

ORGANIZATIONAL LEADERSHIP AWARENESS OF THE HIERARCHICAL MUM
EFFECT: A MODIFIED DELPHI STUDY

by

Jeremy Beakley

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of the Requirements for the Degree
Doctor of Management in Organizational Leadership

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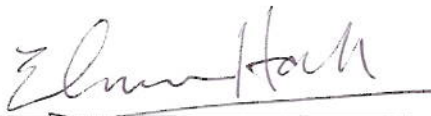
ORGANIZATIONAL LEADERSHIP AWARENESS OF THE HIERARCHICAL MUM
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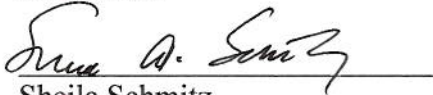
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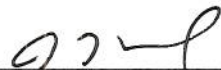
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ABSTRACT

The hierarchical mum effect is a phenomenon found in the workplace which represents a subordinate's unwillingness to communicate bad news to a supervisor out of fear of retribution, fear of association with the message itself, or fear of harming the subordinate-supervisor relationship. Prior to this study, sparse literature existed which identified the subordinate and supervisor factors which foster a mum environment. Moreover, even less literature existed which explored organizational leadership's awareness of the hierarchical mum effect. The purpose of this study was to identify organizational leadership awareness of the hierarchical mum effect, the contributing leadership qualities that foster a mum environment, and the impact of the phenomenon on team performance. This modified Delphi study used two rounds of data collection to elicit the opinions of a 24 member panel consisting of human resources and management professionals to identify the most likely factors of the mum effect and organizational leadership's awareness of those factors. Participant first round, qualitative responses, were further explored in the second round via a 1-5 point Likert scale to identify the most important factors which foster a mum environment and to identify the disparity of upper-management's awareness of those factors. *Very high disparities* (+) were identified as upper-management awareness of factors greater than one point from the mean awareness of factors. The greatest disparities between factors fostering a mum environment and upper-management awareness are found among subordinate fear of consequences, supervisor's ego being non-conducive to feedback, the lack of subordinate-supervisor trust, and supervisors who are non-responsive to employee communication.

DEDICATION

I dedicate this dissertation to my beautiful children Emily and Ries. I hope I have begun providing you with the guidance to grow up happy, healthy, and successful as much as the two of you have, so very much, shaped and defined who I am. This dissertation is the culmination of a tremendous amount of work and commitment to substantial goals. Whatever your goals in life, I know both of you will succeed. Accomplishing my goals have been, and always will be, for you.

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Charge of the Light Brigade

“Theirs not to make reply,
Theirs not to reason why,
Theirs but to do and die”

(Tennyson, 1856)

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Chapter 1

Introduction

The hierarchical mum effect exists within organizations when subordinates are unwilling to communicate unpleasant, negative, or contradictory information to a supervisor (Bisel, Messersmith, & Kelley, 2012). This phenomenon is represented by subordinate fear of retribution, fear of association with the bad news, or fear of disrupting their association with the supervisor (Ploeger, Kelley, & Bisel, 2011). Further, the hierarchical mum effect reflects a hindrance to organizational learning and long-term harm to subordinate-supervisor relationships. This modified Delphi study was used to collect participant opinions of upper-management awareness of the factors of the hierarchical mum effect and the contributing subordinate and supervisor factors which foster a mum environment.

The outcome of this study was intended to assist leaders identify why the hierarchical mum effect persists in organizations, recognize upper-management's level of awareness of the phenomenon, and thus provide further direction in managing members of the organization. Relevant scholarship addresses the existence of the hierarchical mum effect and mum environments in organizations (Bisel, Kelley, Ploeger & Messersmith, 2011; Bisel et al. 2012; Ploeger et al., 2011; Riley, 1993; Rosen & Tesser, 1972; Tesser & Rosen, 1972; Thomas, Zolin & Hartman, 2009; Wayne & Kacmar, 1991; Wesolowski, & Mossholder, 1997; Yariv, 2006). Yet, despite literature addressing the hierarchical mum effect and the consequences on organizational learning, there was sparse literature addressing organizational leadership awareness of the phenomenon or why the hierarchical mum effect persists in organizations, supervisor and subordinate factors that create a mum-environment, and what impact this effect may have on team performance.

Background of the Problem

Tesser and Rosen (1972) originally coined the term *mum effect* in their research of study participants' willingness to communicate bad news to another party. In this study, participant communication to another party ranged from the potential outcomes of: Bad news with consequences to both recipient and communicator, good news and no consequences for either the recipient or the communicator, or bad news with consequences for the recipient but not the communicator. Tesser and Rosen found that participants responsible for communicating bad news to a recipient felt guilt and an association with the bad news itself. Communicators felt responsible for the negative effects associated with the bad news. This guilt was measured highest when the communicator experienced a dissimilar fate as the message recipient. Under Tesser and Rosen's experiment, participants experienced relief when both themselves, and the individual with whom they were communicating, experienced equally beneficial fates. However, when the participant enjoyed a favorable fate, and the message recipient received a negative consequence, the participant experienced guilt and regret.

Later studies of the mum effect describe the root causes for insincere communication from subordinates to supervisors, and later developed the terms moral mum effect and hierarchical mum effect (Bisel et al., 2012; Ploeger et al., 2011; Yariv, 2006). Some additional factors contributing to this phenomenon include subordinate fear for retribution, a desire to contribute without hierarchical resistance, concern for harming the subordinate-supervisor lines of communication or relationship, and subordinate intentions to conform to organizational norms (Bisel et al.; Nursing Standard, 2008; Ploeger et al.; Yariv). Due to the potential for retribution, fear may contribute to "hierarchical levels to be strained, unwieldy and at times the cause of low productivity and poor employee morale" (Zundel, 2010, p. 6).

An organization that fails to incorporate learning *into the doing* of daily activities suffers discouraging effects to information sharing and organizational growth (Šebestová & Rylková, 2011). Consequently, an employee reluctant to communicate concepts challenging the status-quo may rather opt to choose the path of least resistance. Learmonth and Humphreys (2011) suggest, in addition to a lack of organizational knowledge building, subordinates who do not occasionally resist traditional interests of leadership may also develop dissatisfying and less meaningful identities. The problem however, does not rest solely on the subordinate. Ashcraft, Kunn, and Cooren (2009) identified “organizations constrain communication” in such a manner to discourage disagreement or sharing of unfavorable news (p. 14). The consequences of this suggest a failure on the part of the organization to learn from its mistakes.

The reward for communicating anticipated and preferential information to a supervisor is more readily apparent than the reward for taking risks by providing bad news. Bisel et al. (2012) address the employment contract, between subordinate and organization, as rewarding performance with compensation and organizational status. This form transactional leadership, Yukl (2006) contends, focuses on satisfying the supervisor’s expectations rather than threaten the leader’s position of authority. Bisel et al. (2012) adds in addition to pleasing the supervisor, subordinates may withhold conflicting opinions “through... strategies like silence and equivocation” (p. 49). The consequence of silence in an organization is a lacking ability to learn and adapt to maintain a competitive advantage.

Many organizations adapt to change to maintain a competitive advantage. To establish a learning environment, Lovelace, Shapiro, and Weingart (2001) explain that organizations increasingly rely on members with diverse and unique knowledge, skills, and perspectives. Wright, Heijden, Bradfield, Burt, and Cairns (2004) demonstrated organizational resistance to

change can occur due to a deep-seeded commitment to tradition methods: “The effective solution is an organization intervention, as there are decision and action flaws that cannot be addressed by rational reasoning and persuasion alone” (p. 15). As a result, the introduction of new organizational knowledge may require assertive action of a change agent which solicits information, both good news and bad, from subordinates. A change agent, according to Van de Ven and Sun (2011), “attempts to intervene in and control a change initiative by diagnosing and correcting difficulties that prevent the change process from unfolding as the change agent thinks it should” (p. 58). Fostering an organizational culture open to divergent ideas and perspectives may help mitigate the effects of the hierarchical mum effect.

This modified Delphi study explores organizational leadership awareness of the hierarchical mum effect and advances leadership theory in the ability to identify and address the persistent phenomenon. Organizational leaders in most industries will benefit from the results of this study through better understanding of potential missed organizational learning opportunities resulting from the hierarchical mum effect and learn to recognize leadership qualities which foster a mum environment. The results of this study directly challenges organizational leadership and organizational learning by examining decision-making based on potentially biased information (Waldron, Hunt, & Dsilva, 1993). This information will help leaders recognize possible gaps of confidence in accurate disclosure between supervisors and subordinates. Prior studies of the hierarchical mum effect identify the existence and causes of the phenomenon; however Bisel et al. (2012) recommends a qualitative study examining the organization socialized expectations which may foster a mum environment. Similarly, Payne (2007) provided an investigation of employee organizational self-esteem who too proposed further research in organizational decision-making structures in relation to employee dissent.

Finally, Campbell, White, and Durant (2007) also recommended similar future research to those described by Bisel et al. and Payne, stating a lack of knowledge exists in the connection of influence tactics on employee rapport.

Problem Statement

An organization grows through establishing an environment conducive of learning. Many organizations reevaluate their market-share and positioning regularly to maintain a competitive advantage (Agha, Alrubaiee & Jamhour, 2012). Gandel (2010) argued the hierarchical mum effect actually reinforces “bad behaviors instead of fixing them” (p.1). According to Šebestová and Rylková (2011), organizations that do not incorporate learning “into the doing” of daily activities have a discouraging effect on initiative and innovation (p. 960). Šebestová and Rylková, Argyris (2008), and Senge (2006), suggest members of organizations encouraged to communicate alternative ideas help the organization grow in its diverse knowledge and help members own the decision-making process. Consequently, where innovation is not an emphasis, or even faces regular challenge, subordinates choose to side with popular opinion, norms, and avoid falling into disfavor with supervisors (Payne, 2007).

Bisel et al. (2012) explained corporate communication necessitates a command structure in workplace relationships, the implications of the command structure on face-time with subordinates, and the negative effects such face-time under the command structure has on organizational learning. Campbell et al. (2007) explained the command structure relationship focuses on maintaining a supervisor’s self-image with little regard given to the self-image of the subordinate. In turn, subordinates maintain credibility in the eyes of the supervisor through not associating themselves with bad news. Opposition to supervisor opinion is a factor for some employees to work in fear.

While research exists which examined the existence of the hierarchical mum effect and the causes for the phenomenon, there was less understanding of why this phenomenon persists in organizations (Bisel et al., 2012). The hierarchical mum effect, in which subordinates are unwilling to communicate dissenting opinions or facts, may in turn reinforce pre-existing corporate culture, policies, and procedures and may have long-term consequences on organizational learning (Bisel et al., 2009; Bisel et al. 2012; Campbell, White, & Durant, 2007). This unwillingness, Bisel (2009) and Ploeger et al. (2011) explain, is a face-saving measure taken by subordinates to protect the relationship status quo with supervisors perceived as inattentive to dissenting opinions. Bisel et al.'s (2011) statistical analysis found that subordinates were twice as likely as supervisors to justify unethical decisions made in the workplace, as denial of a subordinate's request without justification would otherwise potentially cause face threatening action against the subordinate.

Yariv (2006) theorized a subordinate's unwillingness to communicate negative information with supervisors if there is a perceived risk, and that by communicating the information, the relationship with the supervisor will become harmed. This creates, Yariv continues, an imbalance in understanding an organization's true status of performance and culture, as subordinates communicate precisely the message supervisors expect to hear, based on precedent communicate, thus potentially hindering organizational learning. Where communication with the supervisor is viewed as not possible, Bisel et al. (2011) proposes alternative anonymous communication mediums. However, according to a study by the Ethics Resource Center (2012), over one fifth (22%) of all reports of organizational misconduct to management result in retaliation against the reporter.

Bisel et al. (2011) examined the propensity of subordinates to comply with unethical work requests and the correlation of subordinate attempts to maintain positional status by sampling 195 working age adults, ages ranged from 18 to 79 years old, who lived and worked in the United States. Bisel et al. found the hierarchical relationship and the presence of operational justification to conduct unethical actions to be “significantly related, X^2 (df = 2, N = 195) = 27.5, $p < .001$, Cramér’s $V = .38$ ” (p. 161). Bisel et al. concluded the likelihood of “an operational justification being present in a response to an unethical request was about 1.5 times greater when the respondent was a subordinate responding to a supervisor (42% of the time) rather than a supervisor responding to a subordinate (28% of the time) or a coworker responding to a coworker (29% of the time)” (p. 161).

Bisel et al. (2012) concludes the “supervisor-subordinate relationship likely contaminates crucial information sharing from below and, in turn, tends to constrain organizational learning and fitness by producing organizational ignorance—or a collective’s *not knowing*—at the structural level” (p. 139). Bisel et al. acknowledges further research is necessary to understand the extent to which the hierarchical mum effect influences performance in the workplace. The specific problem to be researched is why the hierarchical mum effect persists in organizations and what adverse impact does this effect have on team performance.

Purpose Statement

The purpose of this modified Delphi study was to understand why the hierarchical mum effect persists in organizations and what effect it may have on team performance. The Delphi study, developed by RAND in the 1950’s, is a method to “obtain the most reliable consensus of opinion of a group of experts by a series of intensive questionnaires interspersed with controlled feedback” (Ludwig & Starr, 2005, p. 316). The objective of this modified Delphi study included

two major parts: Two rounds of questioning for a panel of experienced managers, and the ranking and prioritization of participant opinions to predict future events. Successful application of the modified Delphi study first focuses on a firm review of existing literature and a careful selection of criteria for which the participants will meet.

Participants participating in the study signed an Informed Consent disclosure prior to data collection (See Appendix C). Each round of questionnaires were distributed to participants via email, administered by SurveyMonkey™, and completed during predetermined dates most convenient for the participants. Participants responded to questions specifically addressing their experience with the hierarchical mum effect, the knowledge of organizational leadership awareness of the phenomenon, and the participants' assessment of contributing supervisor and subordinate factors which foster a mum environment. Through a content analysis of the interview responses, Moustakas (1994) demonstrates coding of commonalities and differences assist in identify the responses to open-ended questions of the hierarchical mum effect as observed by the participants (See Appendix E).

As organizations focus to identify methods of maintaining competitive advantage, it is also advantageous to explore organizational leadership awareness of the hierarchical mum effect and the factors which foster its continued existence in organizations (Argyris, 2008; Šebestová & Rylková, 2011). Kassing (2005) addressed the potential benefits for organizations by specifically encouraging employees to provide constructive upward communication. The results of this study directly challenges organizational learning by examining decision-making based on input potentially biased by the hierarchical mum effect (Waldron, Hunt & Dsilva, 1993). This information helps leaders recognize potential gaps of confidence in accurate disclosure between supervisors and subordinates.

Significance of the Study

Innovation provides technological, procedural, and cost-reduction advances assisting organizations to escape the competition (Aghion, Harris, Howlitt & Vickers, 2001). Aghion et al. proceeded to explain upstart organizations have both the challenge and greater need to innovate than existing dominant firms. The challenge to an organization's competitive advantage is the recognition of available knowledge resources. Zizlavsky (2011) explained that firms do know they must innovate, but do not recognize their own ability to do so. Zizlavsky proposed three direct challenges to an organization's ability to innovate:

1. Innovation is not a company's primary focus;
2. There is no systematic method in a company to collect innovation;
3. Top level leadership unwillingness to take risks.

Zizlavsky concluded an organization promotes innovative values by creating "an innovative environment that must be perceptive, amenable and open to cooperation" (p. 1019). Innovation, as a vehicle of competitive advantage, requires freedom to openly communicate ideas and suggestions. The effects upon innovation from the hierarchical mum effect look to leadership's awareness of the phenomenon and the receptiveness of leadership to diverse opinions.

Initiative is an organization's ability to recognize an opportunity to make changes, although not necessarily innovative, to maximize shareholder value (Soltani, Pei-Chun & Mahmoudi, 2007). Similar to innovation, firms should take initiative in face of "heightened competition, globalization, and advancements in communications and information technologies, economic recession and a simultaneous search for excellence" (Soltani, Pei-Chun & Mahmoudi, 2007, p. 153). To change a failing product or procedure, a firm should cultivate an environment

in which personnel are willing and able to communicate bad news. However, despite a great deal of interest by management to initiate change, “the findings continue to point to the ineffective nature of the top management’s contribution to managing organizational change programs” (Soltani, Pei-Chun & Mahmoudi, 2007, p. 153). Angehrn and Maxwell (2008) proposed knowledge management initiatives fail because organizations do not adequately consider the emotional and psychological needs of the contributing members. Consequently, top management itself may be a threat to change initiatives (Dalglish, 2003; Deming, 1986; Schwinn, 2002). Further analysis of top management efforts to elicit honest feedback from participants may indicate missed opportunities to initiate change.

Organizational design structures create the hierarchical environment through which communication flows. Festinger (1950) proposed that hierarchies both introduce restrictions to free communication as well as criticisms by subordinates toward supervisors. Bisel et al. (2012) expands Festinger’s proposition by explaining corporate communication requires a command structure in workplace interactions traditionally guiding instruction downward from supervisor to subordinate. These workplace influences create disparaging effects on upward communication. According to Milliken, Morrison and Hewlin (2003), subordinates recognize this hierarchy and have “fear of being viewed or labeled negatively, and as a consequence, damaging valued relationships” if they disagree with a supervisor (p.1453). The concern is a supervisor’s ability to maintain business as usual while negatively affecting a subordinate’s ability to propose alternatives, effectively “undermin[ing] organizational decision making and error-correction” (p. 1454). In lieu of challenging supervisors, subordinates often choose to agree with supervisors to look good, or avoid conflict as a means to avoid additional work and justification.

A predominant source for subordinate inability to oppose supervisor opinion, however, is fear of retribution. Supervisors may influence subordinate decision-making either through real influence, or through the subordinate's perception of available power sources, such as a potential promotion or potentially withholding reward (Koslowsky, Schwarzwald & Ashuri, 2001).

Organizational environments favorable of employee contribution to knowledge is described as one where subordinates perceive top management willing to listen, culture is perceived as generally understanding, and there is reasonably little anxiety of negative consequences (Dutton, Ashford, O'Neill, Hayes & Wierba, 1997).

Nature of the Study

This research employed a qualitative modified Delphi study, drawing on opinions from a 24 member panel of professional and consultant members of human resources, business, and management. Qualitative research is an exploratory method of collecting the subjective mental processes of participants for depth and understanding of specific claims (Christensen, Johnson, & Turner, 2010). While studies existed which depict the causes and effects of the hierarchical mum effect, very little research explains why the effect persists despite existing knowledge of the phenomenon, and what impact this effect may have on team performance. Consequently, additional knowledge from human experiences, business, and management professionals further explores the hierarchical mum effect. These experiences helped reflect opinions of occurrences of mum environments within workplaces of which the participants are familiar. Contrary to objectivity of a quantitative study, a qualitative phenomenological study such as this captures the essence of human experiences (Creswell, 2007). A modified Delphi study was most appropriate, for the purposes of this study, as access to the opinions of non-bias organizational supervisors is

highly challenging. Additionally, this study seeks the opinions of a known phenomenon from experienced managers, upon which commonalities may be drawn.

This modified Delphi study investigated the professional opinions of a 24 human resources, business, and management participants sourced from professional association networks via the worldwide web and referrals via a snowball chain method (Creswell, 2008; Moustakas, 1994). The full panel study identified commonalities in participant responses of the levels of organizational leadership awareness of the hierarchical mum effect and the contributing supervisor and subordinate factors which cultivate a mum environment. Analysis of data collected through this study assisted in arriving at an accurate description of the effects of a mum environment on organizational learning and helped improve recognition of leadership qualities which foster a mum environment. This modified Delphi study consisted of two rounds of questionnaires, beginning with qualitative open-ended and demographic questions, and concluding with a Likert scale questionnaire to rank and prioritization the responses identified in the first questionnaire (Appendix D and Appendix F). The use of open-ended survey questions explored participant subjective experiences while a scale in the final round of questionnaire helped participants reach a level of agreement on predominant factors causing mum-environments and the measurement of leadership awareness of the phenomenon. For the greatest yield of insight into direct experiences with the hierarchical mum effect in organizations, the participants in this study were limited to those with a minimum of five years of work experience and a minimum of two years of managerial experience.

Research Questions

A series of underlying research questions guided this study to explore organizational leadership awareness of the hierarchical mum effect and the contributing supervisor and

subordinate factors which foster a mum environment. The outcomes of this study provide insight on the relationship between the hierarchical mum effect and leadership theory. The underlying research questions for this study included:

RQ1: What are the contributing factors that foster a mum environment?

RQ2: How aware is upper-management of the hierarchical mum effect?

RQ3: What influence does the hierarchical mum effect have on team communication and team performance?

RQ4: What are the implications of the hierarchical mum effect to leadership theory?

Organizational leadership is responsible for portraying an environment conducive of membership contribution to the identification and development of change action (Dutton, Ashford, O'Neill, Hayes & Wierba, 1997). Understanding supervisory projection of authority in an organization helps elucidate the effects of subordinate unwillingness to contribute to organizational learning. Study participant observations of supervisory receptiveness to subordinate contribution of knowledge helps organizational leaders understand why some subordinates may resolve to remain mum.

The answers to these research questions served as the basis for identifying possible leadership redirection necessary to foster a greater learning environment. Additionally, the results of this study assists leadership in identifying potential gaps of confidence in accurate disclosure between subordinates and supervisors. This knowledge may improve leadership's influence tactics to positively affect employee rapport and overcome implicit organizational expectations which undermine effective communication (Campbell et al., 2007; Bisel et al., 2012). Through additional examination of the hierarchical mum effect and its relationship to

leadership theory, the broader implications of this study provide leadership across many industries the information to draw more informed conclusions regarding team communication and performance. Moreover, this study provides opportunity for future studies into fields of human resources and management exploring the testing of the propensity of leaders to behave in ways which may predict the cultivation of mum environments.

Theoretical Framework

The foundational theories of plasticity theory and the mum effect serve as the theoretical framework for this study. The study of plasticity theory helps to understand the source and validity of knowledge. Subordinate desires to remain in good favor with supervisors and organizations may result in withholding accurate, yet displeasing, information. In an effort to conform to an organization's norm or customs, subordinate withholding of accurate information bias the validity of organizational knowledge. The hierarchical mum effect furthers the question of subordinate validity as the communicators' intentions may imply a greater importance of self-preservation over honesty (Bisel et al., 2012).

A common factor related to the hierarchical mum effect is that of self-esteem. Payne (2007) addresses Brockner's (1998) plasticity theory by explaining, "individuals with low self-esteem rely more extensively on external cues and as a result are more 'plastic' in molding their behavior of others" (p. 237). French (1980) explained subordinate tendency to mold their behavior to that which satisfy, that which the subordinate perceives to be, what the supervisor wishes to receive in communication. This theory depicts individuals' inability to develop organization-based self-esteem as such individuals become accustomed to confirming supervisor communication expectations as positive conduct. Payne develops Brockner's theory further by suggesting organizations should exhibit self-awareness of this issue and promote upward dissent

initiatives, such as anonymous reporting hotlines, to assist subordinates develop organizational self-esteem.

Bisel et al. (2012) define the hierarchical mum effect as an individual's reluctance to communicate negative messages for fear of association with the message itself. The mum effect, originally described by Tesser and Rosen (1972), represents a face-saving measure by the communicator to maintain a positive image by disassociation with the negative message. While the effort is to maintain a positive image for both the communicator and recipient, the practice reinforces bad behavior and negatively effects organizational learning. Ploeger et al. (2011) extended Tesser and Rosen's theory by arguing ambiguity in workplace communication serve to save-face while placing workers in ethically compromised positions in decision-making. Bisel et al. encouraged negative feedback as a method of organizational corrective action. One solution the researchers proposed, in lieu of potentially harming one's image in the organization through direct reporting, is the use of anonymous feedback systems. Contrary to an individual's lack of self-esteem developed under the plasticity theory, communicating negative messages become easier to deliver when an individual can disassociate oneself from the message. Individuals, through anonymous communication, develop the opportunity to develop positive self-esteem through contributing to organizational corrective action while reducing the risk of negative consequences associated with unfavorable messages.

Whereas positive organizational self-esteem promotes organizational learning, negative self-esteem, either latent or displaced, may have negative consequential effects on the organization. However, if members of the organization represent plasticity in their behavior and mold their responses to those of peers, or in anticipation of the supervisor's expectations, then the level of an individual's organizational self-esteem is not clear. Individuals with low self-

esteem exhibit greater plasticity when faced with adverse work-conditions, unsupportive supervisors, role conflict, and work overload, thereby exhibiting mum behaviors and withhold accurate, albeit negative, information. In lieu of challenging the adverse work-conditions in anticipation of improving, plastic individuals mold their behavior to match that of higher self-esteem members of the work environment. Payne, citing Brockner, identifies this relationship of a mum environment via plastic behaviors as a negative consequential effect on organizational learning.

Definition of Terms

This study exploring the effects of the hierarchical mum effect on learning, the leadership qualities which foster a mum-environment, and the level of organizational leadership awareness of the phenomenon, necessitates the following definitions to define the parameters of the research. Defining this terminology also serves to avoid misrepresentation of the collected data. This section also serves to provide a basic understanding of the terminology and its application to the organizational environment.

Delphi Method or Delphi Technique: “Delphi may be characterized as a method for structuring a group communication process so that the process is effective in allowing a group of individuals, as a whole, to deal with a complex problem” (Scheele, 2002, p. 2). This is accomplished via one or more rounds of open ended questions followed by one or more rounds of closed ended questions structured to gather group information, knowledge, and judgment, and reach consensus of shared views. Consensus of expert opinion is reached during the final rounds of the survey, during closed end questioning, based on the results found during the earlier open-ended question rounds. Participants remain anonymous throughout the study.

Factor(s): Through the modified Delphi method of collecting opinions of informed participants, successive rounds of data collection permit the researcher to identify emergent commonalities. These emergent commonalities, or factors, are developed by a Delphi method participant panel, resulting from previous rounds of data collection, and further considered by panelists in successive rounds using rating scales. Successive rounds of participant consideration of the identified factors help establish levels of collective opinion on the larger study at hand, help individual members identify items they may have missed, or otherwise previously thought were unimportant (Couper 1984, Goodman, 1987, McKenna, 1994).

Informed Participants: Also referred in this study as *knowledgeable participants*, or simply *participants*, from different disciplines, which possess the same core knowledge, and in excess of that of any individual participant, contribute information or judgments to a problem (Scheele, 2002). These participants must meet the minimum qualifications for this study including five years of work experience and two years managerial experience.

Initiative: According to Cohen et al. (1997), initiative takes form in four theoretical definitions. The first definition of initiative equates to conversational control. The second definition of initiative focuses on problem solving control. The third definition of initiative focuses on goal accomplishment only after an initiator seizes control of the conversation. The fourth definition identifies unique instances that different members of a conversation take control over problem solving.

Innovation: “Innovation is a process of transforming new ideas, new knowledge into new products and services” (Ramadani & Gerguri, 2011, p. 269). Innovation is contingent upon knowledge management and the acquisition of stakeholder agreement. Stakeholders may include supervisors, subordinates, shareholders, regulatory bodies, and board of directors.

Learning Organization: A learning organization “focuses on the methods and tools to evaluate and improve the quality of learning processes within an organization” (Weldy, 2009, p. 60). Such an organization includes a culture of knowledge sharing, knowledge management, and encourages innovative thinking and thought sharing. Participants of such an organization are rewarded for their knowledgeable contributions and procedures are in place to capture and codify knowledge for later use. Weldy adds that learning organizations cultivate an environment which of teamwork and collaboration.

Leadership Style: Any one of several unique methods, an individual’s personal leadership style “involves a process whereby intentional influence is exerted... over other people to guide, structure, and facilitate activities and relationships in a group or organization” (Yukl, 2006). Leadership styles are employed to achieve any combination of subordinate, supervisor, and organizational goals. Individual leadership styles, as outlined in Chapter 2, range from control to empowerment, with varying influences on employee output and behavior.

Likert Scale: This scale is used to sum the values of all questions to create scores for each survey respondent. The scale is balanced on both sides of a neutral option to help provide a less biased measurement, generally with a range of 5, 7, or 9 possible responses per question. The scores may be used to chart the distribution of responses across the total sample as well as identify participant opinions which may tend toward levels of consensus. This scale is appropriate for use in a modified Delphi study as the items in question are related to one another and the scale assists in developing an overall measurement of a particular topic or participant opinion (Creswell, 2007).

Modified Delphi Method: Often the Delphi Method is adjusted from the original approach originally develop by RAND. According to McKenna (1994) and Beretta (1996), the classical

Delphi method relies on consensus of experts. Two key changes from the traditional approach in this study are: use of informed and knowledgeable participants with management experience, but not necessarily *experts*; and the gathering, ranking, and prioritizing of responses, but not necessarily aim for consensus (Hall, 2009; Hall & Jordan, 2013). This method addresses challenges associated with the traditional qualitative study, such as access to unbiased participants, anonymity, and efficiency of time and money. Moreover, this overcomes the challenges to the use of *experts*, according to Turoff (1970), in that the existence of experts may preclude the actuality of an unknown problem worthy of an exploratory Delphi study; and conversely the existence of a Delphi study worthy of exploration may preclude the presence of any actual experts on the specific subject matter. Strauss and Zeigler (1975) resonate with Turoff's position, in arguing that defining any individual specifically as an expert is scientifically indefensible and overstated, and the value of study participants, Goodman (1987) adds, rests primarily in the participant's willingness to complete all rounds of the survey while contributing contemporary knowledge and perceptions.

This modified Delphi study is accomplished via one round of open ended questions followed by one round of closed ended questions structured to gather group information, knowledge, judgment, and then rank and prioritize common views. Ranks and priorities are reached during the second round of the survey, during closed end questioning, based on the results found during the earlier open-ended question round. Participants remain anonymous throughout the study.

Mum Effect: Originally identified by Tesser and Rosen (1972), the mum effect is the tendency for a communicator to withhold negative information out of a feeling of guilt or fear of association with the negative information. Communicators prefer to remain silent rather than

give someone bad news. Withdrawal from communicating bad news helps the communicator disassociate with the message itself, thus saving face or reputation.

Organizational Learning: “The process of individual and collective learning that takes place within an organization” (Weldy, 2009, p. 60). Organizations foster a culture which encourage educational opportunities to improve employee professional status and employee knowledge sharing.

Professional: For the purposes of this study, prospective participants are labeled as a professional based on five years of work experience, and two years of managerial experience, in their respective field. This study focuses on professionals in the field of human resources, business, and management. A professional possesses, according to Nichols, Nichols, and Nichols (2007), high standards of competence, integrity and fairness.

Subordinate: A member of an organization, expectant of direction, entered into an agreement to work for pay (Bisel et al., 2012). Subordinates are subject to supervisor influence based on a range of leadership styles.

Supervisor: A member of an organization, entered into an agreement to work for pay, providing instructions, commands, and directives (Bisel et al., 2012). Supervisors employ a range of leadership styles by which they influence the output and behavior of subordinates.

Assumptions

This study included three primary assumptions. The first assumption is that a modified Delphi study with qualitative questions, answered by a panel of human resources, business, and management professionals is more appropriate for answering questions regarding insincere subordinate-supervisor communication than subordinates or supervisors who may, themselves, be effected by the mum effect and unwilling to share accurate information. The second

assumption is that the mum effect may influence participant responses, despite the participants' disassociation with any given organization, and despite assurances of confidentiality. Finally, the third assumption is that the experiences of human resources, management, and business professionals meeting minimum qualifying criteria will possess experiences comparable to actual subordinates and supervisors actively experiencing the mum effect.

A modified Delphi study with qualitative questions answered by a panel of human resources, business, and management professionals was most appropriate to better understand organizational leadership awareness of the hierarchical mum effect. While research exists which explain the causes and effects of this phenomenon, less research existed depicting organizational leadership's awareness or why the phenomenon persists in organizations despite that which is known of the phenomenon. Moreover, there was little research which indicated the impact of the hierarchical mum effect on team performance. A qualitative study demonstrated the most appropriate method of understanding a complex social interaction between subordinate and supervisor. The experiences of participants with a minimum of five years of work experience in human resources, business, and management professionals, with a minimum of two years in a management role, yielded insight into direct experiences with the hierarchical mum effect in organizations. The extent of quantitative results of this study consists of scale ratings of participant responses to the first round of questions as a means to look for ranking and prioritizing results, and limited correlational analysis.

Further assumptions within this study acknowledge the possibility of participants to bias their responses in an effort to portray their employment experiences in a more positive light. Presumably, participants may believe, despite confidentiality assurance, their responses would link back to themselves. An additional assumption also considers the potential that participants

may believe current supervisors may be privy to the results of the participants' individual responses, despite the confidentiality assurance. Consequently, these assumptions acknowledge the inherent mum effect within the participants. Nevertheless, this study assumes the confidentiality agreement presented sufficient evidence to elicit honest results from all participants (Rubin & Rubin, 2005).

This study assumes the experiences of participants, sourced from both professional association groups on the worldwide web and referrals via a snowball chain method, responding to questions regarding organizational leadership awareness of the hierarchical mum effect and the leadership qualities which foster a mum environment used in this study would be comparable to the experiences of participants from other subpopulations. This study assumed the responses of human resources, business, and management participants of the hierarchical mum effect would mirror those experienced by members of other industries. The use of participants from multiple disciplines serves to capture the professional opinions with greater diversity of experience. The variety of professional experience serves to demonstrate transferability of this study (Christensen et al., 2010; Leedy & Ormrod, 2010; Neuman, 2006; Willis, 2007).

Scope, Limitation, Delimitations

The scope of this research included human resources, business, and management consultants and professionals' perceptions of the effects of hierarchical mum effect, upper-management awareness of the phenomenon, and the subordinate and supervisor factors which foster a mum environment. Respondents to each round of questions (see Appendix D and Appendix F) represented members of professional association networks via the worldwide web found on LinkedIn and referrals via a snowball chain method (Creswell, 2008; Moustakas, 1994). 24 full study participants responded to open-end qualitative questions, followed by a

second round for the purposes of ranking and prioritizing results to the responses reported in the first round. All participants were validated as part of the survey to have a minimum of five years of work experience in the fields of human resources, business, or management, with a minimum of two years of managerial experience.

Participants were randomly assigned a four alphanumeric code generated from randomcodegenerator.com. Accounting for an approximated 30% attrition between rounds of the survey, the data collected from 24 full study participants was adequate to collect sufficient valid data through the completion of the second round (Mesch, 2012). The use of open-ended questions limits the validity of the study, however allows for greater detail in participant responses. The length of time available to data-collection presented a limitation to the study. Participants sourced solely from professional association networks on the worldwide web and referrals form a snowball chain method also acted as a limiting factor, although the use of three separate fields of experience in lieu of fewer, or one, served as a delimitation of the study. Additionally, participant selection from three fields of experience, including an option to describe an alternative field of experience, while maintaining the prerequisite years of management experience, still represented transferable data.

Summary

Subordinates succumbing to the hierarchical mum effect is a sociological phenomenon, identified since the 1970's, as workplace norms and expectations limit accurate subordinate-supervisor communication in fear of negative association with upward communication of bad news (Tesser & Rosen, 1972; Bisel et al., 2012). These norms and expectations condition subordinates to align communication with, what is expected to be, the supervisor's expectations in hopes to save face, to contribute to a group without encountering resistance, or in fear of

retribution for disagreeing (Bisel et al., 2012; Gandel, 2010; Kassing, 2005; Rosen & Tesser, 1972). Thauberger (2003) extended the effects of the hierarchical mum effect in stating, “The placater stance is utilized as a means of preventing others from getting angry, at any cost. The placater will usually speak in ingratiating and apologetic ways, not disagreeing or defending one’s own beliefs at all” (p. 59). The consequences of subordinate “silence and equivocation”, as Bisel et al. (2012) describes, present lasting effects on organizational learning.

A wealth of research exists on the causes of the hierarchical mum effect (Bisel et al., 2012; Dreyfack, 1970; Gandel, 2010; Kassing, 2005; Koslowsky et al., 2001; Milliken et al., 2003; Wesolowski & Mossholder, 1997; Yarov, 2006). Yet, little research addresses organizational upper-management awareness of the well documented phenomenon, nor does much research exist extrapolating the leadership qualities which foster a mum environment. Bisel et al. (2012) recommended further research into organizational socialized expectations which influence the hierarchical mum effect, which may include leadership awareness of the phenomenon as well as the existing leadership practices which may, in fact, foster mum environments. Similarly, Payne (2007) provided an investigation of employee organizational self-esteem. Payne also proposed further research in organizational decision-making structures in relation to employee dissent. Finally, Campbell, White, and Durant (2007) also recommended similar future research to those described by Bisel et al. and Payne, stating a lack of knowledge exists in the connection of influence tactics on employee rapport.

The existence of the hierarchical mum effect challenges organizational ability to maintain competitive advantage. Arukhe (2014) states that knowledge management “is vital to and a driver of organizational success, especially to sustain and improve competitiveness” (p. 9). Verbal discourse, according to Cohen et al. (1997), reflects and organizations initiative and

assertive action to correct deficiencies. Without initiative, innovation cannot exist. Innovation reflects an organization's ability to implement the changes identified via initiative (Ramadani & Gerguri, 2011). Consequently, Waldron et al. (1993) demonstrate upward communication bias based on insincere statements by subordinates result in a failed organizational learning culture.

This modified Delphi study served to improve existing knowledge of the hierarchical mum effect. Specifically, the results of this study provided greater insight to existing recognition of this phenomenon in organizations and the subordinate and supervisor factors which foster a mum environment. Organizational leadership benefit from the results from this study through identifying desirable organizational leadership styles that improve upward communication as well as recognize and deter undesirable subordinate and supervisor factors that foster a mum environment.

Chapter 2

Review of the Literature

The purpose of this chapter is to provide an overview of the literature that discusses the context and scope of the hierarchical mum effect and upper-management's recognition of the phenomenon in their organizations. This discussion will examine the history of the hierarchical mum effect to understand its relationship to leadership and management theory. Understanding the hierarchical mum effect recognizes the contributing interpersonal factors of both upward, and downward, communication between subordinates and supervisors. An analysis of management and leadership theory helps depict the range of interpersonal communication challenges between supervisors and subordinates. Chapter 2 will address the depth of literature reviewed for this study, management theory and leadership theory, including transformational leadership, transactional leadership, participative leadership, charismatic leadership, intellectual leadership, strategic leadership, self-sacrificing leadership, servant leadership, and situational leadership. This chapter furthers with a literature review of the mum effect, the hierarchical mum effect, whistleblowing, research methodology, and a final summary.

The hierarchical mum effect relates to insincere subordinate-supervisor communication. Under the mum effect, the subordinate withholds accurate upward communication when the information is believed to be unfavorable in an effort to protect the subordinate-supervisor relationship (Bisel et al., 2012; Ploeger et al., 2011; Tesser & Rosen, 1972). A similar concept, the *Yes Man*, is the subordinate that rarely, or never, disagrees with the supervisor's direction or statements (Prendergrast, 1993; Prendergrast, 2002; Travers, 1942). The theory of the *Yes Man* closely resonates to the hierarchical mum effect, as Keil (2014) contends, explaining the top reasons why corporate projects fail include staff inaccurately reporting project status and that

executives may tend to ignore bad news. In the context of management and leadership theory, the hierarchical mum effect presents insincerity and persists despite existing research identifying the phenomenon and its disparate impact on subordinate-supervisor communication. Another related concept to the hierarchical mum effect is that of workplace whistleblowing, or the practice of speaking up against workplace improprieties. Callegari (2012) and Cassematis and Wortley (2013) identify the converse of remaining mum in the workplace, by speaking out against illegal or unethical workplace practices through whistleblowing and by doing so, identifying opportunities to improve the organization and protect stakeholder interests. Yet, whistleblowing is closely associated to the problems associated with the mum effect. Illinois University (2009) cites workers option to remain mum, despite anonymous or confidential communication channels such as whistleblowing hotlines, due to “doubt that management would act or fears of retaliation, including losing their jobs” (p.1). Nevertheless, Bisel et al. (2012) propose the use of anonymous communication channels as alternatives when subordinates may otherwise choose to remain mum.

Existing literature provided several important studies which demonstrate the existence of the hierarchical mum effect, although research regarding the phenomenon reflected limited understanding of the effect on workplace teams (Bisel, Kelley, Ploeger & Messersmith, 2011; Bisel et al. 2012; Ploeger et al., 2011; Riley, 1993; Rosen & Tesser, 1972; Tesser & Rosen, 1972; Thomas, Zolin & Hartman, 2009; Wayne & Kacmar, 1991 Wesolowski, & Mossholder, 1997; Yariv, 2006). Bisel et al. (2012) examine the potential for insincerity in subordinate-supervisor communication as face-saving measures for each party involved, yet acknowledge additional research is necessary to understand continued existence of the hierarchical mum effect in current organizational settings. A significant gap in the literature existed regarding

leadership's awareness of, or conditions which foster, the hierarchical mum effect in organizations. There was a lack of effort to date which clearly define the factors which continue to foster the hierarchical mum effect in organizational leadership.

Title Searches, Articles, Research Documents, and Journals

Scholarly books, referenced journal articles, and research documents were sourced through the University of Phoenix search engines, including EBSCOhost, ProQuest, and Google Scholar. The impetus for this modified Delphi study originates from Bisel et al.'s (2012) research of subordinate-supervisor communication. A snowball examination of Bisel et al.'s citations assisted in further research of the hierarchical mum effect, dating back to Tesser and Rosen's (1972) study of the mum effect. The initial search for studies of the mum effect, and subsequent hierarchical mum effect, led to earlier research of the *yes man* phenomenon, identified by Dreyfack (1970) – not coincidentally near the same time the mum effect was identified by Tesser and Rosen. Understanding the hierarchical mum effect required additional searches through EBSCOhost, ProQuest, and Google Scholar for the causes, and effects, of the mum effect on organizations. These searches led to discussion of management and leadership theory. However, searches regularly came up short in regards to the impact of leadership styles on the hierarchical mum effect. For example, the University of Phoenix library of peer-reviewed articles, under the search parameters of “hierarchical mum effect” only contains seven results over the last 10 years, as of the date of this study. Likewise, the University of Phoenix library of dissertations, under the same search parameters, only contains nine results over the last 10 years, as of the date of this study.

A set of keywords associated with this study were used to identify existing scholarly research to help complete the literature review. The primary set of keywords used both alone

and in combination of one another includes: (a) mum effect, (b) hierarchical mum effect, (c) moral mum effect (d) yes man, (e) innovation, (f) initiative, (g) organizational learning, (h) subordinate-supervisor communication, (i) organizational culture, (j) employee silence, (k) employee dissent, (l) organizational ethics, (m) employee fear, (n) upward communication, and (o) whistleblower. Initial searches were limited to publications within five years of the date of this study. Secondary searches, in excess of the past five years, were based on the discovery of pertinent references and historical content. 133 sources were consulted and cited in this study.

Management Theory

The evolution of management theory presents valuable influences on the development of leadership theory. Kotter (2007) describes management as planning, coordinating, and ensuring appropriate structure is in place. Warren, (2005) defines management as problem solving, analysis, and planning. Since the Industrial Revolution, several themes and ideologies have merged and diverged in establishing contemporary management thought. Bateman and Snell (2007) identified the systemic management system which emphasizes standardization of techniques, mass production, and cost reduction through increased economy of scale. General guidelines establish maximization of productivity superseding individual needs. Systemic management was soon replaced by scientific management which focuses on the specific identification of best practices for organizational productivity efficiency. To accomplish this, management began focusing on uniform employee training methods and ensuring work is matched to employee abilities.

The introduction of the scientific method began a management movement which emphasized the importance of individual employee contribution. In the scientific management method, leaders began focusing on proper employee selection, incentives, and training (Chyung,

2005; Locke, 1982; Taylor, 1911). Locke and Taylor recognized the significance of subordinate-supervisor communication. Bateman and Snell (2007) furthered the examination of the advancement of employee engagement in organizational processes in identifying the human relations model. In the human relations model, management began focusing on the social interactions and psychology of subordinate interaction and work productivity. One key contribution to the human resources model of management was the Hawthorne Studies conducted on Western Electric Company. Although the results were controversial, the Hawthorne Study focused on the introduction of variables which were intended to make work conditions favorable and improve productivity (Muldoon, 2012). An additional contributor to the human resources model of management, Schmutte (2002) cites Abraham Maslow and the introduction of Maslow's Hierarchy of Needs. This hierarchy recognizes the significance, and the psychology, of satisfying varying levels of human needs.

Human resource management theory took further advances in the 1950's with a paradigm shift toward organizational behavior. According to Bateman and Snell (2007), organizational theorists, such as Douglas McGregor, proposed subordinates are motivated by challenge and encouragement to take initiative, ultimately resulting in superior workplace performance. Organizational theory furthers the value of autonomy in the workplace increasing subordinate value with shared leadership opportunities.

Social exchange theorists recognize the evolution of management theory toward a human resources model and emphasize that social values influence organizational behavior (Kane-Urrabazo, 2006; Riggs & Rantz, 2001). Specific social behaviors are inherent to organizations. As a result, subordinates and supervisors are equally responsible for developing an organizational culture reflective of their actions and behaviors. The creation of organizational

culture, however, is not without difficulties. The evolution of social exchange theory, in relation to the human resources model of management, introduces the knowledge employee (Drucker, 1997). The knowledge employee enjoys fewer rules and less structure and possesses a great deal of knowledge and thus is of great value to the organization. Due to the technical knowledge this type of employee possesses, management affords greater freedoms to avoid losing this knowledge to competing organizations.

The progression of the human resources methods of management theory serve to advance a growing interest in subordinate engagement in the workplace. Bateman and Snell (2007) demonstrate increased subordinate interaction in the workplace assists job satisfaction, efficiency, and upward sharing of knowledge. Progression of the human resources methods of management theory focuses on the simultaneous satisfaction of subordinate needs which also translate into improvement of team performance. Burns (2005) emphasizes the opportunity for organizational leadership to improve efficiencies and effectiveness through follower involvement, and extended authority, in decision-making. The evolution of leadership theory, concurrent with the evolution of management theory, yields a wide variety of leadership styles which present a range of approaches to satisfying the human resources approach to management.

Leadership Theory

Leadership is the social process of influencing followers toward the achievement of a common goal and vision (Greenberg, Baron, Sales, & Owens, 2000; Yukl, 2013). Leaders, through vision, values, and communication motivate followers to align with a goal (Warren, 2005). Bennis and Nanus (2003) argue, in contrast to management, leadership focuses on doing the right thing; while managerial focus is on doing things right. Styles of leadership have

evolved over time with advances closely aligned with the human resources model of management.

Transformational Leadership. The transformational leader is one that inspires commitment to a common vision of the future to attain incredible results (Bass & Riggio, 2006). Transformational leaders align followers' own values to motivate growth of the followers' leadership development. Burns (1978), credited for coining transformational leadership, describes the transformational leader as one who seeks to satisfy follower needs, develop mutual affiliation, and achieve common goals to the benefit of both the follower and leader. The transformational leader expounds organizational values such as integrity, humility, empowerment, and altruism, which cultivate an environment of open and honest communication (Yukl, 2013).

Transactional Leadership. Transactional leadership is about exchange. Leaders use inducements such as praise, advancements, and money in exchange for work (McGuire & Kennerly, 2006). These rewards are then given or taken away based on follower performance. The direct needs of the transactional leader and the organization are the transactional leader's primary concern (Bass, 2006; Bennis & Nanus, 2003). This leadership style focuses on incremental improvement to quality and quantity, reducing resistance to direction, and instituting decisions (Morris, Coombes, Schindehutte, & Allen, 2007). Burns (2008) and Yukl (2013) identify transactional leadership may not be as effective in subordinate ownership of decisions if subordinates are not engaged or encouraged to participate in decision-making processes.

Participative Leadership. Participative leaders practice decision-making procedures which invite followers to have some impact on the leader's final decision. Yukl (2006) described participative leadership styles to include consultation, joint decision-making, and

delegation. The consultation participative leader requests input from followers then later makes a decision in private based on the followers' input. The joint decision-making participative leader is an equal participant in a group decision-making process. Finally, the delegating participative leader provides guidelines and boundaries to an individual or group, within which the individual or group is delegated authority is to make a decision. Yariv (2006) found, through qualitative semi-structured interviews, that communicating negative feedback to followers is more stressful when the followers are not involved with the decisions and processes associated with the message.

Charismatic Leadership. Charismatic leadership, similar to transformational leadership, is a style in which leaders act in ways that intensely affect followers. Shamir, House, and Arthur (1993) explained that the charismatic leader acts as a role model for the principles and standards the leader wants followers to adopt. Shamir, House, and Arthur further explain the motivating effects of charismatic leaders reinforce the concept of *self* in followers, encouraging ownership, participation, and commitment to organizational goals. Charismatic leader's effect on followers includes the leader's vision, similar beliefs, and wholehearted acceptance of the leader. In addition to the realization of followers' goals, these effects also develop warmth and commitment to the leader. The charismatic leader, according to Avolio and Yammarino (2002), is not yet effective until first the leader substantiates his or her claim to charisma.

Intellectual Leadership. Intellectual leaders, similar to the transformational leader, empower followers and express vision-related behaviors; however unlike the transformational leader, without the willingness of personal sacrifice (Avolio and Yammarino, 2002). This leader clearly analyzes follower and organizational needs, but at no personal risk. Followers develop trust and a vision which align with the intellectual leaders, but without the same level of

commitment as a transformational leader who has a personal stake at risk. One proposition Bisel et al. (2012) for the perpetuation of the hierarchical mum effect is that subordinates may tend to remain quiet and opt to agree with the supervisor to avoid face-threatening disagreement, thus mitigating a supervisor's personal risk, and potentially a consequential subordinate's personal risk as well, in a subordinate-supervisor engagement.

Strategic Leadership. The strategic leader, similar to the intellectual leader, anticipates, visualizes, and thinks strategically to develop change in an organization, without personal risk; however unlike the intellectual leader, the strategic leader's environment focuses on the organization's future needs (Hitt & Ireland, 2005). The strategic leader develops followers, enforces strong ethics, leverages core competencies, and establishes organizational strategic controls (Avolio & Yammarino, 2002). The strategic leader, like the intellectual leader, has less personal stake at risk, however expresses strong vision of future objectives and garners close follower commitment. Agha, Alrubaiee, and Jamhour (2012) emphasize leadership focus on organizational growth through knowledge management and encouraging open communication by stakeholders. Organizations which cultivate open communication channels and mentorship policies can help share and retain knowledge before such talent is lost due to retirement or resignation.

Self-Sacrificing Leadership. Self-sacrificing leaders, in contrast to the intellectual and strategic leaders, abandon personal interests. This leader is committed to assisting followers with their work, defer recognition for success to their followers, and exercise very little power over subordinates (Avolio & Yammarino, 2002). Self-sacrificing leaders support the organizational infrastructure with the core objective of team success over personal success.

Mulder and Nelissen's (2010) statistical analysis found that organizational rules are more likely accepted and followed when leaders are viewed as self-sacrificing versus self-benefiting.

Servant Leadership. The servant leader exhibits personal and empowering behaviors without explicitly exhibiting vision-related behaviors (Avolio & Yammarino, 2002). A servant leader stimulates esteem between leader and follower by treating followers with self-worth and respect (Blanchard, 2000; Burns, 2005; Tate, 2003). The relationship between the leader and follower encourages others to follow as valuable peers and contribute to a collective effort in a safe environment. Walker (1997) found, through case-study, the servant leader impresses upon followers commitment to growth and personal development. In the effort to build esteem and respect, the servant leader exhibits sound decision-making for the best interest of the followers (Stone, Russell, & Patterson, 2004).

Situational Leadership. Situational leadership is a contingency within leadership theory. The situational leader changes his or her leadership style to adapt to situations and individual follower experience and maturity level (Bolman & Deal, 2003). The situational leader individually assesses follower levels of education and commitment. This leadership style is a valuable method of developing and training followers in an open-communication setting and evolution of follower self-confidence and independence (Farmer, 2005). The situational leader requires strong skills in diagnosing individual follower needs and abilities.

The description of the individual leadership styles focus on a range of methods of addressing subordinate-supervisor communication. The methods of addressing communication vary, however, depending on the leadership style. While Avolio and Yammarino (2002) demonstrate leadership focus on follower goals, and McGuire and Kennerly (2006) demonstrate leadership styles which cater to the leader's objectives, Hitt and Ireland (2005) then demonstrate

leadership objectives which focus on the organization's goals. Contemporary leadership styles show increasing emphasis on shared visions and follower empowerment (Blanchard, 2000; Burns, 2005; Farmer, 2005; Tate, 2003; Shamir, House & Arthur, 1993; Yukl, 2006). The focus of each leadership style may potentially contribute to, or remove, a workplace environment subject to the hierarchical mum effect. Moreover, examination of leadership styles in the context of the mum effect may help overcome environments established by certain leaders, which Lipman-Blumen (2005) defines as toxic leadership, that generate serious and enduring poisonous effects on individuals and organizations to enhance themselves at the expense of others.

Mum Effect

Many researchers agree the value added by knowledgeable employees help transform organizations into high performance systems with sustainable competitive advantage (Nonaka, 2004; Senge, 2006; Weldy, 2009). Leadership inability to collect and implement such knowledge is an obstacle to maximizing competitive advantage (Arukhe, 2014). One such obstacle to effective subordinate-supervisor communication is the hierarchical mum effect. The mum effect is the reluctance of a communicator to provide to recipients, negative, or unfavorable news (Bisel et al., 2012; Marler, McKee, Cox, Simmering, & Allen, 2012; Ploeger et al., 2011; Tesser & Rosen, 1972; Yariv, 2006). Specifically, communicators fear association with the bad news and harming relationships with recipients.

Tesser and Rosen (1972) introduce the mum effect in an examination of the similarity of objective fate as a determinant to transmit unpleasant information. Tesser and Rosen hypothesized the reluctance to communicate bad news is due in part to guilt of not disclosing more favorable news. In a learning experiment, Tesser and Rosen positioned participants to either communicate bad or positive news, of which the communicator and news recipient would

experience similar fate. The experiment included the transmittal of a very minor, low voltage shock to both the communicator and news recipient in the event of bad news. Neither received a shock in the event of good news. Additional conditions included the announcement of mixed news, in which the communicator did not receive a shock, but the news recipient did receive a shock. The recipients of the bad news were conditioned to respond as though receiving extreme pain. The measurement of the experiment was the communicator's level of guilt for communicating the bad news and the anticipation of transmitting pain to the other. Tesser and Rosen's experiment confirmed a correlation between the transmittal of bad news and guilt, and the communicator's desire to not communicate the bad news. The greatest sense of guilt was when the communicator received a dissimilar fate, in which the communicator received no shock but yet the news recipient did receive a shock. Tesser and Rosen conclude several factors associated with negative news telling, including guilt, fear that the news recipient would associate the communicator with the news itself, and the psychological conditioning the news communicator undergoes to present negative news.

Weening, Groenenboom, and Wilke (2001) counter predispositions of the mum effect, suggesting the relationship of communicator and news recipient are facilitating factors in the feeling of guilt when transmitting bad news. Weening et al. suggest a close relationship between the communicator and news recipient may mitigate the reluctance to communicate unfavorable information. That reluctance is further mitigated if the unfavorable information has uncertain consequences, or even if the bad news may have helpful results.

Yariv (2006) countered Weening et al.'s (2001) position that close relationships and helpfulness of bad news are mitigating factors to the mum effect. Yariv discussed communicators' willingness to provide negative feedback to recipients both before, and after,

soft negative feedback coaching sessions. Yariv identified, despite effective coaching techniques to provide negative information, bad news communicators continue to prefer to remain silent, or mum, over the secondary options of directly communicating negative news, or tertiary option of providing negative information in writing.

Moral Mum Effect. Bisel et al. (2011) explore the mum effect in terms of ethical alignment of opinions and statements in the workplace. The moral mum effect identifies both subordinate and supervisors' tendency to respond to ethical questions with ambiguity. Regardless of position within the workplace hierarchy, "most workers did not label the unethical request as unethical" (Bisel et al., 2011, p. 153). The moral mum effect examines workplace activities and finds that for most workers, communication is a key, if not primary, component of a job function. Remaining mum to unethical situations, in turn, permeates most workers very job function and challenges a workplace's ability to identify internal risks and opportunities for improvement. Bisel et al. finds that "facework," or the risk of "offending the boss is to risk job security" (p. 154). Bisel et al. recommends internal questioning and surveying to self-assess the actions management takes and to develop a positive culture of information sharing. This internal questioning may be potentially biased, however, if the respondents themselves fear self-identifying their behavior as unethical, and fear offending their own supervisor or upper-management. Thus entails a continued question of how to obtain unbiased recognition of the existence of unethical or mum-inspired workplace cultures.

Hierarchical Mum Effect. Ploeger et al. (2011) furthered the investigation of the mum effect as an inquiry of organizational ethics. In Ploeger et al.'s study, subordinate communicators were found to be more indirect in communicating bad news than supervisors communicating equally bad news. Thus, Ploeger et al. identify the hierarchical mum effect.

This study presented subordinates and supervisors equally unethical business requests and measured within the command structure, the use of linguistics, varying degrees of denial directness. Specifically, Ploeger et al. indicate “females, younger workers, and those with the least work experience are most indirect in denying an unethical request” (p. 465). The limitations and opportunities for future research arising from this study specify potential to examine the hierarchical mum effect contingent on the age, gender, and work experience of the person making requests of subordinates.

Marler et al. (2012) examine the relationship of organizational norms and self-monitoring techniques to the hierarchical mum effect. This study provides empirical evidence supporting the tendency for individuals to remain mum out of self-concern and by the influence of organizational norms. Marler et al. demonstrate not only the interpersonal relationships of communicator and recipient, but also situations and organizational setting as mitigating factors. However, while this study finds organizational norms may shape individual behavior, the findings are inconclusive as to whether organizational norms are sufficient alone in overcoming personal drives. Finally, Marler et al. indicate some individuals are more likely to struggle communicating bad news and organizations may be able to identify these individuals to provide effective information sharing techniques.

Bisel et al. (2012) develop the hierarchical mum effect in a micro-level subordinate-supervisor communication behavioral context as well as a macro-level organizational learning environment. The findings within this study also identify relational contexts between subordinates and supervisors which may be strained or even result in consequences, due to communication of negative information. Bisel et al. identify organizational norms as barriers which suppress dissent with direct consequences to organizational innovation. Bisel et al.

theorize nine propositions of the subordinate-supervisor relationship which influence the existence of the hierarchical mum effect in organizations:

Proposition 1: Workers, who have an employment agreement (i.e., perceive a psychological contract) with an organization, perceive directives from an authorized organizational representative (e.g., a supervisor) to be less face threatening than individuals who do not have an agreement of employment with the directive giver's organization.

Proposition 2: Supervisors are motivated by the context of the command structure to protect their own public self-image when communicating with subordinates.

Proposition 3: Supervisors are not motivated by the context of the command structure to protect their subordinates' public self-images when communicating with subordinates.

Proposition 4: Subordinates are motivated by the context of the command structure to protect their own public self-image when communicating with supervisors.

Proposition 5: Subordinates are motivated by the context of the command structure to protect their supervisors' public self-images when communicating with supervisors.

Proposition 6: Supervisors' public images are more threatened by negative feedback from their subordinates than subordinates' public images are threatened by negative feedback from their supervisors.

Proposition 7: Subordinates tend to use silence or equivocation when they perceive a disagreement with their supervisors to be threatening to their supervisor.

Proposition 8: The hierarchical mum effect is increased by perceptions of high structural and functional distance in the supervisor-subordinate relationship as compared to

supervisor-subordinate relationships characterized by low structural and functional distance.

Proposition 9: Anonymous feedback channels (when used frequently and heedfully by top-level decision makers) moderate the association between structural and functional distance in supervisor-subordinate relationships and organizational learning outcomes (Bisel et al., 2012, p. 133-140).

Whistleblowing

Whistleblowing is closely related to the hierarchical mum effect in that employees may choose to anonymously or confidentially speak up, but not directly to their supervisor in fear of retribution as addressed as a side effect of the hierarchical mum effect. According to Callegari (2012) and Ray (2006), a whistleblower recognizes workplaces unethical or illegal practices, but fears communicating such bad news through chains of authority or supervision. Instead, the individual communicates the observations through confidential or anonymous reporting mechanisms such as reporting hotlines, email, or surveys. Bisel et al. (2012), addresses means of reducing the hierarchical mum effect in Proposition#9 by specifically identifying the use of anonymous channels of communication to encourage honest and open communication. Such channels of communication are also standard practices to ensure workplace compliance to rules and regulations in the identification of illegal practices, as recognized by the United States Sentencing Commission (USSC, 2013). However, a study by Brennan and Kelly (2006), finds the internal structure of organizations may influence the existence of, or how welcome employees are to use, whistleblowing procedures. Apaza and Chang (2011) found, through their case-study, the existence of whistleblowing mechanisms within organizations not only greatly reduced wrong-doing, but also improved day-to-day supervisor-subordinate communications.

While such channels encourage communication, the question still remains as to what leadership qualities necessitate the need for anonymous reporting in lieu of direct reporting (Beakley, 2015). Worse yet, the practice of reporting workplace improprieties becomes increasingly worrisome to subordinates, according to Cassematis and Wortley (2013) and PCAW (2013), as whistleblowers in some instances are identified despite efforts to remain anonymous and receive unfair treatment by their peers and employers, thus requiring legislative actions to further protect whistleblowers.

Qualitative and Quantitative Research Methods

Qualitative research, according to Neumann (2006) is an exploratory research method designed to surpass a researcher's own perspective, which is in contrast to quantitative research which is designed to confirm a perspective. Creswell (2008) explains that qualitative research is best suited for understanding perceptions, beliefs, and processes taking place in a given social situation. Conversely, Neumann explains quantitative research focuses on precise measurement of variables and causal relationships. As such, quantitative methods rely on closed-end, quantifiable questions and responses. A qualitative research method relies on broad open-ended questions which encourage participants to share their thoughts and perspectives (Moustakas, 1994). Whereas a quantitative study tests hypotheses and derive conclusions based on measurable data, a qualitative study explores a central phenomenon for more understanding (Leedy & Ormrod, 2010.)

Qualitative studies may be conducted through the collection of subjective data. This data may include researcher's direct observation, case studies, questionnaires, and interviews to collect non-quantifiable information (Creswell, 2008). Quantitative studies may be conducted

through the collection of objective data. Objective data is measurable and may be calculated to determine degrees of certainty and variation.

Delphi Method

The Delphi method began in the 1950's, by RAND Corporation as a method to “obtain the most reliable opinion of a group of experts by a series of intensive questionnaires interspersed with controlled feedback” (Ludwig & Starr, 2005, p. 316). The objective of the Delphi method includes two major parts: Multiple rounds of questioning for a panel of experts, and identification of options and supporting evidence upon which to analyze a problem (Turoff, 1970). Successful application of the Delphi method first focuses on a firm review of existing literature and a careful selection of criteria for which the participants will meet. Following this criteria, initial response rate should improve and provides a solid understanding of existing research on the topic. Existing literature assists in setting the criteria for selecting the participants.

Ludwig and Starr (2005) explain that content professionals, through their direct experience with a specific problem, provide the best idea of what the future of that problem may bring. Unlike many other questionnaires, the validity of the Delphi method is predicated on the experience of the respondents rather than the number of respondents. Turoff (1970), one of the original authors of the Delphi method, defines the methodology as requiring informed advocates for the research of a problem where expertise may not necessarily already exist. Further, Turoff explains that the existence of such experts of a potential problem-area would likely result in no such problem actually existing and solutions would already be in place. Gleaning knowledge on these unresolved, and frequently complex, problems helps groups reach a judgment (Linstone, 1978). The most common application of the Delphi method is the development of a

questionnaire by an individual or team, then distribution among a larger panel. The questionnaire responses are sent to the originator, compiled, and returned to the original respondents to look for further exploration of factors identified in the first round via a second round of questioning. Linstone posits that a Delphi study is beneficial where analytic techniques are not precisely the most appropriate and participants cannot easily meet face-to-face.

The Delphi study is, according to Ludwig and Starr (2005), most appropriate when there is not a clearly appropriate analytical technique, existing information is inconclusive or non-existent, no existing models exist, or where collecting the needed data is otherwise very difficult. Ludwig and Starr address that the Delphi method is not a statistically rigorous method for predicting future events. Unlike controlled studies, the Delphi method suffers from a lack of sampling, impossibility of accurately predicting all potential future outcomes, and a lack of well-defined procedures for conducting studies.

The study of leadership, in general, includes many complexities including human, situational, and environmental factors. Very few studies of the hierarchical mum effect exist, and even fewer address leadership's awareness of the hierarchical mum effect. Gathering a panel addressing the hierarchical mum effect is, in its own right, a challenge potentially influenced by the hierarchical mum effect. The Delphi study is contingent on confidentiality "to avoid the influence of dominant individuals on group discussion or group pressure for conformity" (Ludwig & Starr, 2005, p. 316). Straus, Bikson, Balkovich, and Pane (2010) conducted a RAND Delphi Method study, and determined that communication within an action-team could improve. In the context of the Straus et al. study, an action-team was a law-enforcement work team. Straus et al. surmised that technology and similar communication techniques could improve organizational communication outside of the action-team environment.

The Delphi method contains several benefits which overcome certain limitations associated with purely qualitative studies. According to Scheele (2002), the Delphi method improves where purely analytical methods are not possible, but collective subjective judgments are appropriate; diverse backgrounds of participants improve heterogeneity; more individuals may participate than is either physically, or financially possible than via face-to-face; the efficiency of anonymous group communication saves time and money; and of particular importance to this study, the unpalatable nature of the subject matter may bias participants results under purely qualitative studies, whereas a Delphi method study preserves anonymity and disassociates participants from any fear of retribution.

The Delphi method does possess limitations for which this study monitor must account. According to Scheele (2002), the study monitor's own views or perceptions could bias, or hinder, accurate contribution by study participants. This must be carefully monitored during questionnaire development and exploration of identified factors in subsequent rounds of the study. Additionally, the Delphi method assumes the participants' opinions act as a surrogate result for all workplace conditions. This study is carefully designed to include a range of participants including human resources, management, and business professionals to ensure heterogeneity.

Modified Delphi Method. Often the Delphi Method is adjusted from the initial approach originally develop by RAND. This study will modify the approach from the original, but still maintain most of the advantages of the Delphi Method. Two key changes from the traditional approach in this study are: use of informed participants with management experience, but not necessarily *experts*; and, gather data is ranked and prioritized, but do not necessitate consensus (Hall, 2009; Hall & Jordan, 2013). Through input from knowledgeable professionals in the

fields of human resources, business, and management, an improved understanding of leadership's awareness of the hierarchical mum effect will be possible by placing all possible options up for group consideration, estimate the possible impact and consequences of the options, and examine and estimate the acceptability of possible options (Turoff, 1970).

According to Turoff (1970), a Delphi study consists of six distinct phases, including the formulation of the issue, identifying possible options, determining early positions on the problem, identify supporting evidence for disagreements on positions on the problem, evaluating those disagreements, and reevaluating the options. However, Turoff explains the actual application of the Delphi study may be performed in as few as three phases. The first phase is the study monitor's formulation of the problem, and then as few as two phases, or rounds, of carefully formulated questionnaires for exploring options and understanding participant positions.

Additional rounds of questionnaires may be necessary to overcome artificial consensus and to clarify responses. Artificial, or forced, consensus may occur if one or more participants are particularly outspoken, if individuals fear advancing ideas which may be deemed unworthy of consideration, an unwillingness to consider options other than those personally advanced, or if a strong minority opinion is abstained simply to agree with popular opinions (Turoff, 1970; Linstone, 1978). Consequently, consensus in a problem which has not yet been thoroughly studied may not be desirable. Consensus may, potentially, be an indication of unexplored options.

Plasticity Theory

A common factor associated with the hierarchical mum effect is that of self-esteem. Payne (2007) addresses Brockner's (1998) plasticity theory in citing, "individuals with low self-

esteem rely more extensively on external cues and as a result are more ‘plastic’ in molding their behavior of others” (p. 237). French (1980) explains the tendency of subordinates to mold their behavior to that which satisfies what the subordinate perceives to be the supervisor expectations. The review of literature regarding plasticity theory progressed from organizational self-esteem, to desire to fit into the organizational social structure, and continued to an examination of organizational norms and ethics in decision-making and communication of undesirable information (Bisel et al., 2012; Ploeger et al., 2011). The mum effect, and resulting hierarchical mum effect, are at their root associated with plasticity theory.

Plasticity theory may reflect the chosen behavior of those individuals that opt to remain mum in lieu of whistleblowing. Cassematis and Wortley (2013) recognize the potential threats to the job security of whistleblowers and, armed with this knowledge, would-be whistleblowers may fear for their job safety. Moreover, recognizing the behaviors of other members of the organization who may promote and enjoy job security, despite recognizing illegal or unethical business practices, would-be whistleblowers may mold their behavior to match those of co-workers’. This consequential mum-effect in turn fails to uncover threats to the organization’s integrity as some whistleblower protections may fail to actually protect individuals.

Gaps in the Literature

Brockner’s examination of the plasticity theory demonstrates individuals’ with low self-esteem tend to mirror their actions to those around them. Ploeger et al. (2011) exhibits contributing factors to low organizational self-esteem, including lack of work experience. Argyris (2010) describes, through a quantitative study of survey data in which participants of an organizational culture, which limits worker involvement in opening communication channels, as trapped by the organizational norms. Bisel et al. (2012) and Ploeger et al., discuss the

willingness of individuals to conform to desirable communication methods when the alternatives may upset message recipients. Specifically, Bisel et al. revealed opportunities for further research into the severity of consequences when communication between subordinates and supervisors is under the effect of the hierarchical mum effect. The severity of consequences for strained subordinate-supervisor communication is evident by the circumstances identified by Cassematis and Wortley (2013), and Ray (2006), in which whistleblower protections may potentially fail, and followers are treated negatively by peers and supervisors. Understanding employee tendency to exhibit plastic behavior, becoming mum in an environment in which communication with supervisors is potentially strained, and deferring to anonymous reporting procedures when possible, the gap in literature should be narrowed through an exploration into why greater measures are not taken to recognize the contributing factors to a mum environment before such an environment becomes the organizational culture.

Summary

A qualitative Delphi method was appropriate to the study of organizational leadership's awareness of the hierarchical mum effect. A qualitative study, by design, is to define both meaning and characterize a phenomenon, of which there is not yet a wealth of understanding. Additionally, qualitative studies employ surveying techniques including interviewing, questionnaires, and observations. A Delphi method was appropriate as it identifies elements of the central phenomenon which informed participants, based on their experience and perceptions, deem important. A quantitative research method was not appropriate for this study as such a method is designed to be objective, which the communication of participant perceptions is inherently subjective data, and insufficient existing data existed to empirically address upper-management's awareness of the phenomenon.

This qualitative study employed a multi-round survey with open-ended questions to further understand the phenomenon of the hierarchical mum effect. This study furthers understanding of the hierarchical mum effect which, at its core, is a phenomenon in which insincere communication is transmitted to another party, who is in positional authority, in fear of perceived retribution. This presents an inherent bias in the study itself if participants fear connection to their responses and a potential retribution in their professional lives. Consequently, alternative qualitative study methods were not appropriate as face-to-face interviews, direct observations, and case studies, for example, each diminish anonymity. Moreover, in these alternative types of qualitative studies, a mum-environment may be biased by the researcher's presence.

The human resources theories of management, combined with increased inter-personal styles of leadership, establish environments within which followers are rewarded for their knowledge and participation. Moreover, research supports that increased follower involvement in decision-making improves ownership and loyalty to the organization (Bennis & Nanus, 2003; Burns, 2005; Yukl, 2006). Despite that which the evolution of management and leadership theory teaches, and the understanding of contributing factors which hinder organizational self-esteem, the hierarchical mum effect persists in organizations, necessitating anonymous reporting of negative information. Examination of the opinions of those with management experience will help understand the persistence of the hierarchical mum effect. Chapter 3 will address the methodology by which this modified Delphi study took place and how the opinions of participants were collected.

Chapter 3

Methodology

The methodology used in this qualitative study to examine organizational leadership awareness of the hierarchical mum effect was a modified Delphi method. Two rounds of surveys of 4 pilot, and 24 full study participants help identify the leadership factors commonly associated with environments which foster the hierarchical mum effect. The results of the first round of qualitative questioning permit a quantitative second round of rating scales to identify the most influential contributing leadership factors fostering the hierarchical mum effect.

This chapter will analyze the historical emergence of the Delphi method and its application to qualitative research studies. This chapter will continue with a discussion of the appropriate application of the research design, research questions, population, sampling frame, instrumentation, data collection, data analysis, validity, and reliability. This chapter concludes with a discussion of confidentiality, informed consent, and summary of the methodology.

Research Design

It is intriguing that the mum effect has been researched and reflected in management and leadership theory, but was not yet well understood by organizational leaders. Consequently, qualitative research would typically be the primary place to research this effect further (Creswell, 2007; Hall, 2009; Ludwig & Starr, 2005). As little research existed regarding organizational leadership's awareness of the hierarchical mum effect, a study designed to explore a range of potential factors associated with a problem was valuable to gain a broader perspective. This perspective, gleaned from a panel of informed participants, resulted in a wide range of supporting options and details.

This study modified the Delphi method from its original approach, but still maintained most of the advantages of the Delphi Method. According to McKenna (1994) and Beretta (1996), the classical Delphi method relies on consensus of experts. Two key changes from the traditional approach in this study were: use of informed and knowledgeable participants with management experience, but not necessarily *experts*; and the gathering, ranking, and prioritizing of responses, but not necessarily aiming for consensus (Hall, 2009; Hall & Jordan, 2013). This method addressed challenges associated with the traditional qualitative study, such as access to unbiased participants, anonymity, and efficiency of time and money. Moreover, this overcomes the challenges to the use of *experts*, which according to Turoff (1970), the existence of experts may preclude the actuality of an unknown problem worthy of an exploratory Delphi study; and conversely the existence of a Delphi study worthy of exploration may preclude the presence of any actual experts on the specific subject matter. Strauss and Zeigler (1975) resonate with Turoff's position, in arguing that defining any individual specifically as an expert is scientifically indefensible and overstated, and the value of study participants, Goodman (1987) adds, rests primarily in the participant's willingness to complete all rounds of the survey while contributing contemporary knowledge and perceptions.

The modified Delphi approach, with its multiple rounds of analysis, was the best approach in this case: to gather definitional information in the first round and to prioritize and analyze those results further in the second round (Creswell, 2010; Hall, 2009; Ludwig & Starr, 2005). The modified Delphi approach of multiple rounds of research was best for defining the hierarchical mum effect more clearly and subsequently exploring leadership's awareness of the phenomenon. Informed participants from the fields of business, human resources, and

management meeting the sampling criteria provided opinions necessary to further understand the hierarchical mum effect.

Appropriateness of Design

Whereas a quantitative study is based on numerical data, and analyzes a known phenomenon, a qualitative study examines and interprets non-numeric data collected about a relatively unknown phenomenon (Christensen et al., 2010). Given the relatively unknown nature of organizational leadership awareness of the hierarchical mum effect, the best method for exploring this topic further was determined to be a qualitative study.

There are existing limitations to the use of a pure qualitative study which the Delphi method overcomes. This study sought honest feedback from individuals who have experienced the hierarchical mum effect in their workplace. However, the hierarchical mum effect is a reduction in sincere communication in fear of retribution. As Callegari (2012) and Ray (2006) address, even legislative protection measures for whistleblowers do not protect all reporters of workplace improprieties, and fear still exists within anonymous reporting channels. Thus, obtaining sincere feedback among workers currently subject to the effects of a mum environment was challenging, if not impossible. Scheele (2002) recognizes the unpalatable nature of such a topic among conflicting segments in the workplace and recommends the Delphi method as a means of overcoming the potential problem. Additionally, a heterogeneous mix of respondents is necessary to maintain the sanctity of the study. Under a pure qualitative study, certain groups of potential respondents may feel more comfortable participating in the study than other groups. However, under the Delphi method, specific criteria ensured qualifying participants.

To understand organizational leadership awareness of the hierarchical mum effect, this qualitative study employed a modified Delphi method to solicit the opinions of a 4 pilot, and 29

full study participant panel. The modified Delphi method allowed for experienced managers to help rank and prioritize past experiences of leadership factors that foster the hierarchical mum effect which will yield insight to likely indicators of factors resulting in future occurrences of the hierarchical mum effect. The first round of questions collected soft data, which Christensen et al. (2010) describes as words or phrases which were further considered by participants in the second round of the study using a rating scale. The primary purpose of using the modified Delphi method was to collect soft data on a relatively unknown phenomenon. The secondary purpose of using the modified Delphi method is a lack of access to subordinates and supervisors willing to respond to their interaction with the hierarchical mum effect. The tertiary purpose for selecting the modified Delphi method is the concern for reliable data collected from supervisors who may feel, despite confidentiality, pressure to answer questions a certain way. Subjects were identified and solicited from professional association networks online, and met the criteria of a minimum of five years work experience, and two years managerial experience.

In the Delphi method, the researcher invites sufficient candidates to participate in the study (Scheele, 2002). The full study reflect the opinions of 24, after attrition following the first round of data collection, study participants which was sufficient to identify some commonalities as well as rank and prioritization of the resulting opinions of past experiences while accounting for potential attrition between rounds. Participants were invited to participate in this study via an email which described the time and effort commitment involved in each round of the study. Participants were sourced from professional association networks online. The first round of the study presented the participants twenty questions, through which responses identified organizational leadership levels of awareness of a hierarchical mum effect and the leadership factors which foster an environment conducive of the hierarchical mum effect. In the second

round of questioning, a rating scale was used to further explore emergent themes identified in the first round of questioning. In the second round of questioning, participants were given the opportunity to provide additional rich data to further elaborate on responses provided in the first round. The second round of questioning also presented an opportunity to explore secondary issues not fully addressed in the first round.

Research Questions

Each round of questions, for the 4 member pilot group, and 24 member full-study group, served to further explore participants' opinions to identify the contributing factors to organizational leadership awareness of the hierarchical mum effect. The objective of this modified Delphi study was to answer the following research questions:

RQ1: What are the contributing factors that foster a mum environment? This research question is addressed by the first round questionnaire, questions #7 and #9, which are prioritized in subsequent rounds.

RQ2: How aware is upper-management of the hierarchical mum effect? This research question is addressed by the first round questionnaire, questions #5 and #6, which are prioritized in subsequent rounds.

RQ3: What influence does the hierarchical mum effect have on team communication and team performance? This research question is addressed by the first round questionnaire, questions #12 and #13, which are prioritized in subsequent rounds.

RQ4: What are the implications of the hierarchical mum effect to leadership theory?

This research question integrates the findings from the previous research questions and combines them with first round questions #8, #10, and #11, to form an integrated pattern.

Participants in this study produced a wide array of responses in the first round of qualitative questions. In the second round of questioning, participants provided feedback to rating scales to assist the researcher to rank and prioritize survey results. The results of the second round survey did not necessitate a third round survey for the purposes of clarification.

Pilot

To test the first round questionnaire before distributing to research participants, a pilot study was conducted using four respondents. This pilot was used to test the questions for understanding and validity, and to provide opportunity to correct the design of the survey prior to implementation. A second pilot group was not necessary as the nature of the Delphi study is a learning-approach, and by design is self-correcting. The second round survey permitted pilot participants to rank collective responses from the first round in order of importance by their own assessments.

Members of the pilot study consisted of human resources, business, and management leaders and consultants, who were members of professional association networks on the worldwide web (Creswell, 2008; Moustakas, 1994). Inclusion of these three groups of leaders and consultants served to neutralize role opinion bias and provide a more heterogeneous sampling (Scheele, 2002). Participants in this study had a minimum of five years work experience with a minimum of either two years managerial experience. The purpose of this criterion was to better ensure participant interaction, in their experience, with the hierarchical mum effect in practice. Participants were contacted via their respective professional association group with a request for research participant involvement letter (Appendix A) and letter of informed consent (Appendix C). Both of these letters clarified that the participants were participating in a pilot study – not the actual Delphi study. The pilot group did not participated

in the questionnaire design, nor did these individuals participate in the full Delphi study. Respondents were encouraged to suggest changes in the wording of items within the questionnaire, and make suggestions for additional questions, for the benefit of the full Delphi study (Turoff, 1970). Responses to the pilot study were collected for 10 days prior to any changes being made to the Delphi study, and prior to any data collection of the actual Delphi study.

Population

The population for this modified Delphi study consisted of all human resources, business, and management professionals and consultants in the United States. Due to accessibility, cultural differences, and potential language barriers, the subset of the population participating in this study consisted of English-speaking human resources, business, and management professionals who were members of professional association networks on the worldwide web, or referred from a member of a professional association network via a snowball chain method. According to Christensen, Johnson, and Turner (2010), the identified population will benefit from this study with wide-reaching application to each participant's respective industry.

Sampling Frame

Members of the panel for this modified Delphi method study consisted of human resources, business, as well as management leaders and consultants, who were members of professional association networks on the worldwide web, or referred via a snowball chain method (Creswell, 2008; Moustakas, 1994). Inclusion of these three groups of leaders and consultants serve to neutralize role opinion bias and provide a more heterogeneous sampling (Scheele, 2002). Participants in this study must have had a minimum of five years business experience with a minimum of either two years human resources or direct management

experience. The purpose of this criterion was to better ensure participant interaction, in their experience, with the hierarchical mum effect in practice. All participants were also requested to recommend any other potential participants meeting the same criteria via a snowball chain referral method (Creswell, 2008; Moustakas, 1994).

Scheele (2002) identifies several variables which may influence the sampling process. Prospective participants may be suspicious of, or even hostile to, researchers, and may fear disclosing their personal views. Additionally, the interpretation of qualitative sample responses is likely influenced, at least minimally, by researcher bias. Finally, the transferability of the research sample's responses will be limited in the study result's application upon the total population. These issues were considered when selecting a representative sample and during data analysis.

The Delphi method helps accommodate for the potential variables identified by Scheele (2002). Given that this study specifically explores honest feedback from both supervisors and subordinates, the likelihood of participants drawn from an organizational setting, who will fear disclosing their personal views, may only worsen. The Delphi method overcomes this challenge by surveying the experiences and opinions of professional human resources, business, and management professionals from professional association networks in lieu of a specific organization. Additionally, the second round of the modified Delphi method helped overcome researcher bias of the interpretation of qualitative responses by eliciting the ranking and prioritizing of the interpreted responses from earlier rounds of data from the study participants. Finally, the population of the professional human resources, business, and management professionals from professional association networks was limited to networks located in the United States so that the responses are culturally significant and concurrent.

Informed Consent and Confidentiality

Participants contributing to this modified Delphi method collaborated and communicated opinions through surveys administered via SurveyMonkey™. Data was collected and maintained confidentially by the study monitor and, individual results, are maintained separate from the final study results. As defined as ethical research practices by Christensen, Johnson, and Turner (2010), the results of this study contains no personally identifiable information. Participants received this assurance through a Letter of Informed Content that their participation will remain confidential throughout, and following, the study. All participant responses are maintained in separate electronic files, labeling participants by a random four alphanumeric code. These electronic files are maintained on the study monitor's personal laptop and personal USB flash drive. Participants' responses remain separate from one another and access to participant responses remain exclusive to the study monitor. No person will have access to these files other than the study monitor. These files will remain confidential and destroyed after 5 years.

Additional measures were taken during the execution of the second round of the study to protect participant anonymity. As participants provided open-end responses to the first round which may contain wording or phrases which are revealing of the individual, the study monitor organized and categorized responses so as not to use individually identifiable unusual words or phrases in the second round of the study. This corresponds with the intent of the Delphi method to maintain anonymity of study participants.

All participants in this modified Delphi method study were required to sign a Letter of Informed Consent prior to participation. This letter informed prospective participants of the purpose of the study, the prospective time commitment, assurance of their confidentiality, their participation is voluntary, and state that they may discontinue participation at any time as shown

in Appendix C. Each prospective participant that received the Letter of Informed Consent was screened to ensure compatibility with the selection criteria for this study via demographic questions at the beginning of the first round. Non-qualifying participants were sent to a disqualifying “thank you” webpage administered by SurveyMonkey™.

Instrumentation

A modified Delphi method study is a multi-round collaborative process for the purposes of ranking and prioritizing opinions of a panel of experienced managers (Goodman, 1987; Scheele, 2002; Turoff, 1970). Members of this study panel responded to two rounds of questionnaires. The first questionnaire collected participant responses regarding their opinion and experience of upper-management awareness of the hierarchical mum effect as well as the contributing subordinate and supervisor factors which foster a mum environment. The second round questionnaire then asked the same participants to rank, via rating scales, the responses from the first round to rank and prioritize results of the most influential issues on this topic. The Delphi process of data collection is reflected in Figure 1.

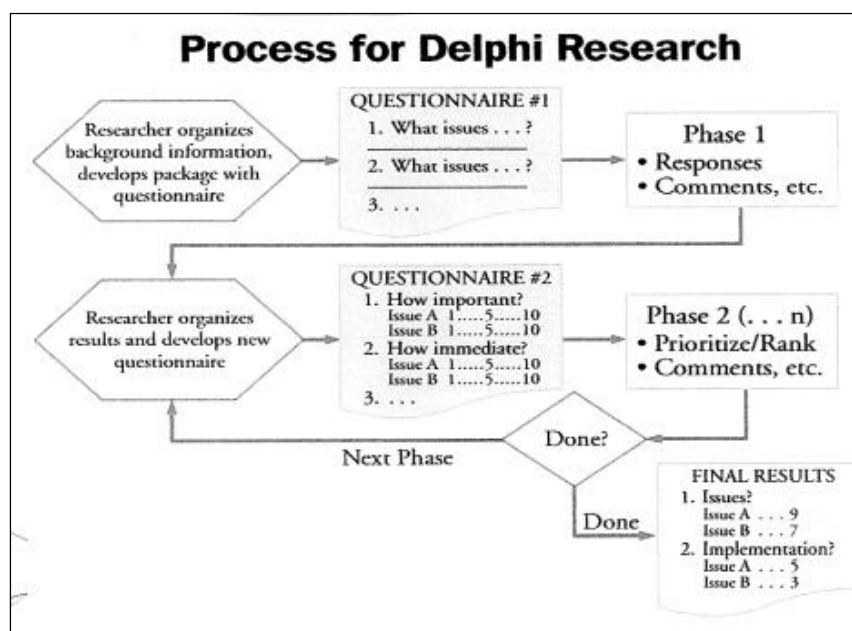


Figure 1. Process for Delphi Research. Adapted from *The Delphi primer: Doing real-world or academic research using a mixed-method approach*, by E. Hall (2009). In C. A. Lentz (Ed.), *The refractive thinker* (pp. 3-26). Las Vegas, NV: The Lentz Leadership Institute, LLC. Reprinted with permission.

Invitations to respond to questionnaires, which included the SurveyMonkey™ website and login instructions, were distributed via email to all participants that signed and returned the Letter of Informed Consent (see Appendix C). Participant responses reflected in the final results of this study completed both rounds of questionnaires on SurveyMonkey™. Participants were randomly assigned a four alphanumeric code generated by codegenerator.com. Accounting for attrition between rounds of the survey, only the data collected from respondents successfully completing both rounds of the survey is used. This modified Delphi method followed a qualitative approach in identifying opinions of a phenomenon that currently has little research.

The first round questionnaire served two purposes. This questionnaire collected certain demographic details of the participants to confirm and document participant eligibility to participate in this questionnaire based on pre-set criteria. Additionally, this first round questionnaire collected the participants' opinions based on their knowledge of organizational leadership awareness of the hierarchical mum effect as well as contributing leadership influences

which create a mum environment. These opinions were measured using a +/- 5 scale developed by the researcher, with responses ranging +5 Highly Aware, 0 Neutral, and -5 Highly Unaware. This scale was tested prior to implementation via a pilot study. The questions presented to the participants were synthesized from the literature review. During the first round questionnaire, questions were open-ended for the purposes of obtaining an unlimited number of possible responses, allow participants to qualify their responses, provide sufficient responses to the complex issue, reveal participant's frame of reference, and allow creativity in their responses (Neuman, 2006).

The researcher used the second round questionnaire to rank and prioritize first round participant responses, via rating scales, to identify factors addressed in the first round questionnaire which contribute to the hierarchical mum effect in an organization. The second round questionnaire consisted of closed-ended questions. Participants responded to the second round questions rating their opinions on a % scale, of 10 equal increments, up to 100%. This survey was tested via a pilot study prior to full implementation. Neuman (2006) advises the benefits of closed-ended questions include as an easier method of answering questions, permit easier comparison of participants responses, easier coding of answers, clarifying participants meanings in their responses, prevent confusing answers, and to permit easier replication. Combining a closed-end second round questionnaire to an open-end question first round questionnaire helped reduce the disadvantages of any one questionnaire.

Data Collection

This study collected qualitative opinions from 4 pilot study, and 24 full-study participants to study the research questions. Through subsequent rounds of the modified Delphi study, the collection of responses from the participants served to identify factors of the hierarchical mum

effect which are important to the respondents. Questionnaires were administered via SurveyMonkey™ and all responses are kept confidential. Participants were randomly assigned a 4 alphanumeric code with their respective questionnaire responses stored, electronically, in separate files. Participants were randomly assigned a 4 alphanumeric code at the beginning of the study by a random code generator (randomcodegenerator.com). Responses were collected by all eligible participants.

Data Analysis

This modified Delphi study consisted of two rounds of questionnaires. In the first round, participants provided independent responses to open-ended, qualitative questions providing their opinions based on their professional experience, identifying organizational leadership awareness of the hierarchical mum effect and the contributing factors that create a mum environment. Responses to the first round of questions administered on SurveyMonkey™ were coded via NVivo© 10 software to identify key factors, which were then ranked in the second round of questions using a rating scale. The responses to the second round questionnaire were then reviewed to rank and prioritize most common factors contributing to the creation of a mum-environment as well as identify the disparity between the importance of those factors and upper-management's awareness of the factors. Additional rounds of questionnaires were not necessary as divergent themes did not develop, consequential to the original data collected in the earlier rounds of data collection. Analysis of this data identified commonalities in participant opinions of the awareness of the hierarchical mum effect.

The results of the first round of open-ended questions were analyzed in the second round of questions to rank and prioritize participant responses of chief contributing factors to the hierarchical mum effect in the workplace. To accomplish this, the results of the open-ended

questions in the first questionnaire were analyzed for commonalities using NVivo© 10 software. NVivo© 10 uses pattern-based auto coding software to code bodies of text. This software assisted in coding, storing, organizing, labeling, and searching data for specific words and phrases (Ryan, 2009). Coding identified similar words of emotion, language, perception, and responses used when participant describe their experiences with contributing factors to a mum environment. NVivo© 10, in coding the commonalities in responses, ranked the contributing factors to the hierarchical mum effect based on participant responses. While consensus is not necessary in this modified Delphi method study, the most frequent opinions and supporting evidence was analyzed in the second round questionnaire. The resulting coded data, with commonalities established, was ranked in order of priority by participants in the second round of questions via a rating scale.

Validity and Reliability

The purpose of this study was to identify organizational leadership awareness of the hierarchical mum effect, the contributing leadership qualities that foster a mum environment, and the impact of the phenomenon on team performance. To accomplish this objective via a modified Delphi study, a sufficient number of participants needed to provide their professional opinions to open-ended questions to identify, rank, and prioritize results of initial rounds of the study through later rounds of the questionnaire. According to Pollard and Tomlin (1995), a final panel of 10 to 50 individuals is sufficient to maintaining validity and reliability using a modified Delphi approach. This study questioned the opinions of 24 qualified full study participants. A panel of this size assisted in identifying commonalities and application which is transferable across management, business, and human resources professionals, but was not so large as to overwhelm the study monitor.

Reliability, according to Neuman (2006), is the dependability of the results of a study not to vary as a result of the instrument of the study. This modified Delphi study, with a panel of 24 full study participants, following the prescribed selection criteria for the panel, using identical questionnaires from each round of the study should result, by other researchers in the future, very similar conclusions as those resulting from this study. The experiences of the study participants, and those of future study participants, present the greatest likelihood of variance to the study's reliability. However, to limit participant influence on reliability, this study specifically sought a distribution of participants and experiences across three areas of expertise: Human resources, business, and management. The subpopulation of participants in this study consisted of professional and consultant members of professional association networks on the worldwide web, and referrals via a snowball chain method (Creswell, 2008; Moustakas, 1994). A different subpopulation of participants may potentially affect the study reliability.

In a Delphi study, "validity of the resulting judgment of the entire group is typically measured in terms of the explicit 'degree of consensus'" among informed participants (Scheele, 2006, p. 22). A modified Delphi study, which will be used in this study, is not the pure version of the Delphi study seeking expert consensus, yet still collects data from knowledgeable participants through multiple rounds of data collection and maintains confidentiality. Scheele expounds this by stating the validity in a modified Delphi study improves through heterogeneity of a panel. Participants in this questionnaire defined, based on their experiences, organizational leadership awareness of the hierarchical mum effect and the common leadership factors which foster a mum environment. Participants came from a range of expertise, consisting of human resources, business, and management. Through subsequent rounds of the study, participants

reflected upon, ranked, and prioritized opinions on the most likely factors which cultivate a mum environment, adding greater degrees of confidence in the study results.

Scheele (2006) identifies several possible researcher issues which may affect validity and reliability. A researcher may feel an urge to predict the study results, feel an urge to simplify the results, have a false sense of expertise, execute the study poorly, become deceived, or succumb to either optimism or pessimism bias. All efforts were made to avoid these potential problems through the course of this study.

Triangulation. This study used triangulation of the collected data to further the credibility of the survey results. Bryman (2011) explains “if we devise a new survey-based measure of a concept... our confidence in that measure will be greater if we can confirm the distribution and correlates... through another measure” (p. 1142). Bryman proposes four types of triangulation, of which two are used in this study.

Data Triangulation. This method of triangulation gathers data through multiple strategies so that slices of that data, collected at different times in different ways, may be gathered and compared. This study asked participants to identify the most common subordinate and supervisor factors that may foster a mum environment, as well as the risks a mum environment pose to workplace teams and barriers to team communication. While it is possible the two sets of data are found to be highly inconsistent, Webb, Campbell, Schwartz, and Sechrest (1966) emphasize the importance of using more than one method of triangulation.

Theoretical Triangulation. This method of triangulation uses more than one theoretical position in interpreting data. This study compared the participant responses to existing research. If respondents identify factors already known of the mum effect then study validity is further

established. That added validity increases credibility to new factors which may not have been previously uncovered.

Transferability

This modified Delphi study developed transferability through a detailed description of all methods of data collection and analysis. Kirchner (2014) describes this method of generalization in qualitative research as “descriptive adequacy” and cites Ary, Jacobs, Sorensen, and Razavieh (2010) in explaining the method provides “sufficiently rich, detailed, thick descriptions of the context” (p. 86). While the findings of this research may not be entirely transferable, the discoveries are fully disclosed to present the audience with sufficient information to reach its own conclusions, to posit working hypotheses regarding the Hierarchical Mum-Effect and leadership theory, and present opportunity for further research.

Possibility to Generalize

There were 24 respondents who completed both rounds of survey; more than twice the goal of 10 needed for a qualitative Delphi study. Given larger than expected results, it was possible to do more statistical analysis than originally planned. The sample of 24 is short of a large sample size ($n \geq 30$) recommended by Neil and Rasmussen (2007) to conduct quantitative analysis, however worthy of limited correlational analysis. With a relatively low number of respondents however, there are fewer statistically significant findings than if the study had a larger sample. Since the variables compared are ordinal, statistical correlations are evaluated through the use of Spearman’s Rho correlational analysis.

Generalization is the extension of research findings from a study population to a larger population. Although generalization is not a surety, statistical probabilities are possible when study populations are large. Given (2008) warns, however, that generalizability is measured by a

study's sampling procedures. As this study was administered as a qualitative study, and questions in the second round of the Delphi method are biased by participant iterative responses, the generalizability of this study may be limited. Moreover, the broad conclusions derived from this study population, sourced by convenient sources, is limited by the sampling and participant eligibility criteria, of which the applicability of the statistically significant Spearman Rho results to a larger population may be limited (Polit & Beck, 2010). Polit and Beck further assert that larger sample sizes assist in cancelling out unusual responses and adds to a sample's representativeness.

Spearman's Rho. Spearman's Rho is a non-parametric test used to measure strength of association between two variables, where $r = 1$ is a perfect positive correlation, and $r = -1$ is a perfect negative correlation. When $r = 0$, no correlation exists at all. Spearman's Rho requires ordinal units of measurement, data in the form of matched pairs, and examines the association of monotonic data. According to Neil and Rasmussen (2007), significant statistical correlation using Spearman's Rho is found with 90%, 95%, and 99% confidence intervals, where $p < .10$, $p < .05$ and $p < .01$. Spearman's Rho equation follows:

$$r_s = 1 - \frac{6 \sum D^2}{N^3 - N}$$

The study, as originally administered, did not anticipate a robust number of respondents, particularly in the second round survey. A preliminary look at the data assisted in determining the distribution of responses was normal. Using SPSS22, Spearman's Rho correlation analysis was calculated to compare key independent predictors against key dependent criterion to evaluate correlation. The correlational analysis adds to the qualitative findings in this study.

Summary

This chapter summarizes the methodology which was used to identify organizational leadership awareness of the hierarchical mum effect and contributing factors to mum environments in organizations today. This chapter addresses the procedural use of a modified Delphi study and its appropriate application, including the conditions of which its appropriate use applies to this study: difficulty of obtaining unbiased opinions from subordinates and supervisors in the workplace and the lack of existing knowledge of this topic. Through multiple rounds of questionnaires administered to a panel of 4 pilot and 24 full-study participants in the fields of human resources, business, and management, the ranked and prioritized results help address the research questions and provide better understanding of the hierarchical mum effect. This chapter discusses the methods that were followed to help ensure the study results are reliable and valid while also acknowledging potential opportunities for, and efforts to reduce, researcher bias. Chapter 4 will discuss the results of this modified Delphi study.

Chapter 4

Results

Chapter 4 addresses the data collection procedures, the sample selection, sample demographics, data analysis procedures, the results of the pilot study, and the results of the full study. Discussion of the processes for data collection and analysis include an explanation of the modified Delphi model used in this study. The purpose of this study was to identify organizational leadership awareness of the hierarchical mum effect, the contributing leadership qualities that foster a mum environment, and the impact of the phenomenon on team performance. Such factors explored in this study included those of the hierarchical mum effect itself, subordinate factors, and supervisor factors. Additionally, this study explored upper-management's awareness of the factors which may foster a mum environment in the workplace. Plasticity theory examines the central tendency for individuals to model the behavior of their peers when the individual's workplace identity is not yet firmly established. Consequently, members of workplace teams might choose to mold their behavior to that of other employees working in a mum-environment. The specific problem researched was why the hierarchical mum effect persists in organizations and what adverse impact does this phenomenon have on team performance.

This modified Delphi study was conducted in two rounds, which collected qualitative data in the first round by a panel of informed participants, followed by ranking and prioritization of the qualitative data via a rating scale in the second round. This method was used to further explore the complex issues of the hierarchical mum effect which to date had little existing research addressing upper-management awareness of the factors which foster a mum

environment. The objective of this study was to identify emergent themes by participants regarding five categories of factors of the hierarchical mum effect. These five categories included factors of the hierarchical mum effect, supervisor factors which foster a mum environment, subordinate factors which foster a mum environment, risks to workplace teams in a mum environment, and barriers to subordinate-supervisor communication. Exploration of these five categories addressed the four guiding research questions of this study.

This study was limited to qualitative data collection followed by the ranking of that data, by participants, in the second round using a rating scale. The mean and standard deviations calculated from the second round data collection helped to identify agreement among the study participants. Twenty-four participants, although more than originally anticipated, is fewer than recommended to conduct advanced statistical correlation analysis reflective of a quantitative study (Creswell, 2008; Neil & Rasmussen, 2007; Neuman, 2006). Although this study was not changed to a mixed-method, correlation analysis was conducted on the limited number of responses, which may have produced less than reliable results. Nevertheless, the analysis did provide a surprisingly high number of correlations which do provide a wealth of valuable information (see Appendix O).

NVivo© 10 software was used to analyze the qualitative data collected in the first round survey to categorize similar qualitative participant responses. These categorized responses were then used in the second round to rank the most frequently cited factors and to ultimately identify the most important resulting factors. A pilot group of four participants completed the pilot study before full implementation to assist the study monitor identify opportunities for improvement and to verify clarity in the research instrument.

SPSS22 software was used to conduct Spearman's Rho correlation analysis (IBM, 2013). This study obtained more respondents than expected with 24 participants, however fewer than recommended to conduct in-depth quantitative analysis. So it was possible to conduct limited correlational analysis. The correlation analysis performed helped to identify correlations between key predictors and criterion variables identified by study participants. However, more than 30 participants would have been recommended to present additional statistically significant analysis (Creswell, 2008; Neil & Rasmussen, 2007; Neuman, 2006). Therefore this qualitative study has the added benefit of some limited quantitative analysis, however there was not sufficient justification to re-characterize and re-focus as a mixed method study.

Data Collection

The data collection instrument for this study was a modified Delphi method qualitative questionnaire maintained on SurveyMonkey™. This research instrument included two rounds of data collection. Participants in this study were invited to contribute to the study findings based on the participant's years of work experience, years of management experience, and experience in the fields of human resources and management. Collectively, participants provide input in the first round which is later ranked and prioritized in the second round. This process served to rank and prioritize participant findings and to identify common factors. Identification of common factors provides a method by which anonymous study participants may begin to reach agreement.

The first round collected participant demographic information for the purposes of early identification of participant eligibility to continue. Eligible participants were permitted to continue on the first round survey to answer a mix of closed-end and open-ended questions.

Ineligible participants received an early disqualification webpage on SurveyMonkey™ which thanked the participant for their time. Open-ended questions served to invite participant independent thoughts and creativity (Gupta & Clark, 1996). First round responses created the foundation for the second round survey. Responses to the first round open-ended questions were ranked and prioritized by participants in the second round survey using a rating scale from 0 – 10.

The study moderator anticipated a 30% attrition rate between each round of this modified Delphi study (Mesch, 2012). To mitigate the loss of participants between rounds, the first round questionnaire combined three important elements of the Delphi process by collecting demographic data, some ranking data, and qualitative data. Turoff (1970) identifies the Delphi data collection process may be conducted in as few as two rounds, with additional rounds administered if necessary to explore divergent themes.

Sample Selection

The target sample for this population included human resources, business, and management professionals sourced from the worldwide web from professional association networks identified on LinkedIn. Participant criteria included evidence that the participant is currently employed within the United States, the participant has a minimum of five years of work experience, and a minimum of two years of managerial experience. Once IRB approval was obtained to conduct research, invitations to participate in the study were distributed via email to sourced LinkedIn candidates.

According to Pollard and Tomlin (1995), a modified Delphi method study should include 10 to 50 participants. For the pilot study, 15 participants sourced from LinkedIn professional

associations, meeting the same selection criteria as the full study population, were invited to participate via an email which included a Letter of Informed Consent (see Appendix B) and Request for Participant Involvement (see Appendix A). Eight participants signed and returned a Letter of Informed Consent. While seven qualified participants meeting the selection criteria began the first round survey, only four completed the survey in its entirety. The same four participants completed the pilot second round survey.

For the full study, 79 candidates were invited to participate via an email which included a Letter of Informed Consent (see Appendix C) and Request for Participant Involvement. 41 candidates signed and returned a Letter of Informed Consent. Of the 41 candidates, 29 both met the criteria of participant selection as well as completed the first round survey in its entirety. Of the 12 that signed a consent, but did not participate, one was disqualified due to not meeting the participant criteria, one withdrew, two did not complete all questions on the first round survey, and the remaining eight never began the survey.

Sample Demographics

This study included 4 pilot participants and 29 full study participants with management, human resources, and business backgrounds. 24 of 29 full-study panelists completed the second round survey. Participants were considered knowledgeable panelists if they possessed a minimum of five years of work experience and a minimum of two years of managerial experience. Participants were sourced from professional association networks located on LinkedIn. Only participants located within the United States were invited to participate.

Panelists included human resources professionals, human resources consultants, and organizational managers and leaders. Inclusion of these three groups of leaders and consultants

serve to neutralize role opinion bias and provide a more heterogeneous sampling (Scheele, 2002). Participants in this study must have had a minimum of five years business experience with a minimum of two years direct managerial experience. The purpose of this criterion was to better ensure participant interaction, in their experience, with the hierarchical mum effect in practice.

The first survey included questions to collect demographic data and to disqualify participants which did not meet the minimum requirements of the study. Demographic data included the participants' number of years of work experience, years of management experience, industry of expertise, number of organizational managers, and the number of the organizations employees. This information was selected to analyze survey results not only in aggregate, but also to identify similarities and differences between sub-groups within the sample.

Pilot Participant Demographics. The pilot study sought the participation of candidates which met the same demographic and professional requirements as those expected of the full study participants. Four participants completed the pilot study. Table 1 shows pilot study participants included two individuals that identify as management, and two as "other." Work experience ranged from six to more than 31 years, with management experience ranging from two to 25 years. Participants represented both smaller organizations (<500 employees) to larger organizations (>2000 employees).

Table 1

<i>Pilot Study Participant Demographics</i>		
<u>Field of Expertise</u>	<u><i>n</i></u>	<u><i>%</i></u>
Human Resources	-	-
Business	-	-
Management	2	0.50
Other	2	0.50
<u>Years of Experience in Field of Expertise</u>		
5 Years	-	-
6-10 Years	2	0.50
11-15 Years	-	-
16-20 Years	1	0.25
21-25 Years	-	-
26-30 Years	-	-
31+ Years	1	0.25
<u>Years of Management Experience</u>		
2 - 5 Years	2	0.50
6-10 Years	-	-
11-15 Years	1	0.25
16-20 Years	-	-
21-25 Years	1	0.25
<u>Approximate Total Managers in Participant's Target Organization</u>		
0-20	1	0.25
21-40	-	-
41-60	-	-
61-80	-	-
81-100	-	-
>100	3	0.75
<u>Approximate Total Employees in Participant's Target Organization</u>		
<500	1	0.25
501-1000	-	-
1001-1500	-	-
1501-2000	-	-
>2000	3	0.75

Note: n = number of participants. Dash (-) = data not reported.

Full Study Participant Demographics. Seventy-nine human resources and management candidates received an invitation to participate in the full study. Invitations were delivered to candidates, via email, between March 6th, 2015 and March 13th, 2015. Of candidates invited to participate, 41 signed and returned the Letter of Informed Consent. Of the candidates who returned a signed Letter of Consent, 30 candidates proceeded to participate in the Round 1 survey. The 30 participants completed their demographic data on the first page of the Round 1 survey, and only one participant was disqualified due to not meeting the management experience criteria, resulting in 29 participants completed the entire first round of the survey.

The demographic details collected from the full study participants is reflected in Table 2. The study participant demographics reflect a diverse mix of human resource professionals, management professionals, and other professionals with a minimum of two years of managerial management experience. The majority of the participants (48.28%) were human resources professionals, and participants represented a mean of 17.38 years of management experience. The majority of respondents (51.72%) represented organizations with fewer than 100 managers and fewer than 1000 employees. With a minimum of five years work experience required of candidates for this study, participants represented a mean of 21.55 years of work experience in their field of expertise.

Table 2

Study Participant Demographics

<u>Field of Expertise</u>	<u>n</u>	<u>%</u>
Human Resources	14	48.28
Business	-	-
Management	8	27.59
Other	7	24.14

Years of Experience in Field of Expertise

5 Years	-	-
6-10 Years	2	6.90
11-15 Years	5	17.24
16-20 Years	8	27.59
21-25 Years	5	17.24
26-30 Years	6	20.69
31+ Years	3	10.34

Years of Management Experience

2 - 5 Years	1	3.45
6-10 Years	7	24.13
11-15 Years	6	20.69
16-20 Years	6	20.69
21-25 Years	5	17.24
26 - 30 Years	2	6.90
31+ Years	2	6.90

Approximate Total Managers in Participant's Target Organization

0-100	15	51.72
101 - 200	4	13.79
201 - 300	1	3.45
301 - 400	1	3.45
401 - 500	1	3.45
501 - 600	-	-
601 - 700	-	-
701 - 800	-	-
801 - 900	1	3.45
901 - 1000	1	3.45
>1000	5	17.24

Approximate Total Employees in Participant's Target Organization

<1000	15	51.72
1001 - 2000	2	6.90
2001 - 3000	2	6.90
3001 - 4000	2	6.90
4001 - 5000	-	-
5001 - 6000	1	3.45
6001 - 7000	-	-
7001 - 8000	1	3.45
8001 - 9000	-	-
9001 - 10000	1	3.45
10001 - 11000	1	3.45
11001 - 12000	-	-
>12000	4	13.78

Note: n = number of participants. Dash (-) = data not reported.

Data Analysis Procedures

The goal of this modified Delphi study was to collect and interpret qualitative data with some statistical analysis. Participant qualitative responses to the first round survey provided key factors of the hierarchical mum effect by which to address more closely in the second round. Using NVivo© 10 software, key factors of the mum effect, factors of supervisors that foster a mum environment, factors of subordinates that foster a mum environment, factors of workplace teams in a mum environment, and factor barriers to communication were identified by finding the most frequent qualitative responses participants cited in the first round survey. A 0-10 rating scale was used, similar to Fletcher, French, Corapi, Irwin, and Norman's (2010) research instrument. Factors cited by the study participants two or more times were ranked by the study participants in the second round survey on a 0-10 rating scale to further explore participant opinions of the importance of each factor in its relationship to hierarchical mum effect. Ensuring near full participant involvement in the second round was of utmost importance. Participants were provided opportunities in both the first and second round to provide additional comments regarding the hierarchical mum effect for the study moderator to further explore in subsequent rounds if appropriate. In addition to the questions in the first round survey which prompted participants to provide open-ended responses, the final question also allowed participants to provide any other insights regarding the hierarchical mum effect which were not already captured in the first round questionnaire. The same opportunity was provided as the final question to the second round questionnaire. Although divergent themes were not identified, this additional opportunity to explore the hierarchical mum effect could have prompted additional rounds of data collection.

A Likert scale was used to analyze participant opinions of pre-defined leadership styles and their propensity in the workplace in the first round survey, and nearly all of the data collected in the second round. The benefit of a Likert scale is that the data collected may be calculated as ordinal measurements. This study used ordinal measurements to rank the survey results. NVivo© 10 software was used to analyze the qualitative data collected in the first round survey. This software identified the frequency of participant identification of similar factors through identifying common words and phrases. Through this process, NVivo© 10 categorized the qualitative responses into the factors participants ranked and prioritized in the second round survey.

Spearman's Rho. Twenty-four participants completed the second round. While this was more respondents than anticipated, 24 participants is fewer than recommended to conduct advanced statistical correlation analysis reflective of a quantitative study (Creswell, 2008; Neil & Rasmussen, 2007; Neuman, 2006). Consequently, this study was not changed to a mixed method study. This Delphi method study collected ordinal data and originally projected far fewer participants, and therefore a mixed-method study was never considered. However, correlation analysis was conducted on the limited number of responses, which may result in less than reliable results. Nevertheless, the analysis did provide a surprisingly high number of correlations which do provide a wealth of valuable information (see Appendix O).

RQ3 asks *what influence does the hierarchical mum effect have on team performance and team communication*. To address the influence of the hierarchical mum effect on team performance, following the second round of data collection in the full study, correlational analysis was performed against *supervisor factors which foster a mum environment (Q3)* and *risks to workplace teams (Q7)*, as well as between *subordinate factors which foster a mum*

environment (Q5) and Q7. Similarly, to address the influence of the hierarchical mum effect on team communication, correlational analysis was performed against Q3 and barriers to workplace teams (Q9), as well as between Q5 and Q9.

Pilot Study

The pilot study was a valuable opportunity to validate the survey instrument of this modified Delphi method study. This pilot provided participants with opportunities to both respond to the survey questions that will be asked of the full study participants, but also to provide feedback regarding the survey itself (Creswell, 2007). This feedback was used to improve clarity to the questions, eliminate ambiguity, and to address technical issues encountered with the online data collection tool, hosted by SurveyMonkey™. With the intent to minimize any threats to data validity in the full study, feedback from the pilot group was incorporated prior to the launch of the full study.

Two Round Delphi Process. The pilot study included two rounds of data collection through questionnaires which requested both closed-end and open-ended responses from participants (see Appendix D and F). Participants were invited to participate and, upon receipt of a signed Letter of Informed Consent (see Appendix C), were given the URL to the first survey of the study, which was hosted on SurveyMonkey™. All participants reported the ability to access the survey without a problem.

On February 12th, 2015, participants were asked, in the first round, to think of a target organization with which the participant was familiar, upon which the participant would base all responses throughout the first round survey. The first round of the pilot study collected participant demographic data, such as years of work and management experience, as well as the

number of managers and employees within their target organization. The survey continued by collecting participant informed opinions of subordinate, supervisor, and organizational conditions which create a mum environment. Participants were provided an opportunity, on all questions, to respond with “no opinion at all.” Participants in the pilot study reported clear understanding of the questionnaire and no problems completing the questionnaire within the projected 20-30 minutes disclosed.

On March 2nd, 2015, participants were invited, via email, to complete the second round survey. Again, the survey was hosted on SurveyMonkey™ and participants were provided a new URL specific to the second survey. In the second round participants rated, on a rating scale of 0 to 10, the most common participant-identified factors of the hierarchical mum effect from the first round. Participants rated the factors of whether they have the effect of fostering “mum environment” on a scale of 0 (no effect) to 10 (high effect). Factors were grouped as: Factors of the hierarchical mum effect, supervisor factors, subordinate factors, and the inherent risks to workplace teams. Following each group, participants were also asked to rate upper-management awareness of each factor within the respective group. Participants ranked upper management awareness of the factor on a scale of 0 (Completely Unaware) to 10 (Highly Aware). Participants were provided with an opportunity to respond with “no opinion at all” to all questions.

Results. In addition to collecting participant demographics, the first round survey served two other functions. The first round survey requested participants to begin ranking leadership styles in their likelihood to foster, or mitigate, the creation of a mum environment. The first round survey also requested participants to provide open-ended responses to questions addressing both the factors of the mum-effect itself as well as supervisor and subordinate factors

likely to foster a mum environment. These open-ended responses served to establish the framework for the second round survey (see Appendix E). The second round survey was built, following the framework identified in Appendix C, after compilation and analysis of participant responses from the first round survey. The second round survey asked participants to rank the importance of open-ended responses, provided by the participants during the first round survey, as influencers of fostering a mum-environment.

Of 15 candidates invited to participate in the pilot study, eight candidates signed a Letter of Informed Consent (see Appendix B). Although seven participants contributed in the first round of the study, only four participants completed the entirety of both Round 1 and Round 2. Only responses from those participants completing both rounds were included in the final pilot study results. Through the pilot, as a trial-run of the full study, participants did help identify opportunities to improve the validity of the study. One participant noted a technical error in completing one question on SurveyMonkey™, which was corrected early in the first round of the pilot. Another participant identified a typo which was also remedied early in the pilot. Otherwise participants were quite satisfied that the survey was clear and concise, and collected necessary and relevant data. However, similar to the mum-effect itself, it is possible that participants did not voice criticism with the research instrument.

Analysis of the pilot results, from both the first and second rounds, presented additional opportunities to improve the research instrument. From only the limited pilot group, it was apparent that demographic questions would require greater granularity in response choices. As an example, in the pilot the maximum number of employees a participant could select as their target organization was >2000, and the maximum number of managers in the pilot was >100. These maximum selections, including intermediate choices, were expanded to collect more

valuable data reflective of much larger organizations, as well as identify more granular differences between participant organizations, in the full study. Finally, the pilot group indicated no questions, concerns, or opportunities to improve upon the piloted +/- 5 point scale used in the first round of data collection, nor the 100 point, 10 point increment, scale used in the second round of data collection.

Full Study

Participants in this full modified Delphi study were prompted under the survey moderator's direction to exchange, rank, and prioritize ideas regarding conditions fostering a mum workplace environment through subsequent rounds of online questionnaires hosted on SurveyMonkey™. The outcome of this study served to provide organizational leadership with greater insight to the supervisor and subordinate factors, as well as workplace conditions, which may inhibit the upward subordinate-supervisor exchange of negative information, and consequently, organizational learning. The results of this study also present opportunities for further empirical studies exploring work team performance under the influence of subordinates and supervisors identified as exhibiting specific factors addressed by this study.

Seventy-nine human resources and management candidates, sourced from human resources and management professional associations on LinkedIn, received an invitation to participate in the full study. Invitations were delivered to candidates, via email, between March 6th, 2015 and March 13th, 2015. Of candidates invited to participate, 41 signed and returned the Letter of Informed Consent. Of the candidates who returned a signed Letter of Consent, 30 candidates proceeded to participate in the Round 1 survey. The full study did not include any participants from the pilot study. The advantage of this process permitted participants from

around the country to quickly participate in a survey, maintain anonymity between one another, while providing independent opinions free of other participant bias or influence. Further, this process allowed the survey monitor to track and correlate responses based on respondent demographics.

The advantage of multiple rounds of questionnaires via a modified Delphi study is that participants may assess and modify their opinions from that of the previous round. The objective of a modified Delphi method study is not to reach consensus among the participants, but rather to gather subjective responses from all participants and prioritize factors the study group find most important. From these subjective responses, the study moderator identifies common underlying factors which influence the existence of a mum workplace environment.

Two Round Delphi Process. Upon receipt of a signed Letter of Consent, each participant was provided a unique, random four alphanumeric code and the hyperlink to the first round questionnaire. Participants were emailed the hyperlink to the first round survey hosted on SurveyMonkey™ between March 9th and March 13th, 2015. The email gave participants a brief overview of the objective of the survey and each participant was instructed to enter their unique code on the first page of the questionnaire in the specified field. The first round questionnaire collected participant demographic data, three closed-end ranking question, and the remaining questions were open-ended for the purposes of providing as much insight into the mum-effect as the participant could share, as appropriate to each question.

Email communication was the primary means of communication with study participants. While 41 participants signed and returned a Letter of Consent, 30 participants contributed to the survey, and 29 were eligible to proceed to the second round based on demographic criteria. The

study moderator sent two follow-up emails to those participants that did not complete the survey within the time allotted. Of the remaining 11 participants that did not complete the survey, four withdrew and four did not respond to the study moderator, and three responded after the deadline.

Participants that completed the survey received a thank you e-mail and were provided a timeframe by which to expect the second round to begin. After identifying factors provided by study participants from Round 1, the study moderator developed the second round survey. The second round survey commenced March 18th, 2015 and ended March 31st, 2015. Participants were given a hyperlink via email to the second round questionnaire hosted on SurveyMonkey™ and again, were asked to enter the same unique, random alphanumeric code previously assigned in the provided field. The second round email, again provided participants with a brief overview of the objective of the next survey.

The results of the first round survey provided the basis of the second round survey. The first round survey included five demographic questions, nine open-ended questions asking participants to reflect on their experiences with a target organization addressing several aspects of the hierarchical mum effect, and three closed-ended ranking questions (see Appendix D). The open-ended questions asked participants to reflect on a target organization with which they were familiar to consider possible factors of supervisors and subordinates which contribute to a mum workplace and to consider factors of the hierarchical mum effect itself. Closed-ended questions asked participants to rank leadership styles by their propensity to foster a mum workplace environment, the frequency by which upper, middle, and line managers partake in a mum environment, and the participants' presumption that their target organization exhibits more, the same, or less mum environments at each aforementioned level of management.

In the second round, panelists evaluated the responses collected from the first round by ranking and prioritizing identified factors. Factors were identified after the first round of data collection through the use of NVivo 10 software. This software categorized key words and phrases from the participant first round open-end responses. Factors cited by participants two or more times were ranked and prioritized by the participants in the second round questionnaire. Participants were asked to rank and prioritize both the factors identified from the first round, as well as rank and prioritize organizational upper-management's awareness of those factors. Participants ranked a total of 102 line-items consisting of identified factors and management awareness to the factors on a rating scale of 0 to 10. The 102 line-items represent 51 different factors which were considered by participants for both the factors' effect on the workplace, as well as management's awareness of the effect of each factor. Factors were ranked 0 for *does not foster a mum environment* to 10 which *highly fosters a mum environment*. Management awareness was ranked 0 for *completely unaware* to 10 for *completely aware*. The objective of ranking and prioritizing identified factors was to affirm the importance of the factors as they relate to fostering a mum-environment.

The goal of a classic Delphi method study is to reach consensus on a specific inquiry (Turoff, 1970). However, Turoff also explains that the existence of experts on a subject of inquiry would preclude the likelihood of a problem actually existing. Alternatively, Linstone (1978) argues modified Delphi methods glean knowledge from a group of participants to reach judgment on complex problems. The goal of this modified Delphi method is to identify a panel of knowledgeable participants' judgment regarding the specific factors of the hierarchical mum effect and factors of subordinates and supervisors which foster a mum environment, and the level of upper-management awareness of these factors, based on the experiences of individuals in the

fields human resources and management. These factors are derived through the participants' consideration of diverse perspectives of the study panel through ranking and prioritizing the collective factors in the second round survey. These ranked and prioritized factors represent the participant's perception of the contributing of the greatest contributing factors of the hierarchical mum effect.

Major Factors. Factors were derived through NVivo© 10 software by importing the qualitative data into a central program for the purposes of labeling and coding key words (Berniker & McNabb, 2006). According to Walsh (2003), NVivo© 10 is used frequently in qualitative research to analyze open-ended responses and organize information to identify factors based on the frequency of words used. NVivo© 10 is a valuable tool for simplifying the examination of a large amount of qualitative data (Bolden, 2011). 51 factors, arranged in order of number of occurrences participants cited the factor, were derived from the first round responses (see Appendix E).

The factors of the hierarchical mum effect identified using NVivo© 10 were a result of participant responses to the first round questionnaire eliciting participant professional opinions of what factors are representative of the mum effect, subordinates which foster a mum environment, and supervisors that foster a mum environment. Participants also identified via open-ended responses the factor risks to workplace teams in a mum environment as well as the factor barriers to subordinate-supervisor communication consequential of a mum-environment. Two responses was the minimum number of responses for a factor to be inclusion in the second round for further participant consideration. A minimum frequency of occurrences from the first round survey does not exist to deem a factor important (Ryan, 2009). Rather, in the second round participants rate the factors in order of importance. Therefore, in the first round participants

were encouraged to provide as much information regarding their experience with the hierarchical mum effect as they wish, and the study moderator arbitrarily set the minimum threshold for second round review to a minimum of two occurrences.

The four research questions that guided this study include (RQ1) what are the contributing factors that foster a mum environment? (RQ2) how aware is upper-management of the hierarchical mum effect? (RQ3) what influence does the hierarchical mum effect have on team communication and team performance? and (RQ4) what are the implications of the hierarchical mum effect to leadership theory? To answer these questions, factors were ranked and prioritized by study participants in the second round both by consideration of the effect the factor has on fostering a mum environment, as well as exploring the likelihood of upper-management's awareness of the factor. In the first round, participants also answered closed-end questions ranking the likelihood of defined leadership styles of fostering a mum-environment (see Appendix D1). The resulting rank and prioritization of factors in the second round allowed analysis of first round ranking of leadership styles to foster or mitigate a mum workplace.

The second round questionnaire included specific questions that addressed categories of factors. For example, in the first round participants were asked to list supervisor factors likely to foster a mum environment. In the second round, participants ranked the factors identified from the first round, in the following corresponding questions on a 0-10 point rating scale: Q4: Based on your business experience in all organizations, please rank the following supervisor factors in order of their influence on fostering a mum work environment; and Q5: Based on your business experience in all organizations, please rank organizational upper-management awareness of the following supervisor factors which foster the *Mum Effect*.

The first round survey included nine open-ended questions eliciting participant responses to their experiences relating to the hierarchical mum effect in a target organization of which the participants were familiar. These questions resulted in 51 factors. Of the 51 factors identified, the following results reflect only the top three factors sourced from each question. Appendix E contains a list of all factors sourced from the first round which met a minimum threshold of two participant citations.

Round 1 Results. The first round survey applied questions addressing each research question (RQ) without grouping questions into categories with the goal of reducing bias in participants recognizing a pattern in the questions. RQ1 is addressed in Question #10, RQ2 is addressed in Questions #8 and #9, RQ3 is addressed in Questions #15, #18, and #19, and RQ4 is addressed in Questions #11, #16, and #17. Demographic questions (#1-7) are not listed below:

Question #8. Asks, “From your experience with your target organization, what supervisor factors contribute to a mum-environment?” The primary supervisory factor likely to foster a mum environment, identified by participants, is *Poor Communication Skills*. Participants also listed supervisor exhibiting *Aggressive Behaviors or Demeanor* and *Micromanagement* as the next two most common attributes of a supervisor developing a mum workplace environment. The remaining nine factors have fewer than eight participant citations.

Question #9. Asks, “From your experience with your target organization, what subordinate factors contribute to a mum-environment?” The most frequent factors identified by study participants was tied between *Fear of Consequences or Retribution* and *Insecure or Lacking Confidence*. The third factor identified most commonly among participants was

Uninformed or Ignorant of All Facts. The remaining seven factors have fewer than four participant citations.

Question #10. Asks, “Based on your experience with your target organization, please describe three common causes for the *Mum Effect* to exist.” The foremost factor identified by study participants was *Fear of Perceived Consequences*. This was followed by two additional factors tied for frequency which included *Poor Supervisor Communication Skills* and *Perceived Closed-Door Organizational Tone or Culture*. The remaining seven factors have fewer than nine citations by study participants.

Question #11. Asks, “Based on your experience with your target organization, please rank each of the following leadership styles on their likelihood to foster either a mum workplace environment or open communication (definitions at bottom of this page). For example, -5 Strongly cultivates a mum environment, +5 Strongly cultivates complete open communication, 0 for no effect (Use N/A if you have no opinion at all).” Participant responses (n = 29) are reflected in Table 3.

Table 3

Leadership Style	Mean	Median	Mode	St. Dev.
Transformational	3.71	4	4	2.12
Transactional	-1.11	-2.5	-4	3.15
Participative	2.76	4	4	2.49
Charismatic	.9	1	3	2.83
Intellectual	-.14	0	2	2.34

Strategic	.97	2	3	3.05
Self-Sacrificing	1.21	2.5	4	3.18
Servant	1.83	3	5	2.95
Situational	.89	1.5	2	2.82

Question #12. Asks, “Do you have any additional comments or thoughts regarding Question 11?” Respondents provided a short range of additional thoughts addressing leadership and the possibility of a mum environment existing under different styles (see Appendix E).

Question #13. Asks, “How prevalent do you find the presence of the *mum effect* at these three levels of your target organization? 0% (Never) to 100% (Always).”

Table 4

Level of Management	Mean	Median	Mode	St. Dev.
Upper-management (C-Suite)	55.52%	60%	90%	2.91
Middle Manager - Area	58.97%	70%	80%	2.45
Line Level Manager	49.66%	50%	30%	2.72

Question #14. Asks, “From your experience with other organization, do you feel your responses to Question 13 are: -5 (Lower Than) 0 (Average) +5 (Higher Than) most organizations.”

Table 5

Level of Management	Mean	Median	Mode	St. Dev.
Upper-management (C-Suite)	.96	0	0	2.57
Middle Manager - Area	.86	0	0	1.98
Line Level Manager	.50	0	0	2.04

Question #15. Asks, “Based on your experience with your target organization, what are common barriers to subordinate-supervisor communication?” Participants most frequently identified *Tight Deadlines and Time Restraints*, followed by *Fear of Being Labeled Negative* and *Too Many Layers in Hierarchical Structure*. The remaining four factors had fewer than three participant citations each.

Question #16. Asks, “Based on your experience with your target organization, what style of leadership (definitions at the bottom of this page) is most commonly cultivated in organizations?”

Table 6

Leadership Style	Response Percent	Response Count
Transactional Leadership	48.3%	14
Transformational Leadership	13.8%	4
Intellectual Leadership	10.3%	3
Strategic Leadership	10.3%	3
Charismatic Leadership	6.9%	2

Servant Leadership	6.9%	2
Situational Leadership	3.4%	1
Participative Leadership	0%	0
Self-Sacrificing Leadership	0%	0

Question #17. Asks, “Based on your experience with your target organization, what style of leadership (definitions at the bottom of this page) is most inviting of creativity in subordinates?”

Table 7

Leadership Style	Response Percent	Response Count
Participative Leadership	44.83%	13
Transformational Leadership	27.59%	8
Servant Leadership	10.34%	3
Self-Sacrificing Leadership	6.9%	2
Charismatic Leadership	3.45%	1
Intellectual Leadership	3.45%	1
Strategic Leadership	3.45%	1
Transactional Leadership	0%	0
Situational Leadership	0%	0

Question #18. Asks, “Based on your experience with your target organization, what are the three greatest risks to a workplace team under the influence of the *Mum Effect*?” Participants

most frequently cited *Employee Turnover* as the greatest risk to workplace teams operating within a mum environment. Participants also frequently cited *Lack of Growth*. Three factors were tied for the third most frequent factors identified by participants, including *Not Identifying Problems Before Becoming Serious*, *Lack of Creativity or Group Think*, and *Poor Morale*. The remaining four factors had fewer than five participant citations each.

Question #19. Asks, “Based on your experience with your target organization, what are the benefits of workplace teams under the influence of the *Mum Effect*?” Only four factors emerged from this question. The four factors include: *Working Toward a Single Narrow Goal*, *Employee Perceived Job Security*, *Reduction to Frequent Changes*, and *Reduction in Team Conflict*.

Question #20. This final question asked participants to reflect on any other aspects of the *mum effect* which were not captured in the preceding questions. Participants did not have any additional comments that were not already addressed.

Round 2 Results. The objective of the second round survey was to provide the informed panel of human resources and management professionals a forum by which to rank and prioritize the key factors identified by the panel in the first round survey. Descriptive statistics were generated from the second round results including each factor’s mean, median, mode, and standard deviation (st. dev.) to each question associated with each factor. Some correlational analysis was possible, but further quantitative statistical analysis was not appropriate for the second round sample size of 24 participants (Anderson, Sweeney, Williams, & Martin, 2008; Creswell, 2008; Neuman, 2006). After the first round, one participant withdrew due to family

commitments, one withdrew for work commitments, and two were non-responsive to invitations to the second round survey.

Participants in the second round survey evaluated the responses collected from the first round by ranking and prioritizing identified factors. The objective of ranking and prioritizing identified factors was to affirm the importance of the factors as they relate to fostering a mum-environment. Participants were asked to rank and prioritize both the factors identified from the first round (0 for *does not foster a mum environment* to 10 which *highly fosters a mum environment*), as well as rank and prioritize organizational upper-management's awareness of those factors (0 for *completely unaware* to 10 for *completely aware*). The top 50% most important factors fostering a mum-environment, identified by study participants, were reviewed for the amount of disparity between those factors and upper-management's awareness of the factors. *Very high disparity (+)* was assigned to factors ≥ 1 point above the study average disparity, or ≥ 3.827 , and *very low disparity (*)* was assigned to factors ≥ 1 point below the study average, or ≤ 1.827 . The average disparity for all questions in this study was 2.827 (see Appendix N).

Appendix G is a summary of all descriptive statistics collected from Round 2, which codes each section and question by category and sequence within the category (i.e. Q1a reflects the response data to the first question in the first category). Appendix G also displays the standard error of skew (SES) reflecting negative skewness indicating distributions with an asymmetrical tail extending toward more negative values for question series Q1, Q3, and Q7 (Creswell, 2007). After collecting responses of all 25 remaining participants, one participant was removed from the study as an outlier.

Outlier Participant Removed. One participant's entire set of second round responses was removed from the study. Participant, randomly alphanumerically coded RLFB, presented qualitative responses to the first round indicating several important factors of the hierarchical mum effect (management closed to alternative perspectives), subordinate and supervisor factors (autocratic and abusive; fear of consequences), and risks to workplace teams (risks to team trust; reduced performance). However, in the second round survey this participant ranked all factors as "No Effect" to fostering mum environments, thus suggesting participant confusion and transposition of 0 (no effect) in place of 10 (high effect) for proper rating scale responses. Participant's ranking of "No Effect" also stands out as a particular outlier as this response, in most cases, was 2-3 points lower than the next lowest participant scoring. This reduced the total 25 participants in the second round to 24 participants. Removing this outlier did not statistically impact the results. However, it did improve the level of consensus (range and standard deviation).

Factors of Hierarchical Mum Effect. The first category of factors identified by study participants included factors of the hierarchical mum effect itself (see Appendix H). Questions Q1a through Q1j ranked factors of the hierarchical mum effect for the likelihood of fostering a mum environment between 0 for *does not foster a mum environment* to 10 which *highly fosters a mum environment*. Questions Q2a through Q2j ranked upper-management's awareness of the factors fostering a mum environment between 0 for *completely unaware* to 10 for *completely aware*. The results of this category of factors address both RQ1, *What are the contributing factors that foster a mum environment?* , and RQ2, *How aware is upper-management of the hierarchical mum effect?* A review the top 50% most important factors of the hierarchical mum

effect, identified by study participants, resulted in identification of the disparity of five factors. Of these factors, two were identified as exhibiting *very high disparity* (+).

<i>Round 2 Comparison of factors of Mum Effect and Upper-Management's Awareness of the Factors</i>			
Factors of <i>Mum Effect</i>	Fostering Mum Environment (Mean)	Upper-Management's Awareness of Effect (Mean)	Disparity
Fear of Perceived Consequences	8.625	5.333	3.292
Perceived Closed Door Culture/Tone	8.208	4.458	3.750
Supervisor Ego Non-Conducive to Feedback	8.167	3.875	4.292+
Lack of Subordinate/Supervisor Trust	7.957	3.667	4.290+
Aggressive Supervisor Behaviors/Demeanor	7.917	4.458	3.459
<i>Mean</i>	8.174	4.358	3.816+
<i>(Note: + = very high disparity; * = very low disparity)</i>			

Supervisor Factors. The second category of factors identified by study participants included supervisor factors which foster a mum environment (see Appendix I). Questions Q3a through Q3l ranked supervisor factors for the likelihood of fostering a mum environment between 0 for *does not foster a mum environment* to 10 which *highly fosters a mum environment*. Questions Q4a through Q4l ranked upper-management's awareness of supervisor factors fostering a mum environment between 0 for *completely unaware* to 10 for *completely aware*. The results of this category of factors address RQ1, *what are the contributing factors that foster a mum environment?*, RQ2, *how aware is upper-management of the hierarchical mum effect,*

and RQ4, *what are the implications of the hierarchical mum effect to leadership theory*. A review of the top 50% most important of supervisor factors which foster a mum environment, identified by study participants, resulted in identification of the disparity of six factors. Of these factors, two were identified as exhibiting *very high disparity (+)*.

Table 9			
<i>Round 2 Comparison of Supervisor Factors of Mum Effect and Upper-Management's Awareness of the Factors</i>			
Supervisor Factors	Fostering Mum Environment (Mean)	Upper-Management's Awareness of Factors (Mean)	Disparity
Retaliatory	8.583	4.542	4.041+
Supervisor Non-Responsive to Employee Communication	8.25	4.417	3.833+
Aggressive Behavior/Demeanor	8.167	5.042	3.125
Pre-Disposed Position Taking - No Alternatives	8.125	4.826	3.299
Cut-Throat Career Advancer	7.833	5.042	2.791
Supervisor Mum to Own Next-Level Supervisor	7.625	3.875	3.75
<i>Mean</i>	8.097	4.624	3.750
<i>(Note: + = very high disparity; * = very low disparity)</i>			

Subordinate Factors. The third category of factors identified by study participants included subordinate factors which foster a mum environment (see Appendix J). Questions Q5a through Q5j ranked subordinate factors for the likelihood of fostering a mum environment between 0 for *does not foster a mum environment* to 10 which *highly fosters a mum environment*. Questions Q6a through Q6j ranked upper-management's awareness of subordinate factors fostering a mum environment between 0 for *completely unaware* to 10 for *completely aware*.

The results of this category of factors address RQ1, *What are the contributing factors that foster a mum environment?* , RQ2, *How aware is upper-management of the hierarchical mum effect,* and RQ4, *what are the implications of the hierarchical mum effect to leadership theory.* A review of the top 50% most important subordinate factors which foster a mum environment, identified by study participants, resulted in identification of the disparity of five factors. Of these factors, one was identified as exhibiting *very high disparity (+)*, which was the highest mean score of this study, represented by the factor of subordinate's fear of perceived consequences or retribution.

Table 10			
<i>Round 2 Comparison of Subordinate Factors of Mum Effect and Upper-Management's Awareness of the Factors</i>			
Subordinate Factors	Fostering Mum Environment (Mean)	Upper-Management's Awareness of Factors (Mean)	Disparity
Fear of Consequences/Retribution	8.917	4.292	4.625+
Insecure / Lack of Confidence	7.625	4.167	3.458
Apathetic / Disengaged	7.125	3.915	3.210
Politics Avoidance	6.292	3.792	2.5
Passive Nature	6.250	4.333	1.917
<i>Mean</i>	7.242	4.100	3.142
<i>(Note: + = very high disparity; * = very low disparity)</i>			

Risks to Workplace Teams. The fourth category of factors identified by study participants included risks to workplace teams operating in a mum environment (see Appendix K). Questions Q7a through Q7i ranked risk to workplace teams operating in a mum environment between 0 for *no influence on workplace teams* to 10 which *highly influences workplace teams*.

Questions Q8a through Q8i ranked upper-management's awareness of risks to workplace teams operating in a mum environment between 0 for *completely unaware* to 10 for *completely aware*. The results of this category of factors address both RQ2, *how aware is upper-management of the hierarchical mum effect*, and RQ3, *what influence does the hierarchical mum effect have on team communication and team performance*. A review of the top 50% most important risks to workplace teams working in a mum environment resulted in identification of the disparity of five factors. Although disparity does exist, none of the risks were identified as exhibiting particularly *very high (+) or very low disparity (*)*. However, more than the preceding categories, the risks to workplace teams represent the highest mean scores to each identified risk within the top 50%.

Table 11			
<i>Round 2 Comparison Risks to Workplace Teams Working in a Mum Environment and Upper-Management's Awareness of the Risks</i>			
Risks to Workplace Teams	Influence on Workplace Teams (Mean)	Upper-Management's Awareness of Risks (Mean)	Disparity
Lack of Trust	8.292	4.833	3.459
Lack of Creativity / Group Think	8.250	4.542	3.708
Poor Morale	8.083	5.250	2.833
Not Identifying Problems Before Becoming Serious	7.917	4.917	3.000
Underperformance	7.875	5.375	2.500
<i>Mean</i>	8.083	4.983	3.100
<i>(Note: + = very high disparity; * = very low disparity)</i>			

Barriers to Communication. The fifth category of factors identified by study participants included barriers to subordinate-supervisor communication (see Appendix L). Questions Q9a through Q9g ranked barriers to subordinate-supervisor communication for the

likelihood of restricting communication between 0 for *no effect* to 10 which *highly restricts subordinate-supervisor communication*. Questions Q10a through Q10g ranked upper-management's awareness of barriers to subordinate-supervisor communication between 0 for *completely unaware* to 10 for *completely aware*. The results of this category of factors address both RQ2, *how aware is upper-management of the hierarchical mum effect*, and RQ3, *what influence does the hierarchical mum effect have on team communication and team performance*. A review of the top 50% most important barriers to communication, identified by study participants, resulted in identification of the disparity of four factors. Of these four factors, while disparity is noted, only one factor stands out as having particularly *very low disparity (-1)*.

Table 12			
<i>Round 2 Comparison of Barriers to Communication and Upper-Management's Awareness of the Barriers</i>			
Barriers to Communication	Restriction to Communication (Mean)	Upper-Management's Barriers (Mean)	Disparity
Fear of Being Labeled a Negative Employee	7.542	4.417	3.125
Supervisor Failure to Follow-Through w/ Commitments	7.458	4.208	3.250
Expectations Not Clearly Communicated	7.417	4.208	3.209
Time Restraints - Tight Deadlines	6.792	5.250	1.542*
<i>Mean</i>	7.302	4.521	2.782
<i>(Note: + = very high disparity; * = very low disparity)</i>			

Benefits to Workplace Teams in Mum Environment. The final category of factors identified by study participants examined the benefits to workplace teams operating in a mum environment (see Appendix M). Questions Q11a through Q11d ranked the benefits to workplace

teams performing in a mum environment between 0 for *no benefit* to 10 for *highly beneficial*.

The results of this category of factors address RQ3, *what influence does the hierarchical mum effect have on team communication and team performance*.

Table 13	
<i>Round 2 Ranking of Benefits to Workplace Teams Operating in a Mum-Environment</i>	
Benefits	How Beneficial (Mean)
Working Toward a Single Narrow Goal	5.167
Reduction in Frequent Changes of Procedure	4.739
Perceived Employee Job Security	4.625
Reduction of Team Conflict	4.304
Mean	4.709

Analysis and Triangulation

Participants were asked to identify factors of the mum effect, supervisor and subordinate factors that foster a mum environment, risks to workplace teams operating in a mum environment, and barriers to subordinate-supervisor communication. Using Nvivo10 software to analyze the qualitative participant responses for commonalities, factors from each category which appeared two or more times from the first round were explored further in the second round. Ranking each factor on a 0-10 rating scale in the second round, study participants began forming consensus by finding importance of the top 50% of all factors identified in the first round with mean scores ranging 6.250 – 8.917 (see Appendixes H-L).

Correlational analysis also identified many statistically significant correlations which corroborate the qualitative findings of this study. Many of the most important attributes of both

supervisors and subordinates were positively, statistically correlated. These correlations illuminated the relationship of the mum effect and its impact on communications and team performance. Additionally, the four pilot respondents were extremely consistent with the fully panel study respondents.

The four research questions below guided this research study.

RQ1: What are the contributing factors that foster a mum environment?

RQ2: How aware is upper-management of the hierarchical mum effect?

RQ3: What influence does the hierarchical mum effect have on team communication and team performance?

RQ4: What are the implications of the hierarchical mum effect to leadership theory?

The objective of this study was to fill the gaps of existing research and knowledge of the hierarchical mum effect by surveying the opinions of informed participants in the fields of human resources and management regarding the factors of the hierarchical mum effect, conditions which foster a mum environment, and upper-management's awareness of these factors and conditions, to better understand why the hierarchical mum effect continues to exist within organizations. Study participants responded to two rounds of questionnaires, collecting open-ended qualitative data in the first round, and ranking that data in the second round on a 0 – 10 rating scale. Participant responses resulted in data which address each of the research questions.

Research Question 1. The first research question asks, “What are the factors that foster a mum workplace?” This was a central factor to the study as participants were asked to provide

open-ended responses to this question in several different ways in the first round survey. Participants were asked generally to identify the factors of the hierarchical mum effect, supervisor factors which foster a mum environment, subordinate factors which foster a mum environment, the risks to workplace teams in a mum environment, and the barriers to subordinate-supervisor communication. In the second round, participants were asked to rank the most frequently identified factors from the first round on a 0-10 rating scale. Only the most important factors, identified as the top 50% mean scores for each category of factors in the second round, are reviewed for further discussion.

Table 8 reflects the top 50% most important factors, identified by participants, which represent the hierarchical mum effect. These top factors include *fear of perceived consequences*, *perceived closed door culture or tone*, *supervisor ego non-conducive to feedback*, *lack of subordinate-supervisor trust*, and *aggressive supervisor behaviors or demeanor*. On a 0-10 rating scale, with 0 reflecting *does not foster* mum environment, and 10 reflecting *highly fosters* mum environment, the average participant scored mean for the top 50% most important factors is 8.175, reflecting the factors highly foster a mum environment.

Table 9 reflects the top 50% most influential supervisor factors, identified by participants, which foster a mum environment. These top supervisor factors include being *retaliatory*, *non-responsive to employee communication*, *aggressive behavior or demeanor*, *pre-disposed position taking*, *cut-throat career advancer*, and *supervisor mum to own next-level supervisor*. On a 0-10 rating scale, with 0 reflecting *does not foster* mum environment, and 10 reflecting *highly fosters* mum environment, the average participant scored mean for the top 50% most important supervisor factors is 8.097, reflecting the supervisor factors highly foster a mum environment.

Table 10 reflects the top 50% most influential subordinate factors, identified by participants, which foster a mum environment. These top subordinate factors include *fearing consequences or retribution, insecurity and lacking confidence, apathy and disengagement, politics avoidance, and passive by nature*. On a 0-10 rating scale, with 0 reflecting *does not foster* mum environment, and 10 reflecting *highly fosters* mum environment, the average participant scored mean for the top 50% most important subordinate factors is 7.242, reflecting the subordinate factors foster a mum environment, but not as highly as those of supervisor factors.

Research Question 1 Data Triangulation. The first research question asks, “What are the factors that foster to a mum workplace?” Three questions in the second round survey, sourced from responses to open-ended questions from the first round, address this research question, including: *Factors of the mum effect, supervisor factors which foster a mum environment, and subordinate factors that foster a mum environment*. Participants in the second round ranked the most frequently cited factors of each category on a 0-10 rating scale, including 10 *factors of the mum effect*, 12 *supervisor factors*, and 10 *subordinate factors*. The top 50% mean scores were identified as the most important factors of each category.

In response to the second round survey, Question 2, participants identified the most important factors of the hierarchical mum effect as *fear of perceived consequences* ($m = 8.625$), *perceived closed door culture or tone* ($m = 8.208$), *supervisor ego non-conducive to feedback* ($m = 8.167$), *lack of subordinate/supervisor trust* ($m = 7.957$), and *aggressive supervisor behaviors/demeanor* ($m = 7.917$). In response to the second round survey, Question 3, participants identified the most important supervisor factors that foster a mum environment as *retaliatory* ($m = 8.583$), *supervisor non-responsive to employee communication* ($m = 8.250$),

aggressive behavior/demeanor ($m = 8.167$), *pre-disposed position taking* ($m = 8.125$), *cut-throat career advancer* ($m = 7.833$), and *supervisor mum to own next-level supervisor* ($m = 7.625$).

Finally, in response to the second round survey, Question 4, participants identified the most important subordinate factors that foster a mum environment as *fear of consequences/retribution* ($m = 8.917$), *insecure or lacking confidence* ($m = 7.625$), *apathetic or disengaged* ($m = 7.125$), *politics avoidance* ($m = 6.292$), and *passive by nature* ($m = 6.250$). Subordinate *fear of consequences* and supervisor *retaliatory behavior* represented the highest levels of agreement by participants in this study across all categories.

Research Question 2. The second research question asks, “How aware are managers and employees of the hierarchical mum effect?” Table 8 represents the general factors of the hierarchical mum effect identified by the study participants. This table represents a *very high disparity* (+) for its mean score for the top 50% most important factors identified by the study participants, and upper-management’s awareness of the factors. This table also exhibits two *very high disparities* (+), demonstrating upper-management’s lack of awareness of the important factors of *supervisors’ egos non-conducive to feedback* and *lack of subordinate-supervisor trust* on fostering a mum environment.

Table 9 further depicts factors of the hierarchical mum effect through the factors of supervisors which foster a mum environment. This table shows two factors which demonstrate a *very high disparity* (+) between the importance of the effect on fostering a mum environment and leadership’s awareness of those effects. These two factors include supervisors that are *retaliatory* and *supervisors non-responsive to subordinate general communication*. As identified in Table 10, subordinate *fear of consequences or retribution* is identified as the study’s highest

degree of disparity among all factor effects on fostering a mum-environment and upper-management's awareness of those effects.

Although Table 11 demonstrates highly influential risks to workplace teams performing in a mum-environment, no *very high disparities* (+) were identified between those risks and upper-management's awareness of those risks. Similarly, Table 12 does not demonstrate any *very high disparities* (+) between barriers to communication and upper-management's awareness of the barriers to communication. However, Table 12 does reflect one instance of *very low disparity* (*) between the participant-identified highly-important barrier to communication of *tight deadlines* and upper-management's awareness of that barrier.

Research Question 2 Data Triangulation. The second research question asks, "How aware are managers and employees of the hierarchical mum effect?" Five questions in the second round survey, sourced from responses to open-ended questions from the first round, address this research question, including: *Upper-management awareness of factors of the mum effect, upper-management awareness of supervisor factors which foster a mum environment, upper-management awareness of subordinate factors that foster a mum environment, risks to workplace teams in a mum environment, and barriers to subordinate-supervisor communication.* Participants in the second round ranked the most frequently cited factors of each category on a 0-10 rating scale. The top 50% mean scores were identified as the most important factors of each category. The disparity (d) between the mean score of the factor and the mean score of management's awareness of the factor is used to demonstrate the level of awareness proportionate to the importance of each factor in fostering a mum environment. Disparities ≥ 1 point above the study average disparity ($d = 2.827$) were identified as *very high disparities* (+). Disparities ≥ 1 point below the study average were identified as *very low disparities* (-).

In response to the second round survey, Question 2, participants identified the most important factors of the hierarchical mum effect as *fear of perceived consequences* ($m = 8.625$), *perceived closed door culture or tone* ($m = 8.208$), *supervisor ego non-conducive to feedback* ($m = 8.167$), *lack of subordinate/supervisor trust* ($m = 7.957$), and *aggressive supervisor behaviors/demeanor* ($m = 7.917$). In response to the second round survey, Question 3, participants identified the most important supervisor factors that foster a mum environment as *retaliatory* ($m = 8.583$), *supervisor non-responsive to employee communication* ($m = 8.250$), *aggressive behavior/demeanor* ($m = 8.167$), *pre-disposed position taking* ($m = 8.125$), *cut-throat career advancer* ($m = 7.833$), and *supervisor mum to own next-level supervisor* ($m = 7.625$). Finally, in response to the second round survey, Question 4, participants identified the most important subordinate factors that foster a mum environment as *fear of consequences/retribution* ($m = 8.917$), *insecure or lacking confidence* ($m = 7.625$), *apathetic or disengaged* ($m = 7.125$), *politics avoidance* ($m = 6.292$), and *passive by nature* ($m = 6.250$). Subordinate fear of consequences and supervisor retaliatory behavior represented the highest levels of agreement by participants in this study across all categories.

Research Question 3. The third research question asks, “What influence does the hierarchical mum effect have on team communication and team performance?” In the first round survey, participants were asked to identify the risks to workplace teams working in a mum environment, the barriers to subordinate-supervisor communication, and the benefits to workplace teams working in a mum-environment. In the second round survey, participants were asked to rank the most frequently identified factors from the first round, using a 0-10 rating scale. Only the most important factors, identified as the top 50% mean scores for each category of factors in the second round, are reviewed for further discussion.

Table 11 reflects the risks to workplace teams working in a mum-environment as identified by the study participants. The top 50% most important risks to workplace teams working in a mum-environment include *lack of trust, lack of creativity or group-think, poor morale, not identifying problems before becoming serious, and underperformance*. On a 0-10 rating scale, with 0 reflecting *no influence*, and 10 reflecting *highly influential*, the average participant scored mean for the top 50% most important risks to workplace teams is 8.083, reflecting the risks are highly influential on team performance.

Table 12 reflects the barriers to subordinate-supervisor communication as identified by study participants. The top 50% most important barriers to subordinate-supervisor communication include *employee fear of being labeled a negative employee, supervisor failure to follow-through with commitments, expectations not being made clear, and time restraints due to tight deadlines*. On a 0-10 rating scale, with 0 reflecting *no restriction* and 10 reflecting *highly restrictive*, the average participant scored mean for the top 50% most important barriers to subordinate-supervisor communication is 7.302, reflecting the barriers are highly influential on subordinate-supervisor communication.

Table 13 reflects the benefits to workplace teams operating in a mum-environment. Only four benefits were identified by participants in the first round, and all were scored in the second round, and reflected in Table 13. The benefits to workplace teams operating in a mum-environment include *working toward a single yet narrow goal, reduction in frequent changes, perceived employee job security, and reduction of team conflict*. On a 0-10 rating scale, with 0 reflecting *no benefit* and 10 reflecting *highly beneficial*, the average participant scored mean for all benefits to workplace teams operating in a mum-environment is 4.709, reflecting the benefits to workplace teams operating in a mum-environment are low.

Appendix O presents the correlation between supervisor factors which foster a mum environment and the risks to workplace teams, as well as subordinate factors which foster a mum environment and the risks to workplace teams. Through Spearman's rho correlation analysis, statistically significant correlation is found between supervisor factors and the risks to workplace teams. Where r_s = Spearman's Rho, and p = statistical criteria, the strongest correlation was found between (Q3b) Supervisor aggressive behaviors and (Q7c) Teams not identifying problems before becoming serious $r_s = .801, p < .01$. Additionally, the second highest correlation was found between (Q3l) Supervisor as a cut-throat career-advancer, and (Q7c) teams not identifying problems before becoming serious $r_s = .798, p < .01$. Although Bisel et al. (2012) identify subordinate loyalty to the supervisor as a motivation to remain mum, interestingly the correlation of (Q5h) subordinate loyalty to supervisors against risks to workplace teams was lower than other participant identified factors, with the highest correlation only of (Q7d) the lack of creativity $r_s = .493, p < .05$. Also interestingly, the barrier to team communication of (Q9a) time-restraints and tight deadlines was least correlated to the majority of participant identified supervisor and subordinate factors, with no statistically significant correlations, although each were identified among the top 50% most important factors associated with the mum effect.

Appendix O also presents the correlation between supervisor factors which foster a mum environment and the barriers to team communication, as well as supervisor factors which foster a mum environment and the barriers to team communication. The supervisor factors of (Q3b) Aggressive behaviors was most significantly correlated to (Q9g) Supervisor failure to follow through with commitments $r_s = .666, p < .01$. The supervisor factor of (Q3j) Mum to own next-level manager was also highly correlated to (Q9b) The fear of being labeled a negative employee $r_s = .696, p < .01$. The barrier to communication of the fear of being labeled a negative employee

was found to be the most statistically significant correlated barrier to communication to the greatest number of supervisor factors. Likewise, (Q9b) The fear of being labeled a negative employee was most significantly correlated to the subordinate factor of (Q5g) politics avoidance $r_s = .623, p < .01$.

Research Question 3 Data Triangulation. The third research question asks, “What influence does the hierarchical mum effect have on team communication and team performance?” Two questions in the second round survey, sourced from responses to open-ended questions from the first round, address this research question, including: *Risks to workplace teams in a mum environment* and *barriers to subordinate-supervisor communication*.

In response to the second round survey, Question 8, participants identified the most important risks to workplace teams performing in a mum environment as *lack of trust* ($m = 8.292$), *lack of creativity or group think* ($m = 8.250$), *poor morale* ($m = 8.083$), *not identifying problems before becoming serious* ($m = 7.917$), and *underperformance* ($m = 7.875$). In response to the second round survey, Question 10, participants identified barriers to subordinate-supervisor trust as *fear of being labeled a negative employee* ($m = 7.542$), *supervisor failure to follow through with commitments* ($m = 7.458$), *expectations not clearly communicated* ($m = 7.417$), and *time-restraints or tight deadlines* ($m = 6.792$).

Research Question 4. The fourth research question asks, “What are the implications of the hierarchical mum effect to leadership theory?” In the first round survey, participants were asked to rank the likelihood of defined leadership styles to foster a mum or open-communication environment. Participants were also asked to choose the leadership style, based on their

experience, which is most commonly cultivated in organizations, as well as the leadership style which would most invite creativity.

In the first round survey, participants were asked “Based on your experience with your target organization, please rank each of the following leadership styles on their likelihood to foster either a mum workplace environment or open communication. For example, -5 Strongly cultivates a mum environment, +5 Strongly cultivates open communication, and 0 for no effect (Use N/A if you have no opinion at all.)” The two highest participant-rated leadership styles conducive of open communication are *transformational* and *participative leadership*. The two lowest participant-rated leadership styles, most likely to foster a mum-environment, are *transactional* and *intellectual leadership* (see Table 3). Following this question, participants were asked “how prevalent do you find the presence of the *mum effect* at these three levels of your target organization” on a 0-100% rating scale, at 10% intervals. Participants were also asked, “from your experience with other organizations, do you feel your responses to the previous question are *lower than (-5), average (0), or higher than (+5)* other organizations?” The participant responses are reflected in Table 15. Participants generally found the hierarchical mum effect to exist within middle management and at only a slightly higher than average rate to most organizations.

Table 14		
<i>Prevalence of mum effect found at levels of management</i>		
Level of Management	Mean (% of time mum effect occurs)	Compared to Most (-5 less than, +5 more than)
Upper-management (C-Suite)	55.52%	0.96
Middle Management (Area)	58.97%	0.86
Line Manager	49.66%	0.5

Table 6 reflects respondents' identification of the leadership style most frequently cultivated in organizations. In response to the first round question, "based on your experience with your target organization, what style of leadership is most commonly cultivated in organizations" the predominant majority of respondents, 48.3%, indicate the most commonly cultivated leadership style in organizations is *transactional*. Conversely, participants identify the leadership styles most likely to cultivate creativity in subordinates were *participative* with 44.83% of respondents, and *transformational* with 27.59% of respondents (see Table 7).

Research Question 4 Data Triangulation. The fourth research question asks, "What are the implications of the hierarchical mum effect to leadership theory?" A total of four questions were asked of study participants to address this research question. In the first round, question #11, participants were asked to rank nine pre-defined leadership styles on a -5 (fosters mum environment) to +5 (fosters open communication) Likert scale (0 = no effect). Participants were asked in the first round, question #16, to identify the leadership style most likely to foster a mum environment, and in question #17 to identify the leadership style most likely to foster creativity in subordinates. In the second round, participants were asked to rank the benefits of workplace teams performing in a mum environment on a 0-10 rating scale (0 = no benefit, 10 = highly beneficial).

In response to the first round survey, Question #11, participants identified the two leadership styles most likely to foster a mum environment as transactional ($m = -1.11$) and intellectual ($m = -0.14$). The two leadership styles identified by study participants to most likely foster open communication were transformational ($m = 3.71$) and participative ($m = 2.76$). Participants identified, in Question #16, transactional leadership as the most commonly cultivated leadership style in organizations (48.28% of respondents), whereas participants

identified in Question #17 the leadership style most likely to foster creativity in subordinates as participative (44.83% of respondents). Finally, participants in the second round questionnaire, Question #12, only ranked one potential benefit, to workplace teams performing in a mum environment, above midpoint, which was *working toward a single narrow goal* ($m = 5.28$).

Summary

Chapter 4 presented the results of this qualitative modified-Delphi study which served the purpose of identifying the factors of the hierarchical mum effect, supervisor factors which cultivate a mum environment, subordinate factors which foster a mum environment, risks to workplace teams working in a mum-environment, and the barriers to subordinate-supervisor communication. This study also served to identify organizational upper-management awareness of the corresponding factors of the hierarchical mum effect. Participants in this study were human resources and management professionals with a minimum of five years of work experience and two years of management experience. All participants were sourced from professional association groups found online via LinkedIn, and all participants are employed and residing in the United States. The goals of the first round survey were to rank leadership theories conducive to open communication, theories that foster a mum-environment, and to collect qualitative data addressing the factors which foster a mum-environment. The qualitative data collected resulted in 102 line-items ranked by the participants in the second round survey via a rating scale.

The results indicated agreement among the participants of factors identified in the first round found to cultivate a mum environment across all five categories of inquiry. Participants were also in strong agreement that the benefits of working in a mum-environment were low.

Through review of upper-management's awareness of the factors in each category, disparities existed for every factor. Five factors were identified as *very high disparities* (+) with significant influences on the hierarchical mum effect. The discussions of the theoretical triangulation, limitations, conclusions, and recommendations for further research of the hierarchical mum effect are presented in Chapter 5.

Chapter 5

Conclusions and Recommendations

The purpose of this qualitative modified-Delphi study was to identify the factors conducive of a mum environment and organizational upper-management's awareness of those factors. Chapter 1 included a detailed review of the Delphi model, the purpose of this study, the problem to be researched, the significance of that problem, and the limitations as foreseen prior to data collection. Chapter 2 contained a review of the related literature from past and present researchers of the mum effect, hierarchical mum effect, and plasticity theory. Chapter 3 included a detailed description of the methodology employed in this study and its appropriateness of design.

Chapter 4 presented the data collected from the modified-Delphi panel of informed participants. This panel established agreement on 51 factors which are conducive of a mum-workplace environment, upon which participants ranked a total of 102 line items, identifying both the effect the factor has on fostering a mum environment as well as upper-management's awareness of the factor. Chapter 5 will present the summarized findings from Chapter 4 and provide recommendations for future research. Chapter 5 includes an overview of the study, interpretation of findings, limitations, significance of the findings for organizational leaders, and suggestions for future research.

Overview of the Study

Many organizations adapt to change to maintain a competitive advantage. To accomplish a learning environment, organizations increasingly rely on members with diverse and unique knowledge, skills, and perspectives (Lovelace, Shapiro & Weingart, 2001). Šebestová and

Rylková, Argyris (2008), and Senge (2006), suggest leaders of organizations should encourage subordinates to communicate alternative ideas, help the organization grow in its diverse knowledge, and help members own the decision-making process. Alternatively, where innovation is not an emphasis or even faces regular challenge, subordinates choose to side with popular opinion, norms, and avoid falling into disfavor with supervisors (Payne, 2007). The hierarchical mum effect exists within organizations when subordinates are unwilling to communicate unpleasant, negative, or contradictory information to a supervisor (Bisel, Messersmith, & Kelley, 2012). This phenomenon is represented by subordinate fear of retribution, fear of association with the bad message, or fear of disrupting their association with the supervisor (Ploeger, Kelley, & Bisel, 2011).

Relevant scholarship addresses the existence of the hierarchical mum effect and mum environments between individuals and within organizations (Bisel, Kelley, Ploeger & Messersmith, 2011; Bisel et al. 2012; Ploeger et al., 2011; Riley, 1993; Rosen & Tesser, 1972; Tesser & Rosen, 1972; Thomas, Zolin & Hartman, 2009; Wayne & Kacmar, 1991; Wesolowski, & Mossholder, 1997; Yariv, 2006). Yet, despite literature addressing the hierarchical mum effect and the consequences on organizational learning, there is limited research addressing organizational leadership awareness of the phenomenon, why the hierarchical mum effect persists in organizations, supervisor and subordinate factors that create a mum-environment, and what impact this effect may have on team performance.

The objective of this modified-Delphi model study was to advance existing literature of the hierarchical mum effect to increase organizational leadership awareness of the factors which foster a mum working environment. A panel of informed participants from the fields of human resources and management contributed to this study to establish agreement on the factors most

conducive of a mum environment and to establish the likelihood of organizational leadership's awareness of those conditions. Taken with the insight from the second round survey data, the study participants also identify in the first round of the study the leadership theories most likely to foster organizational learning and open communication.

Interpretation of Findings

In the first round survey participants responded to seven open-ended questions and five Likert scale questions. The objective of the first round Likert questions were to rank the defined leadership styles for their likelihood to foster open, or mum, workplace environments. The focus of the remaining open-ended questions was to allow participants to share their own perspectives of factors which foster a mum environment. The most frequently cited factors from the first round were ranked and prioritized in the second round through a 0-10 rating scale.

The second round survey questions ranked the most frequently cited factors, from the first round open-ended questions, in five separate categories: Factors of the hierarchical mum effect, supervisor factors that foster a mum environment, subordinate factors that foster a mum environment, risks to workplace teams in a mum environment, and barriers to subordinate-supervisor communication. These five categories address the guiding research questions of this study. Theoretical triangulation of study data is established through a comparison of results to existing literature regarding the mum effect is enhanced by the data triangulation, using Spearman's Rho correlation analysis, discussed in Chapter 4.

RQ1 Theoretical Triangulation. Participant responses to the second round survey Questions #2, #4, and #6 address RQ1, of which many findings do resonate to existing literature. Participants reached high levels of agreement on the key factors of three factors derived from

Questions #2, #4, and #6, exploring the factors of the hierarchical mum effect, supervisor factors which foster a mum environment, and subordinate factors that foster a mum environment.

Factors of the Hierarchical Mum Effect. The highest participant rated factor of the hierarchical mum effect, *fear of perceived consequences* ($m = 8.625$) resonates with Bisel et al.'s (2012) proposition #3 "Supervisors are not motivated by the context of the command structure to protect their subordinates' public self-images when communicating with subordinates," and proposition #7 that states "subordinates tend to use silence or equivocation when they perceive disagreement with their supervisors to be threatening to their supervisor['s public self-image]" (p. 138). The *fear of perceived consequences* also ties closely to Tesser and Rosen's (1972) findings that communicators of bad news fear association with the news itself by the news recipient. These fears may be justified, as Marler (2012) contends, in that individuals with divergent information may stand out when organizational norms conflict.

The second highest participant rated factor of the hierarchical mum effect is the *perceived closed door culture or tone* ($m = 8.208$). This finding is at the crux of Yariv's (2006) disagreement with Weening et al.'s (2001) position that close relationships may help mitigate the influence of the hierarchical mum effect. Weening's position is that a strengthened subordinate-supervisor relationship should mitigate subordinate fears of transmitting bad news. However, Yariv discussed communicators' unwillingness to provide negative feedback to recipients both before, and after, soft negative feedback coaching sessions. Yariv identified, despite effective coaching techniques to provide negative information, bad news communicators continue to prefer to remain silent, or mum, over the secondary options of directly communicating negative news, or tertiary option of providing negative information in writing. Yariv's position leaves room for Bisel et al.'s proposition #9 which states "anonymous feedback channels (when used

frequently and heedfully by top-level decision makers) moderate the association between structural and functional distance in supervisor-subordinate relationships and organizational learning outcomes” (p. 138). However, this introduces Illinois University (2009) position that workers opt to remain mum, despite anonymous or confidential communication channels such as whistleblowing hotlines, due to “doubt that management would act or fears of retaliation, including losing their jobs” (p.1). This in turn seems to closely tie the perception of a *closed door culture* back to the *fear of perceived consequences*.

The third highest participant rated mum factor is *supervisor ego non-conducive to feedback* ($m = 8.167$). This seems to be tied to Bisel et al.’s proposition #6 which states, “Supervisors’ public images are more threatened by negative feedback from their subordinates than subordinates’ public images are threatened by negative feedback from their supervisors” (p. 138). When considered together with the study participants’ identification of *aggressive subordinate behaviors* (7.917), subordinate tension and fear of speaking-up significantly increases (Harvey, 1995).

The fourth highest participant rated mum factor is the *lack of subordinate-supervisor trust* ($m = 7.957$). Bisel et al.’s (2011) study of the moral mum effect identifies both subordinate and supervisors were found to respond to ethical requests with ambiguity, and since “offending the boss is to risk job security,” subordinates instead opt to remain mum (p. 154). Ploeger et al. (2011) study found that subordinates were more indirect in communicating bad news than supervisors, and that the least direct communication came from “females, younger workers, and those with the least work experience” (p. 465). Combine the Bisel et al. and Ploeger et al. findings with Yariv’s study which found subordinates prefer to remain mum when in possession

of bad news, regardless of relationship status with the supervisor, *subordinate-supervisor trust* appears inherently strained.

Supervisor Factors Fostering a Mum Environment. The highest participant rated supervisor factor which fosters a mum environment is *retaliatory* ($m = 8.583$). This factor is linked to Bisel et al.'s proposition #9 which states “anonymous feedback channels (when used frequently and heedfully by top-level decision makers) moderate the association between structural and functional distance in supervisor-subordinate relationships and organizational learning outcomes” (p. 138). However, Illinois University (2009) states that workers opt to remain mum, despite anonymous or confidential communication channels such as whistleblowing hotlines, due to “doubt that management would act or fears of retaliation, including losing their jobs” (p.1). According to a study by the Ethics Resource Center (2012), over one fifth (22%) of all reports of organizational misconduct to management result in retaliation against the reporter. Similar to *retaliatory*, supervisor *aggressive behavior and demeanor* ($m = 8.167$) and *cut-throat career advancer* ($m = 7.833$) rank highly in this study as well as existing literature demonstrates “boss's negative interpersonal behaviors directly predicted employee's work-related tension and fear of speaking-up about work-related issues” (Harvey, 1995, p. 8).

The next supervisor factor fostering a mum environment is *supervisor non-responsive to employee communication* ($m = 8.250$). This appears to correlate with Bisel et al.' (2012) identification of organizational norms as barriers which suppress dissent with direct consequences to organizational innovation. These norms are addressed by two of Bisel et al.'s, propositions:

Proposition 2: Supervisors are motivated by the context of the command structure to protect their own public self-image when communicating with subordinates.

Proposition 3: Supervisors are not motivated by the context of the command structure to protect their subordinates' public self-images when communicating with subordinates.

These propositions suggest organizational norms which may condition supervisors to protect their own public self-image when communicating with subordinates, withhold communication if such communication may be harmful to the supervisor's public self-image, and that there is no motivation to communicate with subordinates if communication only benefits the subordinate's public self-image. Consequently, subordinates may perceive supervisors to be non-responsive to employee communication. These same propositions appear to govern the fourth highest participant rated supervisor factor fostering a mum environment of *pre-disposed position taking* ($m = 8.125$) if, by doing so, the supervisors public self-image is maintained.

The sixth highest participant-rated supervisor factor fostering a mum environment is *supervisor mum to own next-level supervisor* ($m = 7.625$). This is an interesting factor insofar as it embodies all of the existing literature of the hierarchical mum effect in the existence of the mum-effect at any level of the organization. However, sparse literature exists regarding the effect on subordinates of a supervisor mum to upper-management.

Subordinate Factors Fostering a Mum Environment. The highest participant rated subordinate factor fostering a mum environment, *fear of consequences or retribution* ($m = 8.917$) resonates with Bisel et al.' (2012) proposition #3 "Supervisors are not motivated by the context of the command structure to protect their subordinates' public self-images when communicating with subordinates," and proposition #7 that states "subordinates tend to use

silence or equivocation when they perceive disagreement with their supervisors to be threatening to their supervisor[‘s public self-image]” (p. 138). The *fear of perceived consequences* also ties closely to Tesser and Rosen’s (1972) findings that communicators of bad news fear being associated with the news by the news recipient. These fears may be justified, as Marler (2012) contends, in that individuals with divergent information may stand out when organizational norms conflict.

The next highest participant rated subordinate factor fostering a mum environment is *insecurity or lack of confidence* ($m = 7.625$). This very closely ties to Bisel et al.’s proposition #1 which states, “Workers, who have an employment agreement (i.e., perceive a psychological contract) with an organization, perceive directives from an authorized organizational representative (e.g., a supervisor) to be less face threatening than individuals who do not have an agreement of employment with the directive giver’s organization” (p. 138). Insecurity is also evident in Ploeger et al.’s (2011) finding in the moral mum effect that, “younger workers and those with the least work experience are most indirect in denying an unethical request” (p. 465).

Bateman and Snell (2007) furthered the examination of the advancement of employee engagement in organizational processes by identifying the social interactions and psychology of subordinate interaction and work productivity increase when subordinates are afforded the opportunity to help shape organizations decisions. Subsequently, Bateman and Snell’s findings address this study’s finding that *apathetic and disengaged employees* ($m = 7.125$) are likely to remain mum. Bateman and Snell found that employees not encouraged to contribute to decisions take less ownership of the decisions and consequently become less vested in the work-team’s success.

RQ2 Theoretical Triangulation. Participant responses to the second round survey Questions #3, #5, #7, #9, and #11 address RQ2, of which many findings do resonate to existing literature. Participants reached high levels of agreement on the level of upper-management awareness of key factors of three factors derived from Questions #3, #5, #7, #9, and #11, exploring the factors of the hierarchical mum effect, supervisor factors which foster a mum environment, subordinate factors that foster a mum environment, risks to workplace teams in a mum environment, and barriers to subordinate-supervisor communication.

Factors of the Hierarchical Mum Effect. Upper-management disparities were ranked highly for the factors of the hierarchical mum effect, with two factors ranked as *very high disparity (+)*. The factors identified as most important by the participants of this study reflect the following disparities: *Fear of Perceived Consequences* ($d = 3.292$); *Perceived Closed Door Culture/Tone* ($d = 3.750$); *Supervisor Ego Non-Conducive to Feedback* ($d = 4.292+$); *Lack of Subordinate-Supervisor Trust* ($d = 4.290+$); and *Aggressive Supervisor Behaviors/Demeanor* ($d = 3.459$).

Subordinate fear of consequences resonates with Bisel et al.'s (2012) identification of the subordinate perspective that offending the subordinate-supervisor relationship was permanently harmful to continued employment, and the sub sequential recommendation for alternative anonymous communication channels. For both of the factors of *supervisor ego non-conducive to feedback* and *aggressive supervisor behaviors*, the anonymous communication channels are yet even more valuable to overcome the disparity of the problem and upper-management's awareness of the problem. The subordinate perception of a closed-door culture and the lack of subordinate-supervisor trust both relate closely to Marler and Weening's position that a mum

workplace environment may be mitigated by improved subordinate-supervisor relationships and training to provide effective communication skills.

Supervisor Factors Fostering a Mum Environment. Upper-management disparities were ranked highly for supervisor factors fostering a mum environment, with two factors ranked as *very high disparity* (+). The supervisor factors identified as most important by the participants of this study reflect the following disparities: *Retaliatory* ($d = 4.041+$); *Supervisor Non-Responsive to Employee Communication* ($d = 3.833+$); *Aggressive Behaviors/Demeanor* ($d = 3.125$); *Pre-Disposed Position Taking* ($d = 3.299$); *Cut-Throat Career Advancer* ($d = 2.791$); and *Supervisor Mum to Own Next-Level Supervisor* ($d = 3.750$).

Participant identification of supervisor factors including *retaliatory, aggressive, and cut-throat career advancer* with high disparity of upper-management awareness all further support Bisel et al.'s position for the importance of anonymous feedback systems to improve information sharing to advance upper-management awareness. However, these same factors support Callegari's (2012) concerns that retaliation occurs upon those that use anonymous feedback channels, which perpetuates the cycle of fear and lack of information sharing underlying the hierarchical mum effect. The *very high disparity* (+) of upper-management's awareness of *supervisor non-responsiveness to employee communication* may diminish upper-management's recognition that anonymous feedback channels may be of importance.

Subordinate Factors Fostering a Mum Environment. A wide range of upper-management disparities are reflected within the five most important subordinate factors fostering a mum environment. Within the top five most important factors, one disparity is just above *very low disparity* (*) rating, whereas another disparity is rated highest in the study. The subordinate

factors identified as most important by the participants of this study reflect the following disparities: *Fear of Consequences or Retribution* ($d = 4.625+$); *Insecure or Lacking Confidence* ($d = 3.458$); *Apathetic or Disengaged* ($d = 3.210$); *Politics Avoidance* ($d = 2.500$); and *Passive Nature* ($d = 1.917$).

Existing research into the hierarchical mum effect continue to point to the effects of a mum environment, themselves, limit upper-management awareness. Subordinate fear of consequences specifically result in subordinates opting not to share negative information with their supervisors. (Bisel et al., 2011; Bisel et al. 2012; Ploeger et al., 2011; Riley, 1993; Rosen & Tesser, 1972; Tesser & Rosen, 1972; Thomas, Zolin & Hartman, 2009; Wayne & Kacmar, 1991 Wesolowski, & Mossholder, 1997; Yariv, 2006). The study's highest disparity for *fear of consequences* ($d = 4.625+$), accurately reflects existing knowledge that upper-management lacks adequate awareness of the subordinate concerns which prevent knowledge sharing. These fears also limit the use of anonymous feedback channels as subordinates feel insecurity ($d = 3.458$) in the true confidentiality of the channel and that retribution will not be sought against them, and thus then choosing to remain mum (Callegari, 2012).

Risks to Workplace Teams in a Mum Environment. Upper-management disparities reflect a wide range within the five most important subordinate factors fostering a mum environment. The subordinate factors identified as most important by the participants of this study reflect the following disparities: *Lack of Trust* ($d = 3.459$); *Lack of Creativity* ($d = 3.708$); *Poor Morale* ($d = 2.833$); *Not Identifying Problems Before Becoming Serious* ($d = 3.000$); and *Under Performance* ($d = 2.500$). Although this category resulted in participants ranking the above factors as very high influences on workplace teams, so too were upper-management's

awareness proportionately high, thus resulting in disparity ratings that were lower than those found for either supervisor factors or subordinate factors.

The reluctance of subordinates to share bad news with supervisors is deeply rooted to subordinate fear of retribution, maintaining healthy subordinate-supervisor association, and the protection of public self-image (Bisel et al., 2012). Learmonth and Humphreys (2011) point out that in addition to withholding valuable information to management, subordinates that choose to remain mum develop dissatisfying and less meaningful identities. This resonates with the study participants identification of *reduced team trust, lack of creativity, poor morale, and under performance* as key risks to workplace teams. Yet, as the disparities indicate, upper-management is also not adequately identifying these risks. Payne (2007) suggests these risks may persist in organizations where innovation is not an emphasis or even faces regular challenge, and thus subordinates choose to side with popular opinion, norms, and avoid falling into disfavor with supervisors.

Barriers to Subordinate-Supervisor Communication. Upper-management disparities reflect a wide range within the four most important barriers to subordinate-supervisor communication. Within the top four most important factors, one has a *very low disparity* (*) rating, whereas the remaining ratings are all above the study average. The barriers to subordinate-supervisor communication identified as most important by the participants of this study reflect the following disparities: *Fear of Being Labeled a Negative Employee* ($d = 3.125$); *Supervisor Failure to Follow-Through with Commitments* ($d = 3.250$); *Expectations Not Clearly Communicated* ($d = 3.209$); and *Time Restraints and Tight Deadlines* ($d = 1.542$ -).

Richards (2004) identifies emotional commitment as relating to others in the moment, demonstrating how leaders conduct themselves on a day-to-day, and moment to moment, basis. Leaders accomplished this through self-awareness and emotionally engaging with others. Upper-management may not recognize the impact that failing to follow-through with commitments have on subordinate-supervisor communication as evidence by the disparity in this research study. According to Covey (1991), commitments may be formalized by leaders through setting clear performance agreements, or expectations, with subordinates in routine one-on-one communications. While management may believe expectations have been made clear, something may have been lost in communication as, according to this study's results, a disparity exists between the communication of expectations and upper-managements awareness of the problem. Subordinates, in turn, may be reluctant to raise concern regarding missed commitments or unclear expectations to supervisors of fear of being labeled a negative employee as is evidence by the panel's identification.

Lastly, participants identify the subordinate factor to avoid politics. According to Gilmore, Ferris Dulebohn, and Harrell-Cook (1996), subordinates relate office politics to "hidden agendas, unsanctioned behaviors... ambiguities for many, and the inherent win-lose" situations (p. 482-483).

RQ3 Theoretical Triangulation. Participant responses to the second round survey Questions #8 and #10 address RQ3, of which many findings do resonate to existing literature. Participants reached high levels of agreement on the most important risks to workplace teams performing in a mum environment and the barriers to subordinate-supervisor communication.

Risks to Workplace Teams in a Mum Environment. The top three most important risks to workplace teams, as identified by the study participants, include lack of trust, lack of creativity, and poor morale. Each of these items address important underlying motivators and needs Maslow addresses, according to Schmutte (2002), in the Hierarchy of Needs including the second tier of “safety needs,” or stability and freedom from fear, the third tier of “love and belongingness” of a work group, and the fourth tier of “esteem needs,” or self-respect, respect of others, and independence (p. 1501). These needs, and the top risks of workplace teams in a mum environment, also resonate with Bateman and Snell (2007) and Drucker’s (1997) position that work satisfaction increases through valuing knowledge employees through the freedom to share information necessary to the organization in subordinate-subordinate and subordinate-supervisor communication models. When these needs are not met, Bateman and Snell contend that workplace productivity suffers. Burns (2005) emphasizes the opportunity for organizational leadership to improve efficiencies and effectiveness through follower involvement, and extended authority, in decision-making.

Barriers to Subordinate-Supervisor Communication. Although Chyung (2005), Locke (1982) and Taylor (1911) advocate the importance of subordinate-supervisor communication, Bisel et al.’s (2011) identification of subordinate fear of communicating bad news resonates most loudly by study participants as the fear of being labeled a negative employee is identified as the top barrier to subordinate-supervisor communication. Richards (2004) addresses leadership failure to follow-through with commitments as detrimental to building trust with subordinates. Failure to set clear expectations of subordinate-supervisor communication may result in further challenges in communication when time is limited due to tight deadlines (Covey, 1991).

RQ4 Theoretical Triangulation. The leadership style identified by study participants as the most commonly cultivated style in organizations was also identified as the most likely to foster a mum workplace environment. Transactional leadership style, according to Morris et al. (2007) is effective at reducing resistance to decisions made by management with the enticement of reward for work performed toward a specified task. However, Burns (2008) and Yukl (2013) address the problem that transactional leadership does not garner subordinate ownership of decisions. Participants also identified the intellectual leader as one that cultivates a mum environment. This style of leader does not assume personal risk and influences followers to follow the leader's direction.

Alternatively, the leadership styles participants identified as most likely to foster open-communication and allow for subordinate creativity include transformational and participative leadership. Yukl (2013) explains that the transformational leader cultivates organizational values such as integrity, humility, empowerment, and altruism, and thus develop trust in subordinate-supervisor communication. Similarly, participative leaders invite subordinates to have input on final decisions made in the organization (Yukl, 2006).

Potential benefits study participants identified of workplace teams performing in a mum environment included *working toward a single narrow goal*, *employee perceived job security*, *reduction in frequent changes*, and *reduction in team conflict*. However, only one of these four potential benefits was rated above midpoint, *working toward a single narrow goal*, with a mean of 5.28. The potential benefits identified by the study participants resonate with transactional and intellectual leadership styles in which work is accomplished while minimizing subordinate feedback (Yukl, 2013).

Limited Ability to Generalize

Generalization is the extension of research findings from a study population to a larger population. Although generalization is not a surety, statistical probabilities are possible when study populations are large. Neil and Rasmussen (2007) and Neuman (2006) argue that 30 or more participants should be anticipated for statistical significance. This study did not originally anticipate a high number of respondents, and therefore was designed as a qualitative study. However, the first round of data collection resulted in 29 participants, and 24 participants completed the second round of data collection. Given (2008) warns, however, that generalizability is measured by a study's sampling procedures. As this study was administered as a qualitative study, and questions in the second round of the Delphi method might result in participant response bias, and thus the generalizability of this study may be limited. Generalization of this study is possible but has limitations. With this caveat in mind, the results of the correlational analysis in Appendix O is very interesting and can be used to augment data triangulation.

Generalization from Correlational Analysis. Appendix O represents evidence of correlation between participant responses identifying supervisor factors of the mum effect and of participant responses which identify the risks to workplace teams in a mum environment. Highest levels of correlation in participant responses are noted in the relationship between supervisor factors fostering a mum environment and the risks to workplace teams in a mum environment.

Correlation was found between supervisor factors which foster a mum environment and the risks to workplace teams (Appendix O). Two supervisor factors (Q3b, Q3i) had statistically

significant correlations to four risks to workplace teams with $p < .01$. An additional three supervisor factors (Q3d, Q3e, Q3l) had statistically significant correlations to three risks to workplace teams with $p < .05$. One risk to workplace teams (Q7d) was significantly statistically correlated to seven supervisor factors, and one additional risk to workplace teams (Q7i) was significantly statistically correlated to six supervisor factors. A greater number of study participants may have yielded opportunities for more advanced statistical analysis.

Additional correlation was found between supervisor factors which foster a mum environment and barriers to team communication. Supervisor factors Q3b and Q3d each reflect correlation to several potential barriers to team communication, as does Q9b correlate to the widest range of supervisor factors. Q9b also correlates to the widest range of subordinate factors.

Key Findings

The results of this study identified key factors of the hierarchical mum effect and upper-managements' corresponding awareness of the factors. These results also directly challenge most commonly cultivated leadership styles in organizations and explore potential remedies of which leadership may consider. These results were accomplished through the administration of a two round qualitative modified-Delphi study. Twenty-five informed participants, representing a minimum of five years of work experience and two years of managerial experience, drawn from the management and human resource fields, identified the most important factors of the hierarchical mum effect and upper-management awareness of the factors. The key findings of this study include:

1. The participant panel included 48.28% from human resources, 27.59% of management, and 24.14% identified as “other” fields of business.
2. The participant panel’s years of expertise in their current fields included 0-10 years at 6.90%, 11-20 years at 44.83%, 21-30 years at 37.93%, and > 30 years at 10.34%.
3. The participant panel’s years of management experience included 0-10 years at 27.58%, 11-20 years at 41.38%, 21-30 years at 24.14%, and > 30 years at 6.90%.
4. In the first round, the NVivo© 10 application identified 51 factors that study participants identified as factors of the hierarchical mum effect, supervisors fostering a mum environment, subordinates fostering a mum environment, risks to workplace teams in a mum environment, and barriers to communication.
5. The 0-10 point scale in the second round identified each factor’s level of importance of fostering a mum environment as well as upper-management’s awareness of the factors. The top 50% of each category of factors were identified as the most important.
6. Disparity, the difference between the importance of the factor and upper-management’s awareness of the factor, was established to identify the greatest risks to fostering a mum environment. The average disparity in this study was 2.827. Five factors in this study were identified as ≥ 1 point above average and were designated as *very high disparity (+)*. *Very high disparity (+)* factors included: *Supervisor Ego Non-Conducive to Feedback, Lack of Subordinate-Supervisor Trust, Retaliatory Supervisor Behavior, Supervisor Non-Responsive to Subordinate Communication, and Subordinate Fear of Consequences.*

7. Participants identified two leadership styles as most likely to foster a mum environment (transactional and intellectual) and two leadership styles most likely to foster open-communication (transformational and participative).
8. Two risks to workplace teams were most correlated to many of both supervisor and subordinate factors, identified by this study, which foster a mum environment. Q7d represents the risk to workplace teams succumbing to groupthink and Q7i represents the risk of lost revenue. These two risks strongly relate to the risk of loss of competitive advantage, identified by prior literature, resulting from the lack of organizational knowledge management (Agha, Alrubaiee & Jamhour, 2012).
9. The fear of being labeled a negative employee is found to correlate most significantly to the supervisor factors of aggressive demeanor and dismissiveness to subordinate communication, as well as the subordinate factors of politics avoidance and apathy.

The findings of this study reflect an association with one of two theoretical frameworks used in this study. The opinions of the study participants largely correspond with the earlier findings of existing studies of the hierarchical mum effect. Subordinate fear of consequences, the perception of closed-door management, and lack of trust were identified both by the study participants and are important factors identified in the hierarchical mum effect. Only one area of the hierarchical mum effect that was previously anticipated was not supported in this study: This study did not find subordinate tendencies to protect the supervisor as an important factor of the hierarchical mum effect as would prior studies suggest.

The second theoretical framework used in this study was plasticity theory. This framework does not appear to be a factor in the establishment of a mum environment.

Subordinates under a mum environment, as the study participants present, appear to be focused

on self-preservation and maintaining positive subordinate-supervisor relations. The study did not uncover evidence of subordinate tendencies to mold their behaviors to mirror those of other subordinates, but rather demonstrate subordinate decision-making which is more individualistic and self-focused in nature. Similarly, this study did not uncover evidence that supervisors mold their behaviors by observing other supervisors or upper-management.

An organization grows through establishing an environment conducive of learning. Many organizations reevaluate their market-share and positioning regularly to maintain a competitive advantage (Agha, Alrubaiee & Jamhour, 2012). This study assists leadership in identifying undesirable subordinate and supervisor factors which may foster a mum environment and, by extension, limit organizational learning.

Limitations

The first limitation of this study is the generalizability of the study sample, which represents the perspectives of a panel of informed management and human resources participants located in the United States sourced from professional association networks online via LinkedIn. This study is generalizable to management and human resources professionals located within the United States and may not be applied to organizations located outside of the United States. Additionally, although not specifically tracked in the demographic data, certain geographic regions within the United States may have been more heavily represented than others, potentially resulting in skewed perspectives unique to heavily represented regions. Although the results of this study have broader reaching implications to organizations than just those located in the United States, the generalizability of the study remains a limitation.

The second limitation of this study was the data collection timeline. Data collection was limited to 45 days. This limitation was placed as a delimitation of participant attrition common to the Delphi model.

The third limitation was the Delphi model and participant attrition. Prior to data collection, participant attrition was planned not to exceed 30% between each round. This attrition was anticipated to occur as participants have outside obligations, lose interest, or other emergencies occur. Actual attrition was relatively low at 17% (5 out of 29 who started round 1). The delimitation of the attrition was to maintain momentum between rounds of the study, maintaining communication with study participants via email updates, and setting reasonable expectations that additional rounds may be necessary. The momentum between rounds also helped study participants maintain a working knowledge of the prior round of data collection which would assist in decision-making in the second round.

The fourth limitation of the study is that participants were asked, in the first round of data collection, to base their decisions on their experience with a target organizations. The target organization which each participant selected may have been more recent, or much older, than other participants. Consequently, this may have influenced the participant's memory associated to the hierarchical mum effect of the target organization. This limitation is mitigated by the second round of data collection in which the participants ranked the qualitative data collected from all of the participants through which degrees of agreement were obtained. Individuals rated the factors identified by the study panel and not just the factors identified by the individual.

The fifth potential limitation of this study is the possibility that participants were not truthful in their responses. As this study explores the topic of insincere communication out of

fear of negative consequences, the study moderator would be remiss to preclude the possibility that the same concerns exist among a panel of informed participants even though anonymity was assured. This potential limitation is reduced as the participant panel identified important factors, and ranked the factors, progressively from the first to the second round, thus mitigating any one participant's bias data.

The sixth limitation to this study is the application of further statistical analysis. With more than 30 respondents, additional statistically significant results would have been likely (Creswell, 2008; Neil & Rasmussen, 2007; Neuman, 2006). Administered as a qualitative study, the 24 respondents in the second round survey allowed for some correlational analysis which produced high correlations. Further statistical analysis with a larger sample and a study specifically designed as quantitative may have resulted in more pronounced and reliable results.

Finally, this study was limited by the fact that an existing questionnaire did not already exist. This resulted in the development of a new survey instrument which may have failed to ask participants the necessary questions to fully capture all aspects of the hierarchical mum effect. This was compensated for, however, through a pilot study in which participants were asked to provide feedback both in answering the study questions, as well as to address the survey instrument itself. Pilot study participant feedback was incorporated prior to the launch of the full panel study.

Conclusions

This qualitative modified Delphi study collected the informed opinions of 24 participants with backgrounds in management and human resources, located in the United States, sourced from professional association networks via LinkedIn. Participants responded to two rounds of

data collection. This study identified the most important factors of the hierarchical mum effect, supervisor factors that foster a mum environment, subordinate factors that foster a mum environment, risks to workplace teams performing in a mum environment, and the barriers to subordinate-supervisor communication (see Appendix E). Of these factors, the top five disparities, identified as *very high disparities (+)*, between the importance of the factor to fostering a mum environment and upper-management's awareness of the factor were identified (see Appendix N).

This study identified the factors most likely to foster a mum environment. Additionally, participants identified the leadership styles most conducive to foster both open communication and a mum environment (Table 3). Leadership may recognize from this study as participants also identify transactional leadership, the leadership style most likely to foster a mum environment, is also most commonly cultivated in organizations. While study participants recognize different leadership styles may be appropriate under different conditions, a workplace seeking sincere and open subordinate-supervisor communication is most likely to succeed under transformational or participative leaders.

This study provides an important contribution to the existing knowledge gap of the hierarchical mum effect addressing Bisel et al. (2012) recommendation for a qualitative study examining the organization socialized expectations which may foster a mum environment. Establishing a culture and mechanisms to improve subordinate-supervisor communication are important elements to mitigating a mum environment. This study demonstrates, however, that organizational culture alone is not the most significant factor. Rather, individual factors of the subordinate and supervisor demonstrate the greatest disparities between fostering a mum environment and upper-management's awareness of the factor. Consequently, the disparity to

workplace teams in a mum environment and upper-management's awareness of those risks is not as great as the disparity between the factors of the individual and upper-management's awareness of those individual factors.

Significance of Findings to Leadership

Many organizations adapt to change to maintain a competitive advantage. To accomplish a learning environment, organizations increasingly rely on members with diverse and unique knowledge, skills, and perspectives (Lovelace, Shapiro & Weingart, 2001). Wright, Heijden, Bradfield, Burt, and Cairns (2004) demonstrated organizational resistance to change can occur due to a deep-seeded commitment to tradition methods: "The effective solution is an organization intervention, as there are decision and action flaws that cannot be addressed by rational reasoning and persuasion alone" (p. 15). Consequently, the introduction of new organizational knowledge may require assertive action of a change agent which solicits information, both good news and bad, from subordinates. A change agent, according to Van de Ven and Sun (2011), "attempts to intervene in and control a change initiative by diagnosing and correcting difficulties that prevent the change process from unfolding as the change agent thinks it should" (p. 58). Fostering an organizational culture open to divergent ideas and perspectives may help mitigate the effects of the hierarchical mum effect.

Change agents in organizations, those with the knowledge necessary to guide an organization through an important change, face the greatest risk under a mum environment. The greatest challenge to eliciting honest feedback from those in a mum environment is not the workplace team, but rather the individual. The mean disparity of supervisor factors to upper-management awareness is $d = 3.47$ and subordinate factors to upper-management awareness is $d = 3.142$. This is in contrast to the lower disparities of the risks to workplace teams to upper-

management awareness of $d = 3.100$ and the barriers to subordinate-supervisor communication is the lowest at $d = 2.782$. The factors of individuals fostering a mum environment include less evident risks to an organizational leadership than the risks to workplace teams. Organizational leadership, according to the results of this study, is more aware of risk to workplace teams than to the supervisors and subordinate factors of the hierarchical mum effect. Rather, the individual factors remain much more hidden in the form of fear of consequences, retaliatory and aggressive behaviors, and insecurity. Likewise, supervisor factors of abuse and retaliation are also less known to upper management.

Research demonstrates the choice to remain mum is underscored most notably by the fear of retribution. Although Bisel et al, (2012), Callegari (2012) and Cassematis and Wortley (2013) recommend the use of anonymous communication mediums, Illinois University (2009) cites workers opt to remain mum, despite confidentiality assurances due to “doubt that management would act or fears of retaliation, including losing their jobs” (p.1). Although the establishment of whistleblowing hotlines is increasing among organizations as recommended by the USSC (2013), the associated fears of the hierarchical mum effect have not improved.

The evolution of management theory demonstrates a growing consensus for establishment of human resources models of organizational behavior that foster knowledge employees and cross-functional work-teams which draw upon the unique experiences and expertise of a diverse workforce (Drucker, 1997; Kane-Urrabazo, 2006; Riggs & Rantz, 2001). Human resources models of management theory also recognize the individual needs and motivations of the subordinate. Among the human resources model of management theory include participative and transformational leadership styles, as were identified in this study as preferable to cultivating open subordinate-supervisor communication (Yukl, 2012).

Suggestions for Future Studies

The purpose of this study was to identify organizational leadership awareness of the hierarchical mum effect, the contributing leadership qualities that foster a mum environment, and the impact of the phenomenon on team performance. The scope of this study precluded a more thorough examination of the factors identified by study participants in the first round. Consequently, the results of this study does present opportunities for a quantitative empirical study exploring work team performance under specific influences of subordinate and supervisor factors, identified in this study, that foster a mum environment.

One of the most evident factors of this study included subordinate fear of retribution and supervisor aggressive and retaliatory behavior. Knowledge of the hierarchical mum effect may benefit from future studies exploring the connection of supervisor factors that foster a mum environment and of workplace bullying. Although the hierarchical mum effect, as defined by Bisel et al. (2011) and the moral mum effect as defined by Ploeger et al. (2011), is not explicitly defined by hostility, but rather a manner of self-image protection of both the subordinate and the supervisor, a study exploring workplace bullying may yield a new category of the mum effect entirely.

Another opportunity for further research is connected to upper-management's awareness of the factors of the hierarchical mum effect. This study focused on upper-management's awareness of the factors and the disparity between each factor's effect on cultivating a mum environment and management's awareness. However, the concern exists that although management may be aware of a factor, management may or may not, approve of the factor taking place. Future research may explore whether the existence of a factor, of which upper-

management is both aware and approve of, is yielding any benefit of which upper-management actually intends.

Lastly, future research also exists to explore the effect upon subordinates following supervisors mum to their own next level of supervision or management. In the first round of this study participants were asked to rank their perceived rate at which the hierarchical mum effect occurs at each of three levels of management, which included upper-management, middle management, and line-level management (Table 4). Middle management ranked highest of the three. Research into why middle management is the highest, including the effect on the followers of middle managers, may yield further knowledge of the hierarchical mum effect.

Closing Remarks

The objective of this qualitative modified Delphi method study was to obtain information from a panel of informed participants regarding the factors of the hierarchical mum effect, subordinate and supervisor factors that foster a mum environment, risks to workplace teams in a mum environment, and barriers to subordinate-supervisor communication. Through this collection of data from the study participants across two rounds of questionnaires, the most important factors were identified, levels of upper-management awareness of the factors were assessed, and the factors with the greatest disparity between the effect on cultivating a mum environment and upper-management's awareness were listed. These *very high disparity* (+) factors reflect the greatest risks to organizations attempting to establish an open subordinate-supervisor communication culture. Additionally, participants identified the leadership styles most conducive of open-communication and those leadership styles most likely to establish a mum environment.

This study extends existing research regarding the hierarchical mum effect by exploring the specific factors which foster a mum environment. Current literature addresses why the hierarchical mum effect occurs, such as subordinate effort to protect themselves, to protect their supervisors, and to disassociate themselves from bad news (Bisel et al., 2011; Bisel et al. 2012; Ploeger et al., 2011; Riley, 1993; Rosen & Tesser, 1972; Tesser & Rosen, 1972; Thomas, Zolin & Hartman, 2009; Wayne & Kacmar, 1991 Wesolowski, & Mossholder, 1997; Yariv, 2006). However, prior research has fallen short of demonstrating the circumstances which establish a mum environment in lieu of an environment conducive to open and accurate communication.

Organizational leadership may benefit and use the findings of this study to develop organizational cultures more conducive to open-communication. Study participants identify transformational and participative leadership styles as most likely to mitigate the hierarchical mum effect. Organizational leaders that establish a learning culture and cultivate management training to establish transformational and participative leadership styles are more likely to advance competitive advantage in their respective industries through capture valuable subordinate input which may otherwise go unspoken in a mum environment. The opportunities for future research may further extend the knowledge of the hierarchical mum effect and better position organizational leaders to reduce the presence of factors of the hierarchical mum effect.

The mum-effect seems to have a very disruptive impact on a work environment. All levels of management should know how prevalent it is in most organizations and that management is not fully aware of it. It seems that many of the efforts made by human resources related to sensitivity training, sexual harassment, diversity awareness and bullying mitigation can and should include addressing the mum-effect.

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Appendix A: Request for Research Participant Involvement

Dear Colleagues,

My name is Jeremy Beakley and I am a doctoral student in the University of Phoenix's Doctor of Management in Organizational Leadership program. I am a long-time resident of Phoenix, AZ., with much of my career in management, quality assurance, and compliance in both the private and public sectors. The primary purpose of my study is to understand organizational leadership awareness of the hierarchical mum effect and to determine contributing leadership qualities which establish a mum environment. Elements of the hierarchical mum effect are often found in a similar concept known as *the Yes Man* (Keil, 2014; Prendergrast, 1993; Prendergrast, 2002; Travers, 1942)

I am seeking a panel of human resources, business, and management professionals to participate in a two to three round modified Delphi study. Through participation in this study participants will provide their opinions to open-ended questions in the early round(s) of the questionnaire, and begin to identify common opinions via rating scales in the final round. Each round of questions should take approximately 30-45 minutes to complete, and each round of questions should be completed within one week of receiving the questionnaire.

Participants should not communicate with one another and should only communicate their responses directly to myself. Moreover, participation in this study will remain confidential. I will invite some initial respondents to continue further with the study based on predetermined criteria for selection based on knowledge and work experience relevant to this study.

Please RSVP's either your participation, or not participating, to Jeremy.beakley@<emailaddress>.com. I will forward to all confirmed participants a letter of informed consent which will outline full confidentiality and voluntary participation details.

Thank you in advance for considering participating in this study.

Sincerely,

/s/ Jeremy Beakley

DM Student, University of Phoenix



INFORMED CONSENT: PARTICIPANTS 18 YEARS OF AGE AND OLDER

Dear _____,

My name is Jeremy Beakley and I am a student at the University of Phoenix working on a Doctorate of Management in Organizational Leadership degree. I am doing a research study entitled *Organizational Leadership Awareness of the Hierarchical Mum Effect: A Modified Delphi Study*. The purpose of the research study is to determine the levels of awareness of the hierarchical mum effect in organizations and determine the contributing leadership traits to this effect.

Your participation in this pilot study will include at minimum two rounds of questions, but no more than four rounds, distributed via email, and administered via SurveyMonkey.com. These rounds of questions will seek your opinions regarding barriers to communication with organizations within which you are familiar. Each round of questions will take approximately 30 minutes to complete. You can decide to be a part of this study or not. Once you start, you can withdraw from the study at any time without any penalty or loss of benefits. The results of the research study may be published but your identity will remain confidential and your name will not be made known to any outside party.

In this research, there are no foreseeable risks to you. Although there may be no direct benefit to you, a possible benefit from your being part of this study is an advanced knowledge of the hierarchical mum effect of which leaders may take appropriate action to solicit valuable and honest information from all members of the organization.

If you have any questions about the research study, please call me at (999) 555-9999 or jeremy.beakley@<emailaddress>.com. For questions about your rights as a study participant, or any concerns or complaints, please contact the University of Phoenix Institutional Review Board via email at IRB@phoenix.edu.

As a participant in this study, you should understand the following:

1. You may decide not to be part of this study or you may want to withdraw from the study at any time. If you want to withdraw, you can do so without any problems.
2. Your identity will be kept confidential.
3. Jeremy Beakley, the researcher, has fully explained the nature of the research study and has answered all of your questions and concerns.
4. If interviews are done, they may be recorded. If they are recorded, you must give permission for the researcher, Jeremy Beakley, to record the interviews. You understand that the information from the recorded interviews may be transcribed. The researcher will develop a way to code the data to assure that your name is protected.
5. Data will be kept in a secure and locked area. The data will be kept for three years, and then destroyed.

6. The results of this study may be published.

“By signing this form, you agree that you understand the nature of the study, the possible risks to you as a participant, and how your identity will be kept confidential. When you sign this form, this means that you are 18 years old or older and that you give your permission to volunteer as a participant in the study that is described here.”

I accept the above terms. I do not accept the above terms. **(CHECK ONE)**

Signature of the interviewee _____ Date _____

Signature of the researcher _____ Date _____



INFORMED CONSENT: PARTICIPANTS 18 YEARS OF AGE AND OLDER

Dear _____,

My name is Jeremy Beakley and I am a student at the University of Phoenix working on a Doctorate of Management in Organizational Leadership degree. I am doing a research study entitled *Organizational Leadership Awareness of the Hierarchical Mum Effect: A Modified Delphi Study*. The purpose of the research study is to determine the levels of awareness of the hierarchical mum effect in organizations and determine the contributing leadership traits to this effect.

Your participation in this study will include at minimum two rounds of questions, but no more than four rounds, distributed via email, and administered via SurveyMonkey.com. These rounds of questions will seek your opinions regarding barriers to communication with organizations within which you are familiar. Each round of questions will take approximately 30 minutes to complete. You can decide to be a part of this study or not. Once you start, you can withdraw from the study at any time without any penalty or loss of benefits. The results of the research study may be published but your identity will remain confidential and your name will not be made known to any outside party.

In this research, there are no foreseeable risks to you. Although there may be no direct benefit to you, a possible benefit from your being part of this study is an advanced knowledge of the hierarchical mum effect of which leaders may take appropriate action to solicit valuable and honest information from all members of the organization.

If you have any questions about the research study, please call me at (999) 555-9999 or jeremy.beakley@<emailaddress>.com. For questions about your rights as a study participant, or any concerns or complaints, please contact the University of Phoenix Institutional Review Board via email at IRB@phoenix.edu.

As a participant in this study, you should understand the following:

1. You may decide not to be part of this study or you may want to withdraw from the study at any time. If you want to withdraw, you can do so without any problems.
2. Your identity will be kept confidential.
3. Jeremy Beakley, the researcher, has fully explained the nature of the research study and has answered all of your questions and concerns.
4. If interviews are done, they may be recorded. If they are recorded, you must give permission for the researcher, Jeremy Beakley, to record the interviews. You understand that the information from the recorded interviews may be transcribed. The researcher will develop a way to code the data to assure that your name is protected.
5. Data will be kept in a secure and locked area. The data will be kept for three years, and then destroyed.

6. The results of this study may be published.

“By signing this form, you agree that you understand the nature of the study, the possible risks to you as a participant, and how your identity will be kept confidential. When you sign this form, this means that you are 18 years old or older and that you give your permission to volunteer as a participant in the study that is described here.”

I accept the above terms. I do not accept the above terms. **(CHECK ONE)**

Signature of the interviewee _____ Date _____

Signature of the researcher _____ Date _____

Appendix D: Questionnaire Questions

Round 1

- 1.) Please enter the access code provided to you by the study administrator: _____
- 2.) Which field of expertise most closely describes your own (circle one):

Human Resources Business Management Other: _____
- 3.) How many years of work experience do you have in the above identified field of expertise? _____
- 4.) How many years of management experience do you have? _____
- 5.) Please respond to the following questions, and all remaining questions, considering a company you know well, and this target organization will be the focus for the majority of the questions in this questionnaire.
 - a. Approximately how many total managers are in this target organization? _____
 - b. Approximately how many total employees are in this target organization? _____
 - c. What is the industry for this organization? _____

There is a phenomenon in the workplace known as the hierarchical mum effect. According to Bisel, Messersmith, and Kelley (2012), The *Mum Effect* exists within organizations when subordinates are unwilling to communicate unpleasant, negative, or contradictory information to a supervisor. There could be many reasons for this, including fear of being directly associated with the negative information, fear of retribution, or losing supervisor confidence. You may have seen this *mum effect* in the target organization that you are responding about here.

- 6.) Given the above statement please describe, from your experience with your target organization, what leadership factors contribute to a *mum-environment*.
-
-

7.) Given the above statement please describe, from your experience with your target organization, what subordinate factors contribute to a *mum-environment*.

8.) Based on your experience with your target organization, please describe three common causes for the *Mum Effect* to exist

- a. _____
- b. _____
- c. _____

9.) Based on your experience with your target organization, please rank each of the following leadership styles on their likelihood to foster either a mum workplace environment or open communication (definitions at bottom of this page). For example, -5 Strongly cultivates a mum environment, +5 Strongly cultivates complete open communication, 0 for no effect. (Use N/A if you have no opinion at all.)

- a. Transformational Leader <-5.... -4....-3... -2... -1...0... +1...+2...+3...+4...+5> (N/A)
- b. Transactional Leader <-5.... -4....-3... -2... -1...0... +1...+2...+3...+4...+5> (N/A)
- c. Participative Leader <-5.... -4....-3... -2... -1...0... +1...+2...+3...+4...+5> (N/A)
- d. Charismatic Leader <-5.... -4....-3... -2... -1...0... +1...+2...+3...+4...+5> (N/A)
- e. Intellectual Leader <-5.... -4....-3... -2... -1...0... +1...+2...+3...+4...+5> (N/A)
- f. Strategic Leader <-5.... -4....-3... -2... -1...0... +1...+2...+3...+4...+5> (N/A)
- g. Self-Sacrificing Leader <-5.... -4....-3... -2... -1...0... +1...+2...+3...+4...+5> (N/A)
- h. Servant Leader <-5.... -4....-3... -2... -1...0... +1...+2...+3...+4...+5> (N/A)
- i. Situational Leader <-5.... -4....-3... -2... -1...0... +1...+2...+3...+4...+5> (N/A)
- j. Other1 <-5.... -4....-3... -2... -1...0...+1...+2...+3...+4...+5> (N/A)

10) Do you have any additional comments or thoughts regarding Question 9? _____

11) How prevalent do you find the presence of the *mum effect* at these three levels of your target organization?

	<u>Never</u>	<u>Always</u>
Upper-Management (C-Suite):	0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)	
Middle-Management (Area Mgr):	0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)	
Line-Level Managers:	0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)	

12) From your experience with other organizations, do you feel your responses to Question 10 are:

Lower Than Most Organizations

Higher Than Most Organizations

Upper-Management (C-Suite): <-5....-4....-3...-2...-1...0...+1...+2...+3...+4...+5> (N/A)

Middle-Management (Area Mgr): <-5....-4....-3...-2...-1...0...+1...+2...+3...+4...+5> (N/A)

Line-Level Managers: <-5....-4....-3...-2...-1...0...+1...+2...+3...+4...+5> (N/A)

13) Based on your experience with your target organization, what are common barriers to subordinate-supervisor communication?

14) Based on your experience with your target organization, what style of leadership is most commonly cultivated in organizations? (see list in question 8) _____

15) Based on your experience with your target organization, what style of leadership is most inviting to creativity in subordinates? (see list in question 8) _____

16) Based on your experience with your target organization, what are the three greatest risks to a workplace team under the influence of the *Mum Effect*? _____

17) Based on your experience with your target organization, what are the benefits of workplace teams under the influence of the *Mum Effect*? _____

18) Do you have any additional thoughts or comments on these topics that are not fully reflected in the questions? _____

If you decide to withdraw for any reason over the next two weeks please contact me at Jeremy.beakley@<emailaddress>.com with the date and time you completed this Round 1 survey, as well as your personal and unique “catch phrase” of your choosing below. Please do not provide any information in your catch phrase which would identify you personally (i.e. name, organization).

19) Optional catch phrase for late withdrawal: _____

Thank you for completing this questionnaire. Please keep your eye out for the Round 2 questionnaire in the near future! Your time is very much appreciated.

Appendix D1: Definitions

Transformational Leadership. The transformational leader is one that inspires commitment to a common vision of the future to attain incredible results (Bass & Riggio, 2006). Transformational leaders align followers' own values to motivate growth of the followers' leadership development. Burns (1978), credited for coining transformational leadership, described the transformational leader as one who seeks to satisfy follower needs, develop mutual affiliation, and achieve common goals to the benefit of both the follower and leader.

Transactional Leadership. Transactional leadership is about exchange. Leaders use inducements such as praise, advancements, and money in exchange for work (McGuire & Kennerly, 2006). These rewards are then given or taken away based on follower performance. The direct needs of the transactional leader and the organization are the transactional leader's primary concern (Bass, 2006; Bennis & Nanus, 2003). This leadership style focuses on incremental improvement to quality and quantity improvements, reducing resistance to direction, and instituting decisions (Morris, Coombes, Schindehutte, & Allen, 2007).

Participative Leadership. Participative leaders practice decision-making procedures which invite followers to have some impact on the leader's final decision. Yukl (2006) described participative leadership styles to include consultation, joint decision-making, and delegation. The consultation participative leader requests input from followers then later makes a decision in private based on the followers' input. The joint decision-making participative leader is an equal participant in a group decision-making process. Finally, the delegation participative leader provides guidelines and boundaries to an individual or group, within which the delegated authority is to make a decision.

Charismatic Leadership. Charismatic leadership, similarly to transformational leadership, is a style in which leaders act in ways that intensely affects followers. Shamir, House, and Arthur (1993) explained that the charismatic leader acts as a role model for the principles and standards the leader wants followers to adopt. Charismatic leader's effect on followers includes the leader's vision, similar beliefs, and wholehearted acceptance of the leader. In addition to the realization of followers' goals, these effects also develop warmth and commitment to the leader. The charismatic leader, according to Avolio and Yammarino (2002), is not yet effective until first the leader substantiates his or her claim to charisma.

Intellectual Leadership. Intellectual leaders, similar to the transformational leader, empower followers and express vision-related behaviors; however unlike the transformational leader, without the willingness of personal sacrifice (Avolio and Yammarino, 2002). This leader clearly analyzes follower and organizational needs, but at no personal risk. Followers develop trust and a vision which align with the intellectual leaders, but without the same level of commitment as a transformational leader who has a personal stake at risk.

Strategic Leadership. The strategic leader, similar to the intellectual leader, anticipates, visualizes, and thinks strategically to develop change in an organization, without personal risk; however unlike the intellectual leader, the strategic leader's environment focuses on the organization's future needs (Hitt & Ireland, 2005). The strategic leader develops followers, enforces strong ethics, leverages core competencies, and establishes organizational strategic controls (Avolio & Yammarino, 2002). The strategic leader, like the intellectual leader, has less personal stake at risk, however expresses strong vision of future objectives and garners close follower commitment.

Self-Sacrificing Leadership. Self-sacrificing leaders, in contrast to the intellectual and strategic leaders, abandon personal interests. This leader is committed to assisting followers with their work, defer recognition for success to their followers, and exercise very little power over subordinates (Avolio & Yammarino, 2002). Self-sacrificing leaders support the organizational infrastructure with the core objective of team success over personal success.

Servant Leadership. The servant leader exhibits personal and empowering behaviors without explicitly exhibiting vision-related behaviors (Avolio & Yammarino, 2002). A servant leader stimulates esteem between leader and follower by treating followers with self-worth and respect (Blanchard, 2000; Burns, 2005; Tate, 2003). The relationship between the leader and follower encourages others to follow as valuable peers and contribute to a collective effort in a safe environment. In the effort to build esteem and respect, the servant leader exhibits sound decision-making for the best interest of the followers (Stone, Russell, & Patterson, 2004).

Situational Leadership. Situational leadership is a contingency within leadership theory. The situational leader changes his or her leadership style to adapt to situations and individual follower experience and maturity level (Bolman & Deal, 2003). The situational leader individually assesses follower levels of education and commitment. This leadership style is a valuable method of developing and training followers in an open-communication setting and evolution of follower self-confidence and independence (Farmer, 2005). The situational leader requires strong skills in diagnosing individual follower needs and abilities.

Appendix E

Summary Results of Round 1 Questionnaire

This list represents the factors identified in Round 1 questionnaire. The categories are grouped by Round 1 research question. Panelists were invited to provide as many potential factors of the hierarchical *mum effect* as the panelist could think of for each category. The frequency column indicates the factors that were most frequently identified by participants in the first round.

Category	Factors	Frequency
Factors of the <i>Mum Effect</i>	Fear of Perceived Consequences	10
	Poor Supervisor Communication Skills	9
	Perceived Closed-Door Organizational Tone/Culture	9
	Poorly Trained Supervisor	5
	Employee Information Not Acted Upon	5
	Supervisor Ego Non-Conducive to Negative Information	5
	Subordinate Personal Insecurities	4
	Aggressive Supervisor Behaviors	4
	Lack of Subordinate-Supervisor Trust	3
	Lack of Confidence in Organizational Stability	2
Supervisor Factors Fostering Mum Environment	Poor Communication Skills	11
	Aggressive Behaviors/Demeanor	9
	Micromanagement	8
	Non-Responsive to Employee Communication	7
	Predisposed Position, Not Receptive to Alternatives	6
	Arrogance/Egotistical	5
	Lack of Management Training	5
	Shifts Blame	5
	Retaliatory	4
	Supervisor mum to own next-level manager	4
	Lack of Confidence	3
	Cut-Throat Career Advancer	2
	Subordinate Factors Fostering Mum	Fear of Consequences/Retribution

Environment		
	Insecure / Lack of Confidence	12
	Uninformed / Ignorant of all the facts	4
	Good Employee Waiting for Next Good Opportunity – Not Rocking the Boat	3
	Unprincipled / “Yes Man”	3
	Passive Nature	3
	Politics Avoidance	2
	Sense of Loyalty to Supervisor	2
	Apathetic / Disengaged	2
	Easily Influenced	2
Risks to Workplace Teams Under <i>Mum Effect</i>	Employee Turnover	15
	Lack of Growth	6
	Not Identifying Problems Before Becoming Serious	5
	Lack of Creativity – Group Think	5
	Poor Morale	5
	Underperformance	4
	Lack of Trust	2
	Loss of Revenue	2
Barriers to Subordinate – Supervisor Communication	Time Restraints – Tight Deadlines	11
	Fear of Being Labeled a Negative Employee	4
	Too Many Layers in Hierarchical Structure	3
	Substitution of E-Mail in Place of Live One-on-One’s	2
	Middle Management Filtering Upward/Downward Communication	2
	Expectations Not Communicated Clearly	2
	Supervisor Failure to Follow-Through with Commitments	2
Benefits to Organizations with teams working in mum environment	Working toward single, narrow goal	7
	Employee Perceived Sense of Security	3
	Reduction in Frequent Changes to Procedures	2
	Reduction in Team Conflict	2

Appendix F

Round 2 Rating Scale

This second round survey will explore in more detail the factors identified by the study participants regarding the hierarchical mum effect. Based on the responses to the Round 1 Questionnaire, please respond to the following topics which were most commonly cited by the study participants. The following questions are based on Round 1 Questionnaire responses. The number in parenthesis (#) following each item in the questionnaire reflects the number of times the item was cited in Round 1. As before, this questionnaire will take approximately 20-30 minutes to complete (and I thank you in advance).

Whereas your responses in Round 1 were focused on your experiences with a specific organization with which you were familiar, Round 2 will now ask you to reflect on your business experience in all organizations.

1.) Please enter the access code provided to you by the study administrator: _____

As a reminder / refresher from Round 1:

There is a phenomenon in the workplace known as the hierarchical mum effect. According to Bisel, Messersmith, and Kelley (2012), The *Mum Effect* exists within organizations when subordinates are unwilling to communicate unpleasant, negative, or contradictory information to a supervisor. There could be many reasons for this, including fear of being directly associated with the negative information, fear of retribution, or losing supervisor confidence.

2.) Based on your business experience in all organizations, please rank the following factors of the *Mum Effect* in their likelihood to foster a mum-environment. For example, 10 highly fosters a mum environment and 0 does not foster a mum environment, or indicate N/O for No Opinion.

- a. Fear of Perceived Consequences: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- b. Poor Sprv. Communication Skills: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- c. Perceived Closed-Door Culture: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- d. Poorly Trained Supervisor: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- e. Employee Info Not Acted Upon: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- f. Supervisor Ego to Negative Info: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- g. Subordinate Personal Insecurities: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- h. Aggressive Supervisor Behaviors: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- i. Lack of Supervisor/Subord Trust: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- j. Lack of Confid. In Org. Stability: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)

3.) Based on your business experience in all organizations, please rank organizational upper-management awareness of the following factors of the *Mum Effect*. For example, 10 highly aware and 0 completely unaware.

- a. Fear of Perceived Consequences: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- b. Poor Sprv. Communication Skills: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- c. Perceived Closed-Door Culture: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- d. Poorly Trained Supervisor: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- e. Employee Info Not Acted Upon: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- f. Supervisor Ego to Negative Info: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- g. Subordinate Personal Insecurities: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- h. Aggressive Supervisor Behaviors: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- i. Lack of Supervisor/Subord Trust: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- j. Lack of Confid. In Org. Stability: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)

4.) Based on your business experience in all organizations, please rank the following supervisor factors in order of their influence on fostering a mum work environment. For example, 10 highly fosters a mum environment and 0 does not foster a mum environment.

- a. Poor Communication Skills: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- b. Aggressive Behavior/Demeanor: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- c. Micromanagement: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- d. Non-Responsive to Employee: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- e. Pre-Disposed, closed to alternate: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- f. Arrogance / Egotistical: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- g. Lack of Supervisor/Subord Trust: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- h. Lack of Management Training: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- i. Shifts Blame: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- j. Retaliatory: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- k. Supervisor mum to own boss: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- l. Lack of Confidence: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- m. Cut-Throat Career Advancer: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)

5.) Based on your business experience in all organizations, please rank organizational upper-management awareness of the following supervisor factors which foster the *Mum Effect*. For example, 10 highly aware and 0 highly unaware.

- a. Poor Communication Skills: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- b. Aggressive Behavior/Demeanor: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- c. Micromanagement: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- d. Non-Responsive to Employee: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- e. Pre-Disposed, closed to alternate: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)

- f. Arrogance / Egotistical: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- g. Lack of Supervisor/Subord Trust: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- h. Lack of Management Training: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- i. Shifts Blame: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- j. Retaliatory: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- k. Supervisor mum to own boss: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- l. Lack of Confidence: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- m. Cut-Throat Career Advancer: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)

6.) Based on your business experience in all organizations, please rank the following subordinate factors in order of their influence on fostering a mum work environment. For example, 10 highly fosters a mum environment, 0 does not foster a mum environment.

- a. Fear of Consequences: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- b. Insecure / Lack Confidence: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- c. Uninformed/Ignorant of all Facts: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- d. Don't want to Rock the Boat: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- e. Unprincipled / Yes-Man: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- f. Passive Nature: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- g. Politics Avoidance: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- h. Sense of Loyalty to Supervisor: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- i. Apathetic / Disengaged: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- j. Easily Influenced: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)

7.) Based on your business experience in all organizations, please rank organizational upper-management awareness of the following subordinate factors which foster the *Mum Effect*. For example, 10 highly fosters a mum environment, 0 does not foster a mum environment.

- a. Fear of Consequences: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- b. Insecure / Lack Confidence: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- c. Uninformed/Ignorant of all Facts: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- d. Don't want to Rock the Boat: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- e. Unprincipled / Yes-Man: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- f. Passive Nature: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- g. Politics Avoidance: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- h. Sense of Loyalty to Supervisor: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- i. Apathetic / Disengaged: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- j. Easily Influenced: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)

8.) Based on your business experience in all organizations, please rank the following risks to workplace teams under the influence of the *Mum Effect*. For example, 10 highly influences workplace team and 0 does not influence a workplace team.

- a. Employee Turnover: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- b. Lack of Growth: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- c. Not Identifying Problems Timely: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- d. Lack of Creativity – Group Think: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- e. Poor Morale: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- f. Underperformance: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- g. Decreased Initiative: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- h. Lack of Trust: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- i. Loss of Revenue: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)

9.) Based on your business experience in all organizations, please rank organizational upper-management awareness of the risks to workplace teams under the influence of the *Mum Effect*. For example, 10 highly aware and 0 completely unaware.

- a. Employee Turnover: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- b. Lack of Growth: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- c. Not Identifying Problems Timely: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- d. Lack of Creativity – Group Think: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- e. Poor Morale: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- f. Underperformance: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- g. Decreased Initiative: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- h. Lack of Trust: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- i. Loss of Revenue: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)

10.) Based on your business experience in all organizations, please rank the following barriers to subordinate-supervisor communication. For example, 10 highly restricts subordinate-supervisor communication and 0 has no effect.

- a. Time Restraints– Tight Deadlines: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- b. Fear Being Labeled Negatively: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- c. Too Many Layers in Hierarchy: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- d. E-Mail in Place of One-on-One: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- e. Middle Management Filtering: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- f. Expectations Not Comm. Clearly: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- g. Supervisor Fails Follow-Through: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)

11.) Based on your business experience in all organizations, please rank organizational upper-management awareness of the barriers to subordinate-supervisor communication. For example, 10 highly aware and 0 completely unaware.

- a. Time Restraints– Tight Deadlines: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- b. Fear Being Labeled Negatively: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- c. Too Many Layers in Hierarchy: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- d. E-Mail in Place of One-on-One: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- e. Middle Management Filtering: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- f. Expectations Not Comm. Clearly: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- g. Supervisor Fails Follow-Through: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)

12.) Based on your business experience in all organizations, please rank the benefits to organizations with workplace teams performing in a *mum* environment. For example, 10 highly beneficial and 0 No Benefit.

- a. Working Toward one narrow goal: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- b. Employee Perceived Job Security: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- c. Reduction in Frequent Changes: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)
- d. Reduction in Team Conflict: 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 – 8 – 9 – 10-(N/O)

13.) What other thoughts or comments do you have related to the *mum effect*?

If you decide to withdraw for any reason over the next two weeks please contact me at Jeremy.beakley@<emailaddress>.com with the date and time you completed this Round 1 survey, as well as your personal and unique “catch phrase” of your choosing below. Please do not provide any information in your catch phrase which would identify you personally (i.e. name, organization).

14.) Optional Catch Phrase: _____

Thank you so very much for assisting with this study. Hit the <Submit Final Responses> button below to submit your results.

It is possible, but unlikely, that there will be a need for another round of questions to clarify issues discovered in this research. You will hear from me in about two weeks if a 3rd round is needed.

Appendix G

Round 2 Descriptive Statistics Summary

<i>Summary of Mean, Median, Mode, and Standard Deviation for Scores in Round 2</i>					
Item	<i>Mean</i>	<i>Median</i>	<i>Mode</i>	<i>Standard Deviation</i>	<i>Skew (SES = 1.00)</i>
Q1a	8.625	9.5	10	1.974016	-1.57177
Q1b	7.166666667	8	8	2.315668	-0.63323
Q1c	8.208333333	9	10	1.99955	-1.13135
Q1d	7.291666667	7.5	9	2.255027	-0.76907
Q1e	7.125	7	10	2.45503	-0.86878
Q1f	8.166666667	8.5	8	1.736229	-0.98578
Q1g	6.875	7	6	2.028332	-0.46306
Q1h	7.916666667	8	8	2.205067	-1.47767
Q1i	7.956521739	9	9	2.120854	-1.72261
Q1j	6.625	7	6	2.634429	-0.92394
Q2a	5.333333333	5.5	4	2.51373	-0.23358
Q2b	4.166666667	4	4	1.903467	0.152831
Q2c	4.458333333	4	3	2.245366	0.39907
Q2d	4.041666667	4	2	2.074256	0.258443
Q2e	4.166666667	4	4	2.496374	0.287267
Q2f	3.875	4	2	2.507597	0.551322
Q2g	4.541666667	4.5	3	2.51913	0.160225
Q2h	4.458333333	4	4	2.603996	-0.02083
Q2i	3.666666667	3	1	2.729336	0.663052
Q2j	4.041666667	4	1	2.911434	0.104993
Q3a	7.458333333	8	8	2.063749	-1.06847
Q3b	8.166666667	8	8	1.761093	-1.94326
Q3c	7.260869565	8	8	2.359071	-1.11569
Q3d	8.25	9	10	1.799758	-1.28754
Q3e	8.125	9	9	1.776966	-1.27036
Q3f	7.583333333	8	8	1.954185	-0.72755
Q3g	6.375	6	6	1.663221	0.331494
Q3h	7.583333333	8	8	2.041241	-0.54915
Q3i	8.583333333	9.5	10	2.104171	-1.77668
Q3j	7.625	8	8	2.16318	-1.07143
Q3k	6.375	7	8	2.318405	-0.38574

Q3l	7.833333333	9	9	2.548088	-1.20762
Q4a	5.291666667	5	7	2.493106	-0.10616
Q4b	5.041666667	5.5	3	2.115762	-0.0895
Q4c	4.434782609	4	5	2.23253	0.658056
Q4d	4.416666667	4	4	2.569329	0.297741
Q4e	4.826086957	4	4	2.461562	-0.10123
Q4f	4.583333333	4.5	5	2.569329	0.088165
Q4g	4.652173913	5	5	2.123648	0.40804
Q4h	4.25	4	4	2.471578	0.044766
Q4i	4.541666667	4	1	3.006936	0.525557
Q4j	3.875	3	3	2.771164	0.448619
Q4k	4.541666667	5	5	2.264646	-0.13271
Q4l	5.041666667	5	7	2.726348	-0.01959
Q5a	8.916666667	9	10	1.558055	-2.55859
Q5b	7.625	8	8	1.526932	-0.41842
Q5c	5.666666667	5.5	5	2.140026	-0.10539
Q5d	5.791666667	5	5	2.245366	-0.01805
Q5e	6.173913043	7	8	2.741137	-0.35862
Q5f	6.25	6	4	2.288915	0.186885
Q5g	6.291666667	7	8	2.422345	-0.35266
Q5h	5.782608696	6	6	2.430049	-0.1389
Q5i	7.125	7.5	8	2.251811	-0.41864
Q5j	5.916666667	6	5	2.483277	-0.30517
Q6a	4.291666667	3.5	3	2.896462	0.760393
Q6b	4.166666667	4	2	2.713359	0.378044
Q6c	4.166666667	4	3	2.61545	0.215326
Q6d	3.541666667	3	6	2.431303	0.608078
Q6e	3.958333333	4	5	2.510485	-0.03861
Q6f	4.333333333	4.5	6	2.792329	0.213011
Q6g	3.791666667	3	2	2.603996	0.813091
Q6h	5	5	5	2.859006	0.219199
Q6i	3.916666667	4	1	2.764946	0.215351
Q6j	4	4	4	2.620986	0.205476
Q7a	7.416666667	8	8	2.394135	-1.66086
Q7b	7.083333333	7	7	2.041241	-1.02596
Q7c	7.916666667	8.5	10	2.104171	-0.76636
Q7d	8.25	9	9	1.725764	-1.36347
Q7e	8.083333333	8	8	1.931808	-2.14132
Q7f	7.875	8.5	9	2.070759	-1.4848

Q7g	7.458333333	8	7	2.225918	-1.12678
Q7h	8.291666667	9	10	1.921937	-1.5362
Q7i	6.75	6.5	6	2.64164	-0.70822
Q8a	5.666666667	5	5	2.443566	0.130754
Q8b	5.166666667	5	6	2.315668	-0.03735
Q8c	4.916666667	5	5	2.375906	-0.08321
Q8d	4.541666667	5	5	2.39527	-0.39776
Q8e	5.25	5.5	7	2.363674	-0.36905
Q8f	5.375	5	4	2.567565	0.300271
Q8g	4.666666667	4.5	4	2.371326	0.199984
Q8h	4.833333333	5	4	2.973311	-0.01845
Q8i	5.5	5	7	2.963547	-0.12027
Q9a	6.791666667	7	8	2.146365	-0.13699
Q9b	7.541666667	8	8	2.08471	-0.64521
Q9c	6.583333333	7	8	2.062431	-0.68108
Q9d	6.208333333	6	6	2.669948	-0.04907
Q9e	6.666666667	7	5	2.140026	-0.54095
Q9f	7.416666667	7.5	6	2.062431	-0.74626
Q9g	7.458333333	7.5	10	1.955575	-0.3314
Q10a	5.25	5	7	2.506513	0.124244
Q10b	4.416666667	4	7	2.224697	-0.11212
Q10c	4.208333333	4	3	2.321528	0.702482
Q10d	3.75	3.5	2	2.288915	0.714908
Q10e	3.260869565	3	2	1.935726	0.913395
Q10f	4.208333333	3.5	3	2.553415	0.601313
Q10g	4.208333333	3	3	2.858689	0.575202
Q11a	5.166666667	6	6	3.212295	-0.40463
Q11b	4.625	5	5	2.747529	0.085971
Q11c	4.739130435	5	7	2.766971	-0.23917
Q11d	4.304347826	5	5	2.77054	-0.12134

Appendix H

Round 2 Factors of *Mum Effect* Summary

<u>Rank of Factor (high – low) - (Q1)</u>								
<u>Rank</u>	<u>Factor</u>	<u>Mean</u>	<u>St. Dev</u>	<u>Median</u>	<u>Mode</u>	<u>Max</u>	<u>Min</u>	<u>n=</u>
a	Fear of Perceived Consequences	8.625	1.974	9.5	10	10	3	24
b	Perceived Closed Door Culture/Tone	8.208	2.000	9	10	10	3	24
c	Supervisor Ego Non-Conducive to Feedback	8.167	1.736	8.5	8	10	4	24
d	Lack of Subordinate/Supervisor Trust	7.957	2.121	9	9	10	3	23
e	Aggressive Supervisor Behaviors/Demeanor	7.917	2.205	8	8	10	2	24
f	Poorly Trained Supervisor	7.292	2.255	7.5	9	10	2	24
g	Poor Supervisor Communication Skills	7.167	2.315	8	8	10	2	24
h	Employee Information Not Acted Upon	7.125	2.455	7	10	10	1	24
i	Subordinate Personal Insecurities	6.875	2.028	7	6	10	3	24
j	Lack of Confidence in Organizational Stability	6.625	2.634	7	6	10	1	24
<u>Rank of Management Awareness of Factor (low – high) - (Q2)</u>								
<u>Rank</u>	<u>Factor</u>	<u>Mean</u>	<u>St. Dev</u>	<u>Median</u>	<u>Mode</u>	<u>Max</u>	<u>Min</u>	<u>n=</u>
a	Lack of Subordinate/Supervisor Trust	3.667	2.729	3	1	9	0	24
b	Supervisor Ego Non-Conducive to Feedback	3.875	2.508	4	2	9	0	24
c	Lack of Confidence in Organizational Stability	4.041	2.911	4	1	9	0	24
d	Poorly Trained Supervisor	4.042	2.074	4	2	8	1	24
e	Employee Information Not Acted Upon	4.167	2.496	4	4	9	0	24
f	Poor Supervisor Communication Skills	4.167	1.903	4	4	8	1	24
g	Perceived Closed Door Culture/Tone	4.458	2.245	4	3	9	1	24
h	Aggressive Supervisor	4.458	2.600	4	4	9	0	24

	Behaviors/Demeanor							
i	Subordinate Personal Insecurities	4.542	2.519	4.5	3	9	0	24
j	Fear of Perceived Consequences	5.333	2.513	5.5	4	9	1	24

Appendix I

Round 2 Supervisor Factors Fostering Mum Environment

<u>Rank of Factor (high – low) – (Q3)</u>								
<u>Rank</u>	<u>Factor</u>	<u>Mean</u>	<u>St. Dev</u>	<u>Median</u>	<u>Mode</u>	<u>Max</u>	<u>Min</u>	<u>n=</u>
a	Retaliatory	8.583	2.104	9.5	10	10	3	24
b	Supervisor Non-Responsive to Employee Communication	8.250	1.799	9	10	10	3	24
c	Aggressive Behavior/Demeanor	8.167	1.761	8	8	10	2	24
d	Pre-Disposed Position Taking – No Alternatives	8.125	1.777	9	9	10	3	24
e	Cut-Throat Career Advancer	7.833	2.548	9	9	10	2	24
f	Supervisor Mum to Own Next-Level Supervisor	7.625	2.163	8	8	10	3	24
g	Shifts Blame	7.583	2.041	8	8	10	4	24
h	Arrogant – Egotistical	7.583	1.954	8	8	10	3	24
i	Poor Communication Skills	7.458	2.064	8	8	10	2	24
j	Micromanagement	7.261	2.359	8	8	10	2	23
k	Lack of Confidence	6.375	2.318	7	8	10	2	24
l	Lack of Management Training	6.375	1.663	6	6	10	4	24
<u>Rank of Management Awareness of Factor (low – high) – (Q4)</u>								
<u>Rank</u>	<u>Factor</u>	<u>Mean</u>	<u>St. Dev</u>	<u>Median</u>	<u>Mode</u>	<u>Max</u>	<u>Min</u>	<u>n=</u>
a	Supervisor Mum to Own Next-Level Supervisor	3.875	2.771	3	3	10	0	24
b	Shifts Blame	4.250	2.472	4	4	8	0	24
c	Supervisor Non-Responsive to Employee Commun.	4.417	2.569	4	4	9	0	24
d	Micromanagement	4.435	2.233	4	5	9	1	23
e	Lack of Confidence	4.542	2.265	5	5	9	0	24
f	Arrogant – Egotistical	4.583	2.569	4.5	5	9	1	24
g	Retaliatory	4.542	3.007	4	1	10	1	24
h	Lack of Management Training	4.652	2.124	5	5	10	1	23
i	Pre-Disposed Position Taking – No Alternatives	4.826	2.462	4	4	9	0	23
j	Cut-Throat Career Advancer	5.042	2.726	5	7	10	0	24

k	Aggressive Behavior/Demeanor	5.042	2.116	5.5	3	8	2	24
l	Poor Communication Skills	5.292	2.493	5	7	9	1	24

Appendix J

Round 2 Subordinate Factors Fostering Mum Environment

<u>Rank of Factor (high – low) – (Q5)</u>								
<u>Rank</u>	<u>Factor</u>	<u>Mean</u>	<u>St. Dev</u>	<u>Median</u>	<u>Mode</u>	<u>Max</u>	<u>Min</u>	<u>n=</u>
a	Fear of Consequences/Retribution	8.917	1.558	9	10	10	3	24
b	Insecure / Lack of Confidence	7.625	1.527	8	8	10	5	24
c	Apathetic / Disengaged	7.125	2.252	7.5	8	10	3	24
d	Politics Avoidance	6.292	2.422	7	8	10	2	24
e	Passive Nature	6.250	2.289	6	4	10	3	24
f	Unprincipled / “Yes Man”	6.174	2.741	7	8	10	1	23
g	Easily Influenced	5.917	2.483	6	5	10	1	24
h	Good Employee / Don’t Want to Rock the Boat	5.792	2.245	5	5	10	2	24
i	Sense of Loyalty to Supervisor	5.782	2.430	6	6	10	1	23
j	Uninformed / Ignorant of All the Facts	5.667	2.140	5.5	5	10	1	24
<u>Rank of Management Awareness of Factor (low – high) – (Q6)</u>								
<u>Rank</u>	<u>Factor</u>	<u>Mean</u>	<u>St. Dev</u>	<u>Median</u>	<u>Mode</u>	<u>Max</u>	<u>Min</u>	<u>n=</u>
a	Good Employee / Don’t Want to Rock the Boat	3.542	2.431	3	6	10	0	24
b	Politics Avoidance	3.792	2.604	3	2	10	0	24
c	Apathetic / Disengaged	3.917	2.764	4	1	9	0	24
d	Unprincipled / “Yes Man”	3.958	2.510	4	5	9	0	24
e	Easily Influenced	4.000	2.621	4	4	9	0	24
f	Insecure / Lack of Confidence	4.167	2.713	4	2	9	0	24
g	Uninformed / Ignorant of All the Facts	4.167	2.615	4	3	9	0	24
h	Fear of Consequences/Retribution	4.292	2.896	3.5	3	10	0	24
i	Passive Nature	4.333	2.792	4.5	6	10	0	24
j	Sense of Loyalty to Supervisor	5.000	2.859	5	5	10	0	24

Appendix K

Round 2 Risks to Workplace Teams in Mum Environment

<u>Rank of Factor (high – low) – (Q7)</u>								
<u>Rank</u>	<u>Factor</u>	<u>Mean</u>	<u>St. Dev</u>	<u>Median</u>	<u>Mode</u>	<u>Max</u>	<u>Min</u>	<u>n=</u>
a	Lack of Trust	8.292	1.922	9	10	10	3	24
b	Lack of Creativity / Group Think	8.250	1.726	9	9	10	3	24
c	Poor Morale	8.083	1.932	8	8	10	1	24
d	Not Identifying Problems Before Becoming Serious	7.917	2.104	8.5	10	10	3	24
e	Underperformance	7.875	2.071	8.5	9	10	2	24
f	Decreased Initiative	7.458	2.226	8	7	10	2	24
g	Employee Turnover	7.417	2.394	8	8	10	0	24
h	Lack of Growth	7.083	2.041	7	7	10	2	24
i	Loss of Revenue	6.750	2.642	6.5	6	10	1	24
<u>Rank of Management Awareness of Factor (low – high) – (Q8)</u>								
<u>Rank</u>	<u>Factor</u>	<u>Mean</u>	<u>St. Dev</u>	<u>Median</u>	<u>Mode</u>	<u>Max</u>	<u>Min</u>	<u>n=</u>
a	Lack of Creativity / Group Think	4.542	2.395	5	5	8	0	24
b	Decreased Initiative	4.667	2.371	4.5	4	9	1	24
c	Lack of Trust	4.833	2.973	5	4	10	0	24
d	Not Identifying Problems Before Becoming Serious	4.917	2.376	5	5	9	1	24
e	Lack of Growth	5.167	2.316	5	6	10	1	24
f	Poor Morale	5.250	2.364	5.5	7	9	1	24
g	Underperformance	5.375	2.568	5	4	10	1	24
h	Loss of Revenue	5.500	2.964	5	7	10	0	24
i	Employee Turnover	5.667	2.444	5	5	10	1	24

Appendix L

Round 2 Barriers to Communication

<u>Rank of Factor (high – low) – (Q9)</u>								
<u>Rank</u>	<u>Factor</u>	<u>Mean</u>	<u>St. Dev</u>	<u>Median</u>	<u>Mode</u>	<u>Max</u>	<u>Min</u>	<u>n=</u>
a	Fear of Being Labeled a Negative Employee	7.542	2.084	8	8	10	3	24
b	Supervisor Failure to Follow-Through w/ Committ.	7.458	1.956	7.5	10	10	3	24
c	Expectations Not Clearly Communicated	7.417	2.062	7.5	6	10	2	24
d	Time Restraints – Tight Deadlines	6.792	2.146	7	8	10	3	24
e	Middle Management Filtering Up/Down Commun.	6.667	2.140	7	5	10	1	24
f	Too Many Layers in Hierarchical Structure	6.583	2.062	7	8	10	2	24
g	Substitution of E-Mail in Place of One-on-One's	6.208	2.670	6	6	10	2	24
<u>Rank of Management Awareness of Factor (low – high) – (Q10)</u>								
<u>Rank</u>	<u>Factor</u>	<u>Mean</u>	<u>St. Dev</u>	<u>Median</u>	<u>Mode</u>	<u>Max</u>	<u>Min</u>	<u>n=</u>
a	Middle Management Filtering Up/Down Commun.	3.261	1.936	3	2	8	1	23
b	Substitution of E-Mail in Place of One-on-One's	3.750	2.289	3.5	2	9	0	24
c	Too Many Layers in Hierarchical Structure	4.208	2.322	4	3	10	0	24
d	Expectations Not Clearly Communicated	4.208	2.553	3.5	3	9	1	24
e	Supervisor Failure to Follow-Through w/ Committ.	4.208	2.859	3	3	9	0	24
f	Fear of Being Labeled a Negative Employee	4.417	2.225	4	7	8	0	24
g	Time Restraints – Tight Deadlines	5.250	2.507	5	7	10	1	24

Appendix M

Round 2 Benefits of Teams Working in Mum Environment

<u>Rank of Factor (high – low) – (Q11)</u>								
<u>Rank</u>	<u>Factor</u>	<u>Mean</u>	<u>St. Dev</u>	<u>Median</u>	<u>Mode</u>	<u>Max</u>	<u>Min</u>	<u>n=</u>
a	Working Toward a Single Narrow Goal	5.167	3.212	6	6	10	0	24
b	Reduction in Frequent Changes of Procedure	4.739	2.767	5	7	9	0	23
c	Perceived Employee Job Security	4.625	2.748	5	5	10	0	24
d	Reduction of Team Conflict	4.304	2.771	5	5	9	0	23

Appendix N

Round 2 Disparity Summary Table

<i>Factor</i>	<i>Effect</i>	<i>Upper-Management's Awareness of Effect (Mean)</i>	<i>Disparity</i>
Fear of Perceived Consequences	8.625	5.333	3.292
Perceived Closed Door Culture/Tone	8.208	4.458	3.750
Supervisor Ego Non-Conducive to Feedback	8.167	3.875	4.292+
Lack of Subordinate/Supervisor Trust	7.957	3.667	4.290+
Aggressive Supervisor Behaviors/Demeanor	7.917	4.458	3.459
Poorly Trained Supervisor	7.292	4.042	3.250
Poor Supervisor Communication Skills	7.167	4.167	3.000
Employee Information Not Acted Upon	7.125	4.167	2.958
Subordinate Personal Insecurities	6.875	4.542	2.333
Lack of Confidence in Organizational Stability	6.625	4.041	2.584
Retaliatory	8.583	4.542	4.041+
Supervisor Non-Responsive to Employee Commun.	8.25	4.417	3.833+
Aggressive Behavior/Demeanor	8.167	5.042	3.125
Pre-Disposed Position Taking – No Alternatives	8.125	4.826	3.299
Cut-Throat Career Advancer	7.833	5.042	2.791
Supervisor Mum to Own Next-Level Supervisor	7.625	3.875	3.75
Shifts Blame	7.583	4.250	3.333
Arrogant – Egotistical	7.583	4.583	3.000
Poor Communication Skills	7.458	5.292	2.166
Micromanagement	7.261	4.435	2.826
Lack of Confidence	6.375	4.542	1.833
Lack of Management Training	6.375	4.652	1.723*
Fear of Consequences/Retribution	8.917	4.292	4.625+
Insecure / Lack of Confidence	7.625	4.167	3.458
Apathetic / Disengaged	7.125	3.915	3.210
Politics Avoidance	6.292	3.792	2.5
Passive Nature	6.250	4.333	1.917
Unprincipled / “Yes Man”	6.174	3.958	2.216
Easily Influenced	5.917	4.000	1.917
Good Employee / Don't Want to Rock the Boat	5.792	3.542	2.250
Sense of Loyalty to Supervisor	5.782	5.000	0.782*
Uninformed / Ignorant of All the Facts	5.48	4.167	1.313*

Lack of Trust	8.292	4.833	3.459
Lack of Creativity / Group Think	8.250	4.542	3.708
Poor Morale	8.083	5.250	2.833
Not Identifying Problems Before Becoming Serious	7.917	4.917	3.000
Underperformance	7.875	5.375	2.500
Decreased Initiative	7.458	4.667	2.791
Employee Turnover	7.417	5.667	1.750*
Lack of Growth	7.083	5.167	1.916
Loss of Revenue	6.750	5.500	1.250*
Fear of Being Labeled a Negative Employee	7.542	4.417	3.125
Supervisor Failure to Follow-Through w/ Committ.	7.458	4.208	3.250
Expectations Not Clearly Communicated	7.417	4.208	3.209
Time Restraints – Tight Deadlines	6.792	5.250	1.542*
Middle Management Filtering Up/Down Commun.	6.667	3.261	3.406
Too Many Layers in Hierarchical Structure	6.583	4.208	2.375
Substitution of E-Mail in Place of One-on-One's	6.208	3.750	2.458
<i>Mean</i>	7.298	4.472	2.827
<i>Note: + = "high disparity +1 of Mean;" * = "low disparity -1 of Mean"</i>			

Appendix O

Spearman's Rho Correlation Analysis

Spearman's Rho Correlation between Supervisor Factors of the Mum Effect (Appendix I) and Risk to Workplace Teams (Appendix K)

Supervisor Factors	Risks to Workplace Teams								
	Q7a	Q7b	Q7c	Q7d	Q7e	Q7f	Q7g	Q7h	Q7i
Q3a	0.357+	0.488*	0.450*	0.224	0.163	0.262	-0.075	0.097	0.217
Q3b	0.453*	0.464*	0.801**	0.775**	0.455*	0.473*	0.435*	0.527**	0.565**
Q3c	0.104	0.022	0.420*	0.518*	0.296	0.305	0.151	0.490*	0.476*
Q3d ~	0.074	-0.102	0.510*	0.628**	0.393+	0.403+	0.250	0.671**	0.621**
Q3e	0.137	-0.164	0.352+	0.545**	0.357+	0.347+	0.205	0.613**	0.538**
Q3f	0.346+	0.078	0.486*	0.689**	0.328	0.298	0.273	0.536**	0.508*
Q3g	0.297	0.052	0.343	0.322	0.013	-0.051	-0.169	0.118	0.208
Q3h	0.219	0.038	0.476*	0.594**	0.413*	0.325	0.174	0.491*	0.604**
Q3i ~	0.172	0.105	0.533**	0.658**	0.492*	0.511*	0.401+	0.596**	0.533**
Q3j	0.488*	0.205	0.505*	0.420*	0.117	0.271	0.314	0.212	0.267
Q3k	0.451*	0.181	0.581**	0.575**	0.064	0.018	0.148	0.279	0.213
Q3l	0.240	0.191	0.798**	0.654**	0.314	0.448*	0.365+	0.464*	0.622**

Note. + $p < .10$. * $p < .05$. ** $p < .01$. **Bold** rows and columns reflect the top 50% most important factors reflected in Tables 8-12.

Spearman's Rho Correlation between Subordinate Factors of the Mum Effect (Appendix J) and Risk to Workplace Teams (Appendix K)

Subordinate Factors	Risks to Workplace Teams								
	Q7a	Q7b	Q7c	Q7d	Q7e	Q7f	Q7g	Q7h	Q7i
Q5a ~	0.207	0.247	0.114	0.334	0.369+	0.511*	0.310	0.092	0.250
Q5b	-0.047	0.130	0.357+	0.274	0.318	0.316	0.521**	0.390+	0.330
Q5c	-0.097	0.033	0.481*	0.499*	0.206	0.240	0.386+	0.446*	0.567**
Q5d	-0.039	0.029	0.383	0.341	0.170	0.257	0.364+	0.245	0.508*
Q5e	-0.023	-0.148	0.341	0.504*	0.274	0.367+	0.562**	0.486*	0.647**
Q5f	-0.142	-0.092	0.341	0.427*	0.335	0.335	0.304	0.409*	0.730**
Q5g	0.020	-0.031	0.412*	0.552**	0.319	0.381+	0.376+	0.352+	0.585**
Q5h	-0.279	-0.460*	0.301	0.493*	0.204	0.391+	0.431*	0.489*	0.465*
Q5i	-0.007	-0.145	0.407*	0.433*	0.393+	0.404+	0.244	0.567**	0.521**
Q5j	-0.233	-0.372+	0.332	0.535**	0.233	0.299	0.513*	0.615**	0.458*

Note. + $p < .10$. * $p < .05$. ** $p < .01$. **Bold** rows and columns reflect the top 50% most important factors reflected in Tables 8-12.

Spearman's Rho Correlation between Supervisor Factors of the Mum Effect (Appendix I) and Barriers to Team Communication (Appendix L)

Supervisor Factors	Barriers to Team Communication						
	Q9a	Q9b	Q9c	Q9d	Q9e	Q9f	Q9g
Q3a	0.117	0.229	0.162	0.069	0.042	0.272	0.342
Q3b	0.097	0.664**	0.416*	0.428*	0.383+	0.639**	0.666**
Q3c	0.344	0.209	0.198	0.272	0.404+	0.193	0.210
Q3d ~	0.172	0.379+	0.569**	0.295	0.242	0.396+	0.585**
Q3e	0.115	0.299	0.095	0.177	0.116	0.036	0.179
Q3f	0.141	0.430*	0.325	0.386+	0.492*	0.269	0.405*
Q3g	-0.001	0.428*	0.361+	0.299	0.315	0.224	0.312
Q3h	0.184	0.324	0.263	0.514*	0.532**	0.167	0.258
Q3i ~	-0.107	0.662**	0.223	0.174	0.172	0.259	0.306
Q3j	0.070	0.696**	0.531**	0.209	0.193	0.148	0.393+
Q3k	0.147	0.447*	0.473*	0.355+	0.352+	0.390+	0.482*
Q3l	0.272	0.603**	0.441*	0.428*	0.232	0.197	0.341

Note. + $p < .10$. * $p < .05$. ** $p < .01$. **Bold** rows and columns reflect the top 50% most important factors reflected in Tables 8-12.

Spearman's Rho Correlation between Subordinate Factors of the Mum Effect (Appendix J) and Barriers to Team Communication (Appendix L)

Subordinate Factors	Barriers to Team Communication						
	Q9a	Q9b	Q9c	Q9d	Q9e	Q9f	Q9g
Q5a ~	-0.327	0.299	0.320	-0.244	-0.074	0.372+	0.415*
Q5b	0.035	0.094	0.037	0.168	0.158	0.413*	0.343
Q5c	0.196	0.308	0.172	0.376+	0.343	0.010	0.149
Q5d	0.081	0.317	0.291	0.313	0.230	-0.041	0.078
Q5e	0.177	0.340	0.285	0.356+	0.371+	-0.036	0.130
Q5f	0.121	0.375+	0.330	0.339	0.365+	0.083	0.161
Q5g	-0.094	0.623**	0.506*	0.215	0.192	0.235	0.238
Q5h	0.060	0.327	0.270	0.090	0.046	0.122	0.153
Q5i	0.105	0.488*	0.178	0.289	0.097	0.090	0.226
Q5j	0.139	0.343	0.116	0.106	-0.026	0.117	0.246

Note. + $p < .10$. * $p < .05$. ** $p < .01$. **Bold** rows and columns reflect the top 50% most important factors reflected in Tables 8-12.

Note. Spearman's Rho analysis in Appendix O is limited by the relatively small number of respondents ($n = 24$). A larger sample size would be expected to show more statistically significant correlations.



ORGANIZATIONAL LEADERSHIP AWARENESS OF THE HIERARCHICAL MUM EFFECT: A
MODIFIED DELPHI STUDY

JEREMY BEAKLEY

CONFIDENTIALITY STATEMENT

As a researcher working on the above research study at the University of Phoenix, I understand that I must maintain the confidentiality of all information concerning all research participants as required by law. Only the University of Phoenix Institutional Review Board may have access to this information. “Confidential Information” of participants includes but is not limited to: names, characteristics, or other identifying information, questionnaire scores, ratings, incidental comments, other information accrued either directly or indirectly through contact with any participant, and/or any other information that by its nature would be considered confidential. In order to maintain the confidentiality of the information, I hereby agree to refrain from discussing or disclosing any Confidential Information regarding research participants, to any individual who is not part of the above research study or in need of the information for the expressed purposes on the research program. This includes having a conversation regarding the research project or its participants in a place where such a discussion might be overheard; or discussing any Confidential Information in a way that would allow an unauthorized person to associate (either correctly or incorrectly) an identity with such information. I further agree to store research records whether paper, electronic or otherwise in a secure locked location under my direct control or with appropriate safe guards. I hereby further agree that if I have to use the services of a third party to assist in the research study, who will potentially have access to any Confidential Information of participants, that I will enter into an agreement with said third party prior to using any of the services, which shall provide at a minimum the confidential obligations set forth herein. I agree that I will immediately report any known or suspected breach of this confidentiality statement regarding the above research project to the University of Phoenix, Institutional Review Board.

_____	_____	_____
Signature of Researcher	Printed Name	Date
_____	_____	_____
Signature of Witness	Printed Name	Date