ORGANIZATIONAL WISDOM AND ITS IMPACT ON FIRM INNOVATION AND PERFORMANCE

ÖRGÜTSEL BİLGELİK VE FİRMA YENİLİKÇİLİĞİ VE PERFORMANSINA ETKİSİ

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ABSTRACT: As a fascinating concept, the term organizational wisdom started to attract many researchers from a variety of disciplines. Nevertheless, how the organizational wisdom related practices, such as virtue and practicality, impact the firm innovativeness and financial performance is rarely argued in the literature. We argued that virtue and practicality practices positively impact the firm's innovativeness with increasing level of environmental uncertainty. We also mentioned that firm innovativeness positively mediates the relationship between organizational wisdom and firm financial performance. Further, we argued the managerial and theoretical implications of the study.

Key Words: Organizational Wisdom; Firm Innovativeness; Firm Performance

JEL Classifications: M00; M190

ÖZET: Önemli bir kavram olan, örgütsel bilgelik kavramı birçok alandaki araştırmacıların dikkatini çekmektedir. Fakat örgütsel bilgeliğin bileşenlerini oluşturan değişkenlerin veya örgütsel uygulamaların (erdemlilik ve pratik olma gibi) örgütün yenilikçiliği ve finansal performansı üzerine olan etkilerini tartışan çalışmalar çok azdır. Bu çalışmada, erdemlilik ve pratik olma uygulamalarının artan çevresel belirsizlikle firma yenilikçiliğini etkilediği tartışılmıştır. Ayrıca firma yenilikçiliğinin örgütsel bilgelik uygulamaları ile firmanın finansal performansı arasında kısmı bir aracı rol oynadığı anlatılmıştır. Son olarak, çalışmanın teorik ve yönetsel uygulamaları anlatılmıştır.

Anahtar Kelimeler: Örgütsel Bilgelik; Firma Yenilikçiliği; Firma Performansı

1. Introduction

With increasing rate of technological changes, customer requirements and needs, and competitive pressures, firms use their resources in general and their "knowledge" in particular to become more successful in their operations (Choi and Jong, 2010). In this respect, knowledge management in organizations becomes a critical strategic tool to cope with those environmental changes and to become more successful in the competition (Grant, 1996; Bierly, Kessler and Christensen, 2000; Brown and Starkey, 2000). However, some researchers recently noted that the success in the competition is not just related to the account of knowledge available in firms, but to the firm's ability to make the best use of what it knows, and to know what is strategically most important to it. In this regard, they highlighted the concept of "organizational wisdom," which is defined as the collection, transference, and integration of individuals' wisdom and the use of institutional and social processes (e.g., structure, culture, leadership) for strategic action (Bierly, Kessler and Christensen, 2000, p. 597), in understanding how a firm makes best use of its knowledge. Nevertheless, what

organizational wisdom is comprised of is still missing in the literature (Rowley, 2006; Rooney and McKenna, 2005). Also, while the moderating role of environmental uncertainty in the relationships between managerial and individual wisdom, and performance has been mentioned in the literature (Yang, 2011), its moderating role was not argued at the organizational level yet.

In this study, based on the extended literature, we conceptualize organizational wisdom as a firm's competency to develop organizational practices in using virtue and actions of people for effective decision making and organizational wellbeing (Bierly, Kessler and Christensen, 2000; Rowley, 2006; Küpers, 2007; Rooney and McKenna, 2008). Specifically, from an operational perspective, we argue that the degree to which organizational wisdom is displayed by how well it uses the virtuous (i.e., value humane and virtuous outcomes), and prudent (i.e., taking actions that are practical and oriented toward everyday life) practices. We also argue that organization wisdom has influence on the firm innovativeness. Indeed, while it is widely known that knowledge is a prerequisite for firm innovation efforts and effectiveness (Cooper, 2003; Mohrman, Finegold and Mohrman, 2003), a limited understanding of the potential implications of wisdom with regards to the creation and the management of innovation seems to exist in the literature. For instance, Weick (1998) argued that organizations can create organizational wisdom based shared attitudes that value knowledge, truth and human development, and thereby provide a context favorable for innovation and effectiveness.

Therefore, as shown in Figure 1, this study argues: 1) the role of organizational wisdom practices (e.g., virtuous and prudent) on the firm innovativeness, 2) the moderating role of environmental uncertainty between organizational wisdom practice and firm innovativeness, and 3) the mediating role of firm innovativeness between organizational wisdom and firm financial performance.
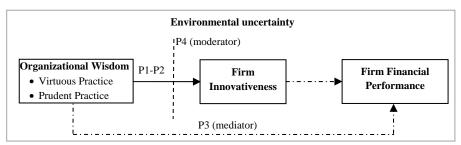

Figure 1. Proposed Model

2. Organizational Wisdom

The concept of "wisdom" developed around 5000 years ago and has been discussed in philosophical context ever since (Izak, 2013). Socrates, for example, argued that love, character, harmony, beauty, and truth contribute to wisdom; and that in order to be wise, individuals should avoid faddishness by seeking timeless truths (Rooney and McKenna, 2008). Socrates also mentioned that expertise, knowledge, and wisdom are sources of power that should be used well for "practical" and "political" purposes to bring about well-being (Rooney and McKenna, 2008). Plato, in his Platonic dialogues and Plato's public (Izak, 2013), noted that wisdom could be approached as a special quality possessed by those who contemplate life (i.e., sophia), the practical application of good judgment to human conduct (i.e.,

phronesis) and, scientific knowledge concerning the nature of things (i.e., episteme). Aristotle, following the Plato, viewed the wisdom concept as phronesis (i.e., prudence), balance, virtue, and aesthetics in his "Nicomachean Ethics" (Rooney and McKenna, 2008; Izak, 2013). Aristotle further proposed phronesis as the form of practical wisdom and sophia as the form of philosophical wisdom combined with intuitive reason, both of which are needed to inform wise action (Kekes, 1995).

These philosophical arguments later influenced the contemporary psychology literature. For example, Sternberg (1998) noted that the term of wisdom indicates the application of tacit knowledge as mediated by values toward the goal of achieving a common good under the difficult and complex circumstances. Kitchener and Brenner (1990) indicated that wisdom represents the awareness of the unknown events, and implications of knowledge for real-world problem solving and judgment. Meacham (1990) said that wisdom is the using knowledge with an understanding of its fallibility, with caution, and concern for its social consequences. Jashapara (2004) mentioned that wisdom is the ability to act critically or practically in a given situation.

Besides the concept of "individual wisdom" in the psychology literature, the term of wisdom was also argued in the management literature, which is often closely linked or confronted with philosophical and, more typically, psychological frameworks, such as those created by Aristotale, Sternberg and Baltes. Researchers mostly discussed the concept of wisdom in the context of leadership in the management literature (Korac-Kakabadse, Korac-Kakabadse, and Kouzmin, 2001; Greaves et al., 2014). Malan and Kriger (1998), for instance, defined managerial wisdom as "the ability to detect those fine nuances between what is right and what is not . . . the ability to capture the meaning of several often contradictory signals and stimuli, to interpret them in a holistic and integrative manner, to learn from them, and to act on them."

In addition to the managerial wisdom, the term of "organizational wisdom" was also argued in the management literature. For instance, Bierly, Kessler and Christensen (2000) contended that wisdom relates to the ability to effectively choose and apply appropriate knowledge in a given situation, and then defined wisdom as "an action-oriented concept, geared to applying appropriate organizational knowledge during planning, decision making and implementation (or action) stages" (p. 601). They further coined the term "organizational wisdom" to depict collective wisdom in organizational contexts. According to their study, the judgment, selection and use of specific knowledge for a specific context was what they termed organizational wisdom. Walter (1993) indicated that wisdom is an integration of thought and action in maintaining and enhancing the good. He also mentioned that, in the organizational context, wisdom emerges from contextual relationship within which wise people and groups are able to reflect on a situation by evaluating and making choices. In her study, Rowley (2006, p. 1250) defined organizational wisdom as the judgment that accommodates multiple realities and wider social and ethical considerations, and is exercised in decision making and the implementation of decisions.

Nevertheless, it is interesting to note here that previous works on organizational wisdom are strictly conceptual oriented solely toward the development of knowledge base in the literature. Accordingly, in order to enhance the current theory

on organizational wisdom, and to fill the gap on the relationship between organizational wisdom and firm innovativeness and performance, we first posit that organizational wisdom, as a firm competence, is embedded and entangled in distributed social practices and interactions throughout the organization (Barge and Little, 2002; Küpers, 2007). Here, organizational wisdom is continuously created and changed in the course of being practiced and is based on relational processes that comprise of jointly or dialogically organized activities. This perspective helps us to avoid the reification of wisdom as well as the problem of how to bridge individual and organizational levels of wisdom (Bierly, Kessler and Christensen, 2000). We also note that organizational wisdom is a dynamic rather than static concept (Malan and Kriger 1998; Intezari and Pauleen, 2014). Such that organizational routines and practices of wisdom are not substantively fixed but, rather, are a shifting cluster of variable elements and dimensions throughout dynamic nexus (Küpers, 2007). Next, organizational wisdom is a holistic concept (Bierly, Kessler and Christensen, 2000; Spiller et al., 2011). Küpers (2008), for example, indicated that wisdom comprises practices and structures that are simultaneously autonomous and dependent, characterized by differentiation (generation of variety) and integration (generation of coherence). Consequently, it allows firms to consider environmental, behavioral, cultural and social-systemic domains together. Mick, Bateman and Lutz (2009, p. 106) also wrote that "Wisdom is the ability to see the underlying patterns, the connections between so many multiple things . . . the things that most people don't see." Finally, based on the study of Rooney and McKenna (2008) and McKenna, Rooney and Boal (2009), we put forward that organizational wisdom can be seen as an identifiable entity composed of virtue and prudence. These practice indicate that organizational wisdom can be learned or developed, and is comprised of information/knowledge, action, ethics, virtues.

2.1. Virtuous Practice

Virtuous practice demonstrates the organizational contexts where the good habits, desires, and actions (e.g., humanity, integrity, forgiveness, and trust) are practiced at the individual and collective levels (Cameron, Bright and Caza, 2004; Rego, Ribeiro and Cunha, 2010; Toner, 2014). Specifically, virtue principle is associated with i-) moral goodness that represents what is good, right, and worthy of cultivation (McCullough and Snyder, 2000) and ethical principles, which can be interpreted as an attempt to operationalize what is right or just (Morse, 1999), ii-) social betterment that transcends the instrumental desires of people, thereby producing benefit to others regardless of reciprocity or reward, and iii-) humanity, such that one should do "what one does just because one sees those actions as noble and worthwhile" (Hughes, 2001, p. 89). In this respect, with virtue aspect of wisdom, people value humane and virtuous outcomes, produce virtuous and tolerant decisions, and have ethical judgments (McKenna, Rooney and Boal, 2009; Morales-sánchez and Cabello-medina, 2013).

2.2. Prudence Practice

Prudence practice illustrates the practically or value-added quality of wisdom and is the right reason in action (McKenna, Rooney and Boal, 2009; Liu, 2011). For example, Mele (2010) notes that while virtue ensures the rightness of the end people aim at, prudence or practical view ensures the rightness of the means people adopt to gain that end. Prudence is the right conduct in each specific situation, and is an optimal practice of dealing with organizational challenges (Oliver, Statler and Roos,

2010). From an operational perspective, prudence practice includes experience, knowledge and principles generated by the specific situations and actions (Mele, 2010). Yuengert (2011) noted that to be practical, people should know what the context is and have experience and knowledge regarding what has and has not been achieved in past contexts. This way, through prudent aspect of wisdom, people have rich factual or declarative knowledge about their specialization in the organization, engage in worldly activities, and are practical and oriented towards everyday life actions (McKenna, Rooney and Boal, 2009).

Having established the characteristics of organizational wisdom concept, we will now develop arguments regarding the relationships among organizational wisdom practices, and firm innovativeness and performance.

3. Hypothesis Development

We put forward that the virtuous practice enhances firm innovativeness by allowing positive emotions, such as "love, empathy, enthusiasm . . . the sine qua non of managerial success and organizational excellence" (Fineman, 1996, p.545), throughout the organization. Staw and Barsade (1993) also indicated that these positive emotions produce improved cognitive functioning, better decision making, and more effective interpersonal relationships among organization members. For example, people experiencing more positive emotions are more helpful to customers, more creative, and more empathetic and respectful. In addition, people broaden their interest in and accessibility to new ideas and information, and become more creative and more effective in their relationships with virtuous behavior (Isen, Daubman and Nowicki, 1987).

Virtue principle also buffers the organization from the negative effects of distress – enhancing innovativeness. For instance, Seligman and Csikszentmihalyi (2000) mentioned that virtues such as courage, hope or optimism, faith, honesty or integrity, forgiveness, and compassion are the prevention agents against psychological distress, addiction, and dysfunctional behavior. In this way, people will have higher levels of helping behavior to others, broader and richer social relationships and harmony, higher satisfaction, greater feelings of empowerment and less anxiety for innovation efforts and effectiveness (Segon and Booth, 2015). Therefore, we propose that;

P1: Virtuous practice is positively related to the firm innovativeness.

Prudence practice also influences the firm innovativeness by helping people to judge thoughtfully and to act decisively about the organizational related issues and events (Kane and Patapan, 2006). For example, Kane and Patapan (2006) note that people should judge particular situations on their individual merits and have a capacity to act accordingly to deal effectively with the challenges. Here, through the prudence practice people assess alternatives for problems and courses of action according to overall goals of organization, while reconciling or striving to harmonize the demands of the most important with those of the most pressing (Yazdani and Murad, 2015).

Prudent practice also impacts the innovativeness by providing a capacity to define goals for specific context that are shared and accepted by people (such as effective product development, customer satisfaction) and to figure out the means to reach

them (Halverson, 2004). For instance, Nonaka and Toyama (2007) indicate that people use their general and explicit knowledge in a particular situation, collectively grasp the essence of particular situations with the help of common sense, and share their perceptions and judgments with others which lead to a collective understanding of the situation. This way, prudence practice enables people to decide heedfully and to take appropriate actions for innovation efforts and performance improvements. Therefore, we propose that;

P2: Prudence practice is positively related to the firm innovativeness.

As a driver of firm innovativeness, organizational wisdom has also influence on firm financial performance. However, the literature explains that firms derive competitive advantages and improve their firm performance by channeling resources into the development of new products and processes (Hult et al., 2004). The rational is that firm financial performance, which denotes the profitability and growth in sales, market share, etc., is the result of the products presented to the market, the processes used in firm's operations, and customer satisfaction and employee learning etc.. For instance, Desphande et al. (1993), investigating Japanese firms, found that innovativeness and operational effectiveness positively relates to a firm's financial performance. Similarly, in an empirical investigation of 187 firms, Calantone et al. (2002), found that the higher the firm's innovativeness, the greater the firm's performance. Bowen, Rostami and Steel (2010), found that innovation and firm financial performance is positively correlated. Also while organizational wisdom practices are necessary and sufficient preconditions of firm innovativeness, that firm innovativeness gives the firm the necessary order to wisdom practices in a reflexive manner to leverage financial performance. Therefore, we propose that;

P3: Firm innovativeness mediates the relationship between organizational wisdom practices (i.e., virtuous and prudent) and firm financial performance.

We finally put forward that the influence of organizational wisdom on the firm innovativeness is moderated by environmental uncertainty. Such that, the higher the environmental uncertainty, higher the impact of organizational wisdom on the firm innovativeness. Here, organizational wisdom practices help people to realize that absolute knowledge is unattainable and that full understanding of an external environment is not possible. Thus, people acknowledge the uncertainty, allowing them to avoid the trap of misplaced overconfidence while at the same time steering clear of restrictive over-caution resulting from a sense of helplessness, paralysis, and inability to act (Wright, 2005). In this sense, organizational wisdom practices improve learning and decision-making of people to elevate firm innovativeness.

Also, organizational wisdom practices help people to have a clearer picture of what they should, could, can, and cannot do, under the uncertain conditions. (Sosik and Lee, 2002), Indeed, organizational wisdom comes not from programming and prediction, but rather from an understanding of formal and informal organizational values, culture, and inter-and intra-organizational relationships. This way, people easily ask questions about the nature of uncertainty and necessary innovation efforts. Therefore, we propose that;

P4: Environmental uncertainty moderates the relationship between organizational wisdom and firm innovativeness.

4. Discussions and Conclusion

In this study, we argued that when people concern the role of ethics and virtue in the organization; see others' actions as noble and worthwhile, and when organizational processes are infused with value beyond the technical requirements of the task at hand, that firm improves its innovativeness. In a sense, virtuous practice that describes ethical obligations and socially responsible action leverages the firm innovation efforts. Especially, we highlighted that virtuous practice serves as the fixed referent in times of change (Whetstone, 2003), and emphasizes a duty perspective for appropriate action. As a result, this pattern of behavior enhances the functioning of an organization on the innovation related issues, because rules and ethical guidelines serve as the universal fixed point upon which an organization may rely.

We also noted that when people acknowledge that decision-making is contingent and rarely involves applying absolute principles in our organization, know how and when to apply absolute principles to a complex and fuzzy reality in our organization, and are able to deliberate well concerning what is good and expedient for themselves in our organization (i.e., prudence practice), that firm enhances its innovation efforts. Here, we argued that the practical aspect of organizational wisdom improves people's time to get to know situations well enough to exercise judgment wisely. In addition, with prudent practice, people follow prescribed lessons learned and rules to achieve uncertain events. As a result, people tailor their knowledge in a way that meets changing environmental needs and conditions.

We next argued that when it is hard to know customers' needs, understand competitors' strategies, predict competitors' product announcement and is difficult to acquire technology (i.e., environmental uncertainty), that firm employ the practical or prudence aspect of wisdom to elevate the firm innovativeness. Here, under conditions of environmental uncertainty, as the future is unknown, people cannot be guided by calculative rationality only; and the optimal course of action cannot be determined ex-ante, as they lack stable information and means of evaluation. In such contexts, a shift from the classical management perspective (such as, strategic planning) to the practice perspective is beneficial as this broadens understanding firm innovation efforts.

We further mentioned that when there exists uncertainty in the external environment, people concern the role of ethics and virtue of in the organizations, have ethical mindset and judgment, and concern for others, being thoughtful and fair, admit their mistakes, and learning from them (i.e., virtues practice). Here, virtuous practice provides frames and sensemaking devices because people are socialized to detect and understand different forms information from the environments and they acquire a sense of whether that information is good or bad.

The implication of this study is that management should enhance firm's wisdom. Specifically, managers should enhance communication channels and dialogue throughout the organization. Also, management should set the "visions" for the organization, foster personnel training and development, encourage the diverse viewpoints, apply metaphors, simulations and organizational stories and common language, and enhance the imagination of people in the organization. Management

should also focus on the positive psychology, such as hope, collective empathy etc., in the organizations.

We believe that the concept of organizational wisdom presents opportunities for future researches in the literature. For instance, the antecedents of the organizational wisdom can be studied in great detail. Such that, how organizational resilience capacity and organizational intelligence influence the organizational wisdom can be investigated. Also, the role of organizational wisdom on the firm absorptive capacity can be studied. Next, organizational wisdom practice can be broadened by adding more variables, such as intuitions, reasoning, and aesthetics practices. Further, the concept of wisdom can be studied at the team level – team wisdom. How new product development teams develop their wisdom, the role of wisdom on the project performance and the moderating effect of team climate on the relationship between team wisdom and project performance can be investigated.

To conclude, in this study we addressed the relevance of organizational wisdom theory in the innovation management context. We believe that organizational wisdom is rich and fruitful research area for the literature.

5. References

BARGE, J.K., LITTLE, M. (2002). Dialogical wisdom, communicative practice, and organizational life. *Communication Research,* 12 (4), pp. 375-397.

BIERL, P., KESSLER, E., CHRISTENSEN, E. (2000). Organizational learning, knowledge and wisdom. *Journal of Organizational Change Management*, 13 (6), pp. 595-618.

BOWEN, F.E., ROSTAMI, M., STEEL, P. (2010). Timing is everything: A meta-analysis of the relationships between organizational performance and innovation. *Journal of Business Research*, 63 (11), pp. 1179-1185.

BROWN, A.D., STARKEY, K. (2000). Organizational identity and learning: A Psychodynamic Perspective. *Academy of Management Review*, 25, pp. 102-120.

CALANTONE, R.J., CAVUSGIL, T.S., ZHAO, Y. (2002). Learning orientation, firm innovation capability, and firm performance. *Industrial Marketing Management*, 31, pp. 515-524.

CAMERON, K.S., BRIGHT, D., CAZA, A. (2004). Exploring the relationships between organizational virtuousness and performance, *American Behavioral Scientist*, 4, pp. 766–790.

CAZA, A., BARKER, B.A., CAMERON, K.S. (2004). Ethics and ethos: The buffering and amplifying effects of ethical behavior and virtuousness, *Journal of Business Ethics*, 52, (2), pp. 169-178.

CHOI, B., JONG, A.M. (2010). Assessing the impact of knowledge management strategies announcements on the market value of firms. *Information & Management*, 47 (1), pp. 42-52.

COOPER, L.P. (2003). A research agenda to reduce risk in new product development through knowledge management: A practitioner perspective, *Journal of Engineering and Technology Management*, 20, pp. 117–140.

DESPHANDE, J.U., Webster, F.E. (1993). Corporate culture, *customer orientation, and innovativeness in Japanese firms: A Quadrad Analysis. Journal* of Marketing 57, pp. 23–37.

FINEMAN, S. (1996). Emotion and organizing. In: S.R. CLEGG, C. HARDY, W.R. NORD (ed), *The handbook of organizational studies*, London, Sage, pp. 543-564.

GRANT, R.M. (1996). Prospering in dynamically-competitive environments: Organizational capability as knowledge integration. *Organization Science,* 7, pp. 375–387.

GREAVES, C.E., ZACHER, H., MCKENNA, B., ROONEY, D. (2014). Wisdom and narcissism as predictors of transformational leadership. *Leadership & Organization Development Journal,* 35 (4), pp. 335-358.

HALVERSON, R. (2004). Accessing, documenting, and communicating practical wisdom: The phronesis of school leadership practice. *American Journal of Education*, 111 (1), pp. 90–112.

HUGHES, G.J.(2001). *Aristotle on ethics*. Routledge, London.

HULT, G.T.M., HURLEY, R.F., KNIGHT, G.A. (2004). Innovativeness: Its antecedents and impact on business performance. *Industrial Marketing Management*, 33, pp. 429-438.

ISEN, A.M., DAUBMAN, K.A., NOWICKI, G.P. (1987). Positive affect facilitates creative problem solving. *Journal of Personality and Social Psychology*, 52, pp. 1122-1131.

INTEZARI, A., PAULEEN, D.J. (2014). Management wisdom in perspective: Are you virtuous enough to succeed in volatile times? *Journal of Business Ethics*, 120 (3), pp. 393-404.

IZAK, M. (2013). The foolishness of wisdom: Towards an inclusive approach to wisdom in organization. *Scandinavian Journal of Management*, 29 (1), pp. 108-115.

JASHAPARA, A. (2004). *Knowledge management: An integrated approach*. FT Prentice Hall, Harlow.

KANE, J., PATAPAN, H. (2006). In search of prudence: The hidden problem of managerial reform. *Public Administration Review*, 66 (5), pp. 711-724.

KEKES, J. (1983). Wisdom. *American Philosophical Quarterly*, 20 (3), pp. 277-286.

KESSLER, E.H. (2006). Organizational wisdom: Human, managerial, and strategic implications. *Group & Organization Management*, 31 (3), pp. 296-299.

KITCHENER, K.S., BRENNER, H.G., (1990). Wisdom and reflective judgment: Knowing in the face of uncertainty. R. Sternberg, (ed.), *Wisdom: Its nature, origins, and development*, pp. 212-229. New York: Cambridge.

KORAC-KAKABADSE, N., KORAC-KAKABADSE, A., KOUZMIN, A. (2001). Leadership renewal: Towards the philosophy of wisdom. *International Review of Administrative Sciences,* 67 (2), pp. 207-227.

KÜPERS, W.M. (2007). Phenomenology and integral pheno-practice of wisdom in leadership and organization, *Social Epistemology,* 21 (2), pp. 169-193.

KÜPERS, W.M. (2008). Embodied "inter-learning" - An integral phenomenology of learning in and by organizations. *The Learning Organization*, 15 (5), pp. 388-408.

LIU, W. (2011). An all-inclusive ınterpretation of Aristotle's contemplative life. *Sophia*, 50 (1), pp. 57-71.

MALAN, L.-C., KRIGER, M. P. (1998). Making sense of managerial wisdom. *Journal of Management Inquiry*, 7 (3), pp. 242-251.

MCCULLOUGH, M.E., SNYDER, C.R. (2000). Classical sources of human strength: revisiting an old home and building a new one. *Journal of Social And Clinical Psychology*, 19, pp. 1-10.

MCKENNA, B., ROONEY, D., BOAL, K.B. (2009). Wisdom principles as a meta-theoretical basis for evaluating leadership. *The Leadership Quarterly*, 20 (2), pp. 177-190.

MEACHAM, J. A. (1990). The loss of wisdom. In R. J. Sternberg (ed.), *Wisdom: Its Nature, Origins and Developme*nt, pp. 181-211.New York, NY: Cambridge University Press.

MELÉ, D. (2010). Practical wisdom in managerial decision making. *The Journal of Management Development*, 29 (7/8), pp. 637-645.

MICK, D.G., BATEMAN, T.S., LUTZ, R.J. (2009). Wisdom: Exploring the pinnacle of human virtues as a central link from micromarketing to macro marketing. *Journal of Macromarketing*, 29 (2), pp. 98-118.

MOHRMAN, S.A., FINEGOLD, D., MOHRMAN, A.M. (2003). An empirical model of the organization knowledge system in new product development firms. *Journal of Engineering and Technology Management*, 20, pp. 7–38.

MORALES-SÁNCHEZ, R., CABELLO-MEDINA, C. (2013). The role of four universal moral competencies in ethical decision-making. *Journal of Business Ethics*, 116 (4), pp. 717-734.

MORSE, J. (1999). Who is the ethics expert? The original footnote to Plato. *Business Ethics Quarterly,* 9 (4), pp. 693–697.

NONAKA, I., TOYAMA, R. (2005). The theory of the knowledge-creating firm: Subjectivity, objectivity and synthesis. *Industrial and Corporate Change*, 14 (3), pp. 419-436.

OLIVER, D., STATLER, M., ROOS, J. (2010). A meta-ethical perspective on organizational identity. *Journal of Business Ethics*, 94 (3), pp. 427-440.

REGO, A., RIBEIRO, N., CUNHA, M.P. (2010). Perceptions of organizational virtuousness and happiness as predictors of organizational citizenship behaviors. *Journal of Business Ethics*, 93 (2), pp. 215-235.

ROONEY, D., MCKENNa, B. (2005). Should the knowledge-based economy be a savant or a sage?. Wisdom and socially intelligent innovation, *Prometheus* 23, (3), 307-323.

ROONEY, D., MCKENNA, B., (2008). Wisdom in public administration: Looking for sociology of wise practice. *Public Administration Review*, 68 (4), 709-721.

ROWLEY, J., (2006). What do we need to know about wisdom? *Management Decision*, 44 (9), pp. 1246-1257.

ROWLEY, J., (2006). Where is the wisdom that we have lost in knowledge? *Journal of Documentation*, 62 (2), pp. 251-270.

SEGON, M., BOOTH, C. (2015). Virtue: The missing ethics element in emotional ıntelligence. *Journal of Business Ethics*, 128 (4), pp. 789-802.

SELIGMAN, M.E.P., CSIKSZENTMIHALYI, M. (2000). Positive Psychology: An Introduction. *American Psychologist* 55, pp. 5-14.

SOSIK, J.J., LEE, D.L. (2002). Mentoring in organizations: A social judgment perspective for developing tomorrow's leaders. *Journal of Leadership & Organizational Studies*, 8 (4), pp. 17-32.

SPILLER, C. PIO, E. ERAKOVIC, L., HENARE, M. (2011), Wise up: Creating organizational wisdom through an ethic of Kaitiakitanga. *Journal of Business Ethics*, 104 (2), pp. 223-235.

STAW, B.M., BARSADE, S.C., (1993). Affect and managerial performance: a test of the sadderbut-wiser vs. happier-and-smarter hypotheses. *Administrative Science Quarterly* 38, pp. 304-331.

STERNBERG, R.J., (1998). *Wisdom: Its Nature, Origins, and Development*. Cambridge University Press, Cambridge, MA.

TONER, C. (2014). The full unity of the virtues. *The Journal of Ethics* 18 (3), pp. 207-227.

WALTER, G.A. (1993). Wisdom's critical requirement for scientific objectivity in organizational behavior research: Explicit reporting of research values. In: R.T. Golembiewski (ed.), *Handbook of Organizational Behavior*, M. Dekker, New York. pp. 491–524.

WEICK, K.E. (1998). The attitude of wisdom: Ambivalence as the optimal compromise. In: S. Srivasta & D.L. Cooperrider (ed.), *Organizational Wisdom and Executive Courage*, New Lexington Press, San Francisco , pp. 40-64.

WHETSTONE, J.T., (2003). The language of managerial excellence: Virtues as understood and applied. *Journal of Business Ethics*, 44, pp. 343–357.

WRIGHT, A. (2005). The role of scenarios as prospective sensemaking devices. *Management Decision,* 43 (1), pp. 86-101.

YANG, S-Y. (2011). Wisdom displayed through leadership: Exploring leadership-related wisdom, *The Leadership Quarterly*, 22 (4), pp. 616-632.

YAZDANI, N., MURAD, H.S. (2015). Toward an ethical theory of organizing. *Journal of Business Ethics,* 127 (2), pp. 399-417.

YUENGERT, A. (2011). Economics and interdisciplinary exchange in catholic social teaching and "Caritas in Veritate, *Journal of Business Ethics*, Supplement 100, pp. 41-54.