

EFFECTIVE LEADERSHIP IN TIMES OF CRISIS:

THE INTERPLAY OF RISK PERCEPTIONS, TRUST AND NATIONAL CULTURE

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Abstract

Risk perceptions may have a more dominant impact on trust and leadership effectiveness than previously assumed. Trust has been identified as being essential in the effectiveness of charismatic leaders (Bass, 1985) and as being critical when leaders communicate information regarding a risky situation or crisis (Kasperson, Kasperson, Pidgeon & Slovic, 2003). Too often risky situations are explained rationally by leaders and experts who are then surprised when these communications are distrusted or rejected. Research, though limited, has found that an individual's affect-based perception of the risk significantly impacts whom and what we trust. The role of culture in how risks are perceived and experts are trusted is even less clear. Bringing together extant theory on leadership, perceived risks, trust, and culture, this article addresses how these forces impact trust and leadership effectiveness and sounds a call for research to close the lacuna in the literature. Research propositions are offered and probable organizational impacts are discussed.

1. Introduction

House (1977) has described a crisis as a unique event where goals and paths to goal attainment are unclear. Leadership, particularly charismatic leadership, has been found to emerge more often under conditions of crises than under conditions of non-crises (Drazin, Glynn, & Kazajin, 1999; Strange and Mumford, 2002; Hunt, Boal & Dodge, 1999; Bedell-Avers, Hunter & Mumford, 2008). Yet the emergence of an effective, charismatic leader in times of crisis is not assured.

Mumford (2006) has argued that sense-making, which is a significant component of leadership in any circumstance, is crucial when leaders and followers are facing crises. House (1977) describes a crisis as a unique event where goals and paths to goal attainment are unclear and therefore can be subject to several interpretations. Given the inherent ambiguities associated with a crisis it would seem reasonable to assume that subordinates would place more trust in leaders that can craft strong sense making messages based upon expert power than in leaders who do not. However, field studies have shown that trust in experts is not assured and can be impacted by the nature of risks and how these risks are perceived (Slovic, Fischoff, & Lichtenstein,1980). Moreover, these perceptions of risk, and how they impact trust in leaders, can be confounded by the cultural orientations of leaders and their followers.

In this paper we look at leadership effectiveness during times of crisis by exploring the interplay between trust, risk factors, and national cultures. We begin with a discussion of the nature of trust as an evolving concept in the management and cross-cultural literature. We then suggest how elements of risk (actual and perceived) impact the development of trust between leaders and their followers. Next, we develop six propositions that merit further research. Our concluding discussion highlights the organizational implications of these proposed relationships on leadership communications and actions during times of crisis.

The Nature of Trust

2.1. Trust in Leadership: An Evolving Theoretical Concept

Trust has been described as a critical component in reducing the fear associated with the perceived risks of a crisis (Kasperson et al., 2003). Therefore to more fully understand how a leader can reduce fear one must also understand the role trust plays in leadership and in crisis response.

Trust has commonly been looked upon as a significant component of cooperation, conflict resolution, and economic exchange (Duestch, 1958; Gambetta, 1988; Deutsch, 1973). As leadership theory advanced from individual attributes of leaders to the interaction of leaders with followers, the role of trust became central in defining effective leaders (McCallister, 1995). Bass (1985) described trust as a key element in establishing a lasting and transforming relationship between followers and leaders. Studies have also shown that charismatic leaders draw heavily upon trust to acquire the mass support needed to accomplish visionary

change (Fiol, Harris, & House, 1999). Yet trust as a theoretical concept has been hard to define and therefore hard to operationalize.

The dictionary defines trust as "assured reliance on the character, ability, strength, or truth of someone or something" (Webster's 9th edition Collegiate Dictionary) yet it is commonly acknowledged that there is no universally accepted scholarly definition of the construct (Rousseau, Sitkin, Burt, & Camerer, 1998). One view of trust is that it is directed to the future, while being based upon experience and, as such, is an intrinsically fuzzy" phenomenon (Clases, Bachmann & Wehner, 2003). Another view is that it is a belief predicated not on the existence of evidence but on the lack of contrary evidence (Gambetta, 1988). Still another description of trust is that it is a phenomenon based upon predictability, dependability, and faith (Das & Teng, 1998).

Drawing upon Mayer, Davis, and Schoorman (1995). Rousseau et al (1998) described trust as a cognitive decision to make oneself vulnerable to another. As a theoretical concept, this definition of trust has been incorporated into many recent investigations into the construct. International investigations into trust have not verified this notion of willingly becoming vulnerable to others (Yamigishi & Yamigishi, 1994). However, the willingness to trust in some manner appears to be a universal aspect of human behavior even as scholars try to define it from a cultural perspective.

2.2. Trust across Cultures

Trust has been described as a psychological state (Kramer, 1999). Like all psychological states, trust assumes different meanings based upon the cultural settings within which individuals live. For example, Triandis (1972) found significant differences in the ways that cultures in Greece, India, Japan, and the United States viewed the causes and outcomes of trust. Two of the most frequently mentioned antecedents that varied across these four national cultures were understanding and the ability to keep secrets. Variations in the consequents of trust across cultures ranged from loyalty and admiration to the potential of being taken advantage of.

In his seminal work on culture, Hofstede associated trust with the cultural dimension of uncertainty avoidance. Although he did not explore the concept directly, he found similarities between the items he used to measure uncertainty avoidance and the items used by the European and World Values Studies that measured trust and tolerance (Hofstede, 2001).

As trust research has undertaken an international lens, it has become clearer that the idea of willingly becoming vulnerable (defined by Rousseau in 1998 as a critical aspect of trust) may be a cultural emic (Bhawuk, 2004). For example, Yamagishi et al (1994) in a comparative study of trust in Japan and the United States discovered that Japanese citizens reported much lower levels of trust compared to their American counterparts. This was contrary to theory, which predicted that collectivistic cultures with their emphasis on

groups and group identity should have higher levels of trust than individualistic cultures that focus upon the individual and individual identity. Upon further research into this anomaly, Yamagishi et al (1994) proposed that there is an important distinction between generalized trust and assurance in Japan. Because Japan is characterized as rich in interpersonal and inter-organizational relationships, vulnerability exists among individuals of the same in-group at a level deeply embedded within the psyche of the individual. As a result, trust is implicitly rather than explicitly given. In the United States where this depth of interrelatedness does not exist, the willingness to be vulnerable is a cognitive choice called trust, which in turn makes trust much easier to recognize in the United States than in Japan. Even though becoming vulnerable willingly to another may indeed be a cultural emic, the feeling of being vulnerable and the need to reduce that feeling is a cultural etic experienced by all people everywhere.

While most theories consider vulnerability and trust within a context of stable social conditions, all people experience a sense of vulnerability when exposed to a risk. This sense is heightened when the risk is related to a crisis. In those circumstances, people especially look to their leaders for guidance and safety. Whether trust is looked upon as a willingness to become vulnerable to another (a more individualistic description of trust) or as compliance with one's in-group to maintain safety (a more collectivistic description) there is a correlation between risk, trust, and, ultimately, leadership.

2.3. The Nature of Risk in the Development of Trust

Most theoretical models of trust either do not consider risk (McKnight, Cummings, & Chervaney, 1998) or consider it only as a condition related to behavior after trust has been established (Mayer et al., 1995; Hung, Dennis, & Robert, 2004). This is surprising given the prominent role that risk has in many descriptions of trust. For example, some trust researchers state that risk mediates trust or view trust and risk as being in a reciprocal relationship (Das & Teng 1998; Das & Teng, 2001). Others state that risk presents a test for trust (Dasgupta 1998).

When risk has been considered in relationship to trust it is generally considered in a rational and scientific manner (Mayer et al, 1995; Hung et al, 2004; Williamson, 1993). Concomitantly, it is assumed that the level of vulnerability that an individual is willing to accept is predicated on the cognitive assessment of risk specific to a particular behavior, which then is mitigated by previously established levels of trust towards another (Mayer et al, 1995).

Several scholars have begun to question the notion that risk assessments are driven only by rational assessments of benefits and losses (Slovic, 1997, Finucane, 2004). Their field studies demonstrate that rational assessments of risk are not a strong predictor of trusting behaviors (Slovic, Kunreuther, & White, 1974; Slovic, Fischoff, Lichtenstein, Corrigan & Combs, 1977; Slovic, Fischoff, & Lichtenstein, 1978; Slovic et al, 1980; Slovic, MacGregor, & Kraus, 1987; Slovic, Flynn, & Layman, 1991). Consequently, they assert that

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risk assessments are frequently driven more by emotions and less by rational assessments, especially in times of crises. Slovic (1987) proposes that risk has two emotional dimensions: dread (something that has the potential of being catastrophic) and uncertainty (something that is unobservable and unpredictable). Together these dimensions create risk that transcends what can be rationally analyzed and assessed. Hence, trust in experts and leaders may be driven more by emotion and less by cognition.

3. Exploring the Interplay between Concepts: Proposition Development

3.1. Crises, Risks and Expert Power in Leaders

Expert power has been identified as an attribute of leadership (Bass, 1985) as well as an antecedent condition in the development of trust (Mayers, et. al, 1995). Expertise has also been shown to be a dominant attribute of trust in leadership under varying conditions of risk, or situational vulnerability (Lapidot, Kark, and Shamir, 2007). The literature indicates what appears to be a strong correlation between crisis, the perceived risks that they create, and the need for expertise in leadership.

Risk has been recognized by scholars as being significantly correlated to the establishment of trust and the quality of decision-making (Das & Teng 1998, 2001; Dasgupta 1998; Slovic, 1987; Finacune, 2004). Yet Meyerson, Weick, and Kramer (1996) as well as Slovic (1997) have described circumstances where an increasing sense of uncertainty reduces a general willingness to trust, more specifically, to trust experts.

Meyerson et al. (1996) theorized that as risk uncertainty increases individuals make a stronger cognitive effort to analyze the risk and therefore trust in experts and the information they provide will diminish. Confirming Meyerson's hypothesis, Slovic (1996 & 1997) found empirical evidence that indicated that as perceived risks increased trust in experts decreased. Slovic (1997) also found that dread, which is the feeling of catastrophe, is stronger in determining whether experts would be trusted than uncertainty.

Contrary to Slovic, Bechtold, Bhawuk, & Tung (2010) found that, when dread and uncertainty were both high, there was an increased trust in experts. Further analysis indicated that these contradictory results were due to the type of risk being surveyed. Slovic (1996 & 1997) presented catastrophes related to nuclear power and other personal behavior risks to prime feelings of perceived risk whereas Bechtold et al (2010) presented scenarios describing infectious disease and the potential that these diseases may have of creating epidemics and global pandemics. Bechtold et al (2010) proposed that ultimately the ability to prevent nuclear power plants from being built created a overriding sense of control over the risk that was lacking when exposure to infectious disease such as SARS or swine flu is being considered as a risk. It was postulated that the lack of control, or sense of control, over the risk had the effect of raising levels of uncertainty which, when coupled with high levels of dread, caused individuals to place higher levels of trust in experts.

3.2. Affect Decision Heuristics and Trust in Leaders

Crises by definition are both unexpected and poorly defined (Bedell-Avers et al, 2008). They create a sense of risk that is often not rationally assessed but rather tied to emotions and emotionally driven decision heuristics (Finucane, Alhakami, Slovic, & Johnson, 2000). These emotions and concomitant heuristics can impact the way that leaders craft "sense-making" messages as well as the extent to which these messages and the leader themselves are believed. Emotionally driven decision heuristics are also influenced by national culture and cultural values that can lead to different interpretations of the risks and the crisis as well as different responses to the crisis by leaders and followers.

Funucane et al. (2000) found that emotion not only affects how individuals perceive risks, but it also creates its own heuristic in how individuals assess information and make decisions about the risk. These affect decision heuristics are loosely based tools that individuals use to reduce the cognitive load in decision making. They are not a rational assessment of the information concerning the risk but rather they are a "gut feel" response to the information. Like all heuristics, they are based upon experience, social convention, or a combination of both.

Finacune et al. (2004) also found that, when a risk had a significant affect component associated with it, an individual would respond more favorably to information that confirmed preconceived notions about the risk and discount information that disagreed with that notion. For example, scientific confirmation that global warming is significantly caused by human activities would be more readily accepted by people that believe that increasing temperatures were caused by human beings and less readily accepted by those who believe that it is a natural cycle of nature. This belief, or disbelief, can be so strong that individuals may reject information that has been scientifically proven beyond any reasonable doubt or accept information that has been repeatedly demonstrated to be inaccurate.

The affect decision heuristic is composed of both risk qualities (dread and uncertainty) described by Slovic (1987). It therefore seems reasonable to assume that this heuristic would also be influenced by the nature of the risk. For example, when a risk has a high potential for catastrophic outcomes (high dread risk) but is more predictable with regard to who it would impact and in what ways (low uncertain risk) then people would more readily reject expert opinions that advocated a need for change and accept opinions that would advocate maintaining the status quo. Once established, this affect decision heuristic would be used to filter any additional information that would advocate the need for change. On the other hand, when a risk is perceived to have a high potential for catastrophic outcomes (high dread risk) and an equally high potential to have an impact on anyone at any time (high uncertain risk) then the affect decision heuristic would endorse expert opinions that advocated a need for change, that could reduce the potential catastrophic outcome or exposure rather than opinions that endorse maintaining the status quo. This protection from the risk may include a dramatic shift away from the behavior (as appears to be occurring regarding

global attitudes towards nuclear power after the disaster in Fukushima, Japan) or even away from established leaders and institutions. Consequently, we propose the following:

Proposition 1 – When perceived risk is high in dread (catastrophic) perceptions but low in uncertainty (unpredictable) outcomes, trust in experts will be diminished.

Proposition 2 – When perceived risk is high in dread (catastrophic) perceptions and high in uncertainty (unpredictable) outcomes, trust in experts and leaders will be increased.

This nuanced view of risk and trust reinforces Slovic's (2000:2) belief that while "danger is real, risk is socially construed". The social construction of risk also would suggest that cultural settings have an impact on risk perceptions and trust.

3.3. The Effects of Culture on Trust, Risk and Leadership

Culture has been found to have an effect in how trust is formed and risks are perceived. Triandis (1972) found that trust, its antecedents and its consequents were often different depending upon the country and culture in which the individual lived. Fukuyama (1995) found that in countries like Japan individuals were more willing to place their trust in organizations whereas in countries like China individuals were more willing to place their trust in their families. Yamagishi & Yamagishi (1994) found that a western (individualistic) view of trust is significantly different than in eastern (collectivistic) view. These cultural differences are so significant that they invalidate western research instruments designed to measure trust.

Research into the effect that culture has on risk perceptions is even more limited. Slovic (1997), in a study on acceptance of nuclear power, found that those with an egalitarian worldview were more inclined to have higher perceptions of risk associated with nuclear power than individuals that had more hierarchal worldview and therefore were more resistant to accepting the technology. The findings implied that cultures that have great acceptance of variations in power distribution would experience less resistance to expert information regarding a risk and therefore would trust this information more than those individuals that are less comfortable with unequal power distribution. Bechtold et al (2010) also found a strong correlation between power differential and trust in experts and leaders. This correlation was verified at both the cultural dimension level (the vertical aspect of individualism/ and collectivism) and at the personal values level. These two studies suggest the following:

Proposition 3 – When faced with a crisis that has high levels of dread risks, experts will be more likely to be trusted in cultures that are generally hierarchal.

Proposition 4 – When faced with a crisis that has high levels of dread risks, experts will be less likely to be trusted in cultures that are generally egalitarian.

Proposition 5 – When faced with a crisis that has high levels of dread and uncertain risks, experts will be more likely to be trusted in cultures that accept differences in power.

Proposition 6 – When faced with a crisis that has high levels of dread and lower levels of uncertain risks, experts will be less likely to be trusted in cultures that do not accept differences in power.

4. Discussion

There has never been a time in human history when people can access communications from virtually everyone about virtually everything. Harm is created when communications, which are intended to move people out of harm's way or to prevent a panic, are poorly crafted and therefore either are not believed or are overly reacted to. Once leaders are rejected and experts are ignored, a pattern sets in that is difficult to break until a catastrophe occurs.

This article begins to address the lacuna in our understanding of the reasons that people might trust leaders and under what circumstances this trust is either enhanced or diminished. Empirical evidence indicates that people perceive risk differently depending upon their personal experiences and the general emotion that the risk creates within them. It is these experiences and emotions that allow individuals to determine whether a risk has great potential for catastrophe as well as potential for widespread and unpredictable exposure.

In order to avoid either a general panic or general apathy, leaders must craft sense-making communications more upon how the risk is being perceived than upon the real nature of the risk. These sense-making communications must not only reassure and create an appropriate call to action, but also be strong enough to withstand challenges from others who view the crisis as an opportunity to acquire power. In times of crisis, one might anticipate that leaders that exhibited expert power would be more readily trusted as they would be able to rationally reduce ambiguity within subordinates. However several empirical studies have shown trust in experts is not universal; it is dependent upon whether the risk is perceived to have a high potential of creating a catastrophic outcome and whether there is predictability in who may be exposed to the risk.

Since risk perceptions are driven by individual experiences and personal values it is clear that culture will have a significant impact on how risks are viewed and how sense-making messages crafted by experts and leaders are trusted. Unfortunately, the literature is scant in describing the role that culture plays in enhancing or diminishing the meaning of these risk perceptions and their impact in trusting experts. We are only beginning to understand the role that culture plays in determining what aspects of perceived risks are cultural emics and which are etics. For example, in more egalitarian cultures, full disclosure of the risk may be considered as a sign of compassion and concern that respects individuals' rights to decide for themselves.

In more hierarchal cultures full disclosure may be considered as a sign of confusion and weakness at a time when individuals want to be directed rather than left to decide for themselves. Hence, the difficulty of determining the most effective way to use experts and communicate is compounded when the risk crosses international borders.

From a practitioner's viewpoint, understanding what types of communications people will trust may have a significant impact on public response to broader societal challenges. For example, public health communications that fail to recognize how risks are perceived across cultures could result in tragic outcomes with regard to a medical emergency or natural disaster. Care must be taken to insure that the general public does not overly respond to a crisis warning (as was the case during the SARS crisis when vaccinating healthy adults created severe shortages that left large numbers of vulnerable populations unprotected) or ignore it completely (as was the case during Hurricane Katrina in the United States when evacuation notices were ignored by a large number of people).

From an organizational perspective understanding risk perceptions and their role in the development of subordinate trust in experts and leaders may have a significant impact on which change initiatives will be embraced and which will be rejected. This is especially true when change is required in response to an organizational crisis. As with general public communications, organizations must craft sense-making messages that consider both the nature of the perceived risk and the cultural perspective of the recipients. These considerations may therefore require more thought being placed upon the channel of delivery than on the content of the message itself. Even more importantly, given the strength of decision heuristics that can be formed in response to perceived risks, a failure to recognize differences in risk perception early on in the creation of sense-making communications may not only cause particular initiatives to fail but create a response reflex rejecting future initiatives as well.

5. Conclusion

While it is uncertain whether the world is experiencing more natural and manmade disasters than in the past, it is certain that the world, given the current state of communications technology, is significantly more aware of these crises and disasters. Moreover, because these situations unfold in real time, people look to their leaders to provide information regarding the magnitude of the risk and who is most exposed even before any significant analysis can be made.

Sense-making communications about risks must reflect the cultural framework of the intended audience. Therefore, it is imperative that we expand our knowledge about perceived risks, how they impact trust, and how culture augments these perceptions. To date we know very little about risks that are perceived to be high in dread and uncertainty. We know less about which type of external conditions can allow these

perceived risks to have an impact on trust in experts and leaders. We know less still about the role that culture plays in magnifying or diminishing these risk perceptions.

What seems clear is that trust in experts and leaders is multi-dimensional and will be influenced more by how we feel than by what we know. We encourage researchers to consider these propositions as they investigate the role that culture has in influencing how risks are perceived and how these perceptions impact trust in leaders and their communications. We suggest that studies be designed that consider perceived risk factors with varying degrees of dread and uncertainty to determine which risky conditions naturally enhance follower trust in leaders and which do not. We also suggest that investigations should look into the effectiveness of leadership communications to global wide crisis such as potential disease pandemics. These investigations should consider if the global communications were understood or, if misunderstood, whether these misunderstandings occurred due to a misrepresentation of fact or a misunderstanding of the emotions that the crisis created. Finally from an organizational perspective, investigations should consider how affect driven risk perceptions impact change initiatives and trust in organizational leaders. Investigations should not only consider whether trust in organizational leaders is heightened or diminished when the organization is perceived to be in crisis but also the role that culture plays in these perceptions and the organizations commitment to trust in their leaders.



References:

- 1. Bass, B.M. (1985). *Leadership and performance beyond expectations*. New York: Free Press.
- 2. Bechtold, D.J., Bhawuk, D.P.S. & Tung K-H. (2010). Affect based risk perceptions and how they impact our decisions to trust. Presented at the Academy of Management annual meeting, August 2010 in Montreal, Canada.
- 3. Bedell-Avers, K.E., Hunter, S.T., & Mumford, M.D. (2008). Conditions of problem-solving and the performance of charismatic, ideological, and pragmatic leaders: A comparative experimental study. *Leadership Quarterly*, 19(1): 89-106.
- 4. Bhawuk, D. P. S. (2004). Personal conversation.
- 5. Clases, C., Bachmann, R., & Wehner, T. (2003). A study of trust in virtual organization. *International Studies of Management and Organization*, 33(3): 7-27.
- 6. Das, T. K. & Teng, B. S. (1998). Between trust and control: Developing confidence in partner cooperation in alliances. *Academy of Management Review*, 23(3): 491-512.
- 7. Das, T. K. & Teng, B. S. (2001). Trust, control, and risk in strategic alliances: an integrated framework. *Organization Studies*, 22(2): 251-283.
- 8. Dasgupta, P. (1998). Trust as a commodity. In D. Gambetta (Ed.), *Trust: Making and Breaking Cooperative Relations*: 49-72. Oxford: Basil Blackwell.
- 9. Deutsch, M. (1958). Trust and suspicion. *Journal of Conflict Resolution*, 2: 265-279.
- 10. Deutsch, M. (1973). *The resolution of conflict*. New Haven, CT: Yale University Press.
- 11. Drazin, R., Glynn, M.A. & Kazajain, R.K. (1999). Multi-level theorizing about creativity in organizations: A sensemaking perspective. *Academy of Management Review*, 24(2): 286-329.
- 12. Finucane, M. L., Alhakami, A., Slovic, P., & Johnson, S. M. (2000). The affect heuristic in judgments of risks and benefits. *Journal of Behavioral Decision Making*, 13(1): 1-17.
- Finucane, M. L. (2004). The psychology of risk judgments and decisions. In N. Cromar, S. Cameron, & H. Fallowfield (Eds.), *Environmental Health in Australia & New Zealand*: 142-155. New York: Oxford University Press.



- 14. Fiol, R.J., Harris, D., & House, R.J. (199). Charismatic leadership: Strategies for effecting social change. *Leadership Quarterly*, 10(3): 449-482.
- 15. French, J.R.P., & Raven, B. (1959). The bases of social power. In D. Cartwright and A. Zander, *Group Dynamics*. New York: Harper Row.
- 16. Fukuyama, F. (1995). *Trust: The Social Virtues and the Creation of Prosperity*. New York: Free Press Paperbacks.
- 17. Gambetta, D. (1988). Can we trust trust? *Trust: Making and Breaking Cooperative Relations*: 213-238. Oxford, England: Basil Blackwell.
- 18. Hofstede, G. (2001). *Culture's consequences: Comparing, values, behaviors, institutions, and organizations across nations.* Thousand Oaks, CA: Sage Publications.
- 19. Hung, Y-T. C., Dennis, A. R., and Robert, L. (2004). Trust in virtual teams: Towards an integrative model of trust formation. Presented at the *37th Hawaii International Conference on System Sciences*, Honolulu, Hawaii.
- 20. Hunt, J.G., Boal, K.B., & Dodge, G.E. (1999). The effects of visionary and crisis responsive charisma on followers: An experimental examination of two kinds of charismatic leadership. *Leadership Quarterly*, 10: 423-448.
- 21. Kasperson, J.X., Kasperson, R.E., Pidgeon, N. & Slovic, P. (2003). The social amplification of risk: Assessing fifteen years of research and theory. In N. Pidgeon, R.E.
- 22. Kasperson, & P. Slovic (Eds.), *The social amplification of risk:* 13-46. Cambridge U.K.: Cambridge University Press.
- 23. Kramer, R. M. (1999). Trust and distrust in organizations: Emerging perspectives, enduring questions. *Annual Review of Psychology*, 50: 569-598.
- 24. Lapidot, Y., Kark, R. & Shamir, B. (2007). The impact of situational vulnerability on the development and erosion of follower's trust in a leader. *Leadership Quarterly*, 18(1): 16-34.
- 25. Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of Management Review*, 20(3): 709-734.
- 26. McAllister, D. J. (1995). Affect- and cognition-based trust as foundations for interpersonal cooperation in organizations. *Academy of Management Journal, Special Issue: Intra- and Inter-organizational Cooperation*, 38(1): 24-59.
- 27. McKnight, D. H., Cummings, L. L., & Chervany, N. L. (1998) Initial trust formation in new organizational relationships. *Academy of Management Review*, 23(3): 473-490.

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- 28. Meyerson, D., Weick, K. E., & Kramer, R. M. (1996). Swift trust and temporary groups. In R.M. Kramer & T.R. Tyler (Eds.), *Trust in Organizations: Frontiers of Theory and Research*: 166-195. Thousand Oaks, CA: SAGE Publications.
- 29. Mumford, M.D. (2006). Pathways to outstanding leadership: A comparative analysis of charismatic, ideological, and pragmatic leadership. Mahwah, NJ: Erlbaum Press.
- 30. Podsakoff, P. M., Todor, W. D., Grover, R. A., & Huber, V. L. (1984). Situational moderators of leader reward and punishment behaviors: Fact or fiction? *Organizational Behavior and Human Performance*, 34: 21-63.
- 31. Rousseau, D. M., Sitkin, S. B., Burt, R. S., & Camerer, C. (1998). Not so different after all: A crossdiscipline view of trust. *Academy of Management Review*, 23(3): 393-404.
- 32. Schwartz, S. H. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. in M.P. Zanna (Ed.). *Advances in Experimental Social Psychology*: 1-65. San Diego, CA: Academic Press.
- 33. Slovic, P., Kunreuther, H., & White, G.F. (1974). Decision processes, rationality and adjustment to natural hazards. In G.F. White (Ed) *Natural Hazards: Local, National, Global*: 187-205. Oxford, UK: Oxford University Press.
- 34. Slovic, P., Fischoff, B., Lichtenstein, S., Corrigan, B., & Combs, B. (1977). Preference for insuring against probable small losses: Insurance implications. *Journal of Risk and Insurance*, XLIV(2): 237-257.
- 35. Slovic, P., Fischoff, B., & Lichtenstein, S. (1980). Facts and fears: Understanding perceived risk. In R.C. Schwing & W.A. Albers, Jr. (Eds.), *Societal Risk Assessment: How Safe is Safe Enough?* 181-216, New York: Plenum Press.
- 36. Slovic, P., MacGregor, D.G., & Kraus, N.N. (1987). Perception of risk and automobile safety defects. *Accident Analysis & Prevention* 19: 359-373.
- 37. Slovic, P. (1987). Perception of risk. *Science*, 236(4799): 280-285.
- 38. Slovic, P., Flynn, J., & Layman, M. (1991). Perceived risk, trust and the politics of nuclear waste. *Science*, 254: 1603-1607.
- 39. Slovic, P. (1996). Perception of risk from radiation. *Radiation Protection Dosimetry* 68(3/4): 165-180.

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- Slovic, P. (1997). Trust, emotion, sex, politics and science: Surveying the risk-assessment battlefield. In M. Bazerman, D. Messick, A. Tenbrunsel, & K. Wade-Benzoni (Eds.), *Environment, Ethics and Behavior:* 277-313. San Francisco: New Lexington Press.
- 41. Slovic, P. (2000). Introduction. In P. Slovic (ed.) *The Perception of Risk*: xxi.xxxvii. London: Earthscan Publications Ltd.
- 42. Slovic, P., Finucane, M. L., Peters, E., & MacGregor, D. G. (2004). Risk as Analysis and Risk as Feelings: Some Thoughts about Affect, Reason, Risk, and Rationality. *Risk Analysis*, 24(2): 311-322.
- 43. Strange, J.M. & Mumford, M.D. (2002). The origins of vision: Charismatic versus ideological leadership. *Leadership Quarterly*, 13(4): 343-377.
- 44. Triandis, H. C. (1972). *The Analysis of Subjective Culture*, New York: Wiley-Interscience.
- 45. Williamson, O. E. (1993). Calculativeness, trust, and economic organization. *Journal of Law and Economics*, 36: 453-486.
- 46. Yamagishi, T. & Yamagishi, M. (1994). Trust and distrust: Psychological and social dimensions" *Motivation & Emotion*, 18(2): 129-166.