

Emotional Intelligence & Shared Leadership: Moderating Role of Task Interdependence

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Shared leadership is a phenomenon which is critical for the organizations especially in the context of organizations shifting to team-based structures. The current study examines the relationship between emotional intelligence of team members and degree of shared leadership in teams. The study also investigates the moderating role of task interdependence on this relationship. Data was collected from 244 respondents who were part of 40 teams. The study shows that there is a positive relationship between emotional intelligence and shared leadership and that this relationship is moderated by the level of task interdependence. This research extends the literature of shared leadership by explaining antecedents and moderating conditions to shared leadership.

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Introduction

Research in the area of shared leadership has grown in the last two decades. There are several reasons for the increasing interest in the concept of shared leadership. First, many organizations are shifting to team-based structures (Salas et al., 2008) and the traditional understanding of leadership may not be the best way to deal with organizations which have team-based structures. Traditional leadership style focuses primarily on top-down approach, while, shared leadership is more fluid and includes lateral influence (Pearce & Conger, 2003). Another reason for the wide interest in research in shared leadership is because of its usefulness in predicting other important organizational outcome variables such as employee performance (Carson, Tesluk & Marrone, 2007), team learning (Liu, Hu, Li, Wang & Lin, 2015), task satisfaction (Serban & Roberts, 2015), and team satisfaction (Serban & Roberts, 2015).

The research pertaining to antecedents of shared leadership is primarily limited to various team level factors such as internal team environment, external

team coaching (Carson, Tesluk & Marrone, 2007), task cohesion (Serban & Roberts, 2015) etc. However, there is a dearth of research investigating the factors at individual level which influence shared leadership in teams. The objective of the current study is to examine emotional intelligence as an antecedent to shared leadership in teams. The study also aims to investigate the moderating role of emotional intelligence in authenticity – shared leadership relationship.

The study aims to make several contributions. First, existing literature does not succinctly answer the questions pertaining to the individual characteristics of members which would have an impact on the degree of shared leadership in teams. This is an important gap to be addressed because research about individual level of antecedents will give insights regarding what characteristics to look for, while designing teams which has to operate with shared leadership. This study proposes authenticity as a key antecedent of shared leadership. Second, it is important to study various underlying mechanisms which influence shared leadership. Our study makes unique contributions in terms of investigating authenticity as an antecedent and task interdependence as a moderator in shared leadership phenomenon.

Emotional Intelligence

The interest in the area of emotional intelligence began with research findings that employee success in organizations is not just a result of traditional cognitive abilities such as IQ but there are other

strong predictors of success at work such as social intelligence and emotional intelligence (Bar-On, 1980). Thus, the concept of emotional intelligence was born. The concept of EI is not contrary to the concept of IQ, instead it is an extension of human potential to succeed in a people-oriented environment (Stein & Book, 2001: 6).

Salovey and Mayor (1990) coined the term emotional intelligence. With the onset of research in emotional intelligence, different researchers defined it from different perspectives such as it being a skill, trait or ability (Bar-on, 2000; Goleman, 1995; 1998; Mayer & Salovey, 1997). Thus, there are several theories pertaining to emotional intelligence.

The first major theory was given by Bar-On (1998). He coined the term emotional quotient which referred to the ability to effectively deal with environmental demands. Bar-On's measure of emotional intelligence comprised five domains i.e. intrapersonal skills, interpersonal skills, adaptability, stress management and general mood. The second theory of emotional intelligence was given by Mayer, Caruso and Salovey (1998) who developed a Multifactor Emotional Intelligence Scale (MEIS). Initially, Salovey and Mayor (1990) proposed that emotional intelligence consists of three dimensions i.e. appraisal and expression of emotion, regulation of emotion to deal with problems. Appraisal and expression of emotion refers to ability to detect emotions in self and others. Second dimension refers to regulation of emotions in self and others. The third dimension of

utilization of emotions refers to planning, creative thinking and motivation to utilize the emotion. In 1997, Salovey and Mayor (1990) revised the model of emotional intelligence and proposed four components of emotional intelligence i.e. perception, appraisal and expression of emotion, emotional facilitation of thinking and reflective regulation of emotions. This revised model primarily focused on the cognitive dimension of emotional intelligence. Unlike the EQ-I test developed by Bar-On (1997) which is based on self-report, MEIS was developed as a test of ability. MEIS test was later revised by Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT, Mayer, Salovey, Caruso & Sitarenios, 2003).

The third theory of emotional intelligence was given by Goleman (1998). He used the term emotional competence which refers to “a learned capability based on emotional intelligence that results in outstanding performance at work”. According to Goleman, there are four areas of emotional competence i.e. self-awareness, self-management, social awareness and relationship management. He proposed that emotional competencies can be learnt and people can master them with practice and through its usage they can be better effective at work.

Shared Leadership

Yukl (1989:5) defined leadership as “influence processes involving determination of the group’s or organization’s objectives, motivating task behavior in pursuit of these objectives, and influencing group maintenance and culture”.

Shared leadership occurs when multiple members of the team performs leadership function by sharing the roles, functions and responsibilities of leadership (Day, Gronn & Salas, 2006; Pearce & Conger, 2003). According to Hiller and colleagues (2006: 388), “the epicenter of collective (shared) leadership is ...the interaction of team members to lead the team by sharing in leadership responsibilities”.

According to Pearce and Conger (2003:1), shared leadership is “a dynamic, interactive influence process among individuals in groups for which the objective is to lead and another to the achievement of group or organizational goals or both... leadership is broadly distributed among a set of individuals instead of centralized in [the] hands of a single individual who acts in the role of a superior”.

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Leadership involves multiple roles (Hollander, 1985) and there is no conclusive list of roles to be played by a leader. How the roles get shared about team members in shared leadership is a pertinent question. The early studies of Bales (1950) and Bales and Slater (1955) identified task and relational roles as the key roles displayed by team members in leaderless groups. Hollander (1961) did a review of literature on emergent leadership and found task focused behavior

and relation focused behavior were both important to be selected as leaders. Seers et al. (2003) observed that the most respected team members took the role of task leader and the most liked team member occupies the social or relational leader role.

Hiller et al. (2006) developed a four-dimensional typology to explain the enactment of various members under team leadership. They explained planning and organizing, problem-solving, support and consideration and developing and mentoring as the four functions within teams, but did not explain how these roles are divided to decide who will play how much of each of these functions within the team. Gronn (2002) found that there are three components which explain the way leadership roles are exchanged between the team members. These components are a logistical exchange of leadership roles, exchange behaviors that are relational in nature and elements that create conditions for exchanges between leaders and followers.

Meta-analysis conducted by Nicolaides et al (2014) found out three methods are commonly used by researchers for measuring shared leadership. The first approach entails administering leadership behavior questionnaire and aggregating using a direct-consensus or referent-shift consensus model (Chen, 1998) where the referent can be either the individual members or the team respectively (Pearce & Sims, 2002; Avolio et al., 1996). Second approach uses a direct consensus or referent shift consensus model that relies on a functional leader-

ship paradigm and measures shared behaviors, such as boundary spanning (Morgeson et al., 2010; Hoch & Kozlowski, 2012). The third way of measuring shared leadership takes social network approach. Social network is a set of individuals and the relationship shared by them. Social network approach in shared leadership involves team members rating other team members according to the degree to which they exercised leader like influence (Carson et al., 2007; Mayo, Meindl & Pastor, 2003; Mehra, Smith, Dixon & Robertson, 2006; Seibert, Sparrowe, & Liden, 2003). Social network approach captures the relational approach by demonstrating the actual distribution of leadership in teams (Mehra et al., 2006).

Emotional Intelligence & Shared Leadership

Emotional intelligence is defined as “a form of social intelligence that involves the ability to monitor one’s own and others’ feelings and emotions, to discriminate among them and to use this information to guide one’s thinking and action” (Salovey & Mayor, 1990). According to Mayor and Salovey (1997), emotional intelligence will help individuals to not only perceive and assess emotions but also to act upon it. Emotions are contagious and while working in teams, members can influence other members with their emotions.

Shared leadership is a phenomenon of lateral influence where an individual is willing to both accept and exert influence from other members in the team

(Pearce & Conger, 2003). Members who are high on emotions would be sensitive to their own emotions pertaining to their confidence and ability in dealing with a problem situation. It is expected that individuals who are high on emotional intelligence will be able to sense the need to seek help and accept leadership of other members when they feel that they are not themselves clear about how to go about things while working in a team. Similarly, individuals with high emotional intelligence will also be able to assess their emotions and take decisions pertaining to when to exert leadership on team members. Therefore, it is hypothesized that:

H1: Emotional Intelligence will positively influence shared leadership

Moderating Role of Task Interdependence

Task interdependence refers to the degree to which members of a team are dependent on other members in the team to complete their task. Kozlowski and Ilgen (2007) said that if the research on teams does not include interdependence then that research is of little relevance. We expect that there is stronger relationship between emotional intelligence and shared leadership when there is higher level of task interdependence. This is because when the nature of task requires higher level of interdependence on team members, it will require more interaction and coordination amongst team members (Zacarro et al., 2009). And when high level of interaction is required between team members, then emotional intelli-

gence will play in critical role in determining shared leadership. If the members are able to manage their own emotions and are able to take cue about others' emotions, they would be in a better position to decide when to exert influence and when to accept leadership from other members. Therefore, it is hypothesized that:

H2 – Task interdependence will moderate the relationship between emotional intelligence and shared leadership such that emotional intelligence will be more strongly related to shared leadership when there is higher task interdependence.

When high level of interaction is required between team members, then emotional intelligence will play in critical role in determining shared leadership.

Participants

Two hundred and forty-four students (67% male) participated in the study as part of their organizational behavior class. Participants were randomly assigned to teams of six members each at the beginning of the course.

Procedure

After two months in the course, students participated in a 3-hour long study. The participants were asked to carry out a team task. The teams were asked to use the concepts taught in organizational behavior class and do an analysis of the

movies assigned to each team. The team had to present various scenes in the movie and explain them using organizational behavior concepts. The team task involved multiple skills (technical skills, analytical skills and presentation skills) and hence there was a possibility for multiple members in the team to take up leadership in different areas depending on the dimension of the work. To minimize the impact of common method variance linked with single source data collection, the data were collected in two stages. Before the commencement of the team task, the questionnaire pertaining to authenticity and emotional intelligence was administered. Data related to shared leadership was administered in stage two after the task was completed.

Measures

Emotional intelligence and interdependence were measured using a 1 (strongly disagree) to 5 (strongly agree) Likert scale. Shared leadership was measured using a 1 (not at all) to 5 (to a great extent) Likert scale.

Emotional Intelligence was measured using Schutte et al. (1998) thirty-three item scale (reliability $\alpha = 0.84$). A sample item is "I am aware of my emotions as I experience them".

Interdependence was measured using a five-item scale (reliability $\alpha = 0.74$). A sample item is "I required information and advice from my team members to perform my job well".

Shared leadership was measured using social network approach (Mayo, Meindl & Pastor, 2003). Team members rated each of his/her peers on a single item scale: "to what degree does your team rely on this individual for leadership?"

Results

The results were analyzed using the statistical package for social sciences (SPSS). Table 1 reports the reliability of emotional intelligence and task interdependence scale. The alpha values are high (Nunally, 1978). Table 2 shows correlation between emotional intelligence, task interdependence and shared leadership. It shows that emotional intelligence and task interdependence are positively correlated with shared leadership and there is no correlation between emotional intelligence and task interdependence.

Emotional intelligence and task interdependence are positively correlated with shared leadership and there is no correlation between emotional intelligence and task interdependence.

Table 1 Reliability

No. Scale	No. of Items	Cron Bach Alpha
1 Emotional Intelligence Scale	33	0.84
2 Task Interdependence	5	0.74

Table 2 Correlation between Emotional Intelligence, Task Interdependence & Shared Leadership

	EI Mean	TI Mean	SL Mean
EI Mean	1.00	-	-
TI Mean	0.199	1.00	-
SL Mean	0.439**	0.558**	1.00

**p<0.01

To test the hypothesis that emotional intelligence influences shared leadership and task interdependence moderates the relationship between emotional intelligence and shared leadership, a hierarchical multiple regression analysis was conducted. In the first step, two variables were included: emotional intelligence and task interdependence. These variables accounted for a significant amount of variance in shared leadership, $R^2 = .193$, $F(1, 38) = 9.075$, $p < .005$. To avoid potentially problematic high multicollinearity with the interaction term, the variables were centered and an interaction term between emotional intelligence and task interdependence was created (Aiken & West, 1991). Next, the interaction term between emotional intelligence and task interdependence was added to the regression model, which accounted for a significant proportion of the variance in shared leadership, $\Delta R^2 = .679$, $\Delta F(1, 37) = 195.7$, $p = .000$, $b = 2.52$, $t(37) = 2.10$, $p < .05$. Examination of the interaction plot showed an enhancing effect that as emotional intelligence and task interde-

pendence increased, shared leadership increased. At low emotional intelligence, the level of shared leadership was similar for low, average and high task interdependence. However, when there is high emotional intelligence and high task interdependence, it leads to higher shared leadership. Table 3 and Fig. 1 shows moderation results.

When there is high emotional intelligence and high task interdependence, it leads to higher shared leadership.

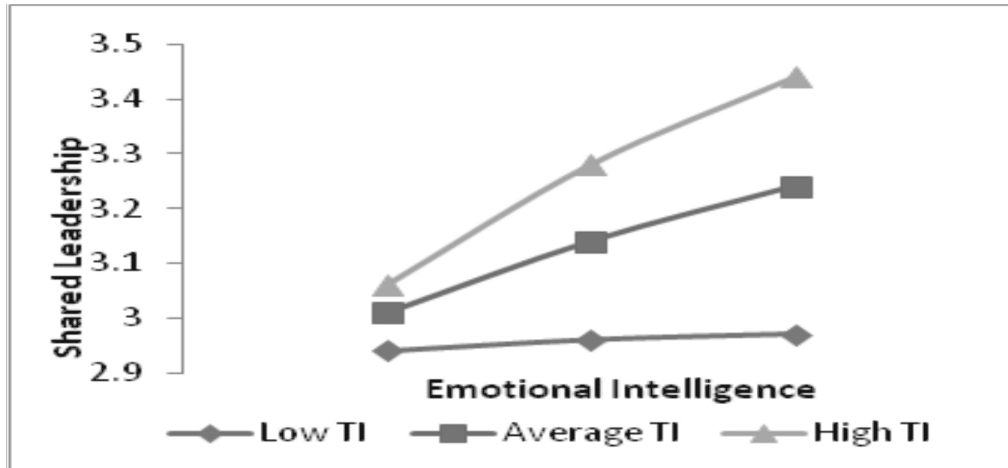
Discussion

The primary purpose of this study is to examine the influence of emotional intelligence on shared leadership. The results of our study indicate that emotional intelligence has a positive impact on shared leadership. The findings of the study have important implications on shared leadership research. Past research has primarily examined team level

Table 3 Shared Leadership Predicted by EI & TI

Predictor	Δ	P	90% CI	
Emotional Intelligence	0.88	0.001	0.242	1.516
Task Interdependence	0.55	0.008	0.247	0.857
EI*TI	2.52	0.042	0.095	4.945

Fig. 1 Interaction Effect of Emotional Intelligence & Task Interdependence on Shared Leadership



antecedents of shared leadership. But it is equally important to find out the characteristics of the individuals who have a higher probability of demonstrating shared leadership. The study found that individuals who are high on emotional intelligence are more likely to engage in shared leadership. The findings have implications on the decisions pertaining to team design. When there is less of vertical leadership and teams have to depend on internal leadership of the team members, while deciding the team members, it is important to consider members with higher emotional intelligence. The study reveals that emotional intelligence positively influences the degree to which members accept leadership from multiple members in the team. Past researchers

Emotional intelligence positively influences the degree to which members accept leadership from multiple members in the team.

in the area of emotional intelligence have considered it as an ability (Salovey & Meyer, 1997). Therefore, teams which are expected to demonstrate shared leadership should be trained to develop their emotional intelligence skills.

Another important finding of the study pertains to the moderating effect of task interdependence on relationship between emotional intelligence and shared leadership. The study found that the impact of emotional intelligence on shared leadership becomes critical when there is a high level of task interdependence. Therefore, for teams such as project teams where there is high level of interdependency of members on each other, emotional intelligence plays a critical role.

Limitations & Future Directions

The sample size of the present study is small. The study should be carried out

on larger sample to get more reliable conclusions. Further, the study did not examine any mediating variable which affects the relationship of emotional intelligence and shared leadership. Future research can address that gap. Also, there are other individual level variables such as authenticity, self-efficacy can be examined as antecedent of shared leadership.

The current study was carried out on student teams. Future studies can replicate the study with corporate teams to find out if there could be any change in the dynamics because of the nature of the team.

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