi [32] finding revealed that higher EI was associated with higher leadership effectiveness. Butler and Chinowsky conclude that a strong relationship between EI and leadership behaviours exists [33]. Vrba [34] conclude that there is positive correlation between all the EI skills and the transformational styles. Ramo, Saris, and Boyatzis studied Spanish executives and found that emotional competencies and personality traits are valuable predictors of job performance and competencies seem to be more powerful predictor of performance than global personality traits [35].

Srivastava and Bharamanaikar [36] examined leadership effectiveness with a unique population of 291 Indian army officers. The results significantly supported the connection between leader EI and all of the components of the transformational leadership style. Higher EI scores were also found for the contingent reward component of transactional style. Singh [37] studied 210 males and 130 females in an Indian software organization and found that EI of the both gender was positively associated with their leadership effectiveness and EI of the both gender predicted strongly to their leadership effectiveness. Duckett and Macfarlane examined EI and transformational leadership relationships in the managers of 21 retail stores of UK, and found a "strong" relationship [42]. Srivastava A K, Sibia, Misra G Conclude that the study of EI in India has taken off with a good start and it will be premature to draw any conclusion at this juncture [14].

3. ANALYSIS AND FINDINGS

To begin with, personal profile of the managers was tabulated. Reliability and validity of the research instruments used were computed. The findings have been explained according to the hypothesis of the study. For each hypothesis testing, correlations were run using SPSS and AMOS was used to develop Measurement model and Structural Model.

3.1 Sample Description and Demographics

The sample consisted of 156 managers who are employed by different software organizations and who have minimum 2 employees that directly report to them. The 156 managers completed the demographics survey. 2 direct reports to these 156 managers rated their managers using ESCI and MLQ5x. Descriptive analysis showed that 85% of managers were male and 15% were female respondents. 87% of respondents were married and 12% Bachelor along with 1% belonging to others category. Out of total respondents 69% were below 35 years of age and remaining 31% belonged to higher age groups.

3.2 Reliability of Research Instruments

Cronbach's Alpha values of Emotional Intelligence Competencies and leadership styles and leadership effectiveness scales are shown in Table 1 and Table 2.

3.3 Confirmatory Factor Analysis & Convergent and Discriminant Validity

To test for convergent validity, items in each construct must have reliabilities (loadings) over 0.5 [51] [52] and Composite Reliabilities (CR) should be over 0.7 [53], and greater than their respective Average Variance Extracted (AVE). Lastly, the average variance extracted should be maximized, with a minimum of 50% [54]. Discriminant validity is established by showing that the correlation between any two constructs is less than the square root of the average variance extracted by the measures of that construct [55]. For each of the scales in each of the analyses, all construct CR, AVE, and their relationship have met the respective thresholds to be considered as showing sufficient convergent validity. The square root of the AVE was greater than the inter-scale correlations, showing discriminant validity for each of the scales for each of the analyses. Measurement models of emotional intelligence clusters, leadership styles and leadership effectiveness are shown in Tables 3 to Table 5. The indicators of convergent and discriminant validity for the ESCI and MLQ 5x are shown in Tables 6 to Table 10. Conflict Management competence and some items from other ESCI competences and leadership scales were removed from analysis due to poor loadings. The relationships

among variables were tested using AMOS 18.0. The data was analysed via a two step process by, examining the measurement model and then the structural model for each hypothesis.

Table 1: Cronbach’s Alpha values of Emotional Intelligence Competencies

Cluster	Competency	Cronbach’s Alpha
Self Awareness	Emotional Self Awareness	.771
Self Management	Achievement Orientation	.835
Self Management	Adaptability	.832
Self Management	Emotional Self-Control	.809
Self Management	Positive Outlook	.819
Social Skills	Empathy	.869
Social Skills	Organizational Awareness	.856
Relationship Management	Conflict Management	.623
Relationship Management	Coach and Mentor	.872
Relationship Management	Influence	.781
Relationship Management	Inspirational Leadership	.822
Relationship Management	Teamwork	.799

Table 2: Cronbach’s Alpha values of Leadership Style and Effectiveness scales

Characteristic	Scale Name	Cronbach’s
Transformational	Idealized Attributes	.876
Transformational	Idealized Behaviors	.851
Transformational	Inspirational Motivation	.838
Transformational	Intellectual Stimulation	.749
Transformational	Individualized consideration	.683
Transactional	Contingent Reward	.827
Transactional	Mgmt. by Exception (Active)	.792
Passive Avoidant	Mgmt. by Exception (Passive)	.649
Passive Avoidant	Laissez-Faire	.799
Outcomes of Leadership	Extra Effort	.873
Outcomes of Leadership	Effectiveness	.899
Outcomes of Leadership	Satisfaction	.975

Overall fit of each model was assessed by chi-square /degree of Freedom (χ^2/df), Comparative Fit Index (CFI) and Root Mean Square Error of Approximation (RMSEA). The values of χ^2/df , CFI and RMSEA were compared with the recommended values. χ^2/df should be less than 3, CFI $\geq .90$ and RMSEA $< .80$ are considered good [56] [57] [58] [59].

Table 3: Measurement Model Emotional Intelligence Clusters

Fit Measures	CFA-SA	CFS-SM	CFA-SoA	CFA-RM
χ^2/df	1.079	2.877	2.968	1.748
CFI	1.00	.934	.975	.975
RMSEA	.016	.078	.80	.049

Note: SA: Self Awareness, SM: Self Management, SoA: Social Awareness, RM: Relationship Management

Table 4: Measurement Model Leadership Styles

Fit Measures	CFA-TF	CFS-TS	CFA-PA
χ^2/df	2.446	1.116	2.727
CFI	.962	.999	.989
RMSEA	.068	.023	.075

Note: TF: Transformational Leadership, TS: Transactional Leadership, PA: Passive Avoidant

Table 5: Measurement Model Leadership Effectiveness

Fit Measures	CFS-Leadership Effectiveness
χ^2/df	2.353
CFI	.990
RMSEA	.066

Table 6: Convergent validity and Discriminant validity of Emotional & Social Competency Inventory Constructs

	CR	AVE	Team	ESA	Achieve	Adapt	PO	ESC	Emp	Org	ILead	Influ	Coach
Team	0.858	0.603	0.776										
ESA	0.818	0.530	0.503	0.728									
Achieve	0.879	0.645	0.638	0.607	0.803								
Adapt	0.844	0.576	0.721	0.622	0.754	0.759							
PO	0.851	0.589	0.758	0.582	0.738	0.690	0.768						
ESC	0.837	0.563	0.558	0.472	0.608	0.653	0.648	0.750					
Emp	0.899	0.689	0.687	0.563	0.654	0.731	0.756	0.646	0.830				
Org	0.878	0.643	0.499	0.575	0.520	0.588	0.468	0.374	0.633	0.802			
ILead	0.901	0.694	0.673	0.539	0.662	0.711	0.705	0.510	0.694	0.566	0.833		
Influ	0.848	0.583	0.623	0.568	0.652	0.657	0.645	0.535	0.647	0.496	0.631	0.764	
Coach	0.906	0.658	0.710	0.593	0.675	0.718	0.683	0.513	0.773	0.583	0.767	0.661	0.811

Note: CR: Composite Reliability, AVE: Average Variance Extracted, ESA: Emotional Self Control, PO: Positive Outlook, ESC: Emotional Self Control, Adapt: Adaptability, Achieve: Achievement Orientation, Org: Organizational Awareness, Emp: Empathy, Team: Teamwork, Influ: Influence, Inspire: Inspirational Leadership, Coach, Coach and Mentor,

Table 7: Convergent validity and Discriminant validity MLQ 5x Leadership Effectiveness Constructs

	CR	AVE	EFF	EE	SAT
EFF	0.892	0.735	0.857		
EE	0.874	0.699	0.813	0.836	
SAT	0.975	0.951	0.738	0.654	0.975

Note: CR: Composite Reliability, AVE: Average Variance Extracted, EE: Extra Effort, EFF: Effectiveness SAT: Satisfaction

Table 8: Convergent validity and Discriminant validity of MLQ 5x Transformational Leadership Style Constructs

	CR	AVE	IB	IA	IM	IS	IC
IB	0.871	0.692	0.832				
IA	0.868	0.687	0.824	0.829			
IM	0.843	0.641	0.775	0.761	0.801		
IS	0.847	0.649	0.715	0.671	0.761	0.806	
IC	0.839	0.635	0.758	0.707	0.679	0.791	0.797

Note: CR: Composite Reliability, AVE: Average Variance Extracted, IA: Idealized Attributes, IB: Idealized Behaviour, IM: Inspirational Motivation, IC: Individualized Consideration, and IS: Intellectual Stimulation

Table 9: Convergent validity and Discriminant validity of MLQ 5x Transactional Leadership constructs

	CR	AVE	CR	MA
CR	0.817	0.598	0.773	
MA	0.852	0.658	0.596	0.811

Note: CR: Composite Reliability, AVE: Average Variance Extracted, CR: Contingent Reward, MA: Management by Exception (Active), MP: Management by Exception (Passive), LF: Laissez-faire

Table 10: Convergent validity and Discriminant validity of MLQ 5x Passive Avoidant Leadership constructs

	CR	AVE	MP	LF
MP	0.879	0.709	0.842	
LF	0.907	0.764	0.588	0.874

Note: CR: Composite Reliability, AVE: Average Variance Extracted, MP: Management by Exception (Passive), LF: Laissez-faire

3.4 TEST OF HYPOTHESIS

3.4.1. Hypothesis 1 stated a positive relationship between the Emotional Intelligence of leaders and Leadership Effectiveness

Correlations were run among four Clusters of emotional intelligence Self Awareness (SA), Self Management (SM), Social Awareness (SoA), and Relationship Management (RM) and three factors of leadership effectiveness Extra Effort (EE), Effectiveness (EFF) and Satisfaction (SAT). The correlations results revealed significant positive correlations among

all four clusters of EI and three factor of leadership effectiveness. Table 11 depicts the correlation results among four clusters of emotional intelligence and three factor of leadership effectiveness. The relationship was tested using amos software. The measurement model was valid. The fit of the data is good in structural model of EI and leadership effectiveness. Social Awareness and Relationship Management have positive effects on Leadership effectiveness (.470 and .337 respectively). 55.7 % variance in leadership is explained by EI. Structural model of EI and leadership effectiveness is shown in Figure 2.

Table 11: Correlations among Emotional Intelligence clusters and Leadership Effectiveness scales

	Extra Effort	Effectiveness	Satisfaction
Self Awareness	.468**	.363**	.443**
Self Management	.576**	.559**	.636**
Social Awareness	.590**	.645**	.540**
Relationship Management	.597**	.553**	.618**

** . Correlation is significant at the 0.01 level (2-tailed).

Fit Indices of Measurement Model of EI and Leadership Effectiveness

- χ^2/df :2.032 p: .000 , Comparative Fit Index (CFI): .963
- Root Mean Square Error of Approximation (RMSEA): .058 PClose: .122

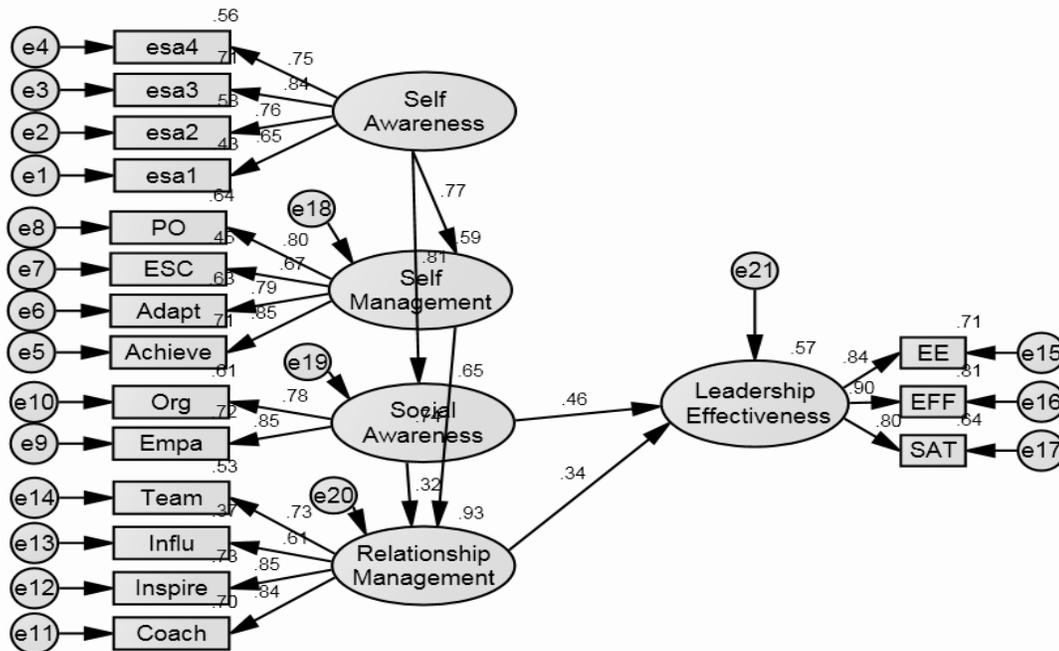


Figure 2: Structural Model of Emotional Intelligence and Leadership Effectiveness

Model Fit Summary of Structural Model of EI and Leadership Effectiveness

- χ^2/df : 1.950 p: .000, Comparative Fit Index (CFI): .936
- Root Mean Square Error of Approximation (RMSEA): .080 PClose: .002

Hypothesis 1 was supported.

3.4.2. Hypothesis 2 stated a positive relationship between the Emotional Intelligence of leaders and Transformational Leadership Style

The correlations results revealed significant positive correlations among all four clusters of EI and five factors Idealized Attributes (IA), Idealized Behaviour (IB), Inspirational Motivation (IM), Individualized Consideration (IC), and Intellectual Stimulation (IS) of transformational leadership style. Table 12 depicts the correlation results among four clusters of EI and five scales of transformational leadership style. The relationship was also tested using amos software. The measurement model was valid and the fit of the data is good in structural model of EI and transformational leadership style. Social Awareness and Relationship Management have positive effects on Leadership effectiveness (.576 and .273 respectively). 60 % variance in transformational leadership style is explained by EI. Structural model of emotional intelligence and transformational leadership scales is shown in Figure 3.

Table 12: Correlations among Emotional Intelligence clusters and Transformational Leadership scales

	Idealized Influence	Idealized Behaviour	Individualized Consideration	Inspirational Motivation	Intellectual Stimulation
Self Awareness	.423**	.456**	.417**	.301**	.480**
Self Management	.579**	.585**	.552**	.580**	.612**
Social Awareness	.605**	.611**	.603**	.598**	.600**
Relationship Management	.529**	.556**	.561**	.604**	.555**

** . Correlation is significant at the 0.01 level (2-tailed).

Model Fit Summary of Measurement Model EI & Transformational Leadership Style

- χ^2/df : 1.870 p: .000, Comparative Fit Index (CFI): .965
- Root Mean Square Error of Approximation (RMSEA): .053 PClose: .305

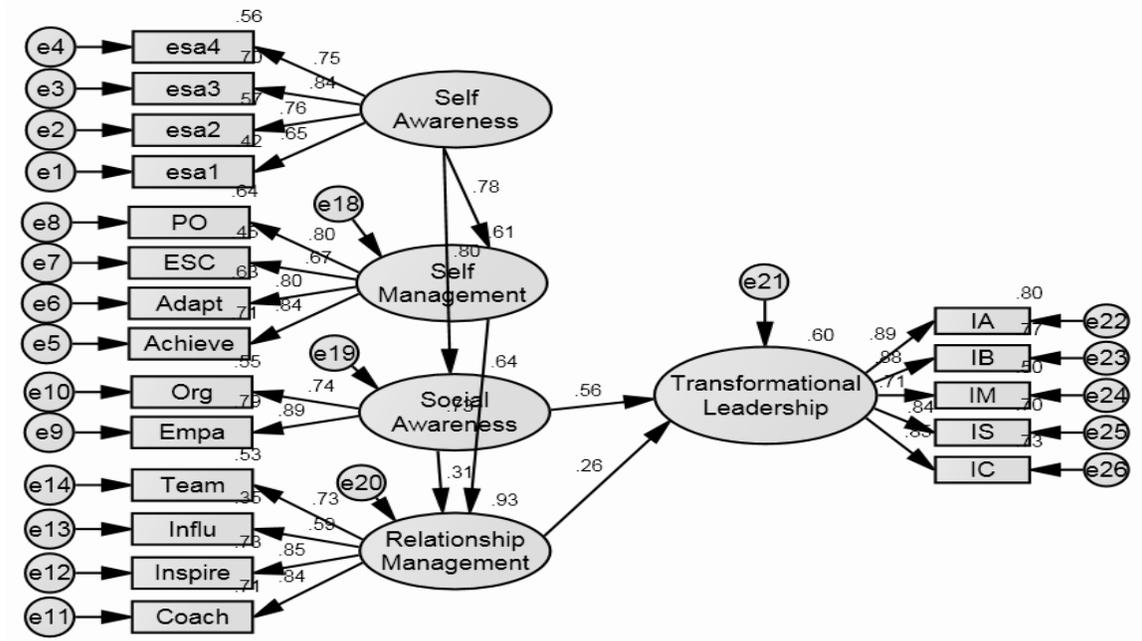


Figure 3: Structural Model of Emotional Intelligence & Transformational Style

Model Fit Summary of Structural Model of EI & Transformational Leadership Style

- χ^2/df : 1.904 p: .000, Comparative Fit Index (CFI): .934
- Root Mean Square Error of Approximation (RMSEA): .078 PClose: .001

Hypothesis 2 was supported.

3.4.3. Hypothesis 3 stated a positive relationship between the Emotional Intelligence of leaders and Transactional Leadership Style

Correlations results revealed significant positive correlations among all four clusters of EI and two factors Contingent Reward (CR), and Management by Exception Active (MA) of transactional leadership style. Table 13 depicts the correlation results among four clusters of factors of transactional leadership style. The relationship was also tested using amos software. The measurement model was valid and the fit of the data is good in structural model of EI and transactional leadership style. Only Social Awareness has a positive effect on Transactional style (.760). 68 % variance in transactional leadership style is explained by EI. Structural model of EI and transformational leadership is shown in Figure 4.

Table 13: Correlations among Emotional Intelligence clusters and Transactional Leadership scales

	Contingent Reward	Management by Exception (Active)
Self Awareness	.371**	.300**
Self Management	.506**	.321**
Social Awareness	.569**	.483**
Relationship Management	.560**	.407**

** . Correlation is significant at the 0.01 level (2-tailed).

Model Fit Summary of Measurement Model of EI & Transactional Leadership Style

- χ^2/df : 1.834 p: .000, Comparative Fit Index (CFI): .970,
- Root Mean Square Error of Approximation (RMSEA): .052 PClose: .390

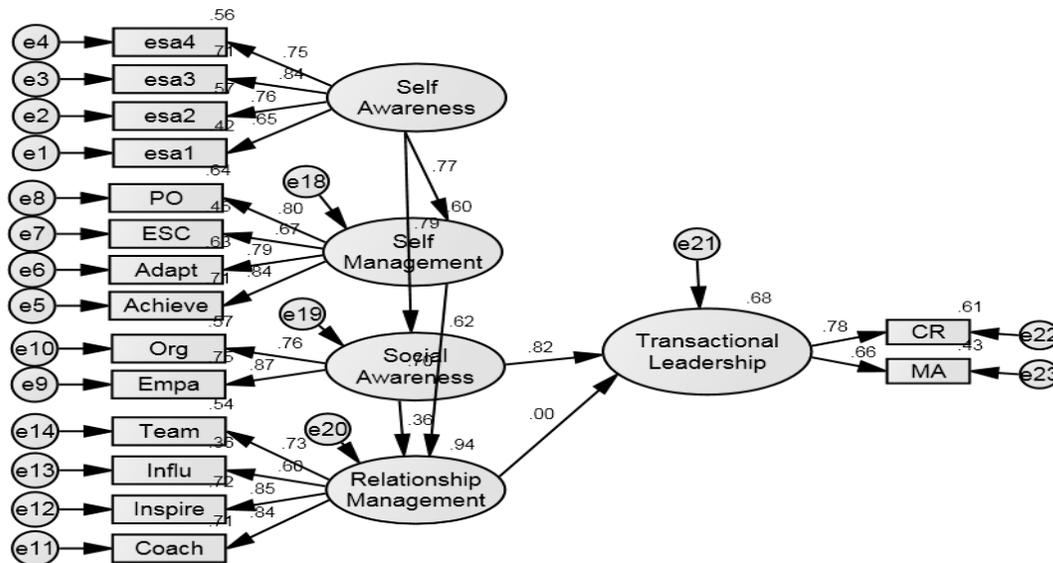


Figure 4: Structural Model of Emotional Intelligence & Transactional Leadership Style

Model Fit Summary of Structural Model of EI & Transactional Style

- χ^2/df : 1.881 p: .000, Comparative Fit Index (CFI): .939
- Root Mean Square Error of Approximation (RMSEA): .077 PClose: .007

Hypothesis 3 was supported.

3.4.4. Hypothesis 4 stated a negative relationship between the Emotional Intelligence of leaders and Passive Avoidant Leadership Style.

The correlations results revealed negative correlations among all four clusters of EI and two scales Exception Passive (MP), and Laissez-Faire (LF) of passive leadership style. Table 14 depicts the correlation results among four clusters of EI and two scales of passive avoidant leadership style. The measurement model was valid and the fit of the data is good in structural model of EI and passive avoidant leadership style. Relationship Management has negative effect on passive avoidant Leadership style (-.690). 31 % variance in passive avoidant style is explained by EI. Structural model of EI and transformational leadership is shown in Figure 5.

Table 14: Correlations among Emotional Intelligence clusters and Passive Avoidant Leadership scales

	Management by Exception (Active)	Laissez-Faire
Self Awareness	-.153	-.205*
Self Management	-.359**	-.448**
Social Awareness	-.233**	-.300**
Relationship Management	-.317**	-.377**

** . Correlation is significant at the 0.01 level (2-tailed).* . Correlation is significant at the 0.05 level (2-tailed).

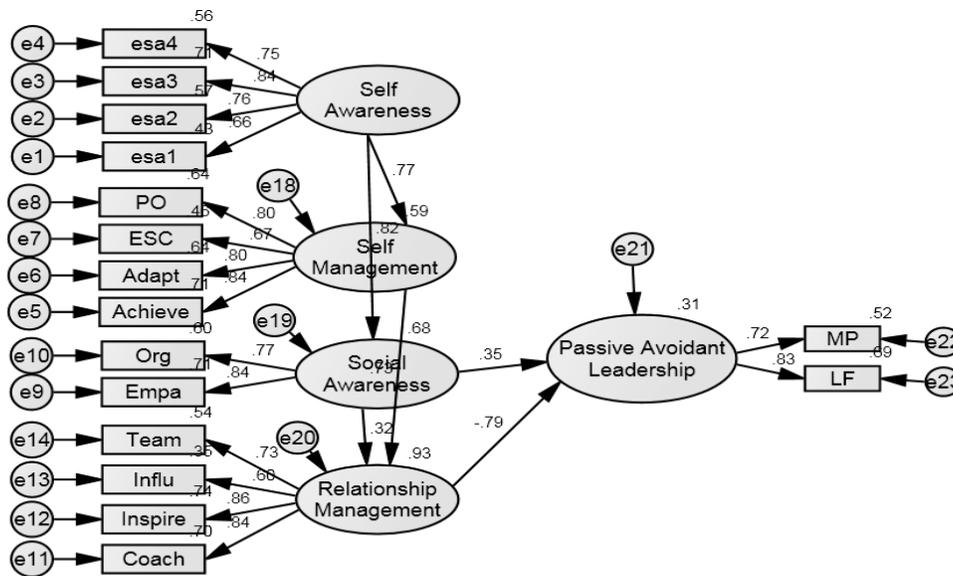


Figure 5: Structural Model of Emotional Intelligence & Passive Avoidant Leadership Style

Model Fit Summary of Measurement Model of Emotional Intelligence & Passive Avoidant Leadership Style

- χ^2/df :1.891 p: .000, Comparative Fit Index (CFI): .967
- Root Mean Square Error of Approximation (RMSEA): .054 PClose: .302

Model Fit Summary of Structural Model of EI & Passive Avoidant Leadership Style

- χ^2/df :1.8205 p: .000, Comparative Fit Index (CFI): .942
- Root Mean Square Error of Approximation (RMSEA): .074 PClose: .014

Hypothesis 4 was supported.

4. CONCLUSION

Companies are continuously searching for strategies to strengthen leadership abilities in the organization. According to the study results, a statistically significant relationship exists between EI and leadership effectiveness among software supervisors. The high correlation between EI and leadership effectiveness indicate that higher levels of emotional intelligence is associated with higher leadership effectiveness. Supervisors having high EI will influence their subordinates in putting extra efforts and these subordinates will perceive their supervisors more effective and will be satisfied with them. Earlier researches [32], [33], [35] [69] [70] [32] [71] [72] [73] have already supported role of EI in leadership effectiveness.

According to the study results, a statistically significant relationship exists between EI and transformational leadership style among software supervisors. Consequently, supervisors with high EI scores and transformational leadership skills would be expected to positively influence individuals, teams, and organizations that are experiencing significant organizational change. Transformational leadership model expands the leader's role from simple leader-follower exchange agreements to inspiring and motivating followers to achieve goals beyond their own expectations [63]. Transformational leaders have the ability to stimulate other leaders, colleagues, and followers to embrace new organizational perspectives, support the vision or mission of the organization, and achieve higher levels of performance [61] [62] [41] [63].

These findings are in line with prior research studies that have shown a positive relationship between EI and transformational leadership styles [10] [19] [60]. Transformational leaders enhance follower satisfaction and performance by demonstrating idealized leadership, inspirational motivation, intellectual stimulation, or individualized consideration [41].

The findings of this study indicate that leaders EI is also impacting transactional leadership style. These findings are in line with some prior research studies that have shown a positive relationship between EI and transactional leadership styles [36] [46]. Transactional leadership may be effective in certain situations; however, it is less effective when the leader does not have oversight of the reward process. Transactional leaders may have a marginal effect on follower performance but are more effective when used in conjunction with transformational leadership behaviours [62] [63]. The findings also indicate that EI is negatively related with passive avoidant leadership style.

This study provides more accurate estimates of the relationships between EI and leadership effectiveness and leadership styles because in this study measurement error is corrected using Structural Equation Modeling (SEM). SEM can take measurement error into account in order to provide more accurate estimates of the relationship between constructs [52]. The behavioural level of EI is most likely to relate to job performance and outcomes [74] [75]. This study used EI competencies as measured by “others observations”. The “others observations” are demonstrated behaviours of managers as seen by their subordinates. Thus, the study provides better understanding of relationship between EI and leadership effectiveness and leadership styles.

4.1 IMPLICATIONS OF THE STUDY

Effective leaders use their EI to manage themselves and to effectively manage and direct others within the organization. The results of this study suggest that EI has a significant effect on leadership; therefore, higher levels of EI could help improve leadership performance and leadership effectiveness in the software industry. EI can be improved upon with training and development. Therefore, training programs within the organization could have a positive effect on leadership and leadership performance, hence driving the organization to organizational success. Many practitioners and scholars believe that emotional intelligence can be improved upon through development and training programs [64] [65] [66] [67]. Therefore, for leaders employed in the organization, organization can focus on creating or gearing training and development programs toward improving levels of existing leaders' EI.

According to the findings of the study, EI also had a statistically significant relationship with transformational and transactional leadership styles. Consequently, organizational leaders may want to place an emphasis on developing comprehensive leadership development programs that include EI and full range leadership. Doing so will allow team members to

learn shared leadership skills on the job, gain emotion-based skills to enhance and improve self learning, develop leaders as mentors, and assess and develop emotional competencies throughout the organization [66].

The results of this study could affect leadership effectiveness by providing software organizations with a transformational model of EI. The transformative learning of EI encourages employees to explore, identify, understand, learn, and apply the skills and behaviours essential for effective leadership. The transformative learning model includes an emotional learning process that integrates self-directed coaching, relationship-focused learning (mentoring and coaching), and actively performing positive behaviours [68].

Organizations may create an assessment tool that includes a measure of EI to increase the probability of successful person/job fit for the organization.

4.2 LIMITATIONS AND SCOPE FOR FURTHER RESEARCH

There are a few limitations of the study.

(1). Data was collected from software organizations from national capital region of India. Representative sample from different software hubs of India is required to further investigate the relationship between emotional intelligence, leadership effectiveness and leadership styles. The analysis also suffers from small sample size, which could be increased by collecting data from other software hubs of India.

(2). While collecting data for emotional intelligence and leadership effectiveness and styles, responses from subordinates were collected. Further research may be conducted in which data is collected from peers and supervisors as well.

(3) It is also suggested that future research might use a longitudinal design. Further studies may use a research approach that allows emotional intelligence to be assessed first and leadership effectiveness and leadership styles to be assessed some time later.

5. ORGANIZATION OF THE THESIS

The study has been organized in five chapters. A brief outline of the various chapters is as follows:

Chapter 1 is an introduction of the thesis. It briefly explains the introduction, underlines the objectives, the need and significance of the study.

Chapter 2 illustrates the research work that has taken place globally with reference to emotional intelligence and leadership.

Chapter 3 explains description of sampling, tools of data collection, and tools of data analysis.

Chapter 4 explains data analysis, interpretation and discussion of findings.

Chapter 5 is devoted to conclusions and implications. This chapter also discusses the limitations and scope for future research.

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