

*Conceptual Paper*

# Impact of Cultural Intelligence and Learning Styles on Leadership Effectiveness: A Conceptual Analysis

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## Abstract

The study has reviewed a significant number of research articles to examine the effects of cultural intelligence and learning styles on leadership effectiveness. Almost all the articles reviewed were empirical in nature and few conceptual papers were reviewed as well. Fifteen (15) relevant research were reviewed to establish the theoretical proposition of the effect of cultural intelligence on leadership effectiveness, while another fifteen (15) articles were reviewed to examine the effect of learning style on leadership effectiveness. Most of the reviewed papers indicated that cultural intelligence and learning style has significant positive effects on leadership effectiveness. From the review, it was also found that there is lack of studies examining learning style effect on leadership effectiveness particularly in pharmaceutical sector. This study will contribute by establishing the link between cultural intelligence, learning style and leadership effectiveness simultaneously. Also, this study will be able to use to design the training and development programs to enhance, cultural intelligence and to adopt appropriate learning style to improve leadership effectiveness in commercial enterprise sector, particularly in Malaysia.

**Keywords:** Cultural Intelligence, Leadership Effectiveness, Learning Style.

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## Introduction

Leadership effectiveness is crucial, especially in the current dynamic business environment and leaders need to utilise their CQ to improve their performance and their employees' productivity (Richard-Eaglin, 2021; Afsar, Shahjehan, Shah & Wajid, 2019). The intense competition faced by organisations in their operating context demands leaders to be highly effective in terms of productivity and fast decision making (Ali & Anwar, 2021a; Warrick, 2017). In order to be effective, leaders are expected to ensure their subordinates are committed and motivated to face the challenges of changes (Ali & Anwar, 2021b; Owens & Hekman, 2016). It is pivotal for leaders to continuously enhance their CQ to improve leadership effectiveness by adopting appropriate learning styles to make fast and timely decisions (Davidaviciene & Al Majzoub, 2022; Reyes, 2021; Nam & Park, 2019). Similarly, to compete effectively, the CQ must be improved in order to enhance the memory and knowledge base to avoid making mistakes during decision making at various locations of the world (Hassan, Osman-Gani & Hamid, 2022; Presbitero, 2020; Hassan, Basit & Sethumadavan, 2020). CQ is considered as an important factor that could improve learning to improve leadership effectiveness (Velarde, Ghani, Adams & Cheah, 2022; Osman-Gani & Hassan, 2018).

Recent studies found that leadership effectiveness is important in pharmaceutical sector as leader's behaviours play an important role improving employee performance and their satisfaction (Zadeh, Hackney & Zeng, 2022; Hidayati & Zainurossalamia, 2020; Sultana, Tarofder, Darun, Haque & Sharief, 2020; Haider, Nisar, Baig & Azeem, 2018). Since leaders who assume the headship of their organization, they have a prime position in the development and performance of their respective organizations (Guarana & Avolio, 2022). According to Burnes, Hughes and By (2018), changes in organizational structure, vision and leadership are unavoidable in any organization (Abbas, Ekowati & Suhariadi, 2021). The leadership style of a leader is individualistic, and it is distinctly different from other individuals in an organization (Sims, Carter & Peralta, 2021; Koo & Park, 2018). It separates a leader from another and it is this authoritative power that drives employee's performance, especially in the pharmaceutical sector. It is thus important that leadership teams at pharmaceutical sector build their capacity as strong leaders to be able to lead their team members towards achieving their organizational goals and vision (Hamid, Widodo & Buchdadi 2022; Yuan & Lo, 2018). Furthermore, it is crucial for leaders to instil confidence in each of their team members through CQ (Davidaviciene & Al Majzoub, 2022; Dibble, Henderson & Burns, 2019). Thus, it is very important for a leader in a diverse environment to be able to adapt to cultural differences and bring together different styles and attributes to form his/her strategy for success (Charoensukmongkol, 2021; Weber, Sadri & Gentry, 2018; Mui, Basit & Hassan, 2018). A truly experienced leaders must know how to use CQ and LS to drive the organisation forward and achieve challenging targets without neglecting specific cultural attributes (Reyes, 2021; Solomon & Steyn, 2017). Research shows that the effect of national cultures on organisational cultures or local cultures are highly influential to effect on business environments (Lopes & Boyadjian, 2021; Khan & Panarina, 2017), and in addition it was argued that greater differences in organisational attributes and practices exist when companies face great cultural distance between the two countries (Lopes & Boyadjian, 2021; Shao, Bouzdine-Chameeva & Lunardo, 2020). Some researchers have substantiated the need to focus on enhancing leadership

effectiveness, particularly on improving sales, marketing and operational leaders' effectiveness by improving CQ through LS to grow the firm 's revenue (Velarde et al., 2022; Charoensukmongkol & Phungsoonthorn, 2022; Hassan et al., 2020; Basit et al., 2020).

It is crucial to have highly capable, effective, smart and high-performing leaders or leaders to ensure a firm's business sustainability (Ali & Anwar, 2021a; Blanchard, 2018; Mui et al., 2018). However, there are several management issues and operational challenges facing firms today in using leaders, particularly sales and marketing leaders (Ali & Anwar, 2021b; Hassan et al., 2020). Managing and motivating sales and marketing leaders are challenging tasks and require a huge amount of time, money and effort (Zadeh et al., 2022; Hohenberg & Homburg, 2016). Hence, leaders' performance warrants rigorous examination when studying factors affecting a pharmaceutical company's performance (Zadeh et al., 2022; Ugbam & Okoro, 2017). In Malaysia, it is evident that there is lack of empirical research done so far to examine the mediating effect of LS on relationship between CQ and LE (Rahman et al., 2022; Basit, Sethumadevan & Hassan, 2020). In terms of CQ, much research in the past indicated that the cultural diversity for multicultural domestic work teams (Rahman et al., 2022; Osman-Gani & Hassan, 2018), multinational work teams (Hamid et al., 2022; Iskhakova & Ott, 2020), global leaders (Davidaviciene & Al Majzoub, 2022; Jiang, Le & Gollan, 2018) and those in overseas work assignments (Charoensukmongkol & Phungsoonthorn, 2022; Furnham, 2017) were important cultural elements to enhance the leadership effectiveness. However, the available literature lacks to evaluate the effect of CQ on leadership effectiveness among pharmaceutical leaders, both in Malaysia as well as in the global context (Rahman et al., 2022; Basit et al., 2020). Current literature pertaining to CQ in Malaysia shows only handful of published articles, which had investigated the effects of CQ on job performance and/or job adjustment among expatriates in Malaysia (Rahman et al., 2022; Hassan et al., 2020; Ramalu & Subramaniam, 2019; Malek & Budhwar, 2013).

In previous studies, it is evident that less emphasis was made in understanding the effect of CQ and LS on leadership effectiveness in the Western countries as well. Most of the studies focus on cultural intelligence and leadership style (Gill, 2021; Hatane et al., 2021; Kua & Lee, 2021; Zaman et al., 2021; Solomon & Steyn, 2017; Aldhaferi, 2017; Solomon & Steyn, 2017a) while there were only limited studies on examining the impact of CQ on leadership effectiveness in commercial sectors (Gill, 2021; Ashley, 2020; Solomon & Steyn, 2017). Very few studies focus on examining the effect of cultural intelligence on learning style (Hatane et al., 2021; Kurpis & Hunter, 2017; Li, Mobley & Kelly, 2013) and learning style on leadership effectiveness in pharmaceutical or commercial enterprises are very limited (Kua & Lee, 2021; Akyürek & Guney, 2018; Zumitzavan, 2011; Joy & Kolb, 2009). But the limited studies done to examine the effect of CQ on leadership effectiveness and LS on leadership effectiveness in developing countries have been producing inconsistent results due to differences in socio-cultural background, income, and culture (Zaman et al., 2021; Kouzes & Posner, 2018; Piercy, Low & Cravens, 2011). Since the focus of CQ and LS on leadership effectiveness were not sufficiently addressed, particularly in pharmaceutical industry, it would be worthwhile to conduct an empirical study to understand the effects of CQ and LS on leadership effectiveness. Based on the above-mentioned issues and problems, this study seeks to bridge the research gaps, and thereby aims to contribute to the existing body of

knowledge on leadership effectiveness. The present study attempts to conduct a systematic review by conceptualising the effect of CQ and LS on leadership effectiveness.

From the above reviews, it is clearly evident that the past research mainly focused on examining the effects of CQ on leadership effectiveness (Basit et al., 2020; Ahmad & Saidalavi, 2019; Osman-Gani & Hassan, 2018; Pacheco & Stevens, 2018). Basit et al (2020) covered the two aspects of CQ and Learning Style on leadership effectiveness. However, their study was a conceptual analysis on the banking sector. This needs to be further investigated by empirically testing the propositions made in their study. Similarly, this conceptual analysis is further review more empirical based studies and explored in pharmaceutical sector-based literature. Since Learning style is mainly studied or tested in academic sector along with students and teachers' learning style and its effect on academic achievement or performance (Ata & Cevik, 2019; Akyürek & Guney, 2018; Labib, Canós & Penadés, 2017; Turesky & Gallagher, 2011)

This shows that there is very little or limited research done to establish the simultaneous effect of CQ and LS on leadership effectiveness, especially in the pharmaceutical sector. Therefore, this study could be one of the pioneering studies that will examine the effect of CQ and LS on leadership effectiveness in commercial sector. This study will enable us to put emphasis on the importance of CQ and LS in enhancing leadership effectiveness.

## **Literature Review**

### *Cultural Intelligence*

CQ is a collection of mental, motivational and behavioural abilities (Idrus, 2021; Presbitero, 2016). Also, it was reported that CQ is distinct from emotional and other intelligences in that such intelligences are culture constrained (Akpan & Inyang, 2022; Thomas, Elron, Stahl, Ekelund, Ravlin, Cerdin & Maznevski, 2008) as they do not transfer across the cultural spectrum. One of the key definitions of CQ is 'an individual's capability to function and manage effectively in culturally diverse settings' (Ang, Van Dyne, Koh, Ng, Templer, Tay & Chandrasekar, 2007, p.337). Also, CQ is defined as 'ability to adapt effectively to new cultural settings' (Ng & Earley, 2006, p.7). Alternatively, CQ is referred to as 'individual's capability to detect, assimilate, reason, and act on cultural cues appropriately in situations characterised by cultural diversity' (Earley & Ang, 2003, p.297). On the other hand, CQ was defined as awareness and motivation about cultural differences to provide rooms for adaptation and adjustments where necessary (Akpan & Inyang, 2022; Van Dyne, Ang, Ng, Rockstuhl, Tan & Koh, 2012).

### *Leadership effectiveness*

Yukl, Mahsud, Prussia and Hassan (2019) and Louw, Muriithi and Radloff (2017) described leadership effectiveness as a process of interaction to influence subordinates and colleagues to attain the desired goal through effective dialogue with the employees and agreement with them on ways of achieving it (Singh, 2021). Similarly, leadership effectiveness is all about achieving a shared objectives by influencing one or many to

accomplish the objectives (Sims et al., 2021; Islam, Osman, Othman & Raihan, 2019). As accomplishing shared objectives by influencing one or many individuals who are willing and convinced to work for accomplishment of the objectives (Singh, 2021; Müller, Pintor & Wegge, 2017). Bass and Stogdill (2018) have worked on more than thousand definitions of leadership effectiveness and have resolute that effectiveness of leadership largely focuses on measurability of productivity and achievement of shared goals (Singh, 2021). Also, leadership effectiveness is about applying the appropriate leadership style in given situations (Kwiatkowska, Wolniak, Gajdzik & Gębczyńska, 2022; Lor & Hassan, 2017). More recently Kouzes and Posner (2018) argued that the leadership effectiveness comprises of five exemplary practices such as challenge the process, inspire a shared vision, enable others to act, model the way, and encourage the heart. The leadership effectiveness was conceptualised in relation to emotional intelligence by Osman-Gani, Anwar and Hamid (Osman-Gani, Anwar & Hamid, 2017). Much earlier than this, Osman-Gani and Rockstuhl (2009) have discussed leaders' adjustment in cross cultural setting and how such adaptation could affect leadership effectiveness. Ajanaku and Lubbe (2021), Basit et al (2020) as well Osman-Gani and Hassan (2018) have proposed the revised leadership effectiveness model which was originally developed by Kouzes and Posner (1995) and was considered as one of the most relevant and appropriate leadership effectiveness models.

### *Learning Style*

The debate about learning styles has been ongoing for more than decades (Alonso-Martín et al., 2021; Husmann & O'Loughlin, 2019). Early definition of learning style stated that “learning styles are cognitive, affective, and physiological traits that serve as relatively stable indicators of how learners perceive, interact with, and respond to learning environment” (Keefe, 1982, p.2). Research into learning styles was originally associated with the theoretical domain of psychology (Wong, 2022; Barry & Egan, 2018; Felder & Silverman, 1988). Also, learning style is defined as a preference method of study, attitude, and strength of student in receive data and process data (Gayef, Çaylan & Temiz, 2023; Felder & Silverman, 1988). Kolb (1984) had opinion that learning style is defined a person regular or specific interest way in receiving develop new knowledge in these areas. Leaders' and managers' learning orientation towards some of the Kolb's learning dimensions such as abstract conceptualisation over concrete experience was related to the increased self-efficacy beliefs (Özdemir & Hastürk, 2021; Yamazaki, Toyama & Ubed, 2018). Where managers' orientations towards active experimentation over reflective observation was associated with general self-efficacy development but had a marginal influence on career management self-efficacy (Taneja, Kiran & Bose, 2023; Yamazaki et al., 2018).

### *Analysis of Relevant Theories*

In terms of related theories in explaining the three key concepts, five exemplary leadership practices were the most dominant leadership effectiveness theory widely adopted among the scholars (Kouzes & Posner, 2018). These five (5) practices are mostly considered as an advocate of transformational leadership and Kouzes and Posner (2018) investigated in-depth what transformational leaders do when they are at their best. The five (5) exemplary practices of leadership include Modelling the Way, inspiring a Shared



Vision, Challenging the Process, Enabling Others to Act, and Encouraging the Heart (Kouzes & Posner, 1995).

There are several reasons why the Leadership Practices Inventory (LPI) is the most relevant framework to assess leadership effectiveness. First, the construct of Kouzes and Posner's (1995) leadership model is grounded on their five-year extensive research involving thousands of high-performing leaders and their followers (Kouzes & Posner, 2021; Kouzes & Posner, 2018). Second, many researchers have well received this model as truly representing the highly effective leadership practice (Zaini & Mansor, 2021; Osman-Gani & Hassan, 2020; Basit et al., 2020). Third, the Five Practices of Exemplary Leadership provides a framework for the development of a reliable and validated instrument to measure effective leadership, which is the Leadership Practices Inventory (Kouzes & Posner, 2021). In a review article investigating the reliability and validity of the Leadership Practices Inventory concluded that the leadership Practices Inventory is essentially robust and practical in a variety of settings and populations (Posner, 2016; Kouzes & Posner, 2016; 2017; 2019). Fourth, the leadership effectiveness measured by Leadership Practice Inventory (LPI) of Kouzes and Posner's was examined to determine the professional development of managers (Zaini & Mansor, 2021). Therefore, this study adopted Kousez and Posner's LPI as it was widely adopted and applied to assess leadership effectiveness in diverse settings, including pharmaceutical sector.

In terms of cultural intelligence, On the other hand, according to Sternberg (2018) intelligence is inherent in different loci within individuals. Based on the insights from the prior intelligence research, the cultural intelligence model. Earley and Ang (2003) proposed that cultural intelligence is a multi-faced aggregate construct and consists of four factors: (1) meta-cognitive cultural intelligence, which refers to an individual's higher mental thought capability to acquire cultural knowledge; (2) cognitive cultural intelligence, which refers to an individual's knowledge of cultures and intercultural variations; (3) motivational cultural intelligence, which refers to an individual's intrinsic energy that directed towards functioning in intercultural contexts; and (4) behavioural cultural intelligence, which refers to an individual's capability for flexibility in his behaviours during intercultural interactions. Both meta-cognitive and cognitive cultural intelligence are the intellectual elements of cultural intelligence, and therefore apply in developing the aspects that flow from different cultural experiences. The cultural intelligence model of Earley and Ang (2003) is relevant and important to this study for the following reasons. First, this cultural intelligence model describes a general set of capabilities that facilitate an individual's potential to perform effectively even in different unfamiliar intercultural settings (Fu & Charoensukmongkol, 2023; Ott & Michailova, 2018; Ang et al., 2007). Second, it is a theoretically coherent model that provides a parsimonious framework for intercultural functional capabilities, sparing various narrower distal dimensions such as planning, self-awareness (Pidduck, Shaffer, Zhang et al., 2022; Ang, Rockstuhl & Tan, 2015). Third, this cultural intelligence model takes into account all four factors simultaneously to encompass the cultural capabilities domain (Paiuc, 2021; Ramsey, Abi Aad, Jiang, Barakat & Drummond, 2016) while other cultural competency models differ in scope and fail to incorporate all the four factors. Fourth, the twenty-item four factors Cultural Intelligence Scale (CQS) developed by Ang et al., (2007) fulfils both the criteria as it generalises across different settings (Stoermer, Davies & Froese, 2021). It has been adopted in various empirical research extensively, i.e.,

multiple student or executive samples, a vast number of countries (including United States, Switzerland, South Korea, and Turkey), repeated measurements with time interval up to four months, multicultural teams' settings, and multicultural samples (Ang et al., 2015). Sixth, the cultural intelligence model has significant rigorous psychometric properties and proven construct validity (Soffer-Dudek et al., 2021; Ang et al., 2020). Seventh, several scholars have appreciated that the construct of cultural intelligence provides a practical framework for intercultural application and capabilities (Chen, Yang, Liu et al., 2023; Stoermer et al., 2021; Ang et al., 2020; Hassan et al., 2020; Basit et al., 2020; Osman-Gani & Hassan, 2018). Moreover, the cultural intelligence of Earley and Ang (2003) were studied in association with leadership effectiveness by many scholars in the past (Fu & Charoensukmongkol, 2023; Charoensukmongkol & Phungsoonthorn, 2022; Davidaviciene & Al Majzoub, 2022; Charoensukmongkol, 2021). The four cultural intelligence elements such as metacognitive, cognitive, motivational and behavioural cultural intelligence were studied and have established its causal influence on leadership effectiveness (Khemakhem, 2023; Velarde et al., 2022; Licki & Van Der Walt, 2021). Therefore, the cultural intelligence model of Earley and Ange (2003) model is considered as one of the most appropriate and relevant models to study cultural intelligence in relation to leadership effectiveness.

In terms of learning theories, the experimental learning style of Kolb (1984) was adopted as one of the key determinants of leadership effectiveness. Kolb has introduced the theories of four stage learning cycle that indicates learning is deemed to be a continuous and interactive process (Kolb, 1976). The four stages of learning cycle are the four learning orientations form two orthogonal bipolar dimensions of learning (Kolb, 1984). Firstly, comprehension tends to be information obtained from experience; it consists by bipolar orientations from Concrete Experience to Abstract Conceptualisation. Next, the second dimension described is transformation, which is the process of transformation of information received. It constitutes Active Experimentations and Reflective Observation (Kolb & Kolb, 2005). Kolb (1984)'s experimental learning style framework was adopted for the following reasons: (1) Kolb's theory is an established theory as a learning theory that confirms the key aspects of active learning (Song & Park, 2021; Hasnine, Ahmed & Ueda, 2021, July). (2) It gives theoretical claim of independent learning, learning by performing, problem-based learning and work-based learning (Fergusson, 2022). (3) Kolb's learning theory has a substantial range of applications, including helping individuals recognise themselves, helping the leaders become reflexive leaders, identifying learning styles of subordinates, and development of key leader's skills (Fergusson, 2022; Aksan, 2021). (4) Also, Kolb's learning theory helps in development of teamwork or project work (Rossetti, 2023; Wong, Ko, Nam et al., 2022). (5) Furthermore, Kolb's learning theory helps deciding ways that information and communication technologies can assist the process of learning (Saputra & Hadi, 2023; Chiu, Hwang & Hsia, 2023; Nozaleda, 2021). Moreover, Kolb's learning theory has the following benefits over other learning theories.

- ✓ Gives ready guidance or instruction for application (AbuKhouza, El-Tahawy & Atif, 2023)
- ✓ Gives instruction or guidelines for the necessary range of workplace learning methods (AbuKhouza et al., 2023; Mayombe, 2023).

- ✓ Provide a strong link between theory and practice: Offers a theoretical proposition of things that many trainers and instructors apply and need advice on how to improve their practice (Wijnen-Meijer, Brandhuber, Schneider & Berberat, 2022)
- ✓ Clearly formulates the importance of employees to reflect and the importance of providing feedback in order to enhance their performance (Rossetti, 2023)
- ✓ Enable to justify the way of combining learning styles so that learning can become more effective (Özdemir & Akalın, 2022).
- ✓ Without any effort, Kolb's learning theory can be used in all functional areas of the organization in order to train the employees in every subject area to solve the issues (Gencel, Erdogan, Kolb & Kolb, 2021).
- ✓ Kolb's learning theory can be used by an individual, by teams, or by whole organisations (Devi & Thendral, 2023).
- ✓ Kolb's learning theory can be used in a particular training, briefing sessions, or long-term training of study (Devi & Thendral, 2023; Fergusson, 2022; Aksan, 2021)

Therefore, the Kolb (1984)'s learning style model is considered to be most appropriate and relevant learning theory to undertake this study in determining leadership effectiveness.

## Research Methods

This conceptual analysis via literature review examined relevant information regarding cultural intelligence, learning style and leadership effectiveness in a multi-ethnic society. The primary goal of this conceptual analysis through systemic literature review is to identify the existing research gaps with regards to a particular research area. The synthesis of the existing research available on public domains focused on examining the causal impact of CQ and learning style on leadership effectiveness outcomes were important to achieve the objective of this conceptual analysis. Therefore, a well-designed approach was adopted to analyses and determine the value of relevant research using a widely adopted selection process, which is illustrated below.

### Search Strategy

Multiple databases were utilized to identify published, peer-reviewed articles containing relevant primary studies. Studies were sourced from the following databases: Emerald Insight, Science Direct/Elsevier, Business Source Premier/EBSCO, Google Scholar, and Sage Publications. The inclusion criteria and search terms were developed. Full article screening was subsequently completed, through which additional articles were identified for inclusion. Emphasis was placed on selecting studies that applied to cultural intelligence and learning style at the level of individual capability, while simultaneously capturing only those studies that were relevant to the concept of leadership effectiveness. Keywords for the search, therefore, included three concept domains such as "cultural intelligence," "learning style", and "leadership effectiveness".



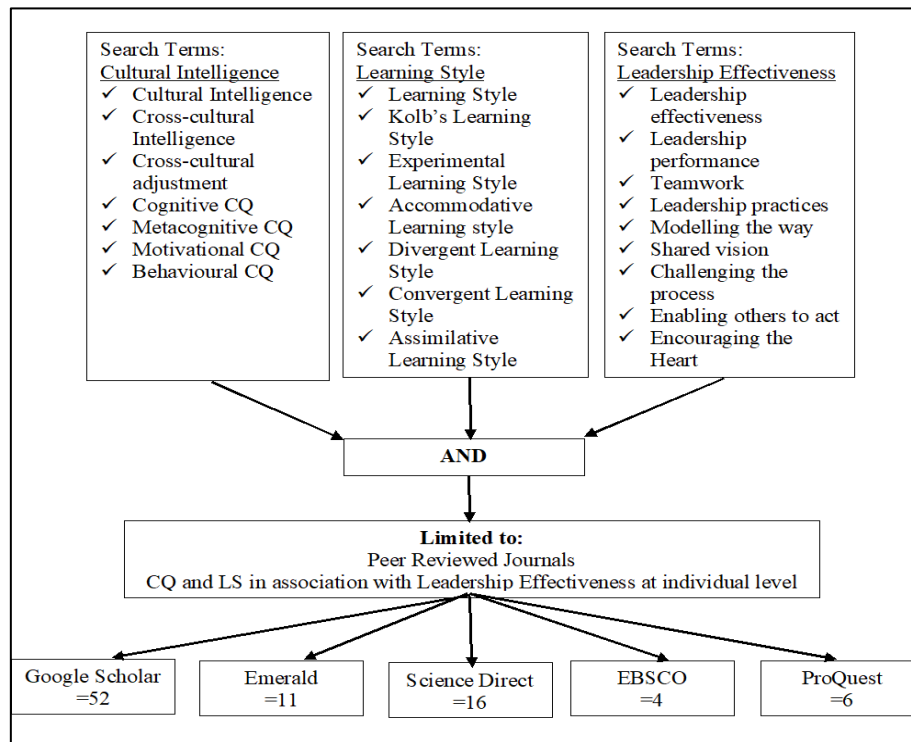


Figure 1. Search Strategy Framework

Within these three (3) categories, several related terms and synonyms were used with OR as the connector in order to avoid excluding studies which used different phrasing. The category CULTURAL INTELLIGENCE included: “cultural intelligence”, “cross-cultural intelligence”, “cross-cultural adjustment”, “cognitive CQ”, “metacognitive CQ”, “motivational CQ”, and “behavioural CQ”. The category LEARNING STYLE included: “learning style”, “Kolb’s learning style”, “experimental learning style”, “accommodative learning style”, “divergent learning style”, “convergent learning style”, and “assimilative learning style”. With respect to the category “LEADERSHIP EFFECTIVENESS” included the words “leadership effectiveness”, “leadership performance”, “teamwork”, “leadership practices”, “modelling the way”, “shared vision”, “challenging the process”, “enabling others to act”, and “encouraging the heart”.

During the search, the word AND was used a search connector to ensure at least one keyword from each category of “CULTURAL INTELLIGENCE”, “LEARNING STYLE” and “LEADERSHIP EFFECTIVENESS” was included in the results. Separate searches on all five (5) databases using the keywords produced a total of eighty-nine (89) outcomes, as summarized in Figure 1.

The abstract was first reviewed and examined to check for its relevance and to determine if the studies met the inclusion criteria as discussed below. The full text was examined to determine the relevance of the article against the inclusion criteria. Furthermore, the reference sections of relevant articles thoroughly examined to include any additional relevant articles for analysis. The duplicated articles were removed during the screening process. Most of the articles found during the literature search were excluded based on the selection criteria.

Research articles were screened for specific qualities identified in the selection criteria in order to determine the most relevant available evidence on the causal impact of cultural intelligence and learning style on leadership effectiveness outcomes. Only relevant peer-reviewed journal articles were included in the analysis. Most of the articles, particularly research articles that examined cultural intelligence and learning style at organisational capability level were excluded. Research articles that focused on or provide data on examining the impact of cultural intelligence and learning style and/or its elements on leadership effectiveness were included. The studies that assessed the predictors of cultural intelligence and learning style using self-report measures were included based on the inclusion criteria. The predictor of cultural intelligence includes cultural intelligence, cross-cultural intelligence, cross-cultural adjustment, cognitive, metacognitive, motivational and behavioural CQ. Studies that assessed learning style of leaders based on Kolb's accommodative, divergent, convergent and assimilative learning style by utilizing peer/supervisor assessment or self-reporting that met the inclusion criteria. Studies which examined leader's leadership effectiveness but were not associated with cultural intelligence (CQ) and learning style were excluded from the review. The leadership performance, teamwork, leadership practices, modelling the way, shared vision, challenging the process, enabling others to act, and encouraging the heart were included in the selection process. If any of these concepts were not identified in association with leadership effectiveness were excluded from the review.

According to Earley and Ang (2003), CQ research was driven by the reality of shrinking space, shrinking time, and borderless world causing a deeper integration of globalisation in the workplace, where the credibility of research seeking to address the impact of CQ on leadership effectiveness particularly in multi-ethnic society. Considering this, the diversity of research contributions and diversity of leadership experience were deemed to be vital to the context of this specific research. In order to ensure that all applicable leadership effectiveness experiences were assessed. Therefore, the journal location and quality were not included as a screening requirement. The article selection process was illustrated in Figure 2.

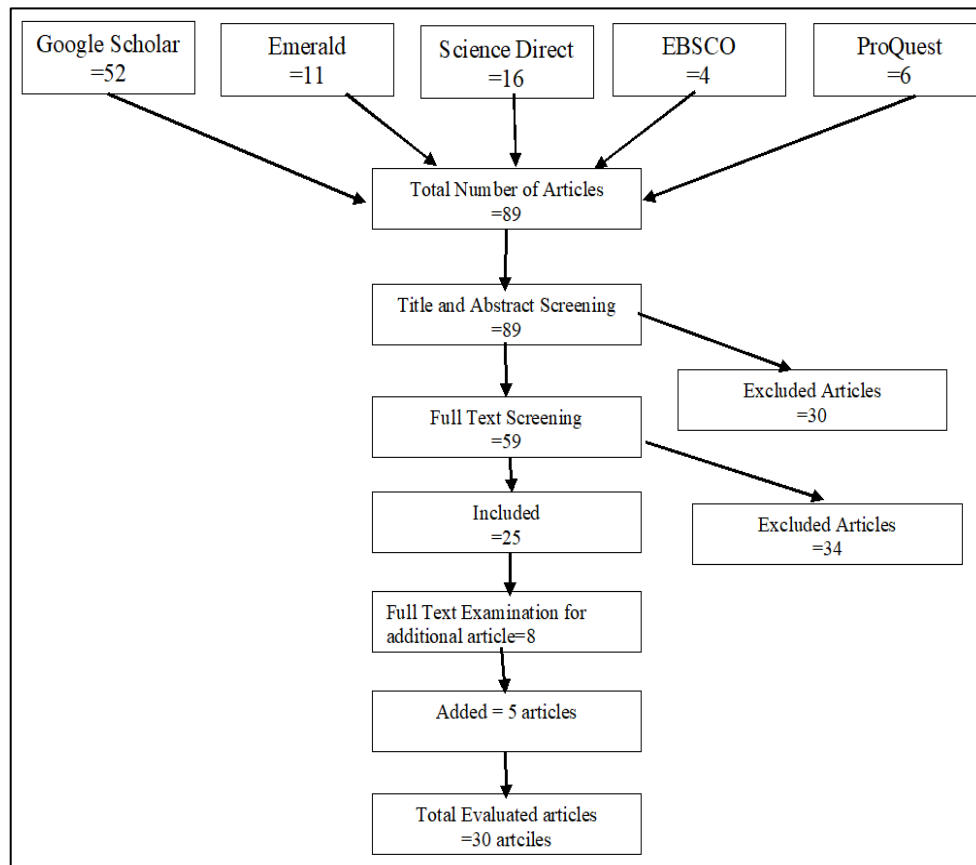


Figure 2. Article Selection Process

## Findings and Analysis

Cultural intelligence (CQ) tends to portray a general perspective about various cultural norms, practices, and values that enables to increase leadership effectiveness (Fu & Charoensukmongkol, 2023; Ahmad & Saidalavi, 2019). Also, they argued that CQ is one of the prime factors that influence leadership effectiveness in multicultural setting where there exists a very diverse workforce (Khemakhem, 2023; Velarde et al., 2022; Licki & Van Der Walt, 2021; Ahmad & Saidalavi, 2019; Osman-Gani & Hassan, 2018). Furthermore, it was found that in situations which involved cultural diversity cross-border context, leaders with high level of CQ have an enormous influence on leadership effectiveness (Davidaviciene & Al Majzoub, 2022; Charoensukmongkol, 2021; Rockstuhl & Van Dyne, 2018). Furthermore, it was argued that global leaders with high level of CQ able to transform their experiences into positive learning outcomes that improve their overall leadership effectiveness (Cotter, 2021). More recent research suggested that CQ has significant effect on the inter-cultural capacity of leaders and by improving such intellectual behaviour of leader's causes to improve leadership effectiveness (Chen et al., 2023; Stoermer et al., 2021; Liao & Thomas, 2020). Several research have examined the relationship between the dimensions of cultural intelligence; meta-cognitive CQ, cognitive CQ, motivational CQ, and behavioural CQ towards transformational leadership and found meta-cognitive CQ was the most significant predictor of transformational leadership (Akpan & Inyang, 2022; Idrus, 2021; Afsar et al.,

2019; Göksoy, 2017; Ang et al, 2007). In the past, research has indicated that Metacognitive CQ was significantly associated with leadership effectiveness (Le, Jiang & Radford, 2021; Solomon & Steyn, 2017). Second dimension of CQ such as cognitive CQ has a significantly strong influence on leadership effectiveness (Mangla, 2021; Kim & Van Dyne, 2012). Also, past research has asserted that motivational CQ has a significantly positive influence on transformational leadership (Velarde et al., 2022; Ismail, Reza & Mahdi, 2012). Research done in the past indicated that motivational CQ was significantly associated with leadership effectiveness (Charoensukmongkol, 2021; Solomon & Steyn, 2017). A recent study also indicated that motivational CQ is positively associated with leadership effectiveness in terms of task performance (Song, Varma & Zhang Zhang, 2023; Pacheco & Stevens, 2018). In terms of behavioural CQ, research indicated that behavioural CQ has significant and positive influence on leadership effectiveness (Charoensukmongkol, 2021; Göksoy, 2017). Furthermore, past research found that behavioural CQ has mediated the preceding cultural interaction towards international leadership potentials (Velarde et al., 2022; Van Dyne et al, 2012). Since most of the recent research reported that leaders directly influence employee performance indicating leadership effectiveness, it shows that behavioural CQ of leaders has a positive and significance effect on employee performance (Yuan, Kim & Min, 2023; Göksoy, 2017; Ismail, Reza & Mahdi, 2012). Therefore, the following proposition is developed:

**Proposition 1:** CQ has a positive and significant effect on leadership effectiveness.

The relationship between learning style and leadership effectiveness is merely established in the past research. Also, leaders can become more effective by selecting a specific learning style to acquire and disseminate knowledge (Saputra & Hadi, 2023; Park & Kim, 2016). Once leaders identify their learning style, it will help them to understand the process making them more effective in learning and acquiring knowledge (Saputra & Hadi, 2023; Gemmell, 2017). Furthermore, this enables leaders to increase their own learning processes and skills, opening the opportunity to improved performance and personal development (Durnali, 2022; Heslin & Keating, 2017). In addition to this, learning style makes it easier for the leaders to know how to attain the skills or knowledge involved in their everyday responsibilities (Idkhan & Idris, 2021; Gemmell, 2017). As argued by Posner (2016), individuals who can learn from more than one category and thus have a greater repertoire of learning styles at their disposal are better able to learn about leading and becoming leaders. The reviewed research indicated that Kolb's learning styles such as concrete experience has significantly positive relationship with leadership effectiveness in terms of strategic decision making (Rossetti, 2023; Wong et al., 2022; Akyürek & Guney, 2018). They also found that learning styles such as abstract, active, and reflective observation have a positive and significant association with leadership effectiveness in terms of effective decision making (Fergusson, 2022; Akyürek & Guney, 2018). With reference to past literature, it is evident that each learning style poses challenges and enables opportunities for leaders to become more effective by adopting the most suitable learning style (Aksan, 2021; Basit et al, 2020). For example, past research indicated that the divergent learning style has the strength and liability of lie in leaders desire to search unceasingly for new possibilities and solutions (Maya, Luesia & Pérez-Padilla, 2021; Turesky & Gallagher, 2011). On the negative side the divergent learning style may diverge leaders from the problem or situation at hand and go off on a tangent, straying significantly from the task (Cohen, 2023; Alvesson, 2019) making

leaders become less relevant and ineffective. In terms of convergent learners, they are very technical rather than interpersonal (Idkhan & Idris, 2021; Ata & Cevik, 2019). However, leaders with convergent learning style tend to make decisions without complete information causing those leaders to become less effective (Maker, 2022; Gemmell, 2017). However, the leaders with the learning style of converges tend to be more effective when they work in groups (Malatji, Ramollo & Malatji, 2023; Labib et al, 2017). In terms of assimilators, those leaders with assimilator learning style tend to gather information and data to make decisions, while they tend to think a lot and be concerned about the people (Nitriani, Darsikin & Saehana, 2022; Turesky & Gallagher, 2011). Assimilators are less effective in decision making as assimilators normally will make decisions when they only obtain the complete set of information (Kamran, Naeim, Mohammadi & Masoumi, 2022; McCarthy, 2016). Leaders with accommodative learning style tend to respond quickly to the needs, especially when others are involved (Saputra & Hadi, 2023; Jena, 2016). Accommodators are highly effective in their decision making and focus on whole problem results improvement in leadership effectiveness (Saputra & Hadi, 2023; Avsec, & Szewczyk-Zakrzewska, 2017). Therefore, the following proposition is developed:

**Proposition 2:** Learning Styles have positive and significant effect on leadership effectiveness.

## Conclusions

Based on the review of the related theories, concepts and past literature, it can be concluded that cultural intelligence (CQ) and Learning styles are two crucial constructs that can influence leadership effectiveness. Cultural intelligence (CQ) reflected by the four aspects such as cognitive CQ, meta-cognitive CQ, motivational CQ and behavioural CQ has a positive and significant impact on leadership effectiveness. Although very few studies have focused on examining the relationship between learning style and leadership effectiveness, it was argued in the past that identification of appropriate learning style of leaders is important to develop effective leadership competencies. Also, the overall effect of learning style dimensions on leadership effectiveness is very important. Therefore, it is very important to empirically examine effects of CQ and LS on Leadership Effectiveness in banking sector, particularly in Malaysia to establish the link between CQ and LE through LS and thereby identify the appropriate human resource development interventions to develop leadership effectiveness through five exemplary practices of leadership proposed by Kuozes and Posner (1995). This study will enable managers in the banking sector to develop and design their human capital programs as well as in training programs to enhance the CQ and leaning style adoption among the managers, particularly pharmaceutical industry Leaders.

## Implications for Research and Practice

This study will increase the level of understanding and knowledge about multiple cultures and will enable us to focus on ways to facilitate successful inter-cultural interaction. As a result of increasing knowledge, it may increase leadership effectiveness. Also, this study will contribute to developing new knowledge in the theoretical domains of the theories of multiple intelligence and learning styles. The findings will also enable



managers in making new organisational and human resource development policy decisions on improving and enhancing leadership effectiveness by improving cultural intelligence as well as by facilitating and guiding managers to adopt most appropriate learning style.

Also, this study will emphasis establishing the LS and CQ as two key determinants of leadership effectiveness. This means the study will contribute to leadership theory with new findings. Since many studies have been undertaken to study various aspects of the Theory of multiple intelligence, the present study has chosen CQ as a key intelligence construct that is relevant to study leadership effectiveness. Since leaders working in commercial sectors in Malaysia are constantly engaging with people from various cultural backgrounds (Malay, Chinese, Indians and other ethnic groups), commercial enterprise leaders need to enhance their CQ to make effective and efficient decisions to increase productivity. MNCs operating in Malaysian enterprises contribute significantly and they have grown bigger during past years. To ensure sustainability of the organisations, leaders must understand the effect of CQ on the cultural adjustment of foreign workers/expatriates working in multinational organisations in Malaysia.

Based on motivation theories, motivational CQ affects leaders or employee performance because the individual's desire to test other cultures and interact with people of those cultures help people in doing their jobs better, through flexibility in verbal and non-verbal communication skills in fulfilling job expectations. Since an important part of CQ is skills and capabilities that are related to employee performance, leaders inevitably must develop or improve this intelligence among their employees. This study will contribute by identifying which dimensions of CQ are crucial for pharmaceutical leaders to enhance their leadership effectiveness.

The current study will enable employees to identify their strengths and weaknesses in relevant facets of CQ. This can serve as a starting point for putting further efforts in improving their performance by eliminating their weaknesses. Cross-cultural training for employees, familiarising them with values, norms, behaviours, differences of people from different cultures, and using the internet are among the ways of improving CQ in employees. Employees can overcome their weaknesses through such educational programs. Therefore, as most CQ skills and capabilities can be learned, leaders can provide special importance to improving such intelligence among themselves and move towards improving cognitive and behavioural skills of their employees by using appropriate training.

These concepts are beneficial to not only human resource practitioners but also researchers who are interested in studying the people who work overseas. To compete successfully in international assignments, they must select and develop employees who can function effectively in a global context (Charoensukmongkol, 2021; Hassan and Diallo, 2013). Human Resource departments have paid high attention to expatriate management and development issues because these play important roles in organisations and have been highly impacted due to the extent of globalisation trend (Hassan, 2022). To succeed in expatriates' performance effectiveness in overseas assignment, selection and training process are important functions (Zhong, Zhu & Zhang, 2021). For achieving this performance effectiveness, leaders and managers should emphasize on training and

development for the success of expatriates working on international assignments in Malaysia or in other multicultural contexts. This study will help the leaders to motivate and develop the young and dynamic employees to become more effective leaders in today's global business environment by focusing on the key areas of LS and CQ in order to continuously improve their leadership competencies.

## Limitations

Despite several measures are taken to ensure the limitation of the study is minimised, several limitations are associated with the study. (1) It is limited to the use of six (6) databases such as Google-scholars, Emerald insight, Science Direct, EBSCO and ProQuest. While the use of the Google Scholar and Science Direct provides a strong and reliable basis for citation analysis, the combination of other databases such as Web of Science or ERA as well as Scopus would have provided a more comprehensive set. (2) Keywords like “cultural intelligence” exist across multiple fields and this study is limited to business, management and cross-cultural studies literature. Similarly, the keywords like “learning styles” are diverse and multiple styles of learning existed although this study limited to Kolb's learning styles or Kolb's experimental learning style. This causes to exclude several studies that have established the link between learning styles and organizational outcomes. (3) Due to the limited studies available in terms of learning style in the context of business and management. Most of the studies reviewed were based on educational context rather than corporate setting. (4) The filtration of research articles of journals or book chapters were less strictly oriented on journal ranking lists as implemented in other research papers. (5) Most of the studies used in this review are based on other countries such as India, Europe, and U.S.A rather than Malaysia. This show lack of literature available on Malaysian context in terms of LS and CQ, particularly in association with leadership effectiveness.

## Authors' Contributions

**Zubair Hassan** has done a thorough review of the recent and other publications that are relevant to this topic. He came out with the idea of the title and development of the conceptual framework. He has identified that conceptual gaps, and written the literature review and the methodology. He also has written the conceptual analysis.

**Zabeda Bt Abdul Hamid** have assisted and guided the literature review. She has provided useful inputs on where to find the relevant articles and publications that are available in the field of the study. Also, she helped in reading and correcting the reviews. Furthermore, she spends a great deal of time in editing and proofreading the manuscript. She has done corrections of the paper twice. Mostly she has done a faire review of the conclusion and implication aspect of the paper.

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