Defining Leadership as an Influence on KM Success

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Abstract

As many of the constructs of KM success have been identified and empirically shown to have an impact on that success, the need for understanding the underlying influences on these constructs becomes increasingly important. This meta-study investigated the meanings of leadership and its subconstructs (traits/skills, behavior/style, and power) to understand their influences on KM by exploring answers to two research questions: What is meant by the term leadership and how has it been used in KM literature? What are the open research questions about the constructs of leadership and their impact on KM? The answers to these questions take the form of a meta-analysis of the literature and a matrix of the KM success factors and subconstructs of leadership.

1. Introduction

While Knowledge Management (KM) is a relatively new discipline, researchers and practitioners alike have indicated KM is critical to the success of a knowledge economy [1-3]. KM's importance to organizational success is due, in part, to KM's capacity to maximize organizational value and increase an organization's competitive edge [4-6]. Research in KM has established the significance of its impact on organizational success [5, 7] and explored the general constructs associated with KM success [1, 3, 8, 9]. Researchers have, for example, developed a model that empirically demonstrates that influences such as knowledge quality, perceived usefulness of knowledge sharing, system quality, user satisfaction, incentives, and leadership are reliable predictors of KM success [9, 10].

1.1. Problem statement

It is not adequate, however, to merely state that leadership is an important predictor of KM success; an in-depth exploration into the construct itself in terms of how it is observed, measured, and constituted is necessary. While organizational success largely depends on its leaders and how effectively these leaders perform their assigned roles, it has become increasingly important to understand the subconstructs and measures of leadership that influence this success [11]. Although the literature confirms the significant influence of leadership on KM success [1, 9], little research has been done to understand the subconstructs of leadership that are able to predict a successful KM implementation [12, 13]. Lacking a deeper understanding of leadership relegates organizations to designate leaders that may not bring about positive KM results.

1.2. Goals

The goal of this meta study was to provide the context for understanding the construct "leadership" as a contributor to KM success by exploring the ways in which the term has been defined, observed, and measured is scholarly research. To achieve this goal an investigation of the literature was conducted to learn how leadership has been formally defined and to identify those constructs of leadership that influence KM workers to contribute to KM implementation success. Investigating the factors of leadership that influence others to comply with desired organizational goals is a reasonable point of departure for a better understanding of leadership as a construct.

Although the term "leadership" may seem like an obvious concept, a clear understanding of the leadership qualities that influence organizational effectiveness remains elusive [14, 15]. Vague terms such as management, power, and control compound the complexity of understanding leadership as a scientific discipline. The vagueness of the term leadership has its roots in the notion of social influence; the vagueness stems from a lack of understanding of who exercises the influence, how it is exercised, and what are the outcomes [15]. To understand leadership it is important to investigate scholarly literature to identify the factors of leadership that influence followers to achieve stated organizational goals. Researchers have

examined the leadership from three perspectives: leader traits/skills, behavior/style, and power [14-16].

Researchers have argued that while a leader's physical traits may be used as indicators of leadership effectiveness and have suggested no complete picture of traits could be obtained unless it included a discussion of psychological traits [17]. Criticisms of the trait theories gave rise to the need to understand leadership as a set of behaviors [18] normally discussed in terms of leadership styles. Understanding leadership behavior according to leadership styles is therefore central to understanding organizational effectiveness [15]. Leader skills are those abilities, using a common framework of learned activity and inherent abilities, that allows a leader to use his/her knowledge to effectively encourage followers to comply with desired goals [16, 17]. Researchers have also suggested that power was a major factor of leadership and noted that a discussion of leadership would be incomplete without including a review of power [19]. Understanding power draws the question of who wields the power and how power is manifested in a social environment [15, 16].

Those who study leadership have noted the importance of understanding influence respective of leader and follower, but cautioned that a laundry list of representative measures (i.e. power) would not provide a guarantee of leadership's ability to promote organizational success [15, 16]. The research questions posed in this meta-analysis center on understanding leadership according to theories of traits/skills, behavior/style, and power.

RQ1: What is meant by the term leadership and how has it been used in KM literature?

RQ2: What are the open research questions about the constructs of leadership and their impact on KM?

2. Literature analysis

2.1. Leadership Defined

While the terms leader and manager have often been used interchangeably in the literature [15], researches have suggested these terms may be distinctively characterized according to their respective roles and behavior [14, 17]. A simplistic notion suggests a *leader does the right thing* while a *manager does a thing right* [20]. This distinction seems crude; however, it does provide conceptual boundaries whereby each role may be understood. A leader analyzes the environment and market conditions in which the organization operates and provides visions for its future (doing the right thing). A manager, however, strives to ensure that necessary tasks are consistently performed correctly (doing the thing right). Leaders tend to value flexibility, adoption, and seek to produce organizational change while managers tend to value control, stability, efficiencies, and seek predictability [21]. Leaders work to develop new approaches to problems while managers act to limit choices, thereby reducing organizational risk. Researchers argue that while managers typically engage in the processes of planning, organizing, directing, staffing, and controlling, leaders are typically responsible for establishing organizational goals and direction, motivating and inspiring followers, aligning followers to organization goals, and encouraging positive organizational change that would bring about improvements in organizational effectiveness [14, 15, 17, 21].

Researchers seem to agree that the social processes occurring between leader and follower enable a leader to enlist the aid and support of followers [15, 22]. It is through the social interactions that influence the behavior or values of the followers [23]. Perhaps better suggested by Burns [19] and said by Baker "Leadership is a rational, collective, and purposeful activity based in the relationship of human motives and physical constraints between the power wielder and the power recipient" [25, p. 63]. For the purpose of this investigation leadership is characterized as the rational and purposeful human, risk taking activity focused on the positive evolution of an organization based on the social constraints between leader and follower [25].

2.2. Skills / Traits Theories

Leadership skills are primarily used to motivate, train, and help followers in the attainment of organizational goals [26]. These skills are enhanced through training, education, and practice [16]. To understand leader effectiveness in terms of skills, Yukl suggested a taxonomy of broadly defined skills consisting of conceptual skills, interpersonal skills, and technical skills [22]. Leadership researchers later extended this notion to a taxonomy of six basic skill derivatives: communications skills, social skills, influence skills, analytical skills, technical skills, and a drive for continued learning [16].

The focus of early trait theory suggested that leaders were born, not made. One such descriptive theory of leadership is The Great Man Theory first introduced by Thomas Carlyle in 1841. In the series of six lectures, Carlyle classified six kinds of heroes (divinity, prophet, poet, priest, man of letters, and ruler) that suggested that leaders were heroes of sort, possessing special traits that fostered their leadership position independent of situation or environment [27].

The Great Man Theory was based on the belief that leaders were extraordinary people born with innate qualities that foster their ability to lead while followers were born willing to comply [28].

Early research identified personality traits that remain relatively stable throughout an individual's lifespan and across contexts [29]. A list of 4,500 different personality traits organized according to cardinal trait (a trait that dominated an individual's personality), central trait (common personality traits), and secondary traits (traits conditionally exhibited based on circumstance) was developed [34].

Over time, researchers have reduced the number of trait measures to what has become widely accepted and commonly known as the Five Factor Model (FFM) [15, 30, 31]. This model consists of openness to experience and intellect, conscientiousness, extroversion, agreeableness, and neuroticism. Openness includes behavioral factors such as broad interests, imagination, and insight. Conscientiousness includes significant thoughtfulness, scrupulousness, and a behavior guided by one's ethics. Extraversion includes characteristics such as assertiveness, sociability, and emotional expressiveness. Agreeableness includes attributes of trust, kindness, and prosocial behaviors. Neuroticism denotes an individual's tendency to experience emotional instability, anxiety, moodiness, irritability, and sadness.

The literature indicates limited research has been performed to understand leadership traits that may influence KM success [15]. One such case study investigated the failure of a Hong Kong organization (HKB) that had been experiencing a decline in revenue [32]. Based on a series of senior leadership meetings, it was decided that a KM initiative was imperative to the organization's survival. After 15 months of continued financial loss without any indication of KM success, leadership decided that the KM initiative had failed.

Findings revealed a number of causes for the KM failure, many of which centered on HKB's leadership strategies and its lack of leader commitment to the KM initiative. The lack of leadership conscientiousness and agreeableness significantly contributed to the KM initiative failure. One such failure was demonstrated by leadership's promotion of the capturing and storing of irrelevant, unsuitability, and incongruent knowledge obtained from other organizations' best practices or success stories. This action undermined their employees' motivation to explore their own knowledge. Leadership also failed to inject a positive knowledge sharing culture into the organization. An example of this was illustrated by the various social activities scheduled to foster a friendly and open organizational culture. This effort proved to be futile due to the lack of guidelines as the unframed socialization resulted in employee confusion or negative perceptions.

Unlike the research of Chan and Chau [32] that focused on leadership, the research of Mykytyn, Mykytyn and Raja [33] focused on the behavioral and interpersonal skills of KM workers and their impact on knowledge acquisition. The researchers investigated the degree of proficiency knowledge engineers believe they attained, in terms of their traits and skills. The five highest ranked traits/skills centered on communications and problem understanding; the essential elements of the knowledge acquisition process were listening, conceptualize, interviewing, probing, and open-minded (factors of FFM). Similar to the study of Chan and Chau [32], subjects rated themselves highly qualified in conceptualize, probing, and listening, which they believed were important for effective knowledge acquisition.

The research of Leung and Bozionelos [34], conducted in the context of Chinese culture, investigated the relationship between what the authors refer to as the prototypical notion of the effective leader (PNEL) and personality measures of FFM. Traits were measured using scales of extroversion, conscientiousness, openness, emotional stability, and agreeableness. Their research concentrated on the degree to which constructs of TFS were characteristic of effective leaders.

Results indicated high levels of conscientiousness, agreeableness, and emotional stability were desired qualities of effective leaders. A continuously engaged, open-minded, and stable leader/follower relationship was shown to be an important ingredient of effective leadership. Similar to the study of Chan and Chau [32], agreeableness was shown to have a positive impact on leadership effective. It is interesting to note that while openness was a major influence to leadership effectiveness in Anglo-Saxon societies, openness was a relatively minor influence in a Chinese society.

Matzler, et al. [35] studied three personality traits (agreeableness, conscientiousness, and openness) to learn their influence on knowledge sharing. While their study did not focus strictly on leadership, it did illustrate the impact knowledge worker traits had on knowledge sharing. Findings indicated personal disposition in the form of openness, agreeableness, and conscientiousness were positive influences on knowledge sharing. While Chan and Chau [32] and Leung and Bozionelos [34] confirmed the positive impact leadership agreeableness had on leadership effectiveness, this research suggests the agreeableness is also an important factor of follower success in knowledge sharing.

Nana, et al. [36] studied six personality traits (extroversion, agreeableness, openness, conscientiousness, narcissism, and neuroticism) to understand the influence on perceived leadership effectiveness of CEOs. Narcissism was measured as a positive personality trait exhibited by self-confidence.

Findings indicated perceived leadership effectiveness was related to extroversion, agreeableness, openness, conscientiousness, and narcissism. These results suggests that leaders who were perceived being extraverted, open to new experiences, conscientious, and self-confident were perceived to be effective leaders. As indicated by prior research, agreeableness, conscientiousness, extroversion, and openness are a common factors positively contributing to leadership effectiveness, knowledge acquisition, and knowledge sharing [32, 34, 35].

Scholarly research focused on leadership skills and its influence on organizational or KM success is severely lacking and a prime area worthy of study. The research of Mumford, Campion and Morgeson [37] attempted to fill this void by investigating leadership skills as a gage of leadership effectiveness. Their model consisted of four categories of skills (cognitive (analytical), interpersonal (social), business, and strategic) divided into layered (strata) and segmented (plex) skills. They reasoned that different leadership levels (junior, mid, senior) required a different strataplex of skills. For example, a junior leader nay required greater cognitive than interpersonal, business, or strategic skills.

While each of the skill levels indicated a relatively linear increase across different levels of leadership (junior to senior), it was empirically demonstrated that different skill levels were required at different levels. Interpersonal, business, and strategic skills became more important as leaders progress to a higher organizational plateau. Cognitive skills were rated the highest, followed by interpersonal skills, strategic skills, and finally business skills. It is noteworthy that the lowest skill levels increased most dramatically as leadership transitioned to the next higher level. Each subsequently higher skill level transitions to a high level of leadership but at a smaller rate. This indicates junior level leaders should focus their energies on enhancing their business skills ahead of strategic, interpersonal, and cognitive skills.

2.3. Leadership Behavior/Style Theories

Limited research studies have focused on the influence of specific leadership behavior and KM [13, 38]. Instead, many KM studies have taken a more global approach to understanding leader behavior by investigating leadership styles and the impact they have on KM.

While there appears to be many leadership styles described throughout the literature, transformational, transactional, situational, and laissez-faire seem to be the central styles used to understand the factors of leadership that impact the success of KM initiatives. Many of these styles seem to center on three general theories of leader/manager orientation. Task-oriented styles (transactional) tend to center on those that engage in the processes of planning, organizing, directing, staffing, and controlling. Transactional leadership style (TRS) is based on a system of rewards and punishments whereby a follower's reward or punishment is contingent upon their performance [39]. TRS also includes aspect of management by exception (active and passive) [40]. People-oriented style (transformational) tend to center on those engaged in establishing organizational goals and direction, motivating and inspiring followers, aligning followers to organization goals, and encouraging positive organizational change that would bring about improvements in organizational effectiveness. Transformation leader style (TFS) identifies leader's behavior according to their ability to appeal to a follower's moral values, self-interest, and benefits exchange of the follower [15, 19].

Situational leadership is also task oriented but tends to focus on event situations and relationship behavior suggesting that the successful leader adapt his/her leadership style to the maturity of a given situation [41, 42]. This style of leadership segregates leadership task and relationship behavior according to four dimension of Telling (one-way communications), Selling (duplex communication), Participating (shared decision-making), and Delegating (decision delegated to subordinates).

Laissez-faire style (LFS) center on those leaders engaged in neither transactional nor transformational styles but instead focus on follower leadership. This style refers to leaders that avoid decision-making, provide little or no direction, and give power to followers [15]. In this way, followers determine goals, resolve problems, and make decisions, without leader intervention.

Crawford [43] studied TRS, TFS, and LFS leadership to determine the impact on KM behavior focused on information acquisition, creation, and application. While their findings indicated a positive relationship exist between TRS and KM effectiveness, a negative relationship was shown to exist between LSF and KM suggesting that KM success requires active leadership participation focused on information acquisition, creation, and application were critical to that success. Similarly Chan and Chau [32] indicated a

lack of leadership engagement was at least partially blamed for the failure of its KM initiative. This suggests leaders who exhibit an increase in LFS are correlated to a decrease in information acquisition, creation, and application. Contingent reward was shown to be a positive correlation relative to KM.

Chen and Barnes [38] undertook the challenge of understanding the influences of TRS, TFS, and LFS leadership on knowledge sharing within large service firms throughout the U.S. and Taiwan. Knowledge sharing included internal sharing among employees as well as external to customers. Styles included factors of contingent reward, management by exception active, management by exception passive, and laissez-faire.

Finding indicated leadership behavior, as defined by TFS and TRS, were positive influences on knowledge sharing (both internally and externally), While both TRS and TFS were positively correlated to knowledge sharing, their degree of influence on internal and external knowledge sharing varied. Contingent reward was also shown to be the more influential than TRS and TFS. As expected, LFS had a negative influence on knowledge sharing.

Hai-Nam and Sherif [44] investigated leadership styles (TRS, TFS, LFS) to determine the impact they had on knowledge management practices as measured by knowledge sharing, socialization, and internalization. Like the Chen and Barnes [38], styles included factors of contingent reward, management by exception active, management by exception passive, and laissez-faire.

Findings indicated both TRS and TRF were a positive influence on KM practices as measured by internalization, socialization, and knowledge sharing. Management by exception active, management by exception passive, and laissez-faire were a negative influence knowledge sharing, socialization, and internalization. Similar findings reported by Chen and Barnes [38] indicated TRS and TFS were positive influences on knowledge sharing while LFS was a negative influence. Like Chen and Barnes [38], contingent reward was a predictor of knowledge sharing. Again suggesting, as other researcher have pointed out, knowledge is not usually divulged without some form of recompense [1].

The research of Politis [45] investigated which factors of leadership styles best supported knowledge acquisition in KM and the management of knowledge. Knowledge acquisition was measured using the five attributes of communication: problem understanding, personal traits, control, organizations, and negotiation. Leadership styles investigated the relationship between self-management leadership styles (SMS), TFS, and TRS and organizational effectiveness. SMS was measured using leader behaviors that encourage self-observation, self-goal setting, self-reinforcement, self-criticism, self-expectation, and rehearsal. TFS was measured using leader behaviors that exhibited charisma, individual consideration, and intellectual stimulation. TRS was measured using leader behaviors that exhibited contingent reward and management-by-exception.

Findings indicated SMS behavior had positive effect on knowledge acquisition attributed to factors of effective communication and problem understanding, personal traits, and organisational effectiveness. This study revealed SMS, TFS, and TRS were positive influences on knowledge acquisition. Crawford [43] likewise confirmed leadership styles consisting of TFS and TRS were positively related to the skills and traits necessary for knowledge acquisition.

Behery [46] investigated the presence and degree of relationship between 1) knowledge sharing and TFS/TRS/LFS; 2) organizational effectiveness and TFS/TRS/LFS; and 3) knowledge sharing and organizational effectiveness. TFS was measured using dimensions of idealized influence attributed, idealized influence behavior, inspirational motivation, intellectual simulation, and individualized consideration. TRS was measured using contingent reward, management by exception active, management by exception passive, and laissez-faire.

Similar to Chen and Barnes [38] and [44] findings indicated TRS and TFS correlated to knowledge sharing and organizational benefits. Knowledge sharing in turn was shown have a positive correlation to organizational benefits.

2.4. Power Theory

Rahim [47] defined power as the ability of one person to influence or control the behavior and/or attitudes of another. Likewise, Wartenberg [48] believed that a leader in a power relation exhibited power when the leader could strategically constrain the actions of the follower. Power is therefore the capacity of one agent to change the perceived incentive structure of cost and benefits faced by another agent [49].

Much of the research on power refers back to the seminal research of French and Raven [50] who identified and systematically defined major types of social power in terms of its influencing affect causing psychological change in behavior, opinion, attitude, goal, need, value, and other aspects of the person's psychological field. The execution of power implies a change in the attitude or perception of a follower.

While different types of power have been explored, French and Raven [50] were able to summarize power into five power categories they

judged especially common and important. Reward power was based on follower's belief that leader has the ability to mediate some form of reward. The strength of reward power depends on follower's belief that leader is capable and trustworthy of delivering the reward and will increase with the significance of the reward that follower believes leader will grant.

Coercive power is follower's belief that leader has the ability to mediate punishment. This power is based on follower's expectation that some sort of punishment will occur for noncompliance to the influence. The strength of coercive power depends on follower's belief that leader is willing and able to administer punishment.

Legitimate power is based on follower's belief that leader has the legitimate right to influence follower. Legitimate power is derived from the internalized values of follower (i.e. cultural) that dictates both the legitimacy of leader's influence, and follower's obligation to accept the influence.

Referent power is based on follower's admiration of a leader, a follower's belief they identify, or desire to be identified, with leader. If follower has a particular fondness for leader or the desire to be like leader, then follower would likely want become closer to leader.

Expert power is based on follower's belief that leader has some special knowledge or expertise. The strength of this power is directly related to follower's perception of the level of expertise held by leader and the mediating effect perceived by follower's value of leader's expertise.

The research of Jayasingam, Ansari and Jantan [51] investigated the impact of leadership power (LP) on knowledge acquisition, dissemination, and utilization practices using the organization as the unit of analysis. This study explored the potential LP influences on knowledge workers to participate actively in knowledge acquisition, sharing, and usage. The dimensions of LP was derived from French and Raven [50] and included five types of LP (Legitimate power, Coercive power, Reward power, Referent power, and Expert power). KM practices were derived from Darroch [52] to measure KM practices according to knowledge acquisition, dissemination, and utilization employed within the organizations.

Findings indicated LP influenced knowledge acquisition, dissemination, and utilization. Legitimate power negatively influenced knowledge acquisition practices, no effect on knowledge dissemination and utilization. Expert power positively influenced knowledge acquisition and dissemination practices and had no effect on knowledge use. Findings reported Reward, Referent, and Coercive power had no influence on knowledge acquisition, dissemination, and utilization. This suggests an organization wishing to promote knowledge acquisition or distribution should include leaders that are believed to be experts in the related knowledge area.

The research of Politis [53] examined the relationship between the measures of credibility, power, knowledge acquisition, and knowledge sharing in terms of negotiation factors. Credibility was understood to be the degree to which follower's perceive the leader to be honest, competent, and inspiring. Power was measured using French and Raven [50] power-based taxonomy. Knowledge acquisition was measured using subcategories of communication and problem understanding, personal traits, control, organisation, and negotiation.

Findings indicated coercive power was negatively related to personal traits, and negotiation. This suggested the exhibition of leader coercive power is likely to discourage follower's willingness to share knowledge. Leaders should avoid using coercive power when they wish to utilize employee knowledge to benefit the organization. Expert power was positively related to personal traits, control, and negotiation. Leaders who exhibit expert power encouraged followers to subscribe to the importance of knowledge acquisitions and sharing. Further, leaders who wish to promote effective knowledge acquisition and knowledge sharing should be viewed as experts of the related domain. Referent power had a strong negative and significant effect on negotiation. This suggests knowledge sharing is discouraged in followers who view their leader as one that exhibits referent power. Similar to [51], expert power was shown to be an important ingredient of KM, specifically accounting for its positive influence on knowledge acquisition and sharing. However unlike [51], Politis [53] indicated a strong negative relationship existed between referent power and knowledge sharing.

3. Research Method

Researchers have suggested a viable literature review begins with an analysis of scholarly journals [54]. Peachey and Hall [55] investigated top-tier KM journals from 2000 to 2003 in order to understand KM trend streams. Kulkarni and Raghu [56] investigated scholarly conference proceedings to understand the scope and depth of KM research issues. Yukl [15] indicated that understanding the state of about leadership requires an investigation of scholarly organizational science journals.

In addition to creating a list of scholarly references, it is important that preliminary keywords be established [54]. Researchers that study KM tend to focus on such keywords as *knowledge management*, *knowledge*, *satisfaction*, *quality*, *system*, *success*, and

effectiveness [1, 2, 9, 57-59]. Researchers that study organizational science tended to focus on such keywords as *leader*, *manager*, *trait*, *behavior*, *skill*, *style*, and *power* [14, 15, 60, 61].

Once a relevant article was found it was examined critically for its theory, completeness, scientific methodology, and clear statement of its findings [62, 63]. Each article was therefore rated on a scale of 1-5 (5 indicating excellence) according to these metrics. Articles that did not achieve a score of four in each of the categories were disregarded.

4. Results and Summary

This meta-analysis provided the context for understanding the construct leadership as a contributor to KM success by exploring the ways in which the term has been defined, observed, and measured in scholarly research. In addressing that goal, answers to two research questions were sought: What is meant by the term leadership and how has it been used in KM literature? What are the open research questions about the constructs of leadership and their impact on KM?

This study revealed a great deal of misunderstanding exists between the terms leader and manager. However, researchers have proposed factors that uniquely distinguish a leader from a manager. From these factors, we conclude an appropriate definition of leadership is the rational and purposeful human, risk taking activity focused on the positive evolution of an organization based on the social constraints between leader and follower.

While this research was neither exhaustive in its depth nor its breadth of leadership, it did illustrate some of the leader traits/skills, behaviors/styles, and powers that affect KM and organizational success. Refer to Table 1 for a summary of those factors. While research has progressed since the early days of The Great Man Theory, there remain some interesting holes in our understanding.

For example, the FFM has been studied in relation to organization and leader effectiveness as well as aspects of KM, yet we know little about how these constructs influence knowledge application. Further, and perhaps more perplexing, is the lack of understanding how the subconstructs of the FFM may affect KM. Openness, for example, as a intrapsychic dimension (internal psychological processes in humans) is partially based on different value systems exercised in social conditions. How do different values, as motivating factors of openness, affect KM?

While TFS/TRS studies were found to be important influences on organizational effectiveness, KM success, knowledge acquisition, sharing, and application, limited research has been done to understanding the subconstructs of these styles (e.g. intellectual and inspirational motivational factors; honesty, fairness value processes). Yukl [15] warns that studies of contingent rewards (TRS) have provided inconsistent results indicating another area ripe for investigation.

Other leadership theories and styles have been identified in the literature (situational, charismatic, flexible, etc.) [15]. There is noticeably limited research about these styles and their ability to influence KM. Additionally, as KM activities typically focus on the human aspect of knowledge, one wonders about the impact LFS may have on environments of knowledge creation (e.g. Nonaka's *ba*, communities of practice) [11, 64]. Finally, given the number of unethical leader practices brought to the public's attention, little has been done to identify how the subconstructs of benefit exchange, moral, ethical behavior, and self-interest affect KM.

Power, as a fundamental dimension of motivation, remains least understood. Among the many questions that remain, we must ask how do the dimensions of LP affect leadership commitment to KM, knowledge use, and knowledge quality. The authors expect to take up this challenge. While researchers have shown how some of the dimensions of LP affect various aspects of KM, we do not yet understand the proper mix of these powers that would foster improvements in KM behavior.

Additionally, and perhaps most importantly, while measures of leader traits/skills, behavior/styles, and power have been studied, the appropriate mixture of these aspects that foster successful KM behavior has yet to be discovered.

5. Contribution, Limitations, and Future Research

This research contributed to the KM book of knowledge by providing and understanding of the term leadership and how has it been used in KM literature. We suggest a formal definition of KM leadership include the rational and purposeful human, risk taking activity focused on the positive evolution of an organization based on the social constraints between leader and follower. Secondly, we present open KM research questions relating to aspects of leadership. It is expected that research will provide a fundamental impetus to understanding the subconstructs of leader traits/skills, behavior/styles, and power.

This research was neither exhaustive in its depth nor its breadth of leadership and KM and should be considered in that light. Future research should perform a more exhaustive literature review to provide a better understanding of the subconstructs of

leadership and the respective impact they may have on KM.

Table 1. Traits/Skills, Behavior/Styles, Power

	Traits / Skills	Behavior / Styles	Power
Org. Effectiveness	• Lack of commitment to KM / negative impact [32] • Improved cognitive, interpersonal, business, and strategic skills / positive impact [37]	• Transactional / positive impact [46] • Transformational / positive impact [46]	• Undiscovered
Leader Effectiveness	• Extroversion, conscientiousness, openness, agreeableness, and emotional stability / positive impact [34] • Extroversion, openness, agreeableness, conscientiousness, and self-confidence / positive correlation [36] • Improved cognitive, interpersonal, business, and strategic skills / positive impact[37]	• Undiscovered	• Undiscovered
KM Success	• Lack of conscientiousness and agreeableness / negative impact [32] • Lack of promotion of / positive knowledge sharing culture / negative impact [32] • Communications and problem solving abilities / positive impact [33]	• Transformational / positive correlation [43] • Laissez-faire / negative correlation [43] • Contingent Reward / positive correlation [43]	• Undiscovered
Knowledge Acquisition	• Communications and problem solving skills / positive impact [33] • Listening, conceptualizing, interviewing, probing, and openness / positive impact [33]	• Transactional / positive impact [45] • Transformational / positive correlation / impact [43,45] • Self-management / positive impact [45] • Laissez-faire / negative correlation [43]	• Expert Power / positive impact [51,53] • Legitimate Power / negative impact [51]
Knowledge Creation	• Lack of promotion of / positive knowledge sharing culture / negative impact [32]	• Transactional / positive correlation / impact [43,44] • Transformational / positive correlation / impact [43,44] • Laissez-faire / negative correlation / impact [43,44]	• Undiscovered
Knowledge Sharing	• Openness, agreeableness, conscientiousness / positive impact [35]	• Transactional / positive impact [38,44,46] • Transformational / positive impact [38,44,46] • Contingent Reward / positive impact [38,44]	• Expert Power / positive impact [51,53] • Referent / negative impact [53] • Coercive Power / negative impact [51]
Knowledge Application	• Undiscovered	• Transformational / positive impact [43] • Laissez-faire / negative impact [43]	• Undiscovered

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