

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

Asma A. Kanwal¹
Robina Yasmin²
Omar Khalid Bhatti³

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.

¹ Iqra University-Islamabad Campus, Islamabad, Pakistan

² Iqra University-Islamabad, Pakistan

³ Antalya Bilim University, Antalya, Turkey

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

(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, Naumova, & 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 heritages (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 (Derksen, 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 feelings 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 stimulation 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: 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 & Zulauf, 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 leadership style of nurse managers.

Therefore, it is hypothesized that

H3: 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

H4: 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 Gottfredson 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 fulfils 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.

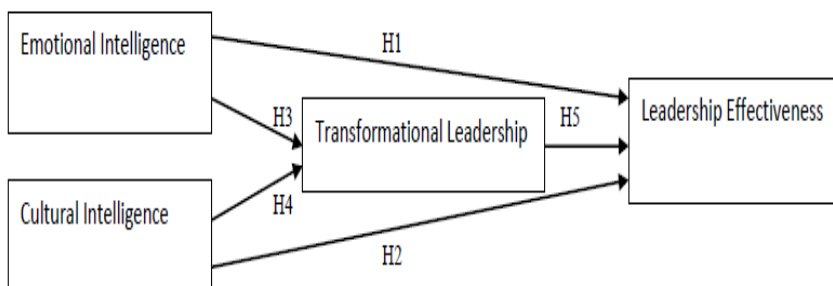


Figure 1. Hypothesized Research model

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 banking 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 (Sekeran, 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 a 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 (α) 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
	TL2	.720
	TL3	.668
	TL4	.616
	TL5	.716

	TL6	.673
	TL7	.630
	TL8	.643
	TL9	.527
	TL10	.583
	TL11	.500
	TL12	.503
	TL13	.470
	TL14	.513
	TL15	.606
	TL16	.500
	TL17	.504
	TL18	.502
	TL19	.521
	TL20	.587
Leadership Effectiveness	LE1	.567
	LE2	.673
	LE3	.826
	LE4	.654

4.2 Demographic Analysis

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 work-force 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 Leadership	3.47	.50	.478**	.507**	1	
• Leadership Effectiveness	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<---	.340	.087	3.896	***	Supported
	EQ	.387	.093	4.143	***	Supported
	.213	LE<---				
	Adjusted	.207	CQ			
F value	35.055				***	
Model 2		.289	.061	4.718	***	Supported
		.377	.066	5.755	***	Supported
	TL <---	.720	.076	9.465	***	Supported
	EQ	.132	.078	1.681	.093	Supported
	TL <---	.115	.086	1.348	.178	Supported
	.414	CQ				
	Adjusted	.407	LE <---			
	F value	60.786	TL			***
	Δ	.201	LE <---			
			EQ			
		LE <---				
		CQ				

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 ($\beta = .340$, $P < .001$, Hypothesis 1) and cultural intelligence also significantly predicts leadership effectiveness ($\beta = .387$, $P < .001$, 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.

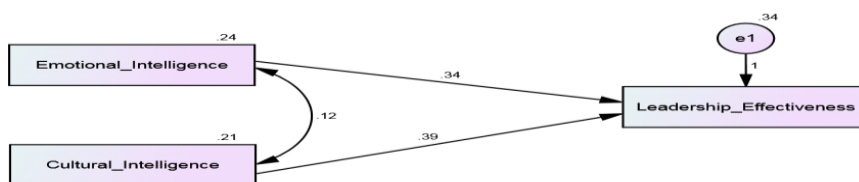


Figure 2. Structural Equation Model illustrating the impact of Emotional Intelligence and Cultural Intelligence on Leadership Effectiveness without mediation

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.

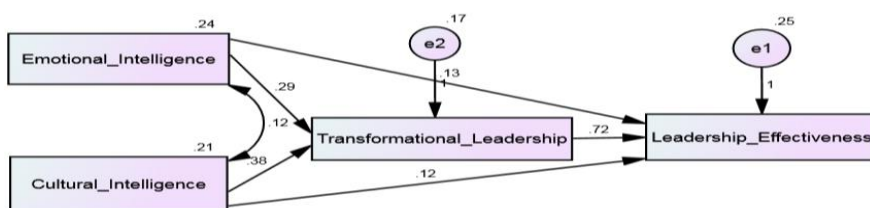


Figure 3. Structural Equation Model illustrating the impact of Emotional Intelligence and Cultural Intelligence on Leadership Effectiveness with Transformational Leadership as a mediating variable.

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 square 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 square is .407. In model 2, F value is 60.786, which is significant at this level. The value of Δ 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 model	7.531	2	3.765	.977	.949	.986	.983	.013
Traditional cut off Criteria			≥5	≥ .95	≥ .90	≥ .90	≥ .95	> .05

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 ≥ 0.90 (Jackson, Gillaspay, & 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.

References

- Alawneh, A. R. & Sweis, R. J. (2016). The relationship between the emotional intelligence level and the effectiveness of a project manager: The case of Jordan. *International Journal of Information, Business and Management*, 8(3), 13-27.
- Alon, I., & Higgins, J. M. (2005). Global leadership success through emotional and cultural intelligences. *Business Horizons*, 48(6), 501-512. doi: 10.1016/j.bushor.2005.04.003
- Alon, I., Boulanger, M., Elston, J.A., Galanaki, E., de Ibarreta, C.M., Meyers, J., Muniz-Ferrer, M. and Velez-Calle, A. (2016). Business cultural intelligence quotient: A five-country study, *Thunderbird International Business Review*, Retrieved June 4, 2015, from <http://onlinelibrary.wiley.com>
- Ang, S., & Inkpen, A. C. (2008). Cultural intelligence and offshore outsourcing success: A framework of firm-level intercultural capability. *Decision Sciences*, 39(3), 337-358. doi: 10.1111/j.1540-5915.2008.00195.x
- Ang, S., & Van Dyne, L. (2008). Conceptualization of cultural intelligence: Definition, distinctiveness, and nomological network. In S. Ang & L. Van Dyne (Eds.), *Handbook of cultural intelligence: Theory, measurement, and applications*, 3 – 15. Armonk, NY: M.E. Sharpe.
- Ang, S., Van Dyne, L. & Rockstuhl, T. (2015). Cultural intelligence: Origins, conceptualization, evolution, and methodological diversity. In M.J. Gelfand, C. Chiu & Y. Hong (eds.), *Handbook of advances in culture psychology* (pp. 273–323). Oxford University Press: New York.
- Ang, S., Van Dyne, L., & Koh, C. S. K. (2006). Personality correlates of the four factor model of cultural intelligence. *Group and Organization Management*, 31(1), 100-123. doi: 10.1177/1059601105275267
- Ang, S., Van Dyne, L., Koh, C. S. K., & Ng, K. Y. (2004). *The measurement of cultural intelligence*. Paper presented at the 2004 Academy of Management Meetings Symposium on Cultural Intelligence in the 21st Century, New Orleans, LA.
- Ang, S., Van Dyne, L., Koh, C., Ng, K. Y., Templer, K. J., Tay, C., & Chandrasekar, N. A. (2007). Cultural intelligence: Its measurement and effects on cultural judgment and decision mak-

- ing, cultural adaptation and task performance. *Management and Organization Review*, 3(3), 335-358. doi: 10.1111/j.1740-8784.2007.00082.x
- Antonakis, J. (2004). On why “emotional intelligence” will not predict leadership effectiveness beyond IQ or the “Big Five”: An extension and rejoinder. *Organizational Analysis*, 12(2), 171-182. doi: 10.1108/eb028991
- Antonakis, J., & Atwater, L. (2002). Leader distance: A review and a proposed theory. *The Leadership Quarterly*, 13(6), 673-704. doi: 10.1016/s1048-9843(02)00155-8
- Antonakis, J., Avolio, B. J., & Sivasubramaniam, N. (2003). Context and leadership: An examination of the nine-factor full-range leadership theory using the Multifactor Leadership Questionnaire. *The Leadership Quarterly*, 14(3), 261-295. doi: 10.1016/s1048-9843(03)00030-4
- Ashkanasy, N. M., & Tse, B. (2000). Transformational leadership as management of emotion: A conceptual review. In N. Ashkanasy, C. E. J. Hartel, & W.J. Zerbe (Eds.), *Emotions in the Workplace: Research, Theory, and Practice*, 221-35. Westport, CT: Quorum Books.
- Avolio, B. J. (1999). *Full leadership development*. Thousand Oaks, CA: Sage.
- Aydogdu, S., & Asikgil, B. (2011). The Effect of transformational leadership behavior on organizational Culture: An application in pharmaceutical industry. *International Review of Management and Marketing*, 1(4), 65-73. Retrieved June 4, 2015, from <http://www.econjournals.com>
- Barbuto, J. E., & Burbach, M. E. (2006). The emotional intelligence of transformational leaders: A field study of elected officials. *The Journal of Social Psychology*, 146(1), 51-64. doi: 10.3200/SOCP.146.1.51-64
- Barling, J., Slater, F. & Kelloway, K. (2000). Transformational leadership and emotional intelligence: An exploratory study. *Leadership and Organisation Development Journal*, 21 (3), 157-161. doi: 10.1108/01437730010325040
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality*

- and Social Psychology*, 51(6), 1173-1182. doi: 10.1037/0022-3514.51.6.1173
- Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York: Free Press.
- Bass, B. M. (1990). From transactional to transformational leadership: Learning to share the vision. *Organizational Dynamics*, 18(3), 19-31.
- Bass, B. M., & Avolio, B. J. (1994). *Improving organizational effectiveness through transformational leadership*. Thousand Oaks, CA: Sage Publications.
- Bass, B. M., & Avolio, B. J. (2000). *Manual for the multifactor leadership questionnaire*. Redwood City, CA: Mindgarden.
- Bass, B. M., & Avolio, B. J. (2004). *Multifactor Leadership Questionnaire: Manual and Sampler Set* (3rd Ed.). Redwood City, CA: Mind Garden.
- Bass, B. M., & Riggio, R. E. (2006). *Transformational leadership*. New York, NY: Taylor and Francis.
- Bentler, P. M. (1990). "Comparative fit indexes in structural models." *Psychological bulletin*, 107(2), 238.
- Brislin, R., Worthley, R., & MacNab, B. (2006). Cultural intelligence: Understanding behaviors that serve people's goals. *Group and Organization Management*, 31(1), 40–55.
- Bryman, A., & Cramer, D. (1990). *Quantitative Data Analysis for Social Scientists*. Routledge, London.
- Burns, J. M. (1978). *Leadership*. New York: Harper & Row.
- Certo, C. S., & Certo, S. T. (2006). *Modern management* (10th Ed.). Upper Saddle River, NJ: Pearson Education Inc.
- Charoensukmongkol, P. (2016). Cultural intelligence and export performance of small and medium enterprises in Thailand: Mediating roles of organizational capabilities. *International Small Business Journal*, 34(1), 105–122.
- Churchill, G. A. (1979). A paradigm for *developing* better measures of marketing constructs. *Journal of Marketing Research*, 16(1), 64-73. doi: 10.2307/3150876
- Cox, T. H., Lobel, S. A., & McLeod, P. L. (1991). Effects of ethnic group cultural differences on cooperative and competitive behavior on a group task. *The Academy of Management Journal*, 34(4), 827-847. doi: 10.2307/256391

- Dasborough, M. T., & Ashkanasy, N. M. (2002). Emotion and attribution of intentionality in leader-member relationships. *The Leadership Quarterly, 13*(5), 615-634. doi: 10.1016/S1048-9843(02)00147-9
- Davies, M., Stankov, L., & Roberts, R. (1989). Emotional intelligence: In search of an elusive construct. *Journal of personality and Social Psychology, 75*(4), 989-1015.
- Derksen, J., Kramer, I., & Katzko, M. (2002). Does a self-report measure for emotional intelligence assess something different than general intelligence? *Personality and Individual Differences, 32*(1), 37-48. doi: 10.1016/s0191-8869(01)00004-6
- Dionne, S., Yammarino, F., Atwater, L., & Spangler, W. (2004). Transformational leadership and team performance. *Journal of Organizational Change Management, 17*(2), 177-193.
- Downton, J. V. (1973). *Rebel leadership: commitment and charisma in a revolutionary process*. New York: The Free Press.
- Duckett, H. & MacFarlane, E. (2003). Emotional intelligence and transformational leadership in retailing. *Leadership and Organization Development Journal, 24*(6), 309-317.
- Earley, C. P., & Peterson, R.S. (2004). The elusive cultural chameleon: Cultural intelligence as a new approach to intercultural training for the global manager. *Academy of Management Learning & Education, 3*(1), 100-115.
- Earley, P. C., & Ang, S. (2003). *Cultural intelligence: Individual interactions across cultures*. Palo Alto, CA: Stanford University Press.
- Earley, P. C., & Gibson, C. B. (2002). *Multinational work teams: A new perspective*. Hillsdale, NJ: Lawrence Erlbaum.
- Earley, P. C., & Mosakowski, E. (2004). Cultural intelligence. *Harvard Business Review, 82*(10), 139-146.
- Echevarria, I. M., Patterson, B. J., & Krouse, A. (2017). Predictors of transformational leadership of nurse managers. *Journal of nursing management, 25*(3), 167-175.
- Elenkov, D., & Kirova, D. (2008). Are cultural differences in a small country important for international business? New theory and evidence from Cyprus. *Journal of International Business and Economics, 8*(2), 71-78.

- Elenkov, D., & Manev, I. (2009). Senior expatriate leadership's effects on innovation and the role of cultural intelligence. *Journal of World Business*, 44(4), 357-369.
- Elenkov, D., Naumova, I., & Lowery, G. (2005). Rethinking leadership and organizational innovation issues in Southeastern European subcultures. *JIBE*, 1, 9-14.
- Ely, R. J., & Thomas, D. A. (2001). Cultural Diversity at Work: The effects of diversity perspectives on work group processes and outcomes. *Administrative Science Quarterly*, 46(2), 229-273. doi: 10.2307/2667087
- Erkutlu, H. (2008). The impact of transformational leadership on organizational and leadership effectiveness the Turkish case. *Journal of Management Development*, 27(7), 708-726. doi: 10.1108/02621710810883616
- Eysenck, H. J., & Kamin, L. (1981). *The intelligence controversy: The battle for the mind*. New York: John Wiley & Sons (Published in the UK as *Intelligence. The battle for the mind*).
- Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive inquiry. *American Psychologist*, 34(10), 906-911. doi: 10.1037/0003-066x.34.10.906
- Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences*. New York: Basic Books.
- Gardner, L., & Stough, C. (2002). Examining the relationship between leadership and emotional intelligence in senior level managers. *Leadership & Organization Development Journal*, 23(2), 68-78. doi: 10.1108/01437730210419198
- George, J. M. (2000). Emotions and Leadership: The role of emotional intelligence. *Human Relations*, 53(8), 1027-1055. doi: 10.1177/0018726700538001
- Gilbert, D. T., Fiske, S. T., & Lindzey, G. (1998). *The hand-book of social psychology (4thEd.)*. Boston: McGraw-Hill.
- Goleman, D. (1995). *Emotional intelligence: Why it can matter more than IQ*. New York: Bantam Books.
- Goleman, D. (1998). What Makes A Leader? *Harvard Business Review*. November-December.
- Gottfredson, R. K., & Aguinis, H. (2017). Leadership behaviors and follower performance: deductive and inductive examination of theoretical rationales and underlying mechanisms. *Journal of*

- organizational behavior*, 38(4), 558–591. doi: 10.1002/job.2152
- Groves, K. S., & Feyerherm, A. E. (2011). Leader cultural intelligence in context: Testing the moderating effects of team cultural diversity on leader and team performance. *Group & Organization Management*, 36(5), 535–566. doi: 10.1177/1059601111415664
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (1998). *Multivariate data analysis*, 5(3), 207–219. Upper Saddle River, NJ: Prentice hall.
- Hanges, P. J., Aiken, J. R., Park, J., & Su, J. (2016). Cross-cultural leadership: Leading around the world. *Current Opinion in Psychology*, 8(1), 64–69. doi: HYPERLINK "https://doi.org/10.1016/j.copsyc.2015.10.013"10.1016/j.copsyc.2015.10.013
- Hendrickson, C. S. (2016). Interpretive leadership and cultural intelligence: A pathway toward Christian unity. In M.D. Chapman & M. Haar (eds.), *Pathways for ecclesial dialogue in the twenty-first century: Revisiting ecumenical method* (pp. 101–114). Hampshire: Palgrave Macmillan.
- Higgs, M., & Aitken, P. (2003). An exploration of the relationship between emotional intelligence and leadership potential. *Journal of Managerial Psychology*, 18(8), 814–823. doi: 10.1108/02683940310511890
- Hohlbein, P. J. (2015). *The power of play in developing emotional intelligence impacting leadership success: A study of the leadership team in a mid-west private, liberal arts university*. Pepperdine University.
- Hooper, D., Coughlan, J., & Mullen, M. (2008). Structural equation modeling: Guidelines for determining model fit. *Electronic Journal of Business Research Methods*, 6(1), 53–60.
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1), 1–55.
- Hur, Y., Van den Berg, P. T., & Wilderom, C. P.M. (2011). Transformational leadership as a mediator between emotional intelligence and team outcomes. *The Leadership Quarterly*, 22(4), 591–603.

- Hussey, J., & Hussey, R. (1997). *Business Research, a practical guide for undergraduate and postgraduate students*. London: Macmillan.
- Ismail, A. M., Reza, R., & Mahdi, S. (2012). Analysis of the relationship between cultural intelligence and transformational leadership: The case of managers at the trade office. *International Journal of Business and Social Science*, 3(14), 252–261. Retrieved from <http://www.ijbssnet.com>
- Jaccard, J., & Wan, C. (1996). *Lisrel approaches to interaction effects in multiple regression*. Thousand Oaks: Sage.
- Jackson, D. L., Gillaspay, J. A., Jr., & Purc-Stephenson, R. (2009). Reporting practices in confirmatory factor analysis: An overview and some recommendations. *Psychological Methods*, 14(1), 6–23. doi: 10.1037/a0014694
- Jansen, J. J. P., George, G., Van den Bosch, F. A., & Volberda, H. W. (2008). Senior team attributes and organizational ambidexterity: The moderating role of transformational leadership. *Journal of Management Studies*, 45(5), 982–1007. doi: 10.1111/j.1467-6486.2008.00775.x
- Jones V. D. (2012). *The Relationship between Emotional Intelligence and Leadership Effectiveness among Sponsored Research Administrators*. Ph.D. Thesis. The University of Southern Mississippi.
- Judge, T. A., & Piccolo, R. (2004). Transformational and transactional leadership: A meta analytic test of their relative validity. *Journal of Applied Psychology*, 89(5), 755–768. doi: 10.1037/0021-9010.89.5.755
- Judge, T. A., Bono, J. E., Ilies, R., & Gerhardt, M. W. (2002). Personality and leadership: A qualitative and quantitative review. *Journal of Applied Psychology*, 87(4), 765–780.
- Kennedy, C. H. (1984). Policies of Ethnic Preference in Pakistan. *Asian Survey*, 24(6), 688–703. doi: 10.2307/2644399
- Kerr, R., Garvin, J., Heaton, N., & Boyle, E. (2006). Emotional intelligence and leadership effectiveness. *Leadership & Organization Development Journal*, 27(4), 265–279. doi: 10.1108/01437730610666028
- Keung, E. K., & Rockinson-Szapkiw, A. J. (2013). The relationship between transformational leadership and cultural intelligence.

- Journal of Educational Administration*, 51(6), 836 – 854. doi: 10.1108/jea-04-2012-0049
- Law, K. S., Wong, C. S., & Song, L. J. (2004). The construct and criterion validity of emotional intelligence and its potential utility for management studies. *Journal of Applied Psychology*, 89(3), 483-496. doi: 10.1037/0021-9010.89.3.483
- Leban, W. & Zulauf, C. (2004). Linking emotional intelligence abilities and transformational leadership styles. *Leadership and Organization Development Journal*, 25(7), 554-564. doi: 10.1108/01437730410561440
- Leedy, P. & Ormrod, J. (2001). *Practical research: Planning and design* (7th Ed.). Upper Saddle River, NJ: Merrill Prentice Hall. Thousand Oaks: SAGE Publications.
- Leeper, R. W. (1948). A motivational theory of emotion to replace emotion as a disorganized response. *Psychological Review*, 55(1), 5–21. doi: 10.1037/h0061922
- Lenartowicz, T., Johnson, J. P., & White, C. (2003). The neglect of intracountry variation in international management research. *Journal of Business Research*, 56(12), 999-1008. doi: 10.1016/S0148-2963(01)00314-9
- Libbrecht, N., Lievens, F., & Schollaert, E. (2010). Measurement Equivalence of the Wong and Law Emotional Intelligence Scale Across Self and Other Ratings. *Educational and Psychological Measurement*, 70(6), 1007–1020. doi: 10.1177/0013164410378090
- Livermore, D. (2009). *Leading with cultural intelligence*. New York, NY: American Management Association.
- Lord, R. G., & Shondrick, S. J. (2011). Leadership and knowledge: Symbolic, connectionist, and embodied perspectives. *The Leadership Quarterly*, 22(1), 207-222. doi: 10.1016/j.leaqua.2010.12.016
- Lowe, K., Kroeck, K., & Sivasubramaniam, N. (1996). Effectiveness correlates of transformational and transactional leadership: A meta-analytic review of the MLQ literature. *Leadership Quarterly*, 7(3), 385-425. doi: 10.1016/s1048-9843(96)90027-2
- Lugo, M. (2008). *An examination of cultural and emotional intelligences in the development of global transformational leadership skills (Unpublished doctoral dissertation)*. Walden University, Minneapolis, MN.

- MacNab, B., Brislin, R., & Worthley, R. (2012). Experiential cultural intelligence development: Context and individual attributes. *International Journal of Human Resource Management*, 23(7), 1320–41. doi: 10.1080/09585192.2011.581636
- Mahdi, Z., & Elaheh, A. (2012). The investigation of the relationship between cultural intelligence and transformational leadership style of primary schools managers in Torbat-E-Heydaryeh. *Interdisciplinary Journal of Contemporary Research in Business*, 4(4), 198-209. Retrieved June 4, 2015, from <http://www.ijcrb.webs.com/>
- Mandell, B. & Pherwani, S. (2003). Relationship between emotional intelligence and transformational leadership style: A gender comparison. *Journal of Business and Psychology*, 17(3), 387-404. doi: 10.1023/A:1022816409059
- Mannor, M. (2008). Top executives and global leadership: At the intersection of cultural intelligence and strategic leadership theory. In S. Ang & L. Van Dyne (Eds.), *Handbook of cultural intelligence: Theory, measurement, and applications*, 91-106. Armonk, NY: M.E. Sharpe.
- Matrear, D. W. (2009). *An examination of cognitive, cultural, and emotional intelligences, and motivation in the development of global transformational leadership skills (Doctoral dissertation)*. Retrieved June 4, 2015, from ProQuest Dissertations and Theses database. (UMI No. 3387673).
- Matthews, B. & Ross, L. (2010). *Research methods*. Harlow: Longman.
- Mayer, J. D., & Salovey, P. (1990). Emotional intelligence. *Imagination, Cognition, and Personality*, 9(3), 185-211. doi: 10.2190/dugg-p24e-52wk-6cdg
- Mayer, J. D., & Salovey, P. (1997). What is Emotional Intelligence? In P. Salovey & D.J. Sluyter (Eds.), *Emotional Development and Emotional Intelligence: Educational Implications* (pp. 3-31). New York: Basic Books.
- Mayer, J. D., Caruso, D. R. & Salovey, P. (1999). Emotional intelligence meets traditional standards for intelligence. *Intelligence*, 27(4), 267-298. doi: 10.1016/S0160-2896(99)00016-1
- McCleskey, J. (2014). Emotional intelligence and leadership: A review of the progress, controversy, and criticism. *International Jour-*

- nal of Organizational Analysis*, 22(1), 76-93. doi: 10.1108/IJOA-03-2012-056
- Mesterova, J., Prochazka, J., Vaculik, M. & Smutny, P. (2015). Relationship between self-efficacy, transformational leadership and leader effectiveness. *Journal of Advanced Management Science*, 3(2), 109–122. doi: 10.12720/joams.3.2.109-122
- Moss, S. A., & Ritossa, D. A. (2007). The impact of goal orientation on the association between leadership style and follower performance, creativity and work attitudes. *Leadership & Organization Development Journal*, 3(4), 433-456. doi: 10.1177/1742715007082966
- Mullinax, B. A. (2013). *Cultural intelligence and transformational leadership: A study of organizational leaders in India (Doctoral Dissertation)*. Retrieved June 4, 2015, from ProQuest Dissertations and Theses Database. (UMI No. 3613534)
- Ng, K., Van Dyne, L. & Ang, S. (2012). Cultural intelligence: A review, reflections, and recommendations for future research. In A.M. Ryan, F.T.L. Leong & F.L. Oswald (Eds.), *Conducting multinational research: Applying organizational psychology in the workplace* (pp. 29–58). Washington, DC: American Psychological Association.
- Ng, T. W. (2017). Transformational leadership and performance outcomes: analyses of multiple mediation pathways. *Leadership Quarterly*, 28(3), 385–417. doi: 10.1016/j.leaqua.2016.11.008
- Northouse, P. G. (2010). *Leadership Theory and Practice* (2nd Ed.). Thousand Oaks, CA: Sage Publications.
- Noruzi, M. R., & Rahimi, G. R. (2010). Multiple Intelligences, A New Look to Organizational Effectiveness. *Journal of Management Research*, 2(2), 1. doi: 10.5296/jmr.v2i2.375
- Oliverio-Olivieri, D. (2016). Language diversity and leadership effectiveness. *International Journal of Leadership and Change*, 4(1), 13–22.
- Pakistan Demographics Profile. (2014). Ethnic groups. Retrieved June 4, 2015, from http://www.indexmundi.com/pakistan/demographics_profile.html.
- Pallant, J. (2007). *SPSS survival manual: A step by step guide to data analysis using SPSS* (3rd Ed.). Berkshire: McGraw-Hill.

- Palmer, B. R., Walls, M., Burgess, Z., & Stough, C. (2001). Emotional intelligence and effective leadership. *Leadership & Organizational Development Journal*, 22(1), 5-10.
- Park, S. & Nam, Kyoung-Ah. (2016). Organizational Culture, Cultural Intelligence, & Transformational Leadership: Performance Impacts". *Academy of Management Proceedings*, 2016(1). doi: 14160. 10.5465/AMBPP.2016.14160
- Peppas, S. C. (2002). Subcultural approaches to management: A comparative study of African- and Euro-American values. *Cross Cultural Management*, 9(2), 45-64.
- Peppas, S. C. (2006). Diversity in the workplace: Hispanic perceptions of the hiring decision. *Employee Relations*, 28(2), 119-129. doi: 10.1108/01425450610639356
- Polychroniou, P. V. (2009). Relationship between emotional intelligence and transformational leadership of supervisors: The impact on team effectiveness. *Team Performance Management*, 15 (7/8), 343-356. doi: 10.1108/13527590911002122
- Riggio, R. E., Murphy, S. E., & Pirozzolo, F. J. (Eds.). (2002). *Multiple intelligences and leadership*. Mahwah, NJ 7: Lawrence Erlbaum Associates.
- Rockstuhl, T., Seiler, S., Ang, S., Van Dyne, L., & Annen, H. (2011). Beyond EQ and IQ: The role of cultural intelligence in cross-border leadership effectiveness in a globalized world. *Journal of Social Issues*, 67(4), 825-840. doi: 10.1111/j.1540-4560.2011.01730.x
- Rosete, E., & Ciarrochi, F. (2005). Emotional intelligence and its relationship to workplace performance outcomes of leadership effectiveness. *Leadership & Organization Development Journal*, 26(5), 388-399. doi: 10.1108/01437730510607871
- Rubin, R. S., Munz, D. C. & Bommer, W. H. (2005). Leading from within: The effects of emotion recognition and personality on transformational leadership behavior. *Academy of Management Journal*, 48(5), 845-858. 10.5465/AMJ.2005.18803926.
- Schreier, C., & Kainzbauer, A. (2016). Cultural intelligence at work: A case study from Thailand. In C. Barmeyer & P. Franklin (Eds.), *Intercultural management: A case-based approach to achieving complementarity and synergy* (pp. 174–183). New York: Palgrave Macmillan.

- Scott-Halsell, S., Shumate, S. R., & Blum, S. (2007). Using a Model of Emotional Intelligence Domains to Indicate Transformational Leaders in the Hospitality Industry. *Journal of Human Resources in Hospitality & Tourism*, 7(1), 99-113. doi: 10.1300/J171v07n01_06
- Sekeran, U. (2000). *Research Methods for Business: A Skills Building Approach* (3rd ed.). New York: John Wiley & Sons.
- Sivanathan, N., & Fekken, G. C. (2002). Emotional intelligence, moral reasoning and transformational leadership. *Leadership & Organization Development Journal*, 23(4), 198-204. doi: 10.1108/01437730210429061
- Skansi, D. (2017). Relation of managerial efficiency and leadership styles – Empirical study in Hrvatska Elektroprivreda d.d. *Management*, 5(2), 51-67.
- Solomon, A. & Steyn, R. (2017). Leadership style and leadership effectiveness: Does cultural intelligence moderate the relationship. *Acta Commercii*, 17(1), 453. doi: 10.4102/ac.v17i1.453
- Sosik, J. J., & Megarian, L. E. (1999). Understanding leader emotional intelligence and performance: The role of self-other agreement on transformational leadership perceptions. *Group Organization Management*, 24(3), 367-390. doi: 10.1177/1059601199243006
- Steiger, J. H. (1990). Structural model evaluation and modification: An interval estimation approach. *Multivariate Behavioral Research*, 25(2), 173–180.
- Stevens, J. P. (1992). *Applied Multivariate Statistics for the Social Sciences* (2nd Ed.). Hillsdale, NJ: Erlbaum.
- Sternberg, R. J. and D. K. Detterman (1986). *What is intelligence?: Contemporary viewpoints on its nature and definition*. Praeger Pub Text.
- Stokes, D. M. (2013). *Exploring the Relationship between cultural intelligence, transformational leadership, and burnout in doctorate of education students. (Doctoral Dissertations and Projects)*. Paper 771. Retrieved June 4, 2015, from, <http://digitalcommons.liberty.edu/doctoral/771>.
- Sutherland, A., Edgar, D. & Duncan, P. (2015). International infusion in practice – From cultural awareness to cultural intelligence. *Journal of Perspectives in Applied Academic Practice*, 3(3), 32-40. doi: org/10.14297/jpaap.v3i3.188

- Thomson, M., MacInnis, D. J., & Park, C. W. (2005). The ties that bind: Measuring the strength of consumers' emotional attachments to brands. *Journal Of Consumer Psychology, 15*(1), 77-91.
- Thorndike, E. L. (1920). Intelligence and its uses. *Harper's Magazine, 140*, 227-235. doi: 10.12691/rpbs-2-4-2
- Van Dyne, L., Ang, S., & Koh, C. (2008). Development and validation of the CQS: The cultural intelligence scale. In S. Ang & L. Van Dyne (Eds.), *Handbook of Cultural Intelligence: Theory, Measurement, and Applications* (pp. 16–38). Armonk, NY: ME Sharpe.
- Viggiano, E. (2016). The role of cultural intelligence in cyber warfare. In D.T. Zlateva & V.A. Greiman (Eds.), *Proceedings of the 11th International Conference on Cyber Warfare and Security* (pp. 415–422). Boston, MA: Academic Conferences and Publishing International.
- Wang, Y. S. & Huang, T. C. (2009). The relationship of transformational leadership with group cohesiveness and emotional intelligence. *Social Behavior and Personality, 37*(3), 379-392. doi: 10.2224/sbp.2009.37.3.379
- Ward, C., Wilson, J., & Fischer, R. (2011). Assessing the predictive validity of cultural intelligence over time. *Personality and Individual Differences, 51*(2), 138-142.
- Weaver, C.P., Jr. (2015). Perceived organizational support and job overload as moderators on the relationship between leadership effectiveness and job satisfaction. *Emerging Leadership Journeys 8*(1), 79–100.
- Wechsler, D. (1940). Non intellectual factors intelligence. *Psychological Bulletin, 37*, 444 - 445.
- Wechsler, D. (1943). Non-intellective factors in general intelligence. *Journal of Abnormal Social Psychology, 38*(1), 100-104. doi: 10.1037/h0060613
- William, C. (2007). Research methods. *Journal of Business & Economic Research, 5*(3), 65–72.
- Wong, C., & Law, K. S. (2002). The effects of leader and follower emotional intelligence on performance and attitude: An exploratory study. *The Leadership Quarterly, 13*(3), 243-274. doi: 10.1016/S1048-9843%2802%2900099-1

- Yukl, G. (1989). *Leadership in Organizations*. Englewood Cliffs, NJ: Prentice-Hall.
- Zhang, Y. (2012). Expatriate development for cross-cultural adjustment: Effects of cultural distance and cultural intelligence. *Human Resource Development Review*, 12(2), 177–199.
- Zheng, C., Morrison, M., & O'Neill, G. (2009). Enhancing Chinese SME Performance through Innovative HR Practices. *Personnel Review*, 38(2), 175-194. doi: <https://doi.org/10.1108/00483480910931334>
- Zineldin, M. & Amsteus, M. (2014). Negativity hurts your style? A study of leaders' negative emotions and their leadership style. *International Journal of Work Organization and Emotion*, 6(4), 327-337. doi: <https://doi.org/10.1504/IJWOE.2014.068033>