Impact of Leaders’ Emotional and Cultural Intelligence on Leadership Effectiveness: Mediating role of Transformational Leadership

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Abstract
For leaders to serve as effective change agents in the organization, significance of leaders’ intelligence cannot be overlooked. Current empirical study was carried out with an intention to investigate the impact of leaders’ emotional and cultural intelligence on leadership effectiveness through the mediating role of transformational leadership as perceived by followers. With the help of questionnaire, data was collected from the employees of private banks of twin cities (Islamabad and Rawalpindi) of Pakistan. A total of 262 responses were entered in SPSS for analyzing data and interpreting results. The mediating, dependent and independent variables were modeled in a path diagram and tested through structural equation modeling (SEM). The findings of the study indicate that transformational leadership fully mediates the relationships of leaders’ emotional and cultural intelligence with leadership effectiveness. The results of the study provide useful insight into the fact that emotionally and culturally intelligent leaders are more effective because they exhibit more transformational leadership style. Theoretical and practical implications of the findings are discussed along with limitations and recommendations for future research.

Keywords: Emotional Intelligence, Cultural intelligence, Transformational leadership, Leadership Effectiveness, Cultural Diversity.

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1. Introduction
Leadership is a function of management which mostly concentrates on people and social interaction; it’s a process that aims to influence people to achieve organizational goals or common goals (Skansi, 2017). While guiding members of the organization in appropriate directions, a behavior is exhibited by a leader, which is referred to as leadership style (Certo & Certo, 2006). Different leadership behaviors are believed to be displayed by managers at work place and the effectiveness of both leader and organization can be enhanced through adequate use of such leadership behaviors (Erkutlu, 2008).

Among three different leadership styles exhibited by leaders namely, transactional, transformational and laissez-faire (Bass & Avolio, 1994), transformational leadership is most likely to predict leadership effectiveness (Erkutlu, 2008; Judge & Piccolo, 2004; Lowe, Kroeck, & Sivasubramaniam, 1996).

Intelligence can be viewed as one of the most controversial concepts highlighted within leadership literature (Noruzi & Rahimi, 2010; Eysenck & Kamin, 1981). According to Riggio, Murphy, and Pirozzolo (2002) leadership skills need to move beyond a high intelligence quotient (IQ). For effective leadership, the importance of emotional intelligence cannot be overlooked (Higgs & Aitken, 2003).

Researchers in past have argued that emotional intelligence is twice as important as IQ for achieving leadership success (Goleman, 1998; Antonakis, 2004). Emotional intelligence (EQ) involves different attributes that are associated with the ability of an individual to identify as well as respond to the affective conditions of people who belong to the same cultural background (Earley & Peterson, 2004).

Theorists have argued that EQ can contribute to success only if an individual has knowledge of functioning effectively within a particular cultural context (Earley & Ang, 2003). However, cultural intelligence (CQ) is regarded as a capability that allows individuals to perform in an effective manner in situations that involve cultural differences (Ang, Van Dyne, & Koh, 2005; Earley & Ang, 2003).

According to Earley and Mosakowski (2004) emotional intelligence is associated with cultural intelligence, but when emotional intelligence leaves off, cultural intelligence comes into action. Transformational leaders are believed to have an emotional impact on followers by providing them with a vision and motivating them to achieve this vision.
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( Polychroniou, 2009 ). Researchers have divided cultural intelligence into two major categories namely, ethnic CQ and organizational CQ ( Earley & Mosakowski, 2004 ). Current research study highlights the importance of ethnic CQ.

Cultural diversity incorporates certain observable and non-observable features of cultural identities by means of which people differentiate themselves and others ( Ely & Thomas, 2001 ). A society can be divided into different subcultures on the basis of certain criteria such as ethnicity, socio-political history, race and location occupied by most of the people of subculture and religion ( Elenkov, Naoumova, & Lowery, 2005 ; Peppas, 2002, 2006 ; Lenartowicz, Johnson, & White, 2003 ). Hence, cultural diversity not only exists among different nations but such cultural differences also subsist within those countries that have rich cultural heritage ( Elenkov & Kirova, 2008 ). People who belong to different ethnic groups hold unique norms, values and attitudes that reveal their cultural heritage ( Cox, Lobel, & McLeod, 1991 ).

According to Alon and Higgins ( 2005 ), it is utmost important for leaders to function within as well as across different subcultures. Pakistan is regarded as a highly multi ethnic state ( Kennedy, 1984 ). Punjabi, Pathan, Sindhi, Sariaki, Muhajirs and Balochi are the major ethnic groups that constitute about 44.68%, 15.42%, 14.1%, 8.83%, 7.57%, 3.57% respectively of the total population and minor ethnic groups constitute about 6.28% of the total population ( Pakistan Demographics Profile, 2014 ). Hence, leaders of the organizations where employees belonging to different ethnic groups work together for same purpose are required to think beyond traditional managerial competencies to create interest of the employees in the organization and to motivate them to achieve organizational goals more effectively. According to Lord and Shondrick ( 2011 ) genuine leaders are those who craft their visions using gestures, language and emotions that are appropriate in terms of context for conveying contemporary meaning.

Current study focuses on certain significant leadership capabilities that allow leaders to have deep understanding of the emotions of themselves as well as emotions of others, to reduce cultural misunderstandings and to motivate followers to achieve higher levels of growth and achievement. The study aims to provide an extensive relational concept of mediating role of transformational leadership between the
relationships of emotional and cultural intelligence with leadership effectiveness.

1.1 Problem Statement
The problem statement of the present research study is, “To what extent do leaders’ emotional and cultural intelligence predict leadership effectiveness through the mediating role of transformational leadership in private banks of twin cities (Islamabad and Rawalpindi) of Pakistan.”

1.2 Research Questions
Research study addresses following research questions
Q1: Do leaders’ emotional and cultural intelligence predict leadership effectiveness?
Q2: Do leaders’ emotional and cultural intelligence predict transformational leadership?
Q3: Does transformational leadership predict leadership effectiveness?
Q4: Does transformational leadership mediate the relationships of emotional and cultural intelligence with leadership effectiveness?

2. Literature review
2.1 Emotional Intelligence
Researchers have argued that as compared to general intelligence and technical skills emotional intelligence is regarded as more valuable (Hohlbein, 2015). The construct of EQ has its strong roots in Thorndike’s (1920) work on “social intelligence” (Mayer & Salovey, 1990), who defined social intelligence for the first time (McCleskey, 2014). EQ has also its roots in Wechsler’s (1943, 1940) idea of non-intellective aspects of “general intelligence”. Using the same concept of emotional intelligence, Leeper (1948) assumed that emotional thoughts make significant contribution to general intelligence and logical thoughts (Derkson, Kramer, & Katzko, 2002).

With the introduction of the concept of “multiple intelligences” by Gardner (1983), the topic of emotional intelligence was highlighted again. However, Mayer and Salovey (1990) offered the theory of EQ for the first time. Goleman (1995) gave popularity to the construct of EQ by publishing his bestselling book on emotional intelligence. Goleman (1998) in a Harvard Business Review article entitled “What Makes a Leader” emphasized the significance of EQ in becoming successful leaders. Mayer and Salovey (1990) defined EQ as an ability of an individual to monitor one’s own feelings and emotions as well as...
feelings and emotions of other people, to discriminate among such feel-
ing and emotions and to make use of this information to guide one’s own thinking along with actions.

Mayer & Salovey’s (1997) model of EQ shows that EQ is made up of four dimensions. Self-emotion appraisal dimension is related to the extent to which individuals possess the ability to understand and express their emotions in a natural manner (Law, Wong, & Song, 2004). Others’ emotion appraisal involves an individual’s capability of understanding and perceiving the emotions of other people in an accurate manner (Libbrecht, Lievens, & Schollaert, 2010). Use of emotion dimension involves whether the individuals are capable of directing their emotions towards activities that are constructive and enhance performance (Hur, Van den Berg, & Wilderom, 2011). Regulation of emotion dimension reflects the capability of individuals to manage their emotions (Libbrecht et al., 2010), which enable them to recover from distressing situations more rapidly (Wong & Law, 2002).

2.2 Cultural Intelligence

Prior research viewed intelligence as the ability to find solutions to the problems in academic settings, but now there is an increased consensus among researchers that there are places other than classrooms, where there is a need to display intelligence (Sternberg and Detterman 1986). An increased rate of interest in intelligence has resulted in dividing it into different categories such as emotional, social and general intelligence (Zhang, 2012). However these intelligences enable an individual to be successful socially, personally and in work domain when dealing with people who belong to their own cultural groups (Viggiano, 2016). Just like emotional intelligence complements cognitive intelligence and both are equally important for people to be successful in work as well as in personal relationships (Earley & Gibson, 2002), CQ is also a complementary type of intelligence (Ang & Van Dyne, 2008) and is referred to as a person’s capability to function in an effective manner in situations that involve cultural differences (Ang et al., 2004). Such situations incorporate ethnic, organizational, national, and other types of cultures (Ang & Van Dyne, 2008).

A conceptual model of CQ was offered by Earley & Ang (2003) proposed that CQ is a multidimensional construct and is made up of four dimensions (Ang et al., 2007; Van Dyne, Ang, & Koh, 2008). The first dimension of CQ is termed as Meta cognitive CQ,
which is related to higher-order mental processes (Charoensukmongkol, 2016) used by an individual for acquiring and understanding cultural knowledge and it also incorporates the extent to which an individual is knowledgeable and has control over one’s own mental processes (Flavell, 1979; Ang et al., 2007). The second dimension of CQ referred to as cognitive CQ involves the knowledge (universal and culture-specific) that can be gained from both formal education and experience regarding practices, conventions and norms of different cultures (Ang et al., 2007). The differences as well as similarities across different cultures can be easily understood by people with strong cognitive CQ (Brislin et al., 2006). The third dimension of CQ named motivational CQ reflects the desire and motivation of an individual to operate in situations that involve cultural diversity (Ang et al., 2015). The fourth and last dimension is referred to as behavioral CQ which is referred to as an individual’s ability to display verbal and non-verbal behaviours (Ang et al., 2007; Rockstuhl et al., 2011) that are culturally attuned (Sutherland, Edgar & Duncan, 2015). Hence the dimensions of cultural intelligence are mainly concerned with one’s ability to understand one’s own as well as other person’s culture, understanding the similarities and differences across these cultures and having the capability to display verbal and nonverbal behaviors that are culturally appropriate (Schreier & Kainzbauer, 2016).

2.3 Transformational Leadership

Leadership is regarded as crucial for the success of any organization (Hanges et al., 2016). Among different leadership styles (transactional, transformational and laissez faire) identified by researchers (Bass, 1990; Zineldin & Amsteus, 2014) transformational leadership is regarded as highly effective (Erkutlu, 2008). Downton (1973) is believed to be the first person who used the term transformational leadership. However, Burns (1978) introduced the concept of transformational leadership by means of his work on political leaders (Gardner & Stough, 2002).

Based on Burns (1978) work, a new version of transformational leadership was developed by Bass (1985) and later (Bass & Avolio, 1994) offered a complete leadership theory which included three leadership styles (transformational, transactional, and laissez-faire) (Antonakis & Atwater, 2002). According to Bass (1985) transformational leadership is referred to as leaders’ ability to improve subordinates’
confidence, create interest as well as awareness of the subordinates in the organization and motivate followers to focus on higher levels of growth.

Transformational leadership is made up of four different factors (Bass, 1985). The first factor which is termed as idealized influence (charisma) involves the degree to which a leader is considered as an inspirational role model by the followers (Moss & Ritossa, 2007). This dimension of idealized influence is further divided into two categories; idealized influence (attributed) reveals the extent to which leaders are perceived as charismatic, powerful and confident by the followers (Aydogdu & Asikgil, 2011) and idealized influence (behavior) involves charismatic actions displayed by leaders that concentrate on a collective sense of mission, values and beliefs (Antonakis et al., 2003).

The second factor of inspirational motivation reflects the extent to which leaders inspire the followers by envisioning a positive future, motivate followers that vision can be achieved and set targets that are highly ambitious (Bass & Riggio, 2006). The third factor of intellectual simulation incorporates the extent to which leaders encourage followers to devise new ways for solving old problems (Bass & Avolio, 2004). This approach focuses on encouraging followers’ innovativeness and creativity (Avolio, 1999). When transformational leader takes the role of a mentor or coach, individualized consideration is said to take place (Bass, 1985). This fourth factor involves the degree to which leaders treat subordinates not only as group members but as individuals (Dionne et al., 2004).

2.4 Leadership Effectiveness

Depending upon the selection of effectiveness criteria, researchers in past have defined leadership effectiveness in different ways (Yukl, 1989). Weaver (2015) stressed the importance of the positive impact that effective leaders have on the outcomes of followers. Both objective measures and subjective measures have been used by the researchers to assess leadership effectiveness, however, the most frequent used measure of leader effectiveness is regarded as the extent to which an organization or group of the leader completes its tasks successfully and accomplish its goals (Erkutlu, 2008). The effectiveness of leadership in organizations is most often measured in terms of the perception of supervisors, subordinates and co-workers (Judge et al., 2002).
2.5 Hypotheses Development

2.5.1 Emotional Intelligence and Leadership Effectiveness

Leadership intelligence is believed to be strongly associated with leadership effectiveness (Mesterova et al. 2015). Mayer, Caruso, and Salovey (1999) conducted an investigation on the relationship between supervisors’ EQ and subordinate’s perception of supervisors’ effectiveness. It was concluded in the study that supervisors’ EQ is a significant antecedent of effective leadership.

The research work conducted on leadership throws light on how moods along with emotions of leaders affect leadership effectiveness (George, 2000). Dasborough and Ashkanasy (2002) found that emotionally intelligent leaders possess the ability to successfully manage the impressions they give to others and provide better guidance to subordinates to attain desired goals. Rosete and Ciarocchi (2005) study conducted in Australia showed that among the variables of mental intelligence, personality and emotional intelligence, the construct of EQ was found to be linked to leadership effectiveness in a positive significant manner.

Kerr et al. (2006) study examined that linkage between EQ of managers and subordinates’ ratings of leadership effectiveness. It was found in the study that leaders’ EQ was strongly related to supervisory effectiveness as perceived by subordinates. Hur et al. (2011) study showed that emotionally intelligent leaders were perceived to be highly effective by their followers. Jones (2012) study demonstrated a statistically significant relationship between emotional intelligence and leadership effectiveness of research administrators. Similarly, Alawneh and Sweis (2016) conducted a study on the effect of emotional intelligence on the effectiveness of project managers in Jordan. The results showed a significant positive relationship between emotional intelligence and leadership effectiveness of project managers.

Therefore, it is hypothesized that

\[ H1: \text{Emotional intelligence of a leader significantly predicts leadership effectiveness.} \]

2.5.2 Cultural Intelligence and Leadership Effectiveness

Cultural intelligence is regarded as one of the major factors that lead to effective leadership (Ang & Inkpen, 2008). Alon and Higgs (2005) offered a conceptual linkage between cultural intelligence and leadership
performance outcomes and pointed towards the significance of leaders’ CQ for being successful in culturally diverse work settings. According to Mannor (2008) culturally intelligent leaders possess deep understanding of the dynamics of situations that involve cultural differences. Livermore (2010) asserted that advanced CQ capabilities of leaders made vital contributions to leadership effectiveness and also to performance outcomes in teams that are culturally diverse.

The findings of Groves & Feyerherm’s (2011) empirical study proposed that CQ was a significant predictor of leadership performance in work units where cultural diversity was high. Rockstuhl et al. (2011) conducted a study on leaders of Swiss military Academy and found that CQ is a significant predictor of leadership effectiveness in situations that involved cultural diversity in a cross border context. Ng, Van Dyne and Ang (2012) stressed that in enhancing leadership effectiveness cultural intelligence plays a significant part.

According to Alon et al. (2016) multiple intelligences are required for effective leadership and cultural intelligence is regarded as one of them. Leadership effectiveness is negatively affected if leaders ignore cultural differences at workplace (Hendrickson, 2016). Oliverio-Olivieri (2016) proposed that leaders who are culturally intelligent are regarded as highly effective. Solomon and Steyn (2017) argued that cultural intelligence is the competence that helps leaders to operate effectively in culturally diverse situations.

Therefore, it is hypothesized that

**H2: Cultural intelligence of a leader significantly predicts leadership effectiveness.**

### 2.5.3 Emotional intelligence and Transformational Leadership

For almost three decades both academic and management practitioners have given an increased level of interest to transformational leadership style (Northouse, 2010). Transformational leadership theory highlights the significance of leader’s impact on the emotional states of followers (Ashkanasy & Tse, 2000). A wide range of research studies conducted in past shows an existence of significant relationship between the two constructs of EQ and transformational leadership (e.g., Leban & Zuluaf, 2004; Sivanathan & Fekken, 2002; Duckett & MacFarlane, 2003; Mandell & Pherwani, 2003; Barbuto & Burbach, 2006; Gardner & Stough, 2002; Wang & Huang, 2009). Some other researchers e.g., Barling et al. (2000) and Palmer et al. (2001) showed that EQ is strong-
ly linked to all factors of transformational leadership in significant manner except intellectual stimulation.

Rubin, Munz, and Bommer (2005) empirically found that only those leaders were rated high on transformational leadership style that were able to identify emotions in other people in accurate way. Similarly, Scott-Halsell, Schumate, and Blum (2008) found significant link between EQ and transformational leadership style. Echevarria, Patterson, and Krouse (2017) found a significant relationship between emotional intelligence and transformational leader ship style of nurse managers.

Therefore, it is hypothesized that

\[ H_3: \] Emotional intelligence of a leader significantly predicts transformational leadership.

2.5.4 Cultural Intelligence and Transformational Leadership

Extensive range of research studies performed in past reveals that cultural intelligence and transformational leadership are linked to each other in a significant manner (e.g., Lugo, 2008; Matear, 2009; Ismail, Reza, & Mahdi, 2012; Keung & Rockinson-Szapkiw, 2013). Elenkov and Manev’s (2009) study reported that CQ is a significant antecedent of transformational leadership in culturally diverse contexts.

Mahdi & Elaheh (2012) study pointed towards the presence of significant association between CQ and transformational leadership among school employees in Iran. Stokes (2013) findings of the empirical study revealed that among all factors of CQ, meta cognitive dimension of CQ was one of the most significant predictors of transformational leadership. Mullinax (2013) qualitative correlation study on Indian organizational leaders indicated that CQ predicts transformational leadership in a significant manner. Park and Nam (2016) found that higher cultural intelligence results in enhanced transformational leadership behaviour.

Therefore, it is hypothesized that

\[ H_4: \] Cultural intelligence of a leader significantly predicts transformational leadership.

2.5.5 Transformational Leadership and Leadership Effectiveness

It has been indicated by a great deal of research work that transformational leadership is regarded as a highly effective leadership style (Jansen et al., 2008). Ng (2017) and Gottefredson and Aguinis (2017) con-
ducted two of the most recent meta analyses and discussed the relationships of transformational leadership with performance related outcomes. Researchers e.g., Lowe et al. (1996) and Judge and Piccolo (2004) conducted meta analyses and proposed that transformational leadership is a significant antecedent of leadership effectiveness.

Sosik and Megerian (1999) conducted a study on managers, subordinates and also superiors of focal managers. The research findings of the study indicated a strong positive linkage between transformational leadership as rated by subordinates and different performance outcomes including leadership effectiveness. Erkutlu (2008) empirical research conducted on the employees of boutique hotel showed that transformational leadership enhances leadership effectiveness. Therefore, it is hypothesized that

**H5:** Transformational leadership significantly predicts leadership effectiveness.

### 2.5.6 Mediating role of Transformational Leadership

The primary focus of the current study is to explore the effect of transformational leadership as a mediator between the relationships of EQ and CQ with leadership effectiveness. For this proposition emotional intelligence and cultural intelligence are required to be linked to leadership effectiveness directly as well as indirectly through the mediating effect of transformational leadership style and this leadership style is needed to predict leadership effectiveness. Extensive range of research studies has been discussed in literature review of current study that fulfills these requirements and provides support to investigate the key intention of the study. 

**H6:** Transformational leadership acts as a mediator between the links of leaders’ emotional intelligence and cultural intelligence with leadership effectiveness.

### 2.7 Research Model

With regard to the evidence available in the prior literature, Figure 1 depicts a hypothesized research model in which emotional and cultural intelligence impact leadership effectiveness directly as well as indirectly through the mediating variable of transformational leadership.
3. Methodology
3.1 Population and Sample
Islamabad is the capital of Pakistan and Rawalpindi is the city located adjacent to it. These two are termed as the twin cities on the basis of sharing strong social and economic links. Employees working in the organizations of these twin cities belong to different cultural backgrounds in terms of ethnicity. Hence employees from different ethnicities were regarded as most suitable followers to rate their leaders’ emotional intelligence, cultural intelligence, transformational leadership style and leadership effectiveness.

Since 1991 most of the sectors in Pakistan got privatized and baking sector was one of them. The number of public banks in Pakistan is very limited. Therefore in order to obtain large pool of data, target population of the research study was the employees of private banks of twin cities (Islamabad and Rawalpindi) of Pakistan. Non-probability sampling was used and data was collected from those employees who were easily available i.e. convenience sampling was used. The situations in which there is serious mistrust, non-probability sampling technique is well justified (Zheng, Morrison, & O’Neill, 2009).

Quantitative research is built upon theories that are already established (Leedy & Ormrod, 2001) and is applied to a set of data that is well structured and can be represented in the form of numbers (Matthews & Ross, 2010). It includes problem statement, literature review generation of hypotheses and analysis of data in form of numbers (Williams, 2007). Since theories were already established, hypotheses were generated and data was analyzed in form of numbers, therefore, quanti-
tative research technique was adopted as a research strategy in current study.

3.2 Research Instrument

Questionnaire was selected as a tool for measuring the perception of subordinates regarding leaders’ EQ, CQ, transformational leadership and leadership effectiveness. Questionnaires are regarded as one of the most effective methods used for collecting data because researchers have deep understanding regarding which variables to measure and how to measure them (Sekaran, 2000).

For present study, research instrument comprised of two parts. The first part of the measurement instrument incorporated item associated with the demographic of the respondents such as ethnicity. The second part included items regarding the variables used in the research study i.e. EQ, CQ, transformational leadership and leadership effectiveness.

3.3 Measures

3.3.1 Emotional Intelligence

Wong and Law Emotional Intelligence Scale (WLEIS) was used to measure the variable of emotional intelligence (Wong & Law, 2002). Sample items for measuring the four dimensions of emotional intelligence (EQ) include; (a) Self-emotion appraisal, “My manager/supervisor has a good understanding of his/her own emotions.”; (b) Others’ emotion appraisal, “My manager/supervisor is a good observer of others’ emotions.”; (c) Use of emotion, “My manager/supervisor always sets goals for himself/herself and then tries his/her best to achieve them.”; and (d) Regulation of emotion, “My manager/supervisor is able to control his/her temper and handle difficulties rationally.” Items in WLEIS were rated on a 5-point Likert scale that ranges from 1 to 5, where “1” indicates “strongly disagree” and “5” indicates “strongly agree”.

3.3.2 Cultural Intelligence

Cultural intelligence (CQ) was measured through cultural intelligence scale (Ang et al., 2007). Sample items for measuring four dimensions of cultural intelligence (CQ) include; (a) Metacognitive CQ, “My manager/supervisor is conscious of the cultural knowledge he/she uses when interacting with people with different cultural backgrounds”; (b) Cognitive CQ, “My manager/supervisor knows the legal and economic
systems of other cultures”; (c) Motivational CQ, “My manager/supervisor enjoys interacting with people from different cultures”; and (d) Behavioral CQ, “My manager/supervisor changes his/her non-verbal behavior when a cross cultural situation requires it.” Items in CQS were rated on a 5-point Likert scale that ranges from 1 to 5, where “1” indicates “strongly disagree” and “5” indicates “strongly agree”. If scores are higher on CQS then the CQ is also higher (Ward, Wilson, & Fischer, 2011).

3.3.3 Transformational Leadership
For measuring transformational leadership style of the leaders, the Multifactor Leadership Questionnaire (MLQ-Form 5X-Short) was used (Bass & Avolio, 2000). MLQ includes items for measuring each dimension of transformational leadership. Sample items include; (a) Idealized influence (attributed), “My manager/supervisor displays a sense of power and confidence”; (b) Idealized influence (behavior), “My manager/supervisor talks about his/her most important values and beliefs”; (c) Inspirational motivation, “My manager/supervisor talks optimistically about the future”; (d) Intellectual stimulation, “My manager/supervisor seeks differing perspectives when solving problems”; and (e) Individualized consideration, “My manager/supervisor spends time in teaching and coaching”. Items were rated by the respondents on a five-point Likert scale that ranges from 1 to 5, where “1” denotes “not at all” and “5” denotes “frequently, if not always.”

3.3.4 Leadership effectiveness
For measuring subordinates’ perception of leadership effectiveness, four items from Multifactor Leadership Questionnaire (Bass & Avolio, 2000) were used. Sample item includes, “My manager/supervisor is effective in meeting organizational requirements.” Items were rated by the respondents on a five-point Likert scale that ranges from 1 to 5, where “1” means “not at all” and “5” means “frequently, if not always.”

3.4 Procedure
Current quantitative research study was executed in two steps. In first step, pilot study was performed to determine the potential problems with the research tool utilized in the study. In second step, main study was conducted. For the purpose of pilot study, 100 questionnaires were distributed among the employees of private banks of twin cities (Islam-
abad and Rawalpindi) of Pakistan. Out of 100 questionnaires, 60 were returned.

A measure of internal consistency of the items comprising a scale is referred to as scale reliability (Churchill, 1979) and for determining the internal consistency reliability of the research instrument, Cronbach’s Alpha is regarded as one of the best tools (Hussey & Hussey, 1997).

**Table 1. Reliability of Measurement instrument**

| Variable                      | No. of items | Cronbach’s Alpha |
|-------------------------------|--------------|------------------|
| Emotional Intelligence        | 16           | .808             |
| Cultural Intelligence         | 20           | .713             |
| Transformational Leadership   | 20           | .805             |
| Leadership Effectiveness      | 04           | .722             |

For a scale to be regarded as reliable, its Cronbach’s Alpha is greater than 0.7 (Pallant, 2007). Table 1 depicts the values of Cronbach’s Alpha (\(\alpha\)) of the scales of the research study. It shows that the values of reliability coefficient or Cronbach’s Alpha of the four variables emotional intelligence, cultural intelligence, transformational leadership and leadership effectiveness is greater than 0.7, indicating that the research instrument is reliable.

For the purpose of main study 300 Questionnaires were floated among the employees (subordinates) of the same private banks of twin cities (Islamabad and Rawalpindi) of Pakistan as that of pilot study to collect the data regarding EQ, CQ, transformational leadership style and leadership effectiveness of their managers (leaders). The respondents were assured that the data provided by them would not be leaked in any case. Out of 300 questionnaires, 274 questionnaires were returned. However, 262 responses were entered for the statistical application, as 12 of them were incomplete. Therefore, the rate of response for the study was 87.3%.

The proposed hypotheses were tested in the research study by means of Structural equation modeling (SEM) because it offers certain advantages when conducting empirical research. Firstly, degree of fit of the entire model can be estimated by it. Secondly, at one time it can deal with multiple variables. Thirdly, it allows both predictor and criterion variables to include measurement (Hair et al., 2006).
AMOS 18 software was used for confirmatory factor analysis (CFA) and hypothesis testing. AMOS is professional visual software used for Structural equation modelling analysis. SPSS 23 software was used for reliability testing and demographic analysis.

4. Results

4.1 Confirmatory Factor Analysis (CFA)

CFA was used to test the validity of the scale. Convergent validity and divergent validity are two subtypes of construct validity. Convergent validity means that different items measuring the same construct should be highly correlated to each other and divergent validity means that measures of constructs that are different from each other are not supposed to be highly correlated to each other (Gilbert, Fiske, & Lindzey, 1998). Table 2 depicts that factor loading of each item used in the study is above 0.40. Stevens (1992) recommended making use of cut-off of 0.4 for factor loadings regardless of sample size.

Table 2. Factor Loadings

| Construct                     | Items | Factor Loadings |
|-------------------------------|-------|-----------------|
| Emotional Intelligence        | EQ1   | .407            |
|                               | EQ2   | .482            |
|                               | EQ3   | .435            |
|                               | EQ4   | .445            |
|                               | EQ5   | .519            |
|                               | EQ6   | .675            |
|                               | EQ7   | .705            |
|                               | EQ8   | .684            |
| Cultural Intelligence         | CQ1   | .419            |
|                               | CQ2   | .504            |
|                               | CQ3   | .512            |
|                               | CQ4   | .501            |
|                               | CQ5   | .465            |
|                               | CQ6   | .600            |
|                               | CQ7   | .630            |
|                               | CQ8   | .599            |
|                               | CQ9   | .652            |
|                               | CQ10  | .415            |
| Transformational Leadership   | TL1   | .534            |
| ship                          | TL2   | .720            |
|                               | TL3   | .668            |
|                               | TL4   | .616            |
|                               | TL5   | .716            |
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Table 3 provides information regarding the demographic profile of the respondents of the study.

**Table 3. Frequency Distribution of the Demographics of the Respondents**

| Demographics  | Category  | Frequency | Percent |
|---------------|-----------|-----------|---------|
| Ethnicity     | Punjabi   | 93        | 35.5    |
|               | Pathan    | 97        | 37.0    |
|               | Sindhi    | 28        | 10.7    |
|               | Balochi   | 16        | 6.1     |
|               | Saraiki   | 14        | 5.3     |
|               | Muhajir   | 7         | 2.7     |
|               | Other ethnicity | 7 | 2.7 |

*Note. n=262*

Table 3 shows that in terms of ethnicity 37.0% of the respondents were Pathan, 35.5% of the respondents were Punjabi, 10.7% of the respondents were sindhi, 6.1% of the respondents were balochi, 5.3% of the respondents were Saraiki, 2.7% of the respondents were Muhajir. 2.7% of the respondents belonged to other ethnicities like Kashmiri, Gilgiti and Chitrali, Hazara. Hence it shows in terms of ethnicity workforce was highly diversified.
4.3 Descriptive Statistics and Correlation Analysis
Table 4 depicts means, standard deviations of the variables of the study along with correlations between the variables.

Table 4. Descriptive Statistics and Correlation Matrix

| Variable                | Mean | SD  | 1   | 2    | 3    | 4    |
|------------------------|------|-----|-----|------|------|------|
| Emotional Intelligence | 3.44 | .50 | 1   | .    |      |      |
| Cultural Intelligence  | 3.50 | .46 | .542** | 1    |      |      |
| Transformational       | 3.47 | .50 | .478** | .507** | 1    |      |
| Leadership             | 3.53 | .66 | .402** | .409** | .630** | 1    |

Note. n = 262. **p< .01

Correlation measures the strength as well as the direction of relationship that exist between variables (Bryman & Cramer, 1990). Table 4 also shows all the variables of the study are correlated to each other in a significant and positive manner. The strongest correlation exists between transformational leadership and leadership effectiveness with a correlation coefficient of .630.

4.4 Hypothesis Testing
Baron and Kenny (1986) offered few assumptions to establish mediation. Firstly, there should be a correlation between the predictor variable and the criterion variable. Secondly, there should be an association between the independent variable and the mediating variable. In this step the mediator is treated as an outcome variable. Thirdly, there should be a correlation between the mediator and the dependent variable. In this step the mediator acts as a predictor. In case of full mediation beta weights are reduced and also turn non-significant. However, partial mediation is likely to occur if beta weights are reduced but still remain significant. All the assumptions have been followed to investigate the impact of EQ and CQ on leadership effectiveness through the mediating role of transformational leadership.

Table 5 depicts the effects of EQ and CQ on leadership effectiveness using two models; Model 1 (direct model) and Model 2 (indirect model). Model 1 is consistent with Figure 2 showing the impact of EQ and CQ on leadership effectiveness without the effect of mediating variable of transformational leadership.
### Table 5. Mediating Effect of Transformational Leadership

| Models | Effects | Estimates | S.E. | C.R. | P   | Remarks |
|--------|---------|-----------|------|------|-----|---------|
| Model 1 | LE<--- EQ | .340 | .087 | 3.896 | *** | Supported |
|        | LE<--- CQ | .387 | .093 | 4.143 | *** | Supported |
| Adjusted |       | .213 |       |       |     |         |
| F value |         | .207 |       |       |     |         |

| Model 2 | LE<--- TL | .289 | .061 | 4.718 | *** | Supported |
|         | LE<--- EQ | .377 | .066 | 5.755 | *** | Supported |
|         | LE<--- CQ | .132 | .078 | 1.681 | .093 | Supported |
| Adjusted |       | .414 |       |       |     |         |
| F value |         | .407 |       |       |     |         |
| Δ      |         | .201 |       |       |     |         |

Note. ***p<.001, EQ = Emotional Intelligence; CQ = Cultural Intelligence; TL = Transformational Leadership; LE = Leadership Effectiveness.

Model 1 demonstrates that emotional intelligence significantly predicts leadership effectiveness (β = .340, P<.001, Hypothesis 1) and cultural intelligence also significantly predicts leadership effectiveness (β = .387, P<.001, Hypothesis 2). The value of R square of Model 1 is .213 and this value indicates that the variance explained by emotional and cultural intelligence in leadership effectiveness is 21.3%. The value of adjusted R square is .207. Furthermore, the F value of model 1 is 35.055, which is significant at this level.

![Figure 2. Structural Equation Model illustrating the impact of Emotional Intelligence and Cultural Intelligence on Leadership Effectiveness without mediation](image-url)
Figure 3 shows that emotional intelligence significantly predicts transformational leadership ($\beta=.289$, $P<.001$, Hypothesis 3), cultural intelligence significantly predicts transformational leadership ($\beta=.377$, $P<.001$, Hypothesis 4) and transformational leadership significantly predicts leadership effectiveness ($\beta=.720$, $P<.001$, Hypothesis 5). Figure 3 shows the impact of emotional intelligence and cultural intelligence on leadership effectiveness through the mediating role of transformational leadership and is consistent with Model 2 in Table 5.

In support of Hypothesis 6, it is also noticeable in Figure 3 that in the presence of mediating variable of transformational leadership, the significant direct relationship of emotional intelligence with leadership effectiveness ($\beta=.13$, ns) as well as the significant direct relationship of cultural intelligence with leadership effectiveness ($\beta=.12$, ns) turn non-significant. Hence the results point towards full mediation. The value of $R^2$ of Model 2 is .414. This value indicates that the variance explained by the predictors in outcome variable is 41.4%. The value of adjusted $R^2$ is .407. In model 2, $F$ value is 60.786, which is significant at this level. The value of $\Delta$ is .201. It means that the variance that transformational leadership as a mediator accounts for in leadership effectiveness is 20.1%.

Table 6 shows fit indices of the fully mediated model. Hooper, Coughlan, and Mullen (2008) recommended that reporting each and every index of the output of the model is not realistic and necessary, as it will put burden on reader as well as on the reviewer. Jaccard and Wan (1996) suggested using not less than three fit tests.
Table 6. Fit indices of the Fully Mediated Model

|                | CMIN | DF | CMIN/DF | NFI  | NNFI | GFI  | CFI  | RMR  |
|----------------|------|----|---------|------|------|------|------|------|
| Fully mediated | 7.531| 2  | 3.765   | .977 | .949 | .986 | .983 | .013 |
| model          |      |    |         |      |      |      |      |      |
| Traditional    |      |    |         |      |      |      |      |      |
| cut off        |      |    |         |      |      |      |      |      |
| Criteria       |      |    |         |      |      |      |      |      |

If CMIN/DF ratio is less than 5 then the model is considered well accepted (Thomson et al., 2005). According to Hu & Bentler (1999) the cut off criteria for NFI and NNFI should be greater than or equal to .95 and .90 respectively. The cut off criterion for GFI is $\geq 0.90$ (Jackson, Gillaspy, & Purc-Stephenson, 2009). (Bentler (1990)) introduced CFI or Comparative Fit Index and if the value of CFI $\geq .95$, it is a sign of good fit (Hu & Bentler, 1999). According to Stieger (1990), RMR is ideal when it is less than .05. Table 6 reveals that CMIN/DF ratio, NFI, NNFI, GFI, CFI and RMR of the fully mediated model are 3.765, .977, .949, .986, .983 and .013 respectively, fulfilling the traditional cut off criteria therefore, the fully mediated model can be regarded as fit.

5. Discussion

Present study stresses the importance of certain significant leadership competencies that play a vital role in enhancing leadership effectiveness. A total of 262 employees from eleven private banks of twin cities (Islamabad and Rawalpindi) of Pakistan rated EQ, CQ and transformational leadership style and leadership effectiveness of their leaders. It was found that the effect of leaders’ EQ and CQ on leadership effectiveness is fully mediated through the variable of transformational leadership. It means that for leaders to serve as effective change agents in the organization, where employees from different ethnic groups work together under one roof, they are required to be emotionally and culturally intelligent. The paths were already investigated by previous research studies. These paths were a great source of help in exploring the impact of EQ and CQ on leadership effectiveness through the mediating role of transformational leadership. All of the hypotheses were accepted. Fully mediated model showed a good fit according to model fit indices.
5.1 Implications

Findings of the study have some important theoretical as well as practical implications. This research work is an addition to the existing knowledge on leadership effectiveness as it investigates empirically the impact of leaders’ EQ and CQ on leadership effectiveness through the mediating role of transformational leadership. It means that in order to deal effectively with employees who don’t belong to one cultural group but to diverse cultural groups in terms of ethnicity, leaders are needed to be emotionally as well as culturally intelligent. An emotionally and culturally intelligent leader displays more of transformational leadership style, which is regarded as highly effective.

Findings of the study also point towards some important practical implications strategically, operationally and tactically. Leaders play a significant role in motivating and influencing people to achieve organizational goals. Transformational leaders are regarded as highly effective leadership in achieving organizational goals because they are emotionally as well culturally intelligent. It’s important for leaders to focus more on transformational leadership competencies as compared to traditional managerial skills. Such transformational leadership competencies can be acquired through emotional and cultural intelligence. Therefore, in practice organizations should pay attention on selecting and deploying leaders at different managerial levels who are emotionally and culturally intelligent because such leaders have strong potential of becoming transformational leaders.

Training on EQ as well as on transformational leadership can bring significant benefits to both leaders as well as to organizations (Hur et al., 2011). It’s also important for the organizations to conduct managerial training programs on cultural intelligence (MacNab, Brislin, & Worthley, 2012). When organizations incorporate emotional and cultural intelligence into managerial training programs, leaders will exhibit more transformational leadership style and as a result leadership effectiveness can be enhanced.

5.2 Limitations and Future Research

Past research indicates that actual ability possessed by the individuals and the ability rated through same source measures are correlated to small extent (Davies, Stankov, & Roberts, 1989). Therefore, strength of the study is that ratings of leaders’ emotional intelligence, cultural intelligence, transformational leadership and leadership effectiveness from
subordinates are mostly less-biased as compared to same source measures. Present study involves certain limitations. An important limitation is the cross-sectional design, which limits the generalizability of the study. Hence it is recommended that future studies should focus on longitudinal design.

Another important limitation is the sample size of the current research study, which also makes it difficult to generalize the findings of the study. There are several countries in the world where workforce is highly diverse in terms of nationality e.g. Canada, America etc. In future it is suggested to test the said model in multinational organizations of such countries, where employees from different nationalities work together under one roof. Present study has investigated the variables at a broader construct level, in future it is recommended to examine the variables at dimension level.
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