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**A Conceptual Examination of the Relationship between E-  
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Moderated Mediated Theoretical Model**



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## A Conceptual Examination of the Relationship between E-Leadership and Disengagement from Knowledge Sharing: A Moderated Mediated Theoretical Model

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### Abstract

**Purpose:** The purpose of this conceptual paper is to develop a theoretical model to explain the relationship between e-leadership and disengagement from knowledge sharing. The current study employs the Job Demands-Resources theory (JD-R) and Adaptive Cost theory to illuminate a potential drawback of practicing e-leadership.

**Methodology:** A comprehensive review of the existing literature on e-leadership and knowledge sharing was conducted. The synthesis of these diverse research domains led to the development of a conceptual framework that illustrates the proposed relationship between e-leadership behaviors and the tendency of individuals to disengage from knowledge-sharing activities in virtual environments.

**Findings.** The theoretical model presented in this paper suggests that leadership in the virtual environment has the potential to cause adverse outcomes such as leader stress, which could ultimately lead them to disengage from knowledge-sharing activities in the organization.

**Unique contribution to theory, practice, and policy.** The proposed theoretical model contributes to a deeper understanding of the complex dynamics between e-leadership and knowledge-sharing disengagement in virtual settings. By recognizing the key factors that influence disengagement, organizations can develop targeted interventions and strategies to foster a culture of knowledge sharing and enhance e-leadership effectiveness. This paper is the first study to examine how the complexities of e-leadership could negatively affect a leader's health and knowledge-sharing behavior.

**Keywords:** *E-Leadership, Disengagement, Knowledge Sharing, Job Demand-Resources Theory, Adaptive Cost Theory, Moderated Mediation Model*

## INTRODUCTION

Extant studies have cited reasons why employees might decide not to share knowledge, such as knowledge hoarding (Evans et al., 2015; Webster et al., 2008), Knowledge hiding (Connelly et al., 2012), and disengagement from knowledge sharing (Ford & Staples, 2008; Ford et al., 2015). However, most existing studies have focused on employees' knowledge-sharing behavior. The few studies that have examined leader knowledge-sharing behaviors have done so with employees in focus (De Vries et al., 2010; Han et al., 2016). Furthermore, the impact of leadership on leader knowledge-sharing behavior has received minimal attention. The current study proposes a theoretical model to examine the relationship between e-leadership and disengagement from knowledge-sharing.

In this digital age, an organization's competitiveness and effectiveness largely depend on its ability to acquire, process, disseminate, and utilize information efficiently (Abrams et al., 2003; Bartol & Srivastava, 2002). Previous research has shown knowledge sharing to offer higher productivity, better decision-making, and improved work quality (Cabrera & Cabrera, 2002; Haas & Hansen, 2007). In contrast, adverse knowledge-sharing practices are costly to organizations. A recent study conducted in the US reported that inefficient knowledge-sharing practices cost an average large US business \$47 million in productivity annually (Panopto Workplace & Productivity Report, 2021). Another study conducted on more than 1000 US workers reported that 60 percent of respondents found it difficult to obtain information essential to their jobs from their co-workers (Panopto Workplace and Productivity Report, 2021).

Disengagement from knowledge sharing is a nascent area in knowledge-sharing literature. Existing studies on the subject have focused on employees as informers and recipients of knowledge (Ford & Staples, 2008; Ford et al., 2015). The present study extends the existing literature to leaders. Disengagement from knowledge sharing is the failure to protect one's knowledge and a lack of desire to share the knowledge (Ford et al., 2015). Existing studies have highlighted leaders' role in fostering knowledge-sharing behavior between employees (Han et al., 2016). However, research on the impact of leadership on leader knowledge-sharing behaviors is scant. Recent studies have examined information technology's role in promoting knowledge sharing in organizations (Choi et al., 2010; Davison et al., 2012). Several organizations have implemented advanced information technology to improve their knowledge management (KM) systems, expand knowledge bases, and increase the efficiency of knowledge dissemination (Kim & Lee, 2006).

Similarly, advanced information technologies have enabled organizations to establish more virtual teams (Martins et al., 2004). Consequently, organizations have also had to integrate advanced information technology with leadership roles (Avolio & Kahai, 2003; Kahai et al., 2003). E-leadership requires leaders to conduct their various tasks with the aid of advanced technology (Malhotra et al., 2007). Although technology offers benefits to the leader, it also poses some

challenges to the leader (Avolio et al., 2000; Hertel et al., 2005). For instance, managing diverse teams, keeping up with technological changes, and developing trust among team members are some of these challenges (Avolio et al., 2000; Hertel et al., 2005; Malhotra et al., 2007). The present study argues that the complexities associated with practicing e-leadership could have adverse effects on the leader.

This present study posits that practicing e-leadership is linked to disengagement from knowledge through the mediating role of leader stress. Using the Job Demands- Resources (JD-R) theory (Bakker & Demerouti, 2007; Demerouti et al., 2001), this present research argues that leader stress is a resultant effect of the high demands of e-leadership. The moderating roles of leader computer self-efficacy and leader training are conceptualized as resources that e-leaders could utilize to mitigate the stress of practicing e-leadership. The present study also uses adaptive cost theory (Cohen & Spacapan, 1978; Cohen, 1980) to explain the relationship between e-leadership, leader stress, and disengagement from knowledge sharing. The propositions developed in the present study offer directions for future research and implications for practitioners.

## **LITERATURE REVIEW**

### **What is E-leadership?**

We have seen more organizations shift to digitalized workplaces or workspaces in recent years (Bailey et al., 2012; Cortellazzo et al., 2019). Technological advancements have changed how jobs are designed (Gibbs, 2017). Many jobs require extensive use of technology (Cortellazzo et al., 2019), and a leader's job is no exception. Several organizations need individuals in leadership positions to efficiently utilize technology to perform their tasks (Darics, 2020). Advances in Information Communication Technology (ICT) have increased virtual teams' prevalence within organizations (Malhotra et al., 2007). ICT allows virtual teams to have geographically dispersed members, thereby requiring minimal physical contact (Makarius & Larson, 2017). Leading virtual teams needs leaders to communicate, coordinate and facilitate collaboration using technology (Gilson et al., 2015).

Several scholars have researched e-leadership within the context of virtual teams (Avolio et al., 2014; Cascio & Shurygailo, 2003). Virtual teams typically form a small segment of an organization's workforce. Consequently, the research on e-leaders would apply to a minor sect of an organization's management (Hertel et al., 2005). Since the advent of the Covid-19 pandemic, nearly two-thirds of organizations have at least 60 percent of their workforce working remotely. This unprecedented shift to digitalization has caused organizations to rethink how they might operate post-Covid-19 (Conger, 2020; Sneader & Sternfels, 2020). The current trend dictates that most leaders might become e-leaders in the near future and effectively broadens the section of organizations' management that could benefit from e-leadership research.

Avolio et al. (2000) define E-leadership as "social influence mediated by Advanced Information Technology (AIT) to produce a change in attitudes, feelings, thinking, behavior, and performance with individuals, groups, and or organizations" (p.617). E-leadership is distinct from leadership styles and behaviors such as transformational leadership and transactional leadership. Instead, e-leadership is a lens through which we can examine leadership (Avolio et al., 2000; Avolio & Kahai, 2003). E-leadership can be exercised at any management strata and with any leadership style (Avolio et al., 2014). For example, previous research has examined transformational leadership within the context of e-leadership (Hambley et al., 2007; Purvanova & Bono, 2009). Although e-leaders can enact different leadership styles and behaviors within virtual environments, the use of technology adds specific nuances to a leader's experiences that are otherwise not evident in traditional work environments (Liao, 2017).

E-leadership is grounded in Adaptive Structuration Theory (AST) (Avolio et al., 2000; Avolio et al., 2014). Adaptive structuration theory seeks to understand the interaction between AIT and human action (DeSanctis & Poole, 1994). One of AST's assumptions is that individuals decide whether to reject, resist or adapt AIT to their work needs (DeSanctis & Poole, 1994). These decisions result in modifications of the work context utilizing AIT (Avolio et al., 2014; DeSanctis & Poole, 1994). Following AST, the use of AIT alters existing leadership structures and changes how leaders might approach their tasks (Avolio et al., 2014).

Existing research shows that e-leadership could improve worker interconnectedness, enhance communication, and boost work flexibility (Bailey et al., 2012). However, the lack of physical contact could make e-leadership particularly challenging (Malhotra et al., 2007). E-leaders might lack some of the benefits accompanying physical contact (Cortellazzo et al., 2019). For instance, the lack of physical interactions might make it challenging to build trust (Liao, 2017), motivate (Kirkman et al., 2002), or facilitate collaboration (Gilson et al., 2015) within the virtual environment. Additionally, heavy reliance on advanced technology requires e-leaders to remain current with the latest innovations (Bailey et al., 2012). This requirement might be challenging for leaders who are not technologically savvy.

### **Leader Stress**

Several researchers have examined the impact of leaders on followers' well-being (Arnold et al., 2007; Bass & Bass, 2008). However, research on the effect of a leader's job on their well-being pales in comparison (Byrne et al., 2013; Connelly & Arnold, 2011; Harms et al., 2017). Several researchers cite stress as one of the most critical factors influencing individuals' well-being (Bass & Bass, 2008). LePine, LePine, and Jackson (2004) define stress as "an individual's psychological response to a situation in which there is something at stake for the individual and where the situation taxes or exceeds the individual's capacity or resources" (p.883). In the workplace, stress could emanate from task-related sources or interpersonal conflicts (Demerouti et al., 2001; Lovelace et al., 2007). In the present study, the focus is on task-related stress.

Several studies reveal that some jobs are prone to more stress than others (Sulsky & Smith, 2007; Xie & Johns, 1995). For example, a study that sought to examine the difference in stress levels across 26 occupations found that law enforcement employees, prison workers, paramedics, and teachers were more prone to stress than other occupations (Johnson et al., 2005). Extant research shows job-related stress to be a predictor of adverse job outcomes such as burnout (Bakker & Demerouti, 2007; Demerouti et al., 2001), low job performance (Jamal, 1985), low employee engagement (Anthony-McMann et al., 2017) and reduced job satisfaction (Halbesleben & Buckley, 2004; Halbesleben, 2010).

Leaders are often held to higher standards than their followers and might be expected to manage stress better than their followers. Some studies have highlighted a leader's ability to handle stress and stressful situations as an antecedent of leadership effectiveness (Bass & Bass, 2008; Bryman, 1993). Although there is a basis for this assertion, it could potentially prove problematic as it could result in lesser attention to leader well-being and mental health (Byrne et al., 2013). Like followers, prolonged periods of stress could adversely affect a leader's psychological well-being and mental health (Harms et al., 2017; Quick et al., 2007).

### **E- Leadership and Leader Stress: The Moderating Role of Computer Self-Efficacy**

Self-efficacy refers to an individual's belief in their ability to perform a specific task (Bandura, 1977; Bandura & McClelland, 1977; Gist, 1987). Self-efficacy should not be confused with outcome expectancy (Maddux et al., 1982) or competence (Rogers et al., 2014). Several studies show that self-efficacy is positively correlated to task performance (Bandura, 1982; Bandura et al., 1977; Barling & Beattie, 1983; Mitchell et al., 1994), training motivation (Machida & Schaubroeck, 2011), openness to new experiences (Wanberg & Banas, 2000) and willingness to adopt new technology (Hill et al., 1987). Several scholars have extended the research on self-efficacy theory by examining specific aspects of self-efficacy such as leader efficacy (Hannah et al., 2008; Kwok et al., 2020), physical activity efficacy (Ryan & Dzewaltowski, 2002), recovery self-efficacy (Luszczynska & Sutton, 2006) and computer self-efficacy (Compeau & Higgins, 1995).

Compeau and Higgins (1995) define computer self-efficacy as "an individual's perception of their ability to use computers in the accomplishment of a task" (p.191). Specifically, computer self-efficacy examines the applied rather than the rudimentary use of computers (Compeau & Higgins, 1995; Compeau et al., 2006). For example, this involves using computer software to deliver a lecture rather than knowing how to 'type' on a computer. This present study extends Compeau and Higgins' (1995) definition to include other forms of advanced technology, such as artificial intelligence (AI) and virtual reality (VR). Bandura (1977) cited three dimensions of self-efficacy as generalizability (the degree to which an individual's self-efficacy extrapolates to different situations, magnitude (level of task difficulty an individual believes they can manage), and strength (level of conviction about the magnitude of self-efficacy). These dimensions also

extend to the context of computer self-efficacy (Compeau & Higgins, 1995). For instance, e-leaders with a high magnitude of computer self-efficacy believe they can accomplish more complex tasks with computers than those with a low magnitude of computer self-efficacy.

Self-efficacy development requires an individual to cognitively assess their capabilities (Bandura, 1977; Gist, 1987). The assessment of one's capabilities informs the choices one makes regarding the tasks one attempts, the difficulty level of the tasks, the efforts expended, and the skills one decides to acquire (Bandura, 1982; Compeau & Higgins, 1995; Gist, 1987; Hill et al., 1987). For example, we can assume that an individual with high self-efficacy might be more predisposed to choose a challenging task than someone with low self-efficacy. However, in a situation where both are required to complete a challenging task, we can assume that the person with the lower self-efficacy might exert more effort to accomplish their task because they find it more demanding (Bandura, 1977; Bandura, 1982; Gist, 1987). Similarly, a person with higher self-efficacy might cope better with obstacles while undertaking a task than someone with lower self-efficacy (Bandura, 1977; Bandura, 1982; Gist, 1987). An experiment conducted on fifty undergraduate students found that participants who had high pre-exercise efficacy before a workout session reported that they had expended less effort during the exercise session than those who had a low pre-exercise efficacy (Rudolph & McAuley, 1996). One repeated measures experiment assessing participants during an isometric handgrip task revealed that participants with high efficacy found the task less strenuous and more enjoyable than those with low efficacy (Hutchinson et al., 2008). Following this and extrapolating to the present study, I theorize that

*Proposition 1a: E-leaders with low computer self-efficacy will expend more effort to accomplish a task with a computer or advanced technology and vice versa.*

*Proposition 1b: E-leaders with high computer self-efficacy will cope better with obstacles when completing a task than those with low computer self-efficacy.*

Job demands are those psychological, physical, mental, or organizational aspects of a job that require mental or physical effort or skills and consequently accrue certain psychological or physical costs (Bakker & Demerouti, 2007; Schaufeli & Bakker, 2004). Job resources are physical, psychological, or organizational assets available to help individuals meet work goals, stimulate personal growth and development, and reduce the costs associated with job demands (Demerouti et al., 2001; McVicar, 2016). According to the Job Demand-Resources (JD-R) model, deficits in job resources compared to job demands lead to feelings of burnout, stress, and emotional exhaustion (Bakker & Demerouti, 2007). Therefore, increases in job resources can mitigate the costs of high job demands.

Every leadership role has its challenges, and that of the e-leader is no exception (Schaubroeck et al., 1989). Many of the challenges that face e-leaders often emanate or are exacerbated by the complexity of using advanced technology (Avolio et al., 2000; Cascio &

Shurygailo, 2003). For instance, leaders, regardless of their leadership style, might find it challenging to manage employee conflict, convey empathy, manage work schedules, and manage a diverse workforce (Connelly & Arnold, 2011). One study found that salespeople who perceived the integration of sales force automation technology into their routine to be complex also experienced stress, role ambiguity, and role conflict (Rangarajan et al., 2005). The current study suggests that the high demands associated with e-leadership, coupled with the complexity of using advanced technology, could lead to leader stress. However, this study conceptualizes an e-leader's computer self-efficacy as a resource that could offset or exacerbate the costs associated with the demands of e-leadership (Bayraktar & Jimenez, 2020; Gist, 1987). On this basis, I propose that:

*Proposition 2: An e-leader's computer self-efficacy moderates the relationship between e-leadership and leader stress; where a high computer self-efficacy reduces the stress associated with e-leadership, and a low computer self-efficacy increases the stress associated with e-leadership.*

### **E- Leadership and Leader Stress: The Moderating Role of Leadership Training**

Previous research has shown leadership training to generate positive leadership outcomes such as improved performance, increased employee engagement, and leader well-being (Barling et al., 1996; Fielder, 1972; Kaluza et al., 2020; Santos et al., 2015). Training e-leaders equips them with the tools required to navigate the complexities of e-leadership. E-leadership training could guide leaders on efficiently and effectively using innovative technology to motivate, facilitate collaboration, or share knowledge. Training could also improve their computer self-efficacy (Connelly & Arnold, 2011), making it easier to handle the complexities of using advanced technology. E-leadership training serves as a resource that could mitigate the costs associated with the high demands of e-leadership. Therefore, I theorize that:

*Proposition 3: E-leadership training moderates the relationship between e-leadership and leader stress, where the more training an e-leader receives, reduces the chances of experiencing stress.*

### **Disengagement from Knowledge Sharing**

Incorporating proper knowledge management and sharing systems in an organization is one factor that gives an organization a competitive advantage (Abrams et al., 2003; Zboralski, 2009). Bartol and Srivastava (2002) define knowledge sharing as "individuals voluntarily sharing organizationally relevant information, ideas, suggestions, and expertise with one another" (p.65). Knowledge sharing is an extra-role behavior, and several factors influence the decision of leaders and their followers to either share or not share information (Bock et al., 2005; Xue et al., 2011; Zboralski, 2009). Extant studies have investigated different factors that could influence knowledge-sharing behaviors, such as incentives (Bartol & Srivastava, 2002), behavioral intentions (Bock et al., 2005), and organizational climate (Xue et al., 2011). However, individuals



within organizations might choose to hide or hoard their knowledge for various reasons (Connelly et al., 2012; Connelly et al., 2019; Ford & Staples, 2008; Holten et al., 2016).

Ford and Staples (2008) developed a taxonomy of knowledge-sharing behaviors and argued that researchers should view knowledge-sharing behaviors as a spectrum rather than a unidimensional construct that stretches between one extreme of knowledge hoarding to another, extreme knowledge sharing. The findings from an interview study showed that the prevailing reason for adverse knowledge-sharing behavior was disengagement (Ford & Staples, 2008).

Disengagement from knowledge sharing is the absence of an intention to hide or hoard knowledge and the failure to communicate the knowledge (Ford & Staples, 2008; Ford et al., 2015). Disengagement from knowledge sharing is conceptualized as low knowledge sharing and low knowledge hoarding (Ford & Staples, 2008). In essence, individuals fail to share their knowledge because they lack the motivation to do so. Leaders are at the forefront of information exchange within organizations (Hassan & Ahmed, 2011; Norman et al., 2010). A leader's willingness to effectively disseminate knowledge and encourage their followers to participate in knowledge sharing is pivotal to an organization's success and competitiveness (Abrams et al., 2003; Vogelgesang & Lester, 2009).

### **E-leadership and Disengagement from Knowledge Sharing: The Mediating Role of Leader Stress**

Studies have shown stress to predict adverse outcomes such as emotional exhaustion, fatigue, depersonalization, and reduced personal accomplishment (Demerouti et al., 2001; Maslach & Leiter, 2008; Schaufeli & Bakker, 2004). Research shows that leaders who have depleted psychological and mental resources might find it challenging to display positive leadership behaviors (Eubanks & Mumford, 2010). The continuous depletion of a leader's resources induced by stress increases the possibility of enacting negative leadership behaviors such as abusive supervision (Harms et al., 2017).

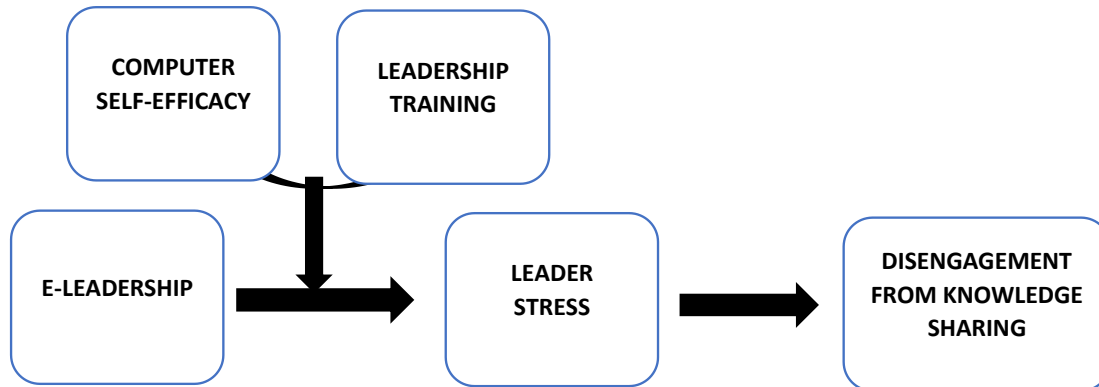
Using the analysis of competing hypotheses, Ford et al. (2015) found empirical support for adaptive cost theory as an explanation for disengagement from knowledge sharing. Adaptive cost theory posits that although humans can often adapt to extreme conditions, adaptability could be costly (Cohen, 1980). Stressors and environmental demands can negatively affect performance and social behavior (Cohen & Spacapan, 1978; Cohen, 1980; Ford et al., 2015). The theory suggests that humans gradually lose attentional capacity by continuously adapting to stressful conditions (Cohen & Spacapan, 1978; Cohen, 1980). The loss of attentional capacity could lead to aftereffects of stress on performance and social behavior (Cohen & Spacapan, 1978; Cohen, 1980; Ford et al., 2015). One study found that participants were less likely to help a woman find her contact lens after performing a highly demanding task than others who performed a low-demanding task (Cohen & Spacapan, 1978).

Knowledge sharing is conceptualized as a voluntary behavior (Bock et al., 2005; Xue et al., 2011; Zboralski, 2009) and as interpersonal helping (Ford et al., 2015); so, although leaders might be cognizant of its importance, they might not feel obligated to participate under extreme conditions (Ford et al. 2015). Studies have shown that most knowledge sharing in organizations could occur through informal channels (Ford & Staples, 2008; Ipe, 2003; Taminiou, Smit & De Lange, 2009). For instance, co-workers have reported exchanging information during lunch breaks or talking in the hallways (Ford & Staples, 2008). The lack of physical contact might make it difficult for the e-leader to take advantage of such informal channels to share knowledge. Extant research has focused mainly on explicit forms of knowledge transmitted through formal channels (Ipe, 2003; Wang & Noe, 2010). However, a large part of the knowledge humans possess is tacit (Ipe, 2003; Nonaka, 1994; Polanyi, 1966). Leaders can often transfer knowledge to their followers by showing rather than telling (Hassan & Ahmed, 2011; Norman et al., 2010; Vogelgesang & Lester, 2009). Hence, virtual communication might be problematic for e-leaders as the lack of proximity to their followers might stifle some of the information that could otherwise be shared. These obstacles, coupled with the high demands of e-leadership, could make knowledge sharing difficult.

Extant research has shown that practicing leadership can be a stressor to a leader (Campbell et al., 2007; Connelly & Arnold, 2011). Similarly, an e-leader overwhelmed by the high demands of e-leadership might experience feelings of stress. This present study theorizes that an e-leader experiencing stress might focus all their resources on adapting to their jobs' rigors, thereby depleting their capacity. In the present study, we could theorize that an e-leader who has low computer self-efficacy and lacks adequate training will be more likely to be disengaged from knowledge sharing. The cost of adapting to their jobs' stress will deplete the resources they have available to share knowledge that might help others.

*Proposition 4: Leader stress will be positively related to disengagement from knowledge sharing.*

*Proposition 5: Leader stress mediates the relationship between e-leadership and disengagement from knowledge sharing.*



**Figure 1: Theoretical model showing the relationship between e-leadership and disengagement from knowledge sharing.**

**CONCLUSION**

The present study sought to explicate the relationship between e-leadership and disengagement from knowledge. This study was a foray into some of the possible negative aspects of practicing leadership, specifically e-leadership. This current study proposed a moderated mediation model to explicate the relationship between e-leadership and disengagement from knowledge sharing. This study used the JD-R theory and adaptive cost theory to explain how practicing e-leadership could be a stressor affecting a leader's desire to engage in knowledge sharing. Computer self-efficacy and leader training were cited as resources that e-leaders could use to alleviate the stress associated with practicing e-leadership. The present study also offers directions for future research and suggestions for practitioners.

**DIRECTIONS FOR FUTURE RESEARCH**

This present study tackles two research areas in infancy by examining the relationship between e-leadership and disengagement from knowledge sharing. Although e-leadership has received increased attention in recent years, there are still areas to be explored (Avolio et al., 2014). Similarly, disengagement from knowledge sharing is a nascent area in the field of knowledge management. Existing research has predominantly examined the impact of e-leadership on follower behaviors. This present study focuses on the impact of e-leadership on the leader. Previous research has focused on the benefits of e-leadership and how it improves organizational processes, job performance, and job satisfaction (Avolio et al., 2014; Bailey et al., 2012). This current study contributes to the existing literature by illuminating the possible downsides of practicing e-leadership.

Previous research has focused on the causes of leader stress, such as role conflict, role ambiguity, time constraints, lack of autonomy, and interpersonal conflicts (Bass & Bass, 2008; Demerouti et al., 2001; Harms et al., 2017). Only a few studies, like Connelly and Arnold's (2011) conceptual paper on the effect of enacting transformational leadership on leader stress, have examined the adverse effects of leadership on a leader's well-being. This study is the first to examine the possible adverse effects of practicing e-leadership on the leader. Future studies could empirically test the model proposed in the current study. This study proposes a moderated mediation model to explicate the relationship between e-leadership and disengagement from knowledge sharing. Future research could test computer self-efficacy and leader training as moderators of the relationship between e-leadership and leader stress. Researchers could also test the mediating role of leader stress between e-leadership and disengagement of knowledge sharing using PROCESS for mediating effects (Hayes, 2018). Future research could also conduct longitudinal studies to establish causal relations between variables in the model.

The current study highlights the importance of computer self-efficacy and leader training in alleviating an e-leader's stress. Using JD-R theory, computer self-efficacy, and leader training are conceptualized as resources that e-leaders could use to manage the high demands of e-leadership. Future research could examine other resources, such as physical activity and counseling, that an e-leader could use to mitigate the costs associated with the high demands of e-leadership. The current study proposes a direct positive relationship between leader stress and disengagement from knowledge sharing. Future studies could explore potential moderators of that relationship.

In the present study, Job Demands-Resources (JD-R) theory and Adaptive Cost theory are incorporated into the proposed model to explain the possible adverse effects of e-leadership on a leader. These theories explicate the costs associated with stressors. In the present study, employing e-leadership is conceptualized as a stressor that could negatively affect the leader and the follower. Future research could explore and test other stress theories, such as the Conservation of Resource (COR) theory (Hobfoll, Shirom & Golembiewsk; 2000; Hobfoll, 2011) or coping theory (Lazarus, 1993) that could provide alternative explanations of the relationships proposed in the model. This current study represents a call for future research to examine the negative aspects of leadership styles and practices. Organizations must consider all leadership ramifications to enable leaders and their followers to be cognizant of potential pitfalls.

This study extends the current research on disengagement from knowledge sharing to leaders, specifically e-leaders. Previous research has focused on employee disengagement from knowledge sharing. This study argues that the stress of practicing e-leadership could affect an e-leader's knowledge-sharing behavior. Ford et al. (2015) cite employee health and wellness, job design, and job engagement as variables related to disengagement to knowledge sharing. This present study highlights the effect of a leader's health and wellness on disengagement from

knowledge sharing by examining leader stress. Future research could examine other variables that could cause disengagement from knowledge sharing. Future studies could also investigate the link between positive leadership behaviors (e.g., transformational leadership, authentic leadership) on disengagement from knowledge sharing.

## **PRACTICAL IMPLICATIONS AND RECOMMENDATIONS**

The proposed model highlights computer self-efficacy as a valuable resource for e-leaders. This current study argues that computer self-efficacy could offset or exacerbate the costs of practicing e-leadership. Therefore, managers practicing e-leadership need to cognitively appraise their computer self-efficacy level because this will influence the decisions and choices regarding the type of tasks to undertake and the skills they need to acquire. Given the rapid shift to digitalization, organizations need to proactively provide their managers with the resources needed to improve their computer self-efficacy to ensure no breakdowns in organizational processes. For instance, organizations could encourage leaders to set learning and outcome goals to ensure the development of their computer self-efficacy (Latham & Brown, 2006).

Leadership training is also conceptualized as a resource that e-leaders could use to cope with the high demands of e-leadership. This present study argues that leaders who have received adequate training in using advanced technology to accomplish various leadership tasks will be better equipped to manage the stress of e-leadership. Leadership training can also be a resource to develop an e-leader's computer self-efficacy. Therefore, organizations need to increase the training available to their leaders. Organizations could implement workshops and other training programs to help e-leaders acquire the skills required to manage the complexities of e-leadership. They also need to pay special attention to the effective transfer of e-leadership training if e-leaders are to maximize the benefits of training programs (Blume, Ford, Baldwin & Huang, 2010; Brown, McCracken, & Hillier, 2013).

According to adaptive cost theory, the aftereffect of stress is a depleted capacity to devote attention to tasks that are not a priority (Ford et al., 2015). In essence, e-leaders who do not consider knowledge sharing a priority are more likely to be disengaged when confronted with stressful situations. Given the importance of knowledge sharing to an organization's success, organizations and their managers need to prioritize knowledge sharing. Organizations need to create avenues for e-leaders to share their knowledge consciously. For instance, the use of knowledge repositories and knowledge management (KM) software could be especially beneficial for virtual organizations employing e-leadership.

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