Do Paradoxical Virtual Leadership and Emotional Intelligence have Relationships? In Particular from Technology Dependence, Geographical Dispersion, and Human Capital Tensions

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ABSTRACT
This study intended to investigate issues on the relationship between paradoxical virtual leadership and emotional intelligence; accordingly, two main questions were addressed; the first one was, investigating what is known and unknown about the concept of paradoxical virtual leadership; and the second question was to describe the relationship between paradoxical virtual leadership and emotional intelligence, in the existing literature. In this regard, methodologically, the study was employed narrative review strategy and 38 relevant studies were selected from various research databases, to answer the raised questions shown earlier. And also, the findings of the studies presented descriptively using content analysis method. As the findings of this study revealed that the major focuses of the previous studies were limited to transformational leadership style, emotional intelligence, virtual teams, and information communication and technology. This shows sufficient studies were not yet conducted on the relationship of virtual leader’s (except transformational leadership style) and emotional intelligence from the paradoxical tensions such as geographical dispersion and human capital. Therefore, it is recommended to employee Purvanova and Kenda’s model and Goleman’s model in combination, to assess their relationships in a comprehensive manner.

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The current global environment has become more hyper-dynamic than ever (Xue et al., 2020), with many challenges and opportunities for organizations (Petkova, 2019). The challenges currently central to both leaders and employees cope with the changing environment and still are successful in task performance (Sefela, 2017). Some of these challenges are internal and the others are external to organizations, for instance, the situations that the organizations are disparately suffering from COVID-19 outbreak and increasing diversity of workers (Contreras et al., 2020; Crummenerl et al., 2020; Gilbert et al., 2021; Samsoondar, 2021; Sefela, 2017; Thambusamy & Bekiroğulları, 2020). The level of uncertainty for most leaders is unprecedented, and most frameworks for planning and problem solving cannot manage the geographic variability, uncertainty, and exponential change brought by this dynamic environmental change (Sharpcloud, 2021). Therefore, with such dynamism, leaders need to manage paradoxes that typically denote a challenging tension yet with interrelated elements (de Valk, 2019; Lewis et al., 2014).

According to de Valk (2019), paradox thinking is not either/or thinking – it is not a zero-sum game, quite the opposite; it assumes abundance and fuels creativity. The paradox finds duality energizing, and it is what every organization needs now in our complex, contradictory world (Ibid.). The paradox is a particularly powerful tool to address the paradoxical nature of leadership (de Valk, 2019), particularly in virtual leadership, which has widely emerged ever since (Petkova, 2019). As noted by (Alward & Phelps, 2019; García, 2015; Maduka et al., 2018; Mehtab et al., 2017; Nwabueze & Mileski, 2018), virtual leadership enables to have effective leadership in achieving the goals and objectives set over pooling expert and talent workers through eliminating space and time barriers. Likewise, revolutionizing and integrating is promising in virtual leadership, especially in the workplace, allowing flexibility, responsiveness, and knowledge sharing in virtual teams (Appiah, 2017; Mehtab et al., 2017).

Conversely, in virtual leadership, according to various scholars (e.g., Mehtab et al., 2017; Samsoondar, 2021), change in communication, management, and organizational structure could likely be spotted. In this regard, as insisted, virtual leaders must have design experience, extensive knowledge of the subject matter, management skills, and a broad vision of virtuality (García, 2015). And also, they need to develop a different set of coordination and control mechanisms in virtual teams; while the situation is completely different from the traditional face-to-face means (Anoye & Kouamé, 2018), for instance, in creating trust, cohesiveness, and communication between virtual teams (Alward & Phelps, 2019). However, despite the growing concept of virtual leadership, relatively little is known about it (García, 2015). It can be noted that this demands the investigation of what is known and unknown about paradoxical virtual leadership in the existing literature.

Besides, extant research findings (e.g., Chew et al., 2013; Drigas & Papoutsi, 2018; Gilar-Corbi et al., 2019; Sefela, 2017; Yükselbilgili et al., 2015) have shown that level of leaders’ emotional intelligence could determine the effectiveness of their leadership in organizations. For instance, the emotion of leaders needs and enables a critical emphasis on making worthwhile decisions (Anoye & Kouamé, 2018). Therefore, failure to incorporate emotional intelligence competencies into management practices could cause leaders’ programs to fail (Joibari & Mohammadtaheri, 2011; Sefela, 2017; Udod et al., 2020). For example, not few studies were conducted on emotional intelligence and virtual leadership (e.g., Ahad et al., 2021; Bartsch et al., 2020; Bregenzer & Jimenez, 2021; Gamero et al., 2021; Gilbert et al.,
However, no research has been conducted on the relationship between paradoxical virtual leadership and emotional intelligence. This energizes the need to research the relationship between paradoxical virtual leadership and emotional intelligence in this super dynamic environment.

This study aims to make the following contributions. First, this study tries to introduce what paradoxical situations are projected in applying virtual leadership in organizations, particularly regarding technology dependence, geographic dispersion, and human capital tensions. In this regard, this study identifies and shows paradoxical tensions that were not yet got sufficient emphasis by the extant studies. In addition, this study also shows at what level of analysis the existing studies investigated the indicated paradoxical virtual leadership dimensions; finally, the study suggests an appropriate paradoxical virtual leadership model for further studies. Second, with regard to the relationship between paradoxical virtual leadership and emotional intelligence, this study comes up and contributes by identifying issues, methodological, and model/theory gaps observed in the extant studies. Lastly, this study proposes possible models applicable to investigate paradoxical virtual leadership and emotional intelligence-related issues in an organization. Therefore, this study provides a crucial theoretical understanding of the relationship between paradoxical virtual leadership and emotional intelligence concepts.

This study was focused on the following objectives: 1) to describe what is known and unknown about paradoxical virtual leadership, particularly from technology dependence, geographical dispersion, and human capital tensions, 2) To describe the relationship between paradoxical virtual leadership and emotional intelligence from technology dependence, geographical dispersion, and human capital tensions.

The following research questions are addressed: 1) What is known and unknown about paradoxical virtual leadership, and 2) how does it relate to emotional intelligence, particularly from technology dependence, geographical dispersion, and human capital tensions?

Theoretical Frameworks

Paradoxical Virtual Leadership

Definitions of Paradox

The word “paradox” derives from the Greek word “paradoxa”, para meaning “contrary to”, and doxa refers to “opinion”, or paradoxa represents contrary to expectation (Schad et al., 2016). In literature, a paradox is a literary device that contradicts itself but contains a plausible kernel of truth (Masterclass, 2020). It is a statement that seems impossible or difficult to understand – because it contains two opposite characteristics or facts (Cambridge Dictionary, 2005).

Lycan (2010) stated that the paradox could be defined as an ostensibly fruitful argument having a proposition or statement that seems absurd or false. Therefore, what is paradoxical is that if the argument is indeed successful as it seems to be - its conclusion must be true. It also refers to a complementary advantage gained over contradiction (Cunha & Putnam, 2019). According to Atuahene-Gima (2005) and Tse (2013), researchers who refer to the term “paradox” indicate to the assortment of organizational phenomena such as contradictory...
situations and puzzling conflicts, and occurrences of opposite choices. Also, the paradox can be used in different ways parallel with close yet distinct concepts, for instance, dualisms, contradictions, tensions, and dialectics, as shown by Cunha and Putnam (2019).

Paradox can also be defined as an organizational concept, for example, as defined by Smith and Lewis (2011), contradictory but interrelated elements that exist persistently over time in a simultaneous manner. As a result, over the past 25 years, the study of paradox and related concepts such as contradictions, dialectics, and tensions in organizational studies has shown grown fast (Schad et al., 2016). It has also been used widely to refer to anything inconsistent; or narrowly defined as absurd interrelationships that defy logic (Fairhurst et al., 2016).

Schad et al. (2016) argued and suggested that the term paradox needs to be defined from the management science perspective; accordingly, they defined paradox as a persistent contradiction among interdependent elements. According to Schad et al., the above definition identifies two major characteristics of a paradox, for example, contradiction and interdependence, that inform boundaries of paradox in management science. In this stance, the contradiction lies at the heart of paradoxical tensions; and interdependence emphasizes the inextricable links between opposing elements (Schad et al., 2016).

In general, from the above definitions of paradox, it can be understood that the term paradox, in particular, in the management discipline, has become the umbrella concept that includes the conceptual map for all organizational contradictions and tensions (Cunha & Putnam, 2019). This consequently enforces widely applied paradoxical insights in this continuously increasing environmental dynamism and complexity, enhancing the experience of paradox (Schad et al., 2016).

Definitions of Virtual Leadership

According to McCann and Kohntopp (2019), virtual leadership, also called e-leadership or distance leadership, can replace traditional leadership due to advancements in technology. For instance, a virtual leader directs their virtual team and virtual workers from a distance to achieve the set goal and objectives of the organization (Renu, 2014; Schmidt, 2014). Virtual teams are a collection of individuals geographically or organizationally dispersed from each other, however, connected via information technology to accomplish assigned goals and objectives (Zigurs, 2003).

As defined by Avolio et al. (2014), virtual leadership is a social influence process embedded in both proximal and distal contexts mediated by information and communication technology that can produce a change in feelings, attitudes, thinking, behavior and performance. It is the effective use and blending of electronic and traditional methods of communication (van Wart et al., 2019). Barnard (2020) and Moore (2020) also defined virtual leadership as a form of leadership in that teams or workers are managed from a remote working environment. Furthermore, virtual leadership can be defined as a process that aims to guide behaviors towards fixed shared goals but simultaneously uses information and communication technology (Jawadi et al., 2013). It is the directing of teams or workers who do not work in an office (Corey, 2020; Scheuplein, 2021).

At large, therefore, as tried to indicate earlier, the extant studies shown that virtual leadership enables to have effective leadership in achieving the goals and objectives set over
pooling expert and talent workers through eliminating space and time barriers (e.g., Alward & Phelps, 2019; García, 2015; Maduka et al., 2018; Mehtab et al., 2017; Nwabueze & Mileski, 2018). Likewise, revolutionizing and integrating is promising in virtual leadership, especially in the workplace, allowing flexibility, responsiveness, and knowledge sharing in virtual teams (Appiah, 2017; Mehtab et al., 2017).

**Challenges and Opportunities of Virtual leadership**

**Challenges.** As discussed earlier, virtual leadership deals with leading teams or workers via distance; and therefore, has its challenges, as various literature results are shown. For example, some of the challenges are related to geographic and organizational dispersions. In virtual leadership, teams are placed in different time zones, resulting in leaders facing different culture and language barriers (Jönsson, 2016). Likewise, as Lilian (2014) indicated, the challenges also emanated from global technological changes, which become unforeseen for virtual leaders that led to organizational restructuring and reshuffling leadership functions and practices; i.e., transitions from the traditional system towards the more flexible one, which has made leaders reorganize tasks in new ways. Therefore, as implied above, organizational success primarily relied on leadership.

Technological changes, particularly communication media, affect virtual leaders, the ability to deliver social presence inherent to face-to-face environments, and information-rich non-verbal cues such as voice inflections, gestures, and facial expressions (Kayworth & Leidner, 2002; Zofi, 2011). As insisted by Lilian (2014), even though the virtual leaders encounter diversified challenges, however, by adapting these challenges, they can enable to convert them into opportunities.

According to Scheuplein (2021), virtual leadership-related challenges are combinations of some managers may find the decline in management and control options problematic; uncertainty among employees about their roles, tasks, and priorities; a feeling of isolation working from home; team spirit suffers due to physical distance; conflicts due to missing or reduced facial expressions and gestures; lack of technical know-how becomes a stumbling block for exchange and communication, and identification with colleagues and tasks could decrease. In this regard, team leaders will need more training, specifically in the delegation. Provided that team members are required and able to share leadership responsibility that supports leadership effectiveness (Anoye & Kouamé, 2018). For instance, some companies assigned expertise in operating and involving virtual teams and create an understanding of how they differ from traditional teams (Ibid.).

Furthermore, as depicted by Eisenberg and Krishnan (2018), consideration and confusion of time zone differences could challenge virtual leadership, particularly virtual communication, which creates complexities in leading virtual organizations. And also, leaders and employees’ additional demands to have constant collaboration and interaction in a virtual organization can expose workers to increasing work overloads, as Cross et al. (2018) stated. However, as explained in the articles of Anoye and Kouamé (2018) and Lilian (2014), the main challenges of virtual leadership are basically related to trust and maintenance, distance and time-related issues; and problems that arise from culture-related differences and diversity; and motivation related challenges.
Opportunities. Besides the possible challenges expected in the application of virtual leadership in organizations, there are also payoffs awaited in using virtual leadership in this dynamic global environment. For instance, effective virtual leaders may address the challenges into opportunities by adapting their behaviors to meet the new virtual environment by adopting new skills and choosing the right information and communication technology application for the right task (Lilian, 2014). The other opportunities of virtual leadership are flexible working models; increased agility due to location independence; establishment of heterogeneous teams even across locations, national borders, and continents; increased level of freedom and personal responsibility for employees; enhancement of a “culture of trust”; virtual knowledge sharing; satisfaction, productivity, and willingness to perform increase; cost savings as a result of reduced travel costs as well as for office space and materials (Scheuplein, 2021).

Furthermore, as indicated in several studies (Avolio et al., 2014; Coenen & Kok, 2014; Cortellazzo et al., 2019; Fedakova & Istonova, 2017; Giovanis, 2018; Gupta & Pathak, 2018; Klopotek, 2017; Nakrosiene et al., 2019; Narayanan et al., 2017; Pavlova, 2019; Schwarzmuller et al., 2018; Vega et al., 2015), virtual leadership has additional opportunities. For instance, it contributes organizations: greater competitiveness to successfully insert in global work environments (Avolio et al., 2014; Narayanan et al., 2017); lower stress, lesser turnover intentions, lesser work-family imbalance and job satisfaction (Coenen & Kok, 2014; Vega et al., 2015); to interact and establish effective virtual teams, increasing their creative capacity (Cortellazzo et al., 2019); autonomy and flexibility at work allow harmonizing the personal and work matters favoring the workers’ well-being (Fedakova & Istonova, 2017); contribute to the solution of global problems such as pollution and air quality, while influencing the firms’ reputation (Giovanis, 2018); the team members’ heterogeneity promotes creativity and innovation through a combination of various perspectives to achieve an objective (Gupta & Pathak, 2018); work autonomy and less distraction potentially allow higher productivity (Klopotek, 2017; Pavlova, 2019); decreases absenteeism due to employees do not have to face difficulties to reach the workplace (Nakrosiene et al., 2019); and information availability increases job performance (Schwarzmuller et al., 2018).

In a general format, as discussed above, virtual leadership has its pros and cons in an organization that decides to apply. In fact, a given organization may decide to apply virtual leadership because of technological advancements and unforeseen majeure like the current global coronavirus pandemic, forcing workers to work at home via electronic means – paradoxical situations that virtual leaders should take into account to recognize the organization’s success.

Leadership Styles and Virtual Leadership
Leadership could be seen as effective, particularly in virtual teams, if it could consider the expectations of virtual teams in their virtual leaders that include motivating team members, giving support, giving instructions for the use of technology, and setting clear goals for the future (Cribb, 2018). The leadership styles could seek to meet the indicated expectations.
Transformational Leadership

Transformational leadership style can be defined as inspiring, conveying a vision, and passion for the projects, which is contagious, instilling energy and enthusiasm into team members (Gaudes et al., 2007). As noted by Mikkelson et al. (2015), transformational leadership can also be described as treating employees with respect, building relationships, and making the work environment pleasant, similar to leadership behaviors associated with relationship building – often described as relationship-oriented behaviors. Transformational leadership is associated with positive outcomes on individual and organizational levels (Nawaz & Khan, 2016). For instance, transformational leaders embolden followers to achieve higher-order needs (such as self-actualization and self-esteem); and are influential in revitalizing followers’ motivation in the way of self-sacrifice for the attainment of organizational goals over personal interests (Bass, 1995).

A transformational leader evaluates their relationship with followers very high in priority and demonstrates individualized consideration in meeting their needs for empowerment, achievement, enhanced self-efficacy, and personal growth (Nawaz & Khan, 2016). Albeit, a leader mostly exhibits multiple leadership styles and behavior or find the middle ground, however, particular to a virtual team, it is suggested that transformational leadership style and relationship-oriented behaviors need a stronger focus above transactional leadership style and task-oriented behaviors in order for the virtual team to be effective (Cribb, 2018). Likewise, as indicated by Cummings et al. (2010), a leader who practiced relational and transformational styles has better quality outcomes than those who experienced autocracy.

Transactional Leadership

Among the different leadership styles, one of the best known is the transactional style (Ruggieri, 2009). The transactional style comprises three major components such as contingent reward, management by exception (active), and management by exception (passive), as shown by Nawaz and Khan (2016). Transactional leaders view the relationship between leader and follower as an exchange process based on a system of reward and punishment (Bass & Avolio, 1993). Therefore, a transactional leader will give positive reinforcement, prizes, praise, compliments, and rewards - when goals are reached and will utilize negative reinforcement (such as punishment and reproach) when errors are made and failures occur (Ruggieri, 2009).

The application of transactional leadership style varies from situation to situation or context to context (Nawaz & Khan, 2016). For instance, the situations entailing a high degree of precision, time constraints, technical expertise, in particular, in a technological intensive environment, it is suggested to prefer transactional leadership (Bums, 2003). Whereas, in a human intensive environment, where the focus is on influencing the followers via motivation and respecting their emotions as per the common goals, beliefs and values, the preferable option is a transformational leadership style (Ibid.).

Shared Leadership

A shared leadership style can be defined as - mutual influence embedded in the interactions among team members (Carson et al., 2007). It is a dynamic, interactive influence process among individuals in groups. The objective is to lead one another to achieve group or
organizational goals or both, as defined by Pearce and Conger (2003). Shared leadership refers to multiple members of a team taking on leadership accountabilities, particularly within the team in a collective approach (Hoch & Dulebohn, 2017; Liao, 2017; Robert & You, 2018; Wang et al., 2014). As indicated in Hoch and Dulebohn’s (2017) study, shared leadership encourages collaborative decision-making and behaviors, which eventually leads to increased trust and knowledge sharing in team members. However, as the same source is added in order for this type of leadership to work, each member who takes on a shared leadership responsibility or accountability should exhibit the qualities expected of a leader, for instance, being able to participate in collaborative decision-making, influence and support other team members, foster motivation, and take responsibility for outcomes.

The extant literature aggressively propagates the benefits of shared leadership, particularly in virtual teams (e.g., Hoch & Kozlowski, 2014; Muethel & Hoegl, 2010; Robert & You, 2013). For example, shared leadership would predominantly address some of the challenges associated with virtuality through facilitating team member interaction (Hoch & Kozlowski, 2014; Pearce & Conger, 2003). However, shared leadership should not just occur naturally in a team but should be nurtured by the initially assigned leader (Cribb, 2018).

**Emotional Intelligence**

**Definitions**

The term emotional intelligence was introduced in 1990 by Peter Salovey and John Mayer, the two researchers, in their article published in the Imagination, Cognition, and Personality journal by the title “Emotional Intelligence” (Institute for Health and Human Portal, 2021); and later popularized by Daniel Goleman in 1995 in his book called “Emotional Intelligence” (Cole, 2019). Albeit, there are several emotional intelligence definitions in the literature, there is considerable overlap amidst them (Petrides, 2017). For instance, the following are some of the definitions provided by scholars for emotional intelligence (EI).

Institute for Health and Human Portal (2021) defined EI as the ability to recognize, understand, and manage our own emotions and recognize, understand, and influence the emotions of others. Likewise, it is the ability to perceive emotions, access, and generate emotions over to assist thought, understand emotions and emotional knowledge; and reflectively regulate emotions to enhance and promote emotional and intellectual change (Mayer & Salovey, 1997). According to Cole (2019), EI is the area of cognitive ability that facilitates interpersonal behavior. Also, it can be defined as the ability to perceive, use, understand and manage emotions (Dhani et al., 2016).

As indicated in the Economics Times Newspaper (2021), EI is defined as the ability of a person to manage and control their emotions as well as possess the ability to control the emotions of others. Similarly, Petrides (2017) defined EI as an array of attributes concerning the way in which people perceive, express, understand, and manage their own emotions as well as the emotions of others. It is defined as an awareness and understanding of person’s feelings, including one’s own, and how to use this knowledge to engage effectively in interpersonal relationships in a wide variety of contexts and situations (di Fabio & Saklofske, 2018).

Moreover, according to Sternberg’s (2001) definition, EI is the ability to perceive accurately, appraise and express emotion; the ability to access and generate feelings to
facilitate thought; the ability to understand emotion and emotional knowledge; and also, the ability to regulate emotions, to promote emotional and intellectual growth. Therefore, as can easily be understood above, the definitions forwarded by various scholars on the concept of emotional intelligence indicate that it could be represented and consist in one or another with the following capabilities such as self-awareness, self-management, social awareness, and social skill (Schlegel & Mortillaro, 2019).

**Models of Emotional Intelligence**

Scholars and researchers have introduced four basic emotional intelligence-related models: the ability model, mixed model, Bar-On model, and trait model. They introduced each of these models together with respective measuring tools. For instance, MSCEIT (Mayer Salovey Caruso Emotional Intelligence Test), ESCI (the 360-degree assessment, Emotional and Social Competency Inventory), and EQi (Emotional Quotient Inventory), used as assessment tools for the ability model, mixed model, and Bar-on model respectively (Lubbadeh, 2020). According to Lubbadeh (2020), the main differences among these models are, in particular, the models such as ability, mixed, and traits that are based on a set of mental ability or personality traits. For example, the ability model entirely focused on emotions, whereas the mixed model emphasizes both emotions and personality traits. On the contrary, the third model, i.e., the trait model - focuses on self-perceptions personality traits (Ibid.). Therefore, the next sections will present the above four emotional intelligence models.

**Ability Model.** The ability model was developed by Salovey and Mayer (1990) and later, Mayer and Salovey in 1997, they conceptualized the model into four dimensions such as perceiving emotions, using emotions, understanding emotions, and managing emotions. As stated by Mayer et al. (2004), the ability model of EI shows the person’s emotions provided with relevant information, such as the person will process the information, then benefit from it, and finally, respond to them to cope with the tense situation or problem more intelligently. As the same source explicated, being aware of emotions makes our emotions smarter. For example, emotions may enhance people to make better decisions while it may link with thinking (Lyubomirsky et al., 2005).

According to Mayer and Salovey (1997), the ability model takes emotions as practical sources of information, which supports one to make sense of; and navigate the social environment. The model indicates people may differ in their ability to process information, especially information on an emotional nature, and associate emotional processing to a broader cognition. As shown earlier, the ability model advocates EI comprised of four abilities (perceiving emotions, using emotions, understanding emotions, and managing emotions).

**Perceiving emotions:** the one’s ability to use their emotions or the emotions of other people, and later, combine and build up these emotions into the thinking process, to enhance the performance of the various organizational tasks (Mayer & Salovey, 1997). Likewise, as indicated by Ivanova (2016), it is the ability to detect and interpret emotions via faces, pictures, voices, and cultural artifacts – then make all other processing of emotional information possible.
Using emotions: it represents the ability of a person to utilize their emotions or emotions of other people and followed by combining the emotions into the thinking process to facilitate the task (Mayer & Salovey, 1997); and also called the ability to harness emotions to facilitate various cognitive activities such as thinking and problem-solving. As shown in Ivanova’s (2016) article, an emotionally intelligent person can fully energize their changing moods to best fit the task at hand.

Understanding emotions: the person’s ability to understand emotional language and address the complex relationships between emotions; and the enthusiasm to classify emotions, to determine their causes and outcomes (Mayer & Salovey, 1997). For instance, understanding emotions incorporates the ability to be sensitive to small differences among emotions; and also encompasses the ability to acknowledge and describe how emotions change over time (Ivanova, 2016).

Managing emotions: as explained by Mayer et al. (2016) and Mayer et al. (2004), the ability to manage emotions means the ability to compose compelling strategies for managing one’s own and other people emotions, to help in achieving the needed result rather than being affected by it in unpredictable ways. In other words, managing emotions means having the ability to regulate emotions, in both ourselves and in others, to be harnessed even negative ones and manage them to achieve the set goals (Ivanova, 2016).

As Salovey and Mayer (1990) have tried to distinguish between the ability model and other models (e.g., mixed model), these models combine a different nature of non-ability and traits variables, which is completely opposed to the ability model, that predominantly focuses on actual abilities such as perceiving, using, understanding and managing emotions. Besides, the ability model has some shortcomings, for instance, lacking face and predictive validity in the workplace (Ivanova, 2016). In contrast, the model also has the advantage of comparing EI with maximal individual performance and standard performance (Ibid.).

Mixed Model. The mixed model was developed in 1995 by Daniel Goleman; and is also called as “Goleman model”, or “competency model”. This model focused on EI as a wide range of skills and competencies that drive leadership performance (Ivanova, 2016). As Goleman (1998) stated, the mixed EI model outlines four branches such as self-awareness, self-management, social awareness, and relationship management. As indicated, each of these branches is comprised of a variety of extensive competencies and skills that boom performance. In this regard, the first two dimensions (self-awareness and self-management) are described as personal competence, whereas the latter (social awareness and relationship management) are social competencies. Goleman (1995) insisted that these competencies are learned abilities that emerged from the fundaments.

According to Goleman (1998), self-awareness is the ability to know what we are feeling, why we think this way, and how we react to those feelings. Self-management represents the ability to manage our distressing emotions and impulses practically. Goleman further showed the other dimensions, such as social awareness and relationship management; the first dimension refers to the ability to know, understand and respond to other’s feelings, and the second is, reflects the ability to combine the first three dimensions or branches (such as self-awareness, self-management, and social awareness) to influence, inspire and to manage conflict.
As Gayathri and Meenakshi (2013) stated, the mixed model can differ from the above-discussed model, i.e., the ability model, this model some personality characteristics such as leadership, collaboration, and conscientiousness.

**Trait Model.** The trait model of EI was developed by Petrides and Furnham in the years 2000 and 2001, also called trait emotional self-efficacy. According to Petrides and Furnham (2003), the model primarily stands for and refers to a constellation of emotion-related self-perceptions and dispositions assessed via self-report. It is suggested that there is a conceptual difference between the trait model and the ability model of EI (Petrides et al., 2007). The crucial and basic foundation for this contrast between the above models: the trait model comprises emotion-related to self-perceptions personality traits (e.g., optimism), as shown earlier, which measured through established self-report measures (Petrides & Furnham, 2003). On the other hand, the ability model involves emotion related to mental ability (e.g., using emotions), which is cognitive ability, measured through maximum performance tests, most likely to be resistant to scientific standards (Ibid.).

Regarding the distinction between the Goleman model (also called the mixed model) and the trait model, Ivanova (2016) considers the trait model of EI to be more general and incorporates the Goleman model discussed earlier in this chapter. For example, the conceptualization of EI as a personality trait can lead to a construct that outsides the taxonomy of human cognitive ability (Ibid.). Therefore, this can be a departure point that requires the operationalization of construct and the theories and suppositions that are formulated about it.

**Bar-On Model.** Bar-on model was developed by Bar-On in 1997, which introduced the self-report of EQ the emotional quotient inventory (EQi) – intended to estimate EI (Lubbadeh, 2020). EQ represents the ESI (Emotional Social Intelligence), which combines emotional and social competencies. As stated by Bar-On (2004), the Bar-On model comprised of five key elements such as intrapersonal, interpersonal, adaptability, stress management, and general mood. Each of these dimensions contains various skills and competencies, focusing on the potential for success. Accordingly, interpersonal covers empathy, social responsibility, and interpersonal relationship; stress management covers stress tolerance and impulse control; adaptability covers reality-testing, flexibility, and problem-solving; and general mood covers optimism and happiness (Bar-On, 2006).

According to Gayathri and Meenakshi (2013), the distinction between the Bar-On model and Goleman model is the former, i.e., the Bar-On model, comprises the elements like stress management and general mood. The Bar-On model is a multi-factorial array, with interrelated emotional and social competencies, skills, and facilitators, which influence one’s ability to recognize, understand and manage emotions; to relate with others, to adapt to change, and solve problems (of a personal and interpersonal nature), and to efficiently cope up with daily demands, challenges, and pressures (Bar-On, 2006).

In general, based on the discussions made above, it can be said that EI comprises emotional and social skills that provide a person with the ability to understand self and other people's emotions. Accordingly, this situation gives them the tendency to participate and interact with other people; and enhances them to be effective at various environments such as
personal, professional, and social levels. In contrast, as explained by Lubbadeh (2020), one of the most conspicuous criticisms faced regarding the theory of EI, for instance, is the multiplicity of methods and approaches, which explain the EQ: there is no only one model that the researchers and scholars rely upon when studying this phenomenon; besides, there is a lack of agreement among researchers and scholars on the definition of emotional intelligence.

Model of Paradoxical Virtual Leadership

One of the conventional models of paradoxical virtual leadership is developed by Purvanova and Kenda (2018). According to them, three main paradoxes are considered in the applicability of an organization's virtual leadership, such as technology dependence, geographic dispersion, and nature of human capital. Accordingly, each of these paradoxes is represented with, for instance, technology dependence: touch tension, data tension, task tension; geographic dispersion: dispersion tension, time tensions, culture tension; and human capital tension.

Besides, the paradoxical tensions discussed above, there are three basic strategies or paradoxical cognitive frames that virtual leaders are advised to think over in dealing with the tensions identified earlier, such as “avoidant”, “either-or”, and “both-and” (Purvanova & Kenda, 2018). Moreover, such cognitive frame selection will be based on the leadership types organizations are using, for example, stagnant, selective, and synergetic (Ibid.).

Two Leadership Approaches to Competing Demands

Traditional leadership differs from paradoxical leadership in its underlying assumptions about truth, resources, and management practices (Smith et al., 2016). Table 1 presents how traditional leadership differs from paradoxical leadership using concrete concepts.

Table 1

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<th>Traditional Leadership vs Paradoxical Leadership</th>
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<td>Traditional Leadership “Either/or”</td>
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| Truth  | True ideas, beliefs, and identifies are internally consistent and coherent. | • Make strategic choices  
• Keep decisions consistent with the chosen strategy  
• Align the firm’s culture  
• Act consistently | True ideas, beliefs, and identities consistently embed multiple, often inconsistent, perspectives. | • Engage conflicting strategies simultaneously  
• Accept and value multiple cultures  
• Learn from multiple perspectives  
• Act consistently inconsistent |
| Resources | Resources (time, money, people, and so on) are scarce. | • Set a clear agenda  
• Make allocation trade-offs to best achieve priorities  
• Encourage competition for limited resources | Resources are abundant and can expand and generate new resources | • Search for opportunities to grow resources, looking beyond current sources and tools  
• Explore new technologies and collaboration partners  
• Be flexible in setting time frames |
| Management Practices | Management involves controlling-by seeking stability and certainty. | • Adopt and apply a consistent identity across the organization  
• Promote best practices  
• Keep it simple | Managing involves copying-by embracing dynamism and change. | • Embrace multiple strategies and identities  
• Tolerate uncertainty  
• Learn from failure  
• Implement workable, temporary faces and keep experimenting |

Note. Source: Smith et al. (2016)
Leadership and Emotional Intelligence

Leadership is, as a concept, one of the most used, in which emotional intelligence has been linked with (Lubbadeh, 2020). It is a scientific fact that emotion entails thought. According to Institute for Health and Human Portal (2021), when emotion runs high, it can change the way our brain functions and simultaneously affect our cognitive abilities, decision-making power, and even our interpersonal skills. This indicates that learning how to manage this emotion, both our own and other people is critical. For instance, persons with high levels of EI are expected to have more success, relish a broader network of colleagues, are more cherished, and could negotiate solutions with greater ease to the problems (Herman et al., 2018). Collin et al. (2018) argued that leadership is primarily about motivating and empowering individuals and teams; therefore, a lack of EI is a daunting hindrance to progress and change. Likewise, Lubbadeh (2020) shows that leaders with high EI help create an interactive and engaging environment and create employees' commitment to direct them and enhance higher productivity in this dynamic environment.

Further, leadership is more effective with EI, while it contributes to having better expertise relationships; improves personal achievement and success; and also, it enhances leaders’ critical, analytical and strategic thinking skills, as it enables leaders to gain new perspectives for the challenging situations they are facing (Ivanova, 2016). For example, a leader with high EI can manage stress and cope with the changes occurring within the organization. According to Ivanova (2016), without EI, an individual can acquire the best skill in the world, an incisive, analytical mind, and a smart and continuous supply of ideas; however, they still will not make a great leader.

On the other hand, as argued, a leader with higher EI might not always be able to direct these skills in a better way. For example, a leader's over-sensitivity to employees’ motivation could challenge them to make effective decisions that will touch the feeling of employees (Lubbadeh, 2020). Another example is a leader might be exposed to serious stress in the situation that they are being extensively involved with employees’ emotions (Ibid.). Besides, Lubbadeh (2020) explained that the worst scenario is when a leader with higher EI uses their emotions in an unethical manner for personal interest. For instance, a leader can manipulate their employees’ emotions to do a certain thing for them, such as doing unethical practices in their favor. Lubbadeh (2020) argues that the use of such EI skills for evil purposes does not represent they have a high EI; rather, it depends on the individual's characteristics and traits.

Therefore, as the linkage between leadership and emotional intelligence discussed previously, there is inconsistency regarding the relationship between leader’s EI and leadership effectiveness. Several scholars (e.g., Collin et al., 2018; Ivanova, 2016) have shown that leader’s EI level and leadership effectiveness have direct relationships. On the contrary, as indicated earlier, some other scholars (e.g., Lubbadeh, 2020) argue that a leader’s EI level and leadership effectiveness are inversely related.

Method

Design

This study employed descriptive design to show what is (not) known in the literature about the paradoxical virtual leadership concept and its relationship with emotional intelligence. According to Kothari (2004), descriptive design helps researchers describe and present the
extant facts related to describing ex-post facto. In this regard, descriptive design is proper to address the raised objectives.

**Research Strategy**

This study was employed a narrative literature review strategy. In narrative reviews, the starting point is that the data materials are treated freely (Evans, 2008). It means that it has not undergone systematic analysis, but it is possible to reach conclusions characterized as syntheses (Honkavuo, 2019). Likewise, the nature of the narrative review strategy does not use a critical approach but instead gives knowledge on extant research (Ibid.). According to Snyder (2019), the narrative review can also be used for review that primarily aims to provide an overview of a research area, synthesize knowledge on a specific topic and create a recommendation for further research. From the same source, the narrative review is designed for topics that have been conceptualized differently and studied by various groups of researchers within diverse disciplines. The narrative review serves as a comprehensive yet critical and objective analysis of a topic and the discussion and current knowledge that embodies it (Petricrew & Roberts, 2008).

**Data Sources and Data Collection**

The main objective of this study is to describe what is (not) known about paradoxical virtual leadership and the relationship it has with emotional intelligence. So, we used secondary sources of data to achieve the set objectives. Accordingly, Google scholar, Emerald, Web of Science, and Management Academia were the main research databases addressed, and 38 studies were selected and reviewed to conduct this study. As indicated in Figure 1, the majority of the studies are quantitative in nature.

**Data Analysis**

This study employed a content analysis method to analyze the collected data. According to Elo et al. (2014), content analysis is a research tool used to determine the presence of certain words, themes, or concepts within some given data, such as qualitative or quantitative. Thus, using this analysis method, researchers and scholars can quantify and analyze the presence,
meanings, and relationships of certain words, themes, or concepts, for instance, paradoxical virtual leadership and emotional intelligence (Ibid.).

**Discussions**

This chapter of the study focused on discussing findings obtained from relevant studies especially conducted on virtual leadership and the relationship between virtual leadership and emotional intelligence. This study considered five basic domains such as the center of focus, level of analysis, models/frameworks employed, target group, and method of analysis, to discuss paradoxical virtual leadership and the relationship it has with emotional intelligence, to draw gaps - which can open up a juncture for future research to be conducted based on the gaps.

To answer the first research question, 38 studies were considered, combinations of empirical and conceptual studies. For the second one, which deals with the relationship between virtual leadership and emotional intelligence, the same relevant studies were used with various nature.

**Center of Focus of the Studies (Paradoxical Tensions)**

Out of 38 virtual leadership and emotional intelligence-focused studies, 47% were quantitative, 21% qualitative, 11% mixed, 13% were systematic, and the remaining 8% were narrative studies. The main focus of these studies was on information communication and technology, leadership style, emotional intelligence, paradoxical tensions, virtual teams, leadership styles, human capital-related challenges and opportunities, and leadership effectiveness. For example, these scholars (e.g., Hogue, 2015; Kayworth & Leidner, 2002; González Macías et al., 2020) have focused on the relationship between leadership and virtuality. Likewise, a commentary assessment on virtual leadership to counter COVID-19 (Gilbert et al., 2021); the role of virtual human capital in developing leadership skills (Suárez et al., 2021); and the relationship between leadership styles and virtuality (Alward & Phelps, 2019).

Similarly, the scholars (Sebastian & Hess, 2019) focused on leader emotional intelligence and work engagement in virtual teams; the effect of emotional intelligence, collaboration technology, team climate, and intrinsic motivation on virtual team effectiveness (Kramer, 2020); emotional intelligence in leadership and project success within virtual teams (Ferronato, 2017); exploring the relationship among emotional intelligence, collective team leadership, and team effectiveness (Robinson, 2013); the relationship between virtual teams’ emotional intelligence composition and their members’ well-being, with the moderator role of an online team emotional management intervention (Gamero et al., 2021); emotional intelligence and transformational leadership in virtual teams (Mysirlaki & Paraskeva, 2020); communication in virtual teams: the role of emotional intelligence (Pitts et al., 2012); and the relationship between emotional intelligence and leadership style (Fannon, 2018). This shows sufficient studies were not yet conducted on the relationship between virtual leader’s and emotional intelligence from the remaining (except technology dependence tension) paradoxical tensions such as geographical dispersion and human capital.
As shown in Figure 2, from the total selected studies, 89% of the studies focused and explained the relationship of virtual leadership and emotional intelligence from technological dependence, 3% of them on human capital tensions, and the remaining (8%) on others.

**Figure 2**
*Paradoxical Tensions*

Therefore, the previous studies primarily focused on and interpreted virtual leadership and emotional intelligence from a technology dependence (as a paradox) viewpoint, which could not give a complete picture of virtual leader’s success (Purvanova & Kenda, 2018).

**Level of Analysis**

In research, we can find a different level of analysis, for instance, micro, meso, or macro level. As shown in Figure 3, from the total studies considered under this study, 47% of them were conducted at the national or country level. The rest, 30% and 23% of the studies were carried out at multi-national and other levels, respectively. For example, many studies (e.g., Hogue, 2015) followed a case study approach specific to large businesses (e.g., Alfehaid & Mohamed, 2019), to investigate virtual leadership and EI issues.

**Figure 3**
*Level of Analysis*
Therefore, this can inform us virtual leadership and its relationship with emotional intelligence are becoming the doings of big businesses or, as indicated in Figure 3, the concern of national and multi-national firms.

**Modell/Framework Employed**

As indicated in Figure 4, about 34% of the studies were conducted using a transparent model, 5% focused on model development, and the remaining 61% were carried out without a model. Therefore, the majority of the past studies have not used apparent models to investigate virtual leadership and emotional intelligence, and there is a contradiction. For instance, the studies that used apparent leadership and EI model, such as Hogue (2015) used Bass’ (1990) model; González Macías et al. (2020) “Garden leadership model” (2004); Fjermestad and Ocker (2007) “distributed cognition theory”; Purvanova et al. (2021) “multilevel leader theory”; and Udom (2017) employed Path-goal theory of leadership; Ferronato (2017) and Sebastian and Hess (2019) “ability model”, Pitts et al. (2012) “IPO framework of Gouran (1973)”; Goleman model (Donkor, 2013; Quisenberry, 2018), Purvanova and Kenda’s paradoxical model (Eikmeier, 2021), Burn’s theory of transformational leadership and Goleman’s emotional intelligence theory (Mburu, 2020), Ability model (Rios-Collazo, 2016); and the remaining two not employed any model (Petkova, 2019; Rajagopalan, 2009).

**Target Group**

As shown in Figure 5, 58%, 34%, and 8% of the studies focused on a virtual team, virtual leader, and both perspectives, respectively. Therefore, the majority of the previous studies addressed virtual leadership and emotional intelligence from virtual teams perspective, for example, Alfehaid and Mohamed (2019); Bregenzer and Jimenez (2021); Fjermestad and Ocker (2007); Hogue (2015); Kayworth and Leidner (2002); González Macias et al. (2020); Purvanova et al. (2021); Sedrine et al. (2020); and Udom (2017). As a result, sufficient studies have not yet been conducted on virtual leaders’ perspectives, particularly on the relationship between paradoxical virtual leadership and emotional intelligence.
Method of Analysis

As can be seen in Figure 6, 52% of the studies were analyzed descriptively, 24% multiple linear regression, 10% bi-variate correlation, and the remaining insignificant percent of studies used SEM, LR model, MANOVA, t-test, and multilevel model as methods of analysis (i.e., 3%, 3%, 3%, 3%, 2%). Therefore, this indicates that almost more than half of the studies focused on virtual leadership and emotional intelligence employed descriptive analysis.

Conclusion

The following critical conclusions were drawn from the findings of the study: Firstly, this deals with the major focus of the previous studies, limited to transformational leadership style, emotional intelligence, virtual teams, and information communication and technology. This shows sufficient studies have not yet been conducted on the relationship between virtual leaders (except transformational leadership style) and emotional intelligence from the paradoxical tensions such as geographical dispersion and human capital. The next is the methodological aspects; an insignificant number of studies were conducted using a mixed
approach. And also, the majority of the past studies were conducted based on case study strategy specifically targeted at big businesses. Thirdly, there is no model employed yet in the extant literature that helps to comprehensively address (paradoxical) virtual leadership and emotional intelligence, particularly from the leader’s perspective.

**Recommendations**

The researchers forwarded the following recommendations, particularly as per the concluding remarks given above on the main findings obtained earlier.

It is well understood that virtual leadership is a recently emerging concept; therefore, more studies need to be conducted using a mixed approach. Also, advised that future studies focus on the remaining paradoxes such as geographical dispersion and human capital tensions.

It is more recommended if future researchers focus on virtual leadership and emotional intelligence relationship at small and medium-sized businesses. And also advised for future researchers and scholars to extend by using integrative leadership styles. As insisted by Goleman (2000) “The best leaders don’t know just one style of leadership—they’re skilled at several, and have the flexibility to switch between styles as the circumstances dictate” (p.1). Finally, it is recommended to employee Purvanova and Kenda’s model and Goleman’s model in combination, to assess their relationships in a comprehensive manner.

**Limitation and Future Research Directions of the Study**

Narrative strategy has its advantage and disadvantage; however, besides its advantage, it has critical disadvantages; for instance, it has no transparent system in selecting databases and journals. In this regard, a very limited number of databases and journals were used in this study, limiting the credibility of the output obtained. Therefore, future researchers advised using a systematic review strategy to examine the relationship between paradoxical virtual leadership and emotional intelligence and generate extended and very fruitful findings.

**Declarations**

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