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International Research Workshop on IT Project Management (IRWITPM)

Winter 12-13-2018

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Ali Vedadi
Middle Tennessee State University, Ali.Vedadi@mtsu.edu

Michael Erskine
Middle Tennessee State University, michael.erskine@mtsu.edu

Melinda Korzaan
Middle Tennessee State University, melinda.korzaan@mtsu.edu

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Ali Vedadi
Middle Tennessee State University
ali.vedadi@mtsu.edu

Michael A. Erskine
Middle Tennessee State University
michael.erskine@mtsu.edu

Melinda Korzaan
Middle Tennessee State University
melinda.korzaan@mtsu.edu

ABSTRACT

Project managers often have early indications that a project is performing poorly and potentially headed for failure. In such cases, reporting these warnings could prompt executives to provide essential support to mitigate and even prevent problems. However, project managers are frequently reluctant to share such information with executives. This research-in-progress aims to develop a model establishing antecedents that drive accurate status reporting between project managers and executives as well as identifying moderating variables impacting such reporting. The theory of planned behavior and information systems (IS) whistleblowing theory provide the theoretical lenses facilitating the identification of probable antecedents to such reporting intentions. A theoretical model including propositions has been developed.

Keywords

Research-in-progress, status reporting, executive communications, executive support, project management.

INTRODUCTION

Reporting eminent failure to an executive or oversight committee provides an opportunity to salvage or rescue a troubled project. However, managers are often reluctant to convey negative project information to such executives, whether informally or via project status reports. In fact, understanding why project status reports to executives are misreported with key information withheld is an ongoing debate in the IS project management literature. However, it is understood that communicating accurate project information – even if it is negative – is important for preventing project escalation and failure (Park et al., 2008; Nuijten et al., 2016; Petter, 2018), yet executives cannot rely on accurate status reports (Keil et al., 2014) and a resistance to reporting negative information is prevalent in the context of technology projects (Park et al., 2008; Petter, 2018; Lee et al., 2017).

Certainly, many potential antecedents have been explored revealing some aspects of this phenomenon; however, the specific project manager to executive relationship has not yet been explored in-depth. In this study, we seek to address two primary research questions: R1) Which antecedents influence a project manager's willingness to discuss project performance with an executive? and R2) Do gender, culture and other demographic variables moderate a project manager's willingness to discuss project performance with an executive? We address these questions through the theoretical frameworks described in the next section. After this a theoretical model and related propositions are presented. In conclusion, potential benefits and limitations of this work are described.

THEORETICAL FRAMEWORK

This research is framed through the Theory of Planned Behavior (TPB) posited by Ajzen (1985, 1991), which is a derivative of the earlier Theory of Reasoned Action (TRA) developed by Fishbein and Ajzen (1975). Both TRA and TPB attempt to predict the intention to perform behaviors (Madden et al., 1992; Netemeyer et al., 1991). This theory has been applied in a variety of disciplines and used to explain behavioral intentions ranging from physical self-injury (O'Connor & Armitage, 2017) and unsafe driving behaviors (McMillan et al. 2017) to entrepreneurial activity (Kautonen et al., 2015) and consumer purchase decisions (De Cannière et al. 2009). Within the IS discipline the TPB partially informed the development of the IS Continuance Theory (Bhattacherjee, 2001) and the TRA has led to the development of several popular theories including the Technology Acceptance Model (TAM) posited by Davis et al.

(1989) and Davis (1989). As we seek to understand the behavioral intent of communicating with executives, the TPB provides a fitting framework.

In addition to the TPB, IS Whistleblowing Theory (ISWT) as presented by Keil et al. (2010) provides a secondary perspective to better understand the intention to share potentially negative status information with an executive. Specifically, ISWT examines traits of individuals that lead to the reporting of project concerns to project leaders. The ISWT was derived from the IT project whistleblowing research stream found in IS literature (e.g., Robey & Keil, 2001; Smith & Keil, 2003; Park & Keil, 2009; Wang et al., 2015) which itself is derived from earlier social psychology research exploring the reluctance to transmit bad news (e.g., Tesser & Rosen, 1975). ISWT literature has primarily examined communicating negative information within project teams and to project managers. What is less understood is the relationship between project managers and executives who oversee, sponsor and champion projects. Such relationships are likely quite different as project managers have an obligation to report accurate status updates to executives, are qualified to understand the impact of information sharing thorough project reports, and have a unique role that offers an opportunity to request executive support.

The dependent variable of willingness to communicate has been widely studied in the context of intercultural issues (e.g., McCroskey & Richmond, 1987; McCroskey & Richmond, 1990; Sallinen-Kuparinen et al., 1991), organizational settings (e.g., Richmond & Roach, 1992), and whistleblowing (Keil et al., 2010). Therefore, this well supported and established dependent variable is appropriate for this research study.

THEORETICAL MODEL

Based on a review of extant TPB and ISWT literature, a theoretical model was developed demonstrating that individual traits, project specific context, and the organizational environment influence the project manager's willingness to share negative project information with executives. This model is shown in Figure 1.
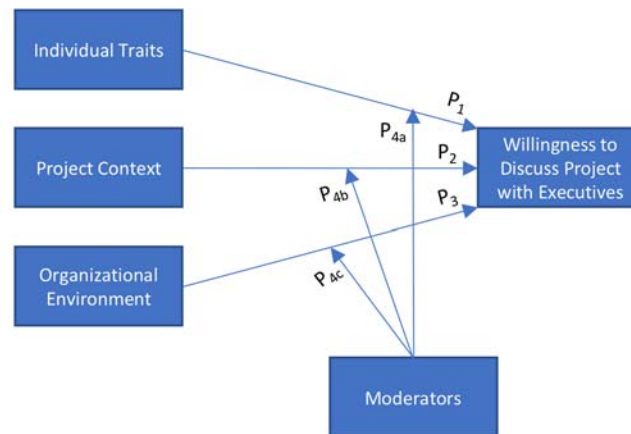

Figure 1. Theoretical Model

Individual Traits

Disclosure of imperfection

The career of a project manager within an organization, or across organizations, is dependent on the project manager's ability to maintain a reputation exemplifying effective project management. As such, project managers will likely strive to avoid disclosing mistakes publicly. While perfectionism, unique from conscientiousness and neuroticism, has been shown to be a multidimensional construct (Flett & Hewitt, 2015), particular dimensions such as the self-presentation of perfectionism may explain why some project managers choose to avoid sharing negative project updates (Hewitt et al., 2003). Perfectionistic self-presentation has been found to be a predictor of imposter fears, which

may correlate with low project management self-efficacy, as well as social interaction anxiety and social performance anxiety (Hewitt et al., 2003; Flett & Hewitt, 2015).

Anxiety about communicating negative information

Concerns related to delivering negative project information may be particularly debilitating to individuals who already confront communications anxiety. This may lead to avoiding the conversation or skewing the information to be primarily positive. Furthermore, some individuals suffer from social anxiety when interacting with unfamiliar others (Safren et al., 1998). Thus, project managers who may feel comfortable when in control of their own projects, may experience a form of social anxiety when interacting with executive leadership.

Optimism of project success

Optimism has been identified as an essential attribute of a successful project manager (Dolfi & Andrews, 2007). A project manager's optimism of project success can lead to increased and accurate project status reporting. Specifically, such optimism could encapsulate the delivery of negative status reporting to executives (Korzaan and Brooks, 2015).

Project management self-efficacy

Self-efficacy, an individual's perception of their personal capability, can be a predictor of future performance (Bandura, 1977; Bandura 1982). While general self-efficacy measures may provide some understanding of self-perceived capabilities, it is suggested that domain- and activity-specific self-efficacy scales offer greater measurement precision and predictive power (McGee et al., 2009; Bandura, 2012; Blomquist et al., 2016). Project-management self-efficacy consists of five project management contextual dimensions: team management, stakeholder management, project planning project execution, and project evaluation (Blomquist et al., 2016).

Based on empirical evidence that behavioral intent can be predicted through perfectionism, interaction anxiety, optimism of project success, and project management self-efficacy, we posit the following:

> *P_1: The project manager's individual traits influence the willingness to discuss negative project performance with an executive.*

Project Context

Project phase

While project managers often receive early notification of potential problems (Cueller et al., 2016; Keil et al., 2014), these potential concerns are often not reported to executive managers during early project phases. Korzaan and Brooks (2015) hypothesized and empirically validated that project workers are more likely to report project information in later stages of the project development cycle. Perhaps an optimistic bias toward project success hinders such reporting in earlier stages of the project development cycle as the project manager firmly believes in the success of the project.

Strategic importance

Organizations that manage multiple projects will often prioritize these projects strategically (Cooke-Davies and Arzymanow, 2003). The level of strategic importance of a project to an organization may moderate the project manager's willingness to discuss project information with an executive. Müller and Turner (2007) identified that different project leadership traits had varying impact on projects when classified by strategic importance. These same traits, particularly that of communication, could influence the willingness to share negative project information with executives.

Project contract type

Using principal-agent theory as a framework, Müller & Turner (2005) report that project contract types require different communication approaches to reach an equilibrium of information needs and information provision between project managers and project owners. Müller & Turner (2007) further suggest that varying project contract types require specific leadership styles. Similarly, the project contract type may influence the project manager's willingness to discuss project information with an executive.

Responsibility for project success

An established responsibility of the project manager role is the frequent and accurate reporting of project status to executives and oversight boards. This responsibility should empower the project manager to share such information without hesitation. This has been examined at the project team level where empirical findings have shown that the responsibility of reporting negative project status information decreases the reluctance to report such information (Keil et al., 2004).

Negative consequences

Perceptions of negative consequences stemming from reporting frequent and accurate project status information, particularly if the information is negative, may prevent a project manager from reporting accurately. At the project team level, project members who fear retaliation from management or colleagues, are more likely to remain silent (Keil et al., 2004; Mesmer-Magnus & Viswesvaran, 2005; Korzaan & Brooks, 2015). Perceived negative consequences, such as a fear of retaliation or harming one's image may hinder a project manager from reporting negative information.

Executive attachment to the project

When reporting occurs directly to project champions and/or sponsors, there may be a perceived emotional attachment between the executive and the project success (Keil and Robey, 2001; Keil et al., 2010). Perceptions of such attachment may complicate the cognitive reasoning associated with the decision of a project manager to share status updates. Executives with a strong emotional attachment to a particular project may exhibit greater levels of disappointment when receiving negative project updates, yet such executives will be more likely to support the project when needed.

Based on empirical evidence indicating that behavioral intent can be predicted through the project level context including the project development phase (e.g., Keil et al., 2014), strategic importance (e.g., Müller & Turner, 2005), contract type (e.g., Müller & Turner, 2005), responsibility of project success (e.g., Keil et al., 2004), negative consequences (e.g., Mesmer-Magnus & Viswesvaran, 2005), and executive attachment to the project (e.g., Keil and Robey, 2001), we posit the following:

> *P₂: The project context influences a project manager's willingness to discuss negative project performance with an executive.*

Organizational Environment

Studies (e.g., Keil et al. 2010) have explored the impact of the organizational environment on communicating project status updates, as well as an antecedent of general intra-organizational communications.

Subjective norms

Subjective norm is described as the perception of a prevailing social opinion toward performing a specific behavior (Ajzen, 1985). Thus, the opinions of colleagues may provide informational influence leading to altered opinions about a behavioral intent (Bunkrant & Cousineau, 1975). Thus, project managers who feel a social pressure to report project information from their peers, team members, or professional organizations, would likely be more willing to adhere to such perceived norms.

Trust in executives

Trust between individual communicators is considered an essential consideration toward effective upward communication (Gaines, 1980; Keil et al. 2010). Thus, a project manager's trust in the executive is expected to influence the willingness to share frequent and accurate status updates. If such trust does not exist, a project manager may be reluctant to share negative project information (Keil et al., 2010).

Executive responsiveness

When executives receive negative project status updates, they are in a unique position to respond with additional resources or other types of executive support. However, depending on the complexity of the leadership structure or

the political climate, executive responsiveness may be hampered (Miceli & Near, 1992; Keil et al., 2010). Thus, the project manager's perception of the responsiveness of the executives is expected to influence the intent to provide frequent and accurate status updates.

Organizational climate conductive to reporting

The climate of an organization determines the degree to which policies, procedures, and culture encourage reporting (Morrison & Milliken, 2000; Keil et al., 2010). PM literature suggests that when an organizational climate is conductive to reporting there are increases in whistleblowing (e.g., Tan et al, 2003; Keil et al., 2004; Keil et al., 2010). Similarly, it should be expected that such climate will predict the willingness of project managers to report negative status updates to executives.

Psychological safety

The shared belief in an organizational environment conductive to interpersonal risk taking, referred to as psychological safety (Edmondson, 1999), has been identified as a factor concerning information sharing behaviors (Detert and Burris 2007; Liang et al. 2012). Thus, the psychological safety of the organization could influence the willingness of project managers to report negative status updates to executives.

Alignment of organizational project management standards and methodologies

An alignment of formal project management training and applied standards and methodologies would undoubtedly lead to a safer and more familiar organizational environment. For instance, a project manager certified as a Scrum Master should be able to facilitate engaging and relevant Daily Scrums, which would ensure adequate communications to executives as in an organization that aligns with the Scrum philosophy such executives would willingly participate in the meetings.

Based on theoretical relationships and empirical evidence, behavioral intent can be predicted based on the organizational environment, particularly when consisting of subjective norms (e.g., Ajzen, 1985), trust in executives (e.g., Gaines, 1980), executive responsiveness (e.g., Keil et al., 2010), organizational climate (e.g., Tan et al, 2003; Keil et al., 2004), psychological safety (e.g., Liang et al., 2012), and through the alignment of organizational project management standards and methodologies. Thus, we posit the following:

> *P₃: The organizational environment influences the project manager's willingness to discuss negative project performance with an executive.*

Moderating Variables

Gender

The role of gender has been examined IS and PM literature (e.g., Korzaan et al., 2018; Korzaan & Brooks, 2015; Pinto et al., 2017; Ojiako et al., 2014). Gender differences have been found to influence decisions of deescalating projects in response to negative information (Cueller et al., 2006).

Work Experience

Similar to project management self-efficacy, the level of experience of project managers may impact the willingness to report (Harrison & Harrell, 1993; Smith et al., 2001). Particularly, if the individual has had positive or negative consequences due to reporting project information in the past. Work experience can be assessed by the duration of time in the role of project manager, in addition to formal project management training and certifications completed.

Individual Ethical Differences

Individual ethical differences have been shown to influence moral decisions, actions, and emotions (e.g., Forsyth, 1980, Chowdhury, 2017). Such individual ethical differences, also referred to as individual moral philosophies, have been assessed using scales of relativism and idealism (e.g., Forsyth, 1980; Tian, 2008). Within project management literature, Huang and Chang (2010) establish that project managers with low relativism are more likely to cancel a project, yet found no significant relationship between idealism and willingness to cancel a project.

Culture

Contemporary project managers often work in multicultural environments and many projects span to organizations across the globe. Culture and ethnocentrism have been used as predictors of communication apprehension across cultures (Toale & McCroskey, 2001). Contemporary studies measure culture using dimensions including: individualism-collectivism, masculinity-femininity, power distance, and uncertainty avoidance (Taras et al., 2009; Hofstede, 1984, 1998). The individualism-collectivism spectrum refers to whether social behaviors are primarily guided through personal goals or goals of the collective (Triandis, 1989; Srite & Karahanna, 2006). Thus, individuals who identify more with the collective cultural background will likely be more willing to share project information than those of a more individualistic cultural background.

Age

Generational differences have been shown to moderate several of the antecedents described herein, particularly those capturing perceptions of social influence (Wang et al., 2009). For instance, in the case of the conceptual model, social influence is expected to moderate individual traits including perfectionism, project specific contexts including perceived negative consequences, and social norms at the organizational environment context. As each contextual level of the study includes potential constructs that capture perceived social influences or perceived outcomes that may have social impact, age may moderate many of the relationships.

Based on an examination of potential moderators, we posit:

> P_{4a}: *Demographic variables moderate the influence of a project manager's individual traits on the willingness to discuss negative project performance with an executive.*

> P_{4b}: *Demographic variables moderate the influence of the project context on the project manager's willingness to discuss negative project performance with an executive.*

> P_{4c}: *Demographic variables moderate the influence of the organizational environment on the project manager's willingness to discuss negative project performance with an executive.*

METHODS

Context and Subjects

Empirical data will be collected using on online survey of current project managers with reporting lines to senior organizational executives. The sample will consist of 300-400 information technology project managers recruited through an electronic communication from a well-respected project management association. This sample size follows best-practices to ensure successful subsequent statistical analysis (Kock & Hadaya, 2018). Stratified sampling will be used to ensure that the sample includes sufficient gender and cultural diversity necessary for the examination of these hypothesized moderators.

Constructs and Measures

This study will rely on constructs and measurement items developed and tested in prior literature. When appropriate, the measurement items will be adapted to the context of status reporting from project managers to executives. A pilot study will be conducted to ensure adequate internal consistency among items measuring the same constructs.

Scale	*Sample Items*	*Adapted/Sourced from*
Perfectionism	I should always keep my problems to myself.	Hewitt et al., 2003
Anxiety	I am nervous interacting with executives I do not know well.	Safren et al., 1998
Optimism	I am completely sure the project will finish successfully.	Korzaan & Brooks, 2015
PM Self-Efficacy	I communicate in a way that ensures all stakeholders have the same understanding, no matter their level of technical or operational understanding.	Blomquist et al., 2016
Project Phase	[Analysis, Design, Programming, Testing]	Korzaan & Brooks, 2015
Strategic Importance	[Mandatory, Repositioning, Renewal]	Müller & Turner, 2007

Contract Type	[Fixed Price, Remeasurement, Alliance]	Müller & Turner, 2007
Responsibility	I am responsible for the project's outcome.	Korzaan & Brooks, 2015
Negative Consequences	I would suffer negative consequences if I went directly to upper management and discussed the status of this project.	Korzaan & Brooks, 2015
Executive Attachment	The project in question is the brain child of one or more executives to whom I report.	Keil et al., 2010
Subjective Norm	People who influence my behavior think that I should discuss project performance with executives.	Venkatesh & Morris, 2000; Bhattacherjee & Lin, 2014
Trust in Executive	I trust the integrity of executives to whom I report.	Keil et al., 2010
Executive Responsiveness	Executives are responsive toward solving reported problems when brought to their attention.	Keil et al., 2010
Organizational Climate	There is a strong sense of where the organization is going.	Keil et al., 2010; Bock et al., 2005
Psychological Safety	Members of my organization are able to bring up problems and tough issues.	Edmondson, 1999
Cultural Values	Group success is more important than individual success.	Yoo et al, 2011
Individual Ethics	The existence of potential harm to others is always wrong, irrespective of the benefits to be gained.	Forsyth, 1980

Table 1. Constructs and Sample Items

Data Analysis and Findings

The collected data will be analyzed using component-based partial least squares structural equation modeling (PLS-SEM). This method has been widely used in IS research (Ringle et al., 2012). We expect the model to present a greater predictive value than prior studies using willingness to report as a dependent variable due to the antecedents having been derived from multiple theories and exploring the individual, project, and organizational contexts. Furthermore, the use of multiple control variables may reveal traits and context that influence the model, which have not been investigated in prior studies.

Limitations

This study has several limitations. First, the factors that lead to an increased tendency to avoid sharing accurate project status updates, may themselves prevent subjects from accurately responding to the measurement items. To address this, the subjects are ensured anonymity and hypothetical project scenarios are suggested. A second limitation stems from the stratified sampling method. We believe that this method is essential to capture the moderating effects of gender and culture, thus outweighing the drawbacks. A third limitation is in regard to the theoretical factors influencing the behavioral intent. While the literature review revealed theoretically sound relationships, it is entirely possible that further factors exist that have not yet been identified or that were inadvertently excluded from the study. While additional candidate antecedents can be found in literature, further increasing the number of measures would certainly decrease response rates. A fourth limitation is that the proposed sample includes only project managers located in the southeastern United States. It is suggested that future studies evaluate the statistically significant relationships discovered in this project to other regions with the intent of further establishing generalizability. A fifth limitation is that the context of the status updates examined applies to negative news. Future studies should examine whether the relationships identified herein explain the project manager's willingness to communicate accurate and complete project status updates in general.

Expected Benefits

We expect this research to reveal important findings for practitioners and academics. Practitioners will benefit from a more comprehensive understanding of what individual, organizational, and project-specific factors influence intentions to communicate accurate project status updates. Training programs could be developed for executives that oversee projects as well as project managers on how to build effective communications and manage communication risk more effectively. Furthermore, project closeout (i.e., lessons learned activities) and even audit and control procedures could be developed to identify insufficient status reporting to executives. Additionally, the identification of organizational environment variables that hinder effective status reporting could present an opportunity to develop

automated reporting to executives in such situations providing a more comprehensive depiction of the overall project health, thereby mitigating potentially incomplete status updates.

Scholars benefit as this study aims to provide a framework for additional research. Specifically, we believe that the findings will facilitate the development of instruments to investigate specific barriers to sharing negative project status and an opportunity to reveal strategies for overcoming such barriers. Furthermore, the theoretical extension of the TBP with ISWT may be applied to additional contexts that address the communication of negative information.

REFERENCES

Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In *Action control* (11-39), Heidelberg: Springer.

Ajzen, I. (1991). The Theory of Planned Behaviour. *Organizational Behavior and Human Decision Processes*, 50, 2, 179-211.

Bandura, A. (2012). On the functional properties of perceived self-efficacy revisited, *Journal of Management*, 38, 1, 9-44.

Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change, *Psychological Review*, 84, 2, 191-215.

Bandura, A. (1982). Self-efficacy mechanism in human agency, *American Psychologist*, 37, 2, 122–147.

Blomquist, T., Farashah, A. D., Thomas, J. (2016). Project management self-efficacy as a predictor of project performance: Constructing and validating a domain-specific scale, *International Journal of Project Management*, 34, 1417-1432.

Bhattacherjee, A. (2001). Understanding information systems continuance: an expectation-confirmation model. *MIS Quarterly*, 25, 3, 351-370.

Bhattacherjee, A., & Lin, C. P. (2015). A unified model of IT continuance: three complementary perspectives and crossover effects. European Journal of Information Systems, 24(4), 364-373.

Bock, G. W., Zmud, R. W., Kim, Y. G., & Lee, J. N. (2005). Behavioral intention formation in knowledge sharing: Examining the roles of extrinsic motivators, social-psychological forces, and organizational climate. MIS Quarterly, 87-111.

Burnkrant, R. E., and Cousineau, A. (1975) Informational and Normative Social Influence in Buyer Behavior, *Journal of Consumer Research*, 2, 3, 206-214.

Chowdhury, R. M. (2017). Emotional intelligence and consumer ethics: The mediating role of personal moral philosophies. *Journal of Business Ethics*, 142(3), 527-548.

Cooke-Davies, T. J., & Arzymanow, A. (2003). The maturity of project management in different industries: An investigation into variations between project management models. *International Journal of Project Management*, 21(6), 471-478

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13, 3, 319-340.

Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: a comparison of two theoretical models, *Management Science*, 35, 8, 982-1003.

De Cannière, M. H., De Pelsmacker, P., & Geuens, M. (2009). Relationship quality and the theory of planned behavior models of behavioral intentions and purchase behavior, *Journal of Business Research*, 62, 1, 82-92.

Dolfi, J. and Andrews, E. J. (2007). The subliminal characteristics of project managers: An exploratory study of optimism overcoming challenging the project management work environment, *International Journal of Project Management*, 25, 674-682.

Fishbein, M. and Ajzen, I. (1975). *Belief, Attitude, Intention and Behavior: An Introduction to Theory and Research*, Addison-Wesley, Reading MA.

Flett, G. L., and Hewitt, P. L. (2015). Measures of perfectionism. In *Measures of personality and social psychological constructs* (pp. 595-618).

Forsyth, D. R. (1980). A taxonomy of ethical ideologies. *Journal of Personality and Social Psychology*, 39(1), 175-184

Gaines, J. (1980). Upward communication in industry: An experiment. *Human Relations*, 33, 12, 929-942.

Harrison, P. D. and Harrell, A. (1993). Impact of 'Adverse Selection' on Managers' Project Evaluation Decisions, *Academy of Management Journal*, 36, 3, 635-643.

Hewitt, P. L., Flett, G. L., Sherry, S. B., et al. (2003). The interpersonal expression of perfection: perfectionistic self-presentation and psychological distress. *Journal of Personality and Social Psychology*, 84, 1303-1325.

Huang, C. L., & Chang, B. G. (2010). The effects of managers' moral philosophy on project decision under agency problem conditions. *Journal of Business Ethics*, 94(4), 595-611

Kautonen, T., van Gelderen, M., & Fink, M. (2015). Robustness of the theory of planned behavior in predicting entrepreneurial intentions and actions. *Entrepreneurship Theory and Practice*, 39, 3, 655-674.

Keil, M., and Robey, D. (2001). Blowing the whistle on troubled software projects. *Communications of the ACM*, 44, 4, 87-93.

Keil, M., Smith, H. J., Pawlowski, S., and Jin, L. (2004). "Why didn't somebody tell me?": Climate, information asymmetry, and bad news about troubled projects. *The DATA BASE for Advances in Information Systems*, 35, 2, 65-84.

Keil, M., Tiwana, A., Sainsbury, R., and Sneha, S. (2010). Toward a theory of whistleblowing intentions: A benefit-to-cost differential perspective, *Decision Sciences*, 41, 4, 787-812.

Kock, N., and Hadaya, P. (2018). Minimum sample size estimation in PLS-SEM: The inverse square root and gamma-exponential methods, *Information Systems Journal*, 28, 1, 227-261.

Korzaan, M. and Brooks, N. (2015). The silent treatment in IT projects: Gender differences in inclinations to communicate project status information. *Journal of Information Systems Applied Research*, 8, 1, 19-30.

Korzaan, M., Harris, A., and Brooks, N. (2018). An exploratory analysis of gender differences in IT project commitment, continuation, and escalation. *Journal of Information Systems Applied Research*, 11, 2, 13-23.

Lee, H., Keil, M., Smith, H. J., and Sarkar, S. (2017). The roles of mood and conscientiousness in reporting of self-committed errors on IT projects. *Information Systems Journal*, 27, 589-617.

McCroskey, J., Richmond, V. (1987). Willingness to Communicate. In J.C. McCroskey & J.A. Daly (Eds.), *Personality and Interpersonal Communication*. Newbury Park, CA: Sage.

McCroskey, J., Richmond, V. (1990). Willingness to Communicate: Differing cultural perspectives. *Southern Communication Journal*, 56, 72-77.

McGee, J.E., Peterson, M., Mueller, S.L., and Sequeira, J.M. (2009). Entrepreneurial self-efficacy: refining the measure, *Entrepreneurship Theory and Practice*, 33, 4, 965-988.

Madden, T. J., Ellen, P. S., and Ajzen, I. (1992). A comparison of the theory of planned behavior and the theory or reasoned action. *Personality and Social Psychology Bulletin*, 8, 1, 3-9.

Netemeyer, R. G., Burton, S., and Johnston, M. (1991). A comparison to two models for the prediction of volitional and goal-directed behaviors: A confirmatory analysis approach. *Social Psychology Quarterly*, 54, 2, 87-100.

Nuijten, A., Keil, M., and Commandeur, H. (2016). Collaborative partner or opponent: How the messenger influences the deaf effect in IT projects. *European Journal of Information Systems*, 25, 534-552.

McMillan, B., Smith, N., and Conner, M. (2017). Examining Normative Pressure in the Theory of Planned Behavior: Impact of Gender and Passengers on Intentions to Break the Speed Limit. In *Planned Behavior* (pp. 91-106). Routledge.

Miceli, M. P. and Near, J. P. (1992). *Blowing the whistle: The organizational & legal implications for companies and employees*, New York: Lexington Books.

Morrison, E. W. and Milliken, F. J. (2000). Organizational silence: A barrier to change and development in a pluralistic world, *Academy of Management Review*, 25, 4, 706-725.

Müller, R., & Turner, J. R. (2005). The impact of principal–agent relationship and contract type on communication between project owner and manager. *International Journal of Project Management*, 23(5), 398-403.

Müller, R., & Turner, J. R. (2007). Matching the project manager's leadership style to project type. *International Journal of Project Management*, 25(1), 21-32

O'Connor, R. C., and Armitage, C. J. (2017). Theory of planned behavior and parasuicide: An exploratory study. In *Planned Behavior* (pp. 19-32). Routledge.

Ojiako, U., Chipulu, M., Gardiner, P., Williams, T., Mota, C., Maguire, S., Shou, Y., and Stamati, T. (2014). Effect of project role, age and gender differences on the formation and revision of project decision judgements. *International Journal of Project Management*, 32, 556-567.

Park, C., Im, G., and Keil, M. (2008). Overcoming the mum effect in IT project reporting: Impacts of fault responsibility and time urgency. *Journal of the Association for Information Systems*, 9, 7, 409-431.

Park, C., and Keil, M. (2009) Organizational silence and whistleblowing on IT projects: An integrated model, *Decision Sciences*, 40, 4, 901-918.

Patterson, M. G., West, M. A., Shackleton, V. J., Dawson, J. F., Lawthom, R., Maitlis, S., ... & Wallace, A. M. (2005). Validating the organizational climate measure: Links to managerial practices, productivity and innovation. *Journal of Organizational Behavior*, 26(4), 379-408.

Petter, S. (2018). If you can't say something nice: Factors contributing to team member silence in distributed software project teams. SIGMIS-CPR'18, Buffalo-Niagara Falls, NY, USA,

Pinto, J. K., Patanakul, P., Pinto, M. B. (2017). "The aura of capability": Gender bias in selection for a project manager job. *International Journal of Project Management*, 35, 420-431.

Richmond, V.P., and Roach, D.K. (1992). Willingness to communicate and employee success in U.S. organizations. *Journal of Applied Communication Research*, 95-112.

Ringle, C.M., Sarstedt, M., and Straub, D.W. (2012). A critical look at the use of PLS-SEM in MIS Quarterly, MIS Quarterly, 36,1, iii–xiv.

Robey, D. and Keil, M. (2001) Blowing the whistle on troubled software projects, *Communications of the ACM*, 44, 4, 87-93.

Safren, S. A., Turk, C. L., and Heimberg, R. G. (1998). Factor structure of the social interaction anxiety scale and the social phobia scale. *Behaviour Research and Therapy*, 36, 4, 443-453.

Sallinen-Kuparinen, A., McCroskey, J. and Richmond, V. (1991). Willingness to Communicate, Communication Apprehension, Introversion, and Self-Reported Communication Competence: Finnish and American comparisons. *Communication Research Reports*, 8, 55-64.

Smith, H. J., and Keil, M. (2003) The reluctance to report bad news on troubled software projects: A theoretical model, *Information Systems Journal*,13, 1, 69-95.

Smith, H. J., Keil, M. and Depledge, G. (2001). Keeping Mum as the Project Goes Under: Towards an Explanatory Model, *Journal of Management Information Systems*, 18, 2, 189-228.

Srite, M. and Karahanna, E. (2006) The role of espoused national cultural values in technology acceptance, *MIS Quarterly*, 30, 3, 679-704.

Tan, B. C. Y., Smith, H. J., Keil, M., and Montealegre, R. (2003). Reporting bad news about software projects: Impact of organizational climate and information asymmetry in an individualistic and a collectivistic culture. *IEEE Transactions on Engineering Management*, 50, 1, 64-77.

Taras, V., Rowney, J., and Steel, P. (2009) Half a century of measuring culture: Review of approaches, challenges, and limitations based on the analysis of 121 instruments for quantifying culture, *Journal of International Management*, 15, 357-373.

Tesser, A., and Rosen, S. (1975). The reluctance to transmit bad news. In L.Berkowitz (Ed.), *Advances in experimental social psychology* (pp. 193–232). Orlando, FL: Academic Press.

Tian, Q. (2008). Perception of business bribery in China: The impact of moral philosophy. *Journal of Business Ethics*, 80(3), 437-445.

Triandis, H. C. Cross-Cultural Studies of Individualism and Collectivism, In *Nebraska Symposium on Motivation*, J. Berman (ed.), University of Nebraska Press, Lincoln, NE, 1989a, 41-133.

Toale, M. C. and McCroskey, J. C. (2001) Ethnocentrism and trait communication apprehension as predictors of interethnic communication apprehension and use of relational maintenance strategies in interethnic communication, *Communication Quarterly*, 49, 1, 70-83.

Wang, Y. S., Wu, M. C., and Wang, H. Y. (2009). Investigating the determinants and age and gender differences in the acceptance of mobile learning, *British Journal of Educational Technology*, 40, 1, 92-118

Yoo, B., Donthu, N., & Lenartowicz, T. (2011). Measuring Hofstede's five dimensions of cultural values at the individual level: Development and validation of CVSCALE. *Journal of International Consumer Marketing*, 23(3-4), 193-210.