Association for Information Systems
AIS Electronic Library (AISeL)

Proceedings of the 2018 Pre-ICIS SIGDSA Symposium

Special Interest Group on Decision Support and Analytics (SIGDSA)

12-12-2018

Why Should I Share my Knowledge? Examining the Effect of Knowledge Sharing in Organizations

Prasad S. Rudramuniyaiah
University of Central Missouri, rudramuniyaiah@ucmo.edu

Shekhar Rathor
University of Central Missouri, rathor@ucmo.edu

Someswar Kesh
University of Central Missouri, kesh@ucmo.edu

Silvana Faja
University of Central Missouri, sfaja@ucmo.edu

Follow this and additional works at: https://aisel.aisnet.org/sigdsa2018

Why Should I Share my Knowledge? Examining the Effect of Knowledge Sharing in Organizations

Research-in-Progress

Prasad S Rudramuniyaiah
University of Central Missouri
rudramuniyaiah@ucmo.edu

Shekhar Rathor
University of Central Missouri
rathor@ucmo.edu

Someswar Kesh
University of Central Missouri
kesh@ucmo.edu

Silvana Faja
University of Central Missouri
sfaja@ucmo.edu

Abstract

Existing literature on knowledge management has largely focused on examining the outcomes of knowledge management, including knowledge sharing behaviors, at the organizational level, while outcomes at the individual level have received little attention. To address this gap in research, we develop a theoretical model to empirically examine the effects of knowledge sharing behavior on job satisfaction. We theorize that knowledge sharing behaviors influence job satisfaction through expertise or human capital, and perceptions of reputation. We propose to test our model using survey responses from IT professionals, to understand what benefits individuals may derive when they share their knowledge. We believe the results of our study would be of interest to both academia and practice by addressing the gap in research and, by providing insights for practitioners in managing knowledge management efforts respectively.

Keywords

Knowledge sharing, job satisfaction, reputation, human capital, expertise.

Introduction

A large body of research on Knowledge Management (KM) focuses on understanding the antecedents of knowledge sharing behaviors (e.g. Bock and Kim, 2002, Kankanhalli et al., 2005, Quigley et al, 2007). This stream of research has examined several antecedents of knowledge sharing to understand what factors facilitate or inhibit knowledge sharing behaviors at the individual level; such as motivations, personality types, work experience and, organizational level factors such as culture and norms, among others (Bock and Kim, 2002, Kankanhalli et al., 2005, Riege, 2005, Quigley et al, 2007)

A second stream of KM research focusses on examining the outcomes of KM efforts, including knowledge sharing behaviors, on organizational performance (e.g. Kogut and Zander, 1992; Nonaka and Takeuchi, 1995) and competitive advantage (Grant, 1996; Davenport and Prusak, 1998; Sosa, 2009; Volberda et al, 2010). This stream of research has provided consistent results on the positive influence of knowledge sharing behaviors and organizational performance.

The key themes underlying these two streams of research is to understand how employee resistance to sharing knowledge can be overcome and, what benefits can be appropriated by overcoming the resistance to share knowledge. While these two streams of research have provided us with a rich understanding of the phenomenon of knowledge sharing, from the perspective of its antecedents and outcomes and, their importance in the organizational context, several questions remain unanswered.

First, based on the vast attention received, in terms of the number of articles published, prior KM literature appears to suggest that the benefits of knowledge sharing are primarily appropriated at the organizational level, in terms of organizational performance and competitive advantage and, several researchers have provided empirical evidence for the same. While we agree with this, we believe that individuals appropriate benefits as well. However, this relationship has not been sufficiently examined in KM research. Our belief is supported by Foss et al., (2010) who found a lack of research on micro level factors in their review of KM literature among top thirteen journals publishing work on KM research.

Second, if individuals are reluctant to share knowledge, it is implied that individuals' perceive that some negative outcomes may result due to the sharing of their knowledge. On the other hand, it can be argued that individuals' perception on the net-benefits resulting due to the sharing of knowledge, may be of more value than the possible negative outcomes; when they share their knowledge. This value assessment is with reference to the "self" or the individual sharing the knowledge. Therefore, we believe that the benefits of knowledge sharing are appropriated at the individual level as well, giving rise to questions such as: what benefits do individuals derive when they share their knowledge?

The evidence for the relationship between knowledge sharing behaviors and individual level outcomes are implied but not sufficiently empirically examined in KM literature, constituting an important gap in research. Our study therefore, aims to addresses the broad question: What are the outcomes of sharing knowledge at the individual level? Alternatively stated, what benefits do individuals derive when they share their knowledge? To address our question, we develop a theoretical model to explain how knowledge sharing behavior may influence job satisfaction among IS professionals.

Theory and Research Model

Our research is grounded in the theoretical perspectives provided by Hackman and Oldham's (1975) Job Characteristic Model (JCM), Social identity theory (Tajfel and Turner, 1985), Social Capital and Intellectual Capital theory by Nahapiet and Ghoshal, (1998), the development of personal reputation (Zinko et. al., 2007) and Subramanian and Youndt's (2005) conceptualization of intellectual capital.

Nahapiet and Ghoshal (1998) suggest that social capital facilitates the creation of new intellectual capital. They conceptualized intellectual capital as *"the knowledge and knowing capability of a social collectivity, such as an organization, intellectual community or professional practice"* (pg. 245). Subramanian and Youndt's (2005) however, argue that: at the individual level, human capital best represents the dimension of intellectual capital rather than the other dimensions of intellectual capital viz. organizational capital and social capital; where the influence of knowledge sharing activities manifest. Since the present study considers individual level outcomes of knowledge sharing behaviors, we adopt Subramanian and Youndt's (2005) conceptualization of intellectual capital.

Second, based on the theory of development of personal reputation (Zinko et. al., 2007), when individuals perform well at their allocated tasks and are helpful towards others at the workplace, they develop a favorable reputation among others. In the work context of IS/IT professionals'; through knowledge sharing, individuals develop a favorable reputation when they are recognized as experts in their tasks. Therefore, we believe that this theoretical perspective provides a useful lens in explaining the outcomes of sharing knowledge at the individual level among IS professionals.

Third, Hackman and Oldham's JCM and Social Identity theory, when taken together, helps us provide an over-arching theoretical perspective to explain how the factors included in our research model are related. Hackman and Oldham's (1975) Job Characteristics Model posits that: core job dimensions and critical psychological states influence personal and work outcomes implying that job satisfaction includes both, intrinsic and extrinsic factors (Howard & Frick, 1996). Critical psychological states in the JCM include meaningfulness of work, responsibility of outcomes and knowledge of results.

The Social identity theory (Tajfel and Turner, 1985) suggests that identification can be of several types, resulting from identity salience due to cognitive processing (Ashforth and Mael, 1989). The salient identity may change overtime and is displayed in multiple ways. Within IS/IT work groups, identification fosters work group cohesion (Riordan and Weatherly, 1999) making the team effective at problem solving. When

individuals exhibit strong identification and belong to cohesive work groups, they are likely to develop higher levels of social capital and develop expertise through the knowledge sharing processes of exchange and combination (Nahapiet and Ghoshal, 1998). This mix, of personal and work related outcomes, are expected to contribute to the concept of "meaningfulness of work" as conceptualized in the JCM, contributing to job satisfaction.

We believe that the theoretical perspectives identified provide us an understanding of the outcomes related to individual level knowledge sharing behaviors; which have not been examined in prior research. An understanding of what benefits individuals derive when they share their knowledge would be an important contribution to the existing body of KM literature. Our research model is shown in *Figure -1* below.
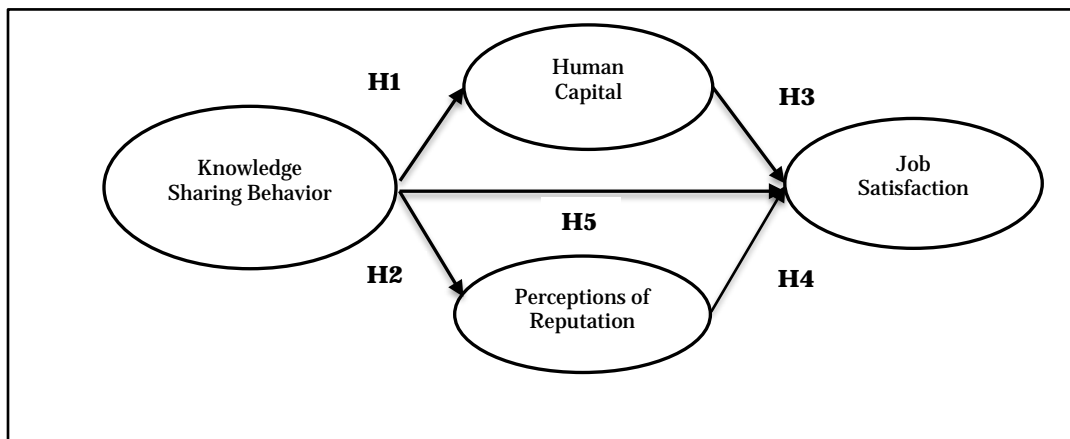

Figure 1. Research Model

We define our constructs based on prior literature. We adopt the definition for job satisfaction based on Egan et. al., (2004) as *"an employee's affective reactions to a job based on comparing desired outcomes with actual outcomes"* (pg. 283) and human capital as *"the knowledge, skills, and capabilities of individual employees"* based on Sabherwal and Hsu (2012, pg. 492). Perceptions of reputation, based on Zinko et al. (2012), is defined as *"the extent to which individuals are perceived by others, over time, as performing their jobs competently, and being helpful towards others in the workplace"* (pg. 157) . Knowledge sharing behavior, Based on Bock et al, (2005) is defined as; *"the sharing or contribution of an individual's knowledge with other members within his/her primary work group" (pg.* 9)

Hypotheses Development

According to prior research, learning culture facilitates knowledge activities through interactions among individuals where individuals share their knowledge, experiences and skills to derive benefit (Gold et. al, 2001; Nonaka and Toyama, 2005; Sabherwal and Hsu, 2012). Sabherwal and Hsu (2012) elaborate on the effects of learning culture on intellectual capital and its three dimensions: organizational capital, human capital and social capital. They state: *"A learning culture also facilitates human capital, because individual knowledge is improved"* (pg. 497). Support for their claim can be found in Subramanian and Youndt (2005) who argue that these three dimensions are *"intertwined in organizations"* and *"their influences are not always isolated"* (Subramanian and Youndt, 2005, pg. 453).

Further, literature on organizational learning acknowledges the existence of feedback loops where individuals learn through feedback learning flows (Vera & Crossan, 2004). Their 4I Framework (pg. 225) suggests that individual competence and capabilities are enhanced when individuals share or contribute knowledge in organizations. Therefore, we believe knowledge sharing behavior among IS professionals influences the creation of human capital. Human capital is operationalized as expertise based on Zinko et. al., (2012). This relationship represents the first hypotheses in our model.

H1: Knowledge sharing behavior is positively related to human capital (expertise).

Zinko et al. (2012) claim when individuals perform well on tasks allocated to them, are helpful to others at work, and are willing to work with others; they develop a positive reputation at the workplace. Being helpful to others and willingness to work with others generally encompass sharing some knowledge or skill and/or providing valuable feedback which may enable task completion in the context of IS projects. Therefore, we believe that over time, knowledge sharing behaviors result in an enhanced perception of positive reputation about the individual sharing knowledge, from the perspective of other organizational members, representing our second hypothesis.

H2: ***Knowledge sharing behavior is positively related to perceptions of reputation.***

Perceptions of oneself as an expert and, being recognized by co-workers as an expert, is expected to positively influence levels of job satisfaction. We therefore believe that human capital positively influence job satisfaction, representing our third hypothesis.

H3: ***Human capital (or expertise) is positively related to job satisfaction.***

Zinko et. al., (2012) developed a model to examine the effects of personal reputation on career success, power and autonomy. They hypothesized that when individuals enjoy higher levels of reputation, they were likely to enjoy more autonomy and power, received greater rewards, favorable performance evaluations, promotions and compensation. These factors were expected to result in higher levels of job satisfaction and, they found support for these characteristics in their two studies.. Therefore, we hypothesize that:

H4: ***Perceptions of reputation are positively related to job satisfaction.***

Egan et. al (2004) cite prior literature to support their claim that job satisfaction reflects an employees' overall perceptions of meeting expectations at work (Porter and Steers, 1973) and not based solely on extrinsic and intrinsic rewards (Howard & Frick, 1996, c.f. Egan et. al., 2004). They argue that when expectations are not met, resulting in low levels of job satisfaction, there is perhaps, a "greater probability of withdrawal behavior" (Pearson, 1991, c.f. Egan et. al., 2004). On the contrary, when job satisfaction levels are high, withdrawal behaviors are expected to be lower, resulting in higher knowledge sharing behaviors. In addition, knowledge sharing behaviors exhibits direct and indirect effects (through human capital and perceptions of reputation) on job satisfaction. Therefore, we hypothesize that:

H5: ***Knowledge sharing behavior is positively related to job satisfaction.***

Research Methodology

Data Collection and Sample Size

We propose to empirically test our model using survey responses from IS professionals in the USA, using random sampling to ensure that our study satisfies high external validity (Simon, 1969).

Based on prior literature, we plan to estimate the required sample size to ensure that we have sufficient valid responses, to better interpret results by accounting for parameters such as effect size and power; rather than interpreting results relying on significance levels (Sawyer & Ball, 1981). Therefore, we plan to conduct an a priori power analysis using statistical software G*Power (http://www.gpower.hhu.de/ (Sabherwal & Hsu, 2012). This would enable us to plan our data collection efforts systematically.

Pretest and Pilot Testing

The survey instrument will pre tested by soliciting responses from IS/IT professionals to validate the survey questionnaire prior to being administered using two methods based on Straub (1989). A pilot test will be conducted subsequently using a second sample to assess the clarity, relevance and specificity of the items

and using a checklist of criteria (e.g. Church & Waclawski, 2001, pg. 85-86) to improvise the survey questionnaire before administration.

Measures

Knowledge sharing behavior is operationalized based on Ma and Agarwal (2007), on knowledge contributions made. Human capital is operationalized in terms of expertise, based on Zinko et. al., (2012) which is, consistent with Sabherwal and Hsu's (2012) operationalization as "competent", "bright" and "experts" (pg. 518). Measures of reputation are adapted from Zinko et. al., (2012). Both, human capital and reputation are measured using a co-worker's responses and, responses to knowledge sharing behavior and job satisfaction, are provided by the primary survey respondent. Responses for the four constructed are recorded using Likert-type responses. Our model includes demographic variables and control variables for IT experience, tenure in current work group, age range, gender, organization size and level of education.

Analysis Strategy

We propose to first conduct an Exploratory Factory Analysis and check for common method bias based on Podaskoff et. al., (2003) and Harman's one-factor test (Podsakoff and Organ 1986) by performing an exploratory factor analysis on all variables to check for the presence of any single factor. Next, we propose to examine whether the model fit $\chi2$ and $\chi2$/d.f. statistics are acceptable based on the recommendations for fit indices by Wheaton et al, (1977), Tabachnick and Fidell, (2007), Bentler and Bonnet, (1980); Jöreskog and Sörbom, (1993) and Barrett, 2007; GFI, AGFI and RMSEA based on the recommendations by (Hu & Bentler, 1999 and MacCallum et al, 1996). Next, we plan to test for *non-response bias* based on the recommendations by Armstrong & Overton, (1997)

Subsequent to assessing the data collected for satisfactory preliminary tests above, we propose to conduct a *Confirmatory Factor Analysis (CFA)* using the Structural Modeling Equation (SEM) software LISREL. We propose to adopt the two-step approach recommended by Anderson and Gerbing (1988), and Segars and Grover (1993) after standardizing the scores.

We also intend to examine whether the Goodness of Fit Index (GFI), Adjusted GFI (AGFI) values are between 0.85 and 0.90 indicating a good fit (Medsker et al., 1994). The values for Root Mean-square Residual (RMR) and Root Mean Square Error of Approximation (RMSEA) will be examined to check whether they are below 0.05 and 0.08 respectively, to indicate a good fit for the hypothesized model (Fulk et al, 2004).

Based on the results of the CFA results, we will assess the psychometric properties of the items using the descriptive statistics and the covariance matrix for assessing *convergent validity* and *unidimensionality*. The factor loading should exhibit values of $\lambda > 0.70$ and Average Variance Extracted (AVE) values should exceed 0.50 (Bagozzi, 1980; Fornell & Larcker, 1981) and have statistically significant t-values at (p < 0.05) as suggested by (Bollen, 1989).

Discriminant validity will be tested by examining whether the correlations between pair wise construct items are significantly different from unity suggested by Anderson and Gerbing (1988). Next we plan to check whether the $\chi2$ difference between the baseline model, consisting of one latent construct and the CFA model are significant at (p < 0.05). Third, we propose to check whether the squared correlations between all the latent constructs are significantly less than the extracted AVE similar to procedures for establishing discriminant validity (e.g. Sabherwal, & Becerra-Fernandez, 2003; Dinev & Hart, 2006).

Reliability will be assessed by examining whether the squared multiple correlations (R^2) exceed 0.50 and *internal consistency* will be assessed by checking whether composite reliability values are >0.70 (Gefen et al, 2000) and preferably above 0.80 (Koufteros, 1999) since composite reliability provides a better estimate of internal consistency compared to Cronbach's alpha (Chin & Gopal, 1995). In order to improve reliability prior literature suggests dropping items which do not load well on their constructs (e.g. Byrne, 1998; Gefen et al, 2000; Choi et al, 2010). We plan to drop items when deemed necessary based on their loading values.

Limitations

We acknowledge several possible limitations in our study. First, the cross-sectional nature of the study does not support causal direction since the relationships may differ when examined across time (Boland, 1979). Second, since self-reported data will be collected from individuals, common method bias may be present (Podaskoff and Orgon, 1986). Though we propose to address this limitation by performing checks for common method bias suggested by and Podaskoff et. al. (2003), common method bias cannot be eliminated. Fourth, social desirability bias cannot be ignored in self-reported data therefore; the results and model estimates may be inflated. Lastly, all other limitations that apply to the survey research methodology are applicable in the context of our study and the results need to be interpreted considering these.

Conclusion

Our study aims to add to the existing body of KM literature by developing a model to test the outcomes of knowledge sharing at the individual level. We believe that the results of our study would provide valuable insights on research lacking in this area. We expect the results of our study would also highlight the importance of knowledge sharing in organizations and provide justification for individuals to increase their levels of knowledge sharing, by sensitizing them to the possible benefits that they may derive in doing so.

References

Anderson, J. C., and Gerbing, D.W., 1998. "Structural equation modeling in practice: A review and recommended two-step approach," *Psychological bulletin* (103:3), pp. 411-423.

Armstrong, J. U. S. T., and Overton, T., 1997. "Estimating nonresponse bias in mail surveys," Journal of marketing research (14:) pp. 396-402.

Ashforth, B. E., and Mael, F., 1989, "Social Identity Theory and the Organization," *Academy of Management Review*, pp.20-39.

Bagozzi, R. P., 1981. "Evaluating structural equation models with unobservable variables and measurement error: a comment," *Journal of Marketing Research,* pp. 375-381.

Bentler, P. M., and Bonett, D. G., 1980, "Significance tests and goodness of fit in the analysis of covariance structures," Psychological bulletin, (88:3), pp.588-606.

Bock, G. W. and Kim, Y. G., 2002. "Breaking the myths of rewards: An exploratory study of attitudes about knowledge Sharing," *Information Resources Management Journal* (15:2.), pp. 14-21.

Bock, G. W., Zmud, R. W., and Lee, K. J., 2005. "Behavioral Intention Formation in Knowledge Sharing: Examining the Roles of Extrinsic Motivators, Social-Psychological Forces, and Organizational Climate," *MIS Quarterly* (29:1), pp. 87-112.

Boland, R. J., Jr. "Control, Causality, and Information Systems Requirements," Accounting, Organizations and Society (4:4), 1979, pp. 259-272.

Bollen, K. A., 1989. "Overall fit in covariance structure models: Two types of sample size effects." *Psychological Bulletin,* (107:2), pp. 256-259.

Chin, W. W. and Gopal, A., 1995, "Adoption intention in GSS: relative importance of beliefs." *ACM SigMIS Database,* (26:2-3), pp. 42-64.

Choi, S. Y., Lee, H., and Yoo, Y., 2010, "The Impact of Information Technology and Transactive Memory Systems on Knowledge Sharing, Application, and Team Performance: A Field Study," *MIS Quarterly* (34:4), pp. 855-870.

Church, A., Waclawski, J., 2001. "Designing and Using Organizational Surveys: A Seven-Step Process," Wiley.

Davenport, T. H., and Prusak, L., 1998. "Working Knowledge", *Executive Excellence* (15:9), pp. 10-12.

Dinev, T., and Hart, P., 2006. "An extended privacy calculus model for e-commerce transactions." *Information Systems Research,* (17:1), pp. 61-80.

Egan, T.M. Yang, B. and Bartlett, K.R., 2004. "The Effects of Organizational Learning Culture and Job Satisfaction on Motivation to Transfer Learning and Turnover Intention." *Human Resource Development Quarterly* (15:3) pp. 279-301.

Fornell, C. and Larcker, D. F., 1981, "Structural equation models with unobservable variables and measurement error: Algebra and statistics," *Journal of marketing research,* pp. 382-388.

Foss, N. J., Husted, K. and Michailova, S., 2010, "Governing Knowledge Sharing in Organizations: Levels of Analysis, Governance Mechanisms, and Research Directions," *Journal of Management Studies*, (47) pp.455-482. doi:10.1111/j.1467-6486.2009.00870.x

Fulk, J., Heino, R., Flanagin, A. J., Peter R. Monge, and François Bar. "A test of the individual action model for organizational information commons." *Organization Science* 15, no. 5 (2004): 569-585.

Gefen, D., Straub, D. W. and Boudreau, 2000. "Structural equation modeling and regression: Guidelines for research practice." In *Communications of the association for information systems*,

Gold, A. H., Malhotra, A., & Segars, A. H., 2001. "Knowledge management: An organizational capabilities perspective," *Journal of Management Information Systems*, (18:1), pp. 185–214.

Grant, R. M., 1996. "Toward a Knowledge-Based Theory of the Firm," *Strategic Management Journal* (17:7), pp. 109-122.

Hackman, J.R., & Oldham, G.R., 1975, "Development of the Job Diagnostic Survey," *Journal of Applied Psychology*, (60) pp. 161.

Howard, J. L., & Frick, D. D. 1996. "The effects of organizational restructure on employee satisfaction," *Group and Organization Management*, (21:3). 278.

Hsu, IC and Sabherwal, R., (2012). "Relationship between Intellectual Capital and Knowledge Management: An Empirical Investigation," *Decision Sciences*, (43:3), pp. 489-524. DOI: 10.1111/j.1540-5915.2012.00357.x.

Hu, L., and Bentler, P., 1999, "Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives," Structural Equation Modeling: A Multidisciplinary Journal (6:1), pp: 1-55.

Jöreskog, K., 1978. "Structural analysis of covariance and correlation matrices." Psychometrika (43:4), pp. 443-477.

Jöreskog, K., and Sörbom, D., 1993. "LISREL 8: Structural equation modeling with the SIMPLIS command language," Scientific Software.

Kankanhalli, A., Tan, B. C. Y., and Wei, K. K., 2005. "Contributing Knowledge to Electronic Knowledge Repositories: An Empirical Investigation," *MIS Quarterly* (29:1), pp. 113-143.

Kogut, B., and Zander, U., 1992. "Knowledge of the Firm, Combinative Capabilities, and the Replication of Technology," *Organization Science* (3:3), pp. 383-397.

Ma, M. and Agarwal, R., 2007. "Through a Glass Darkly: Information Technology Design, Identity Verification, and Knowledge Contribution in Online Communities," *Information Systems Research*, (18:1) pp. 42-67, DOI: 10.1287/isre.1070.0113.

Medsker, G. J., Williams, L. J. and Holahan, P. J., 1994. "A review of current practices for evaluating causal models in organizational behavior and human resources management research," *Journal of Management,* (20:2), pp. 439-464.

Nonaka, I., & Toyama, R., 2005. "The Theory of the Knowledge-Creating Firm: Subjectivity, Objectivity, and Synthesis," *Industrial and Corporate Change*, (14:3), pp. 419–436.

Nonaka, I., and Takeuchi, H., 1995. *The Knowledge Creating Company*, Oxford University Press, New York, NY.

Podsakoff, Philip M., and Dennis W. Organ. "Self-reports in organizational research: Problems and prospects." *Journal of management* 12, no. 4 (1986): 531-544.

Podsakoff, Philip M., Scott B. MacKenzie, Jeong-Yeon Lee, and Nathan P. Podsakoff. "Common method biases in behavioral research: A critical review of the literature and recommended remedies." *Journal of applied psychology* 88, no. 5 (2003): 879-903.

Quigley, N. R., Tesluk, P. E., Locke, E. A., and Bartol, K. M., 2007. "A Multilevel Investigation of the Motivational Mechanisms Underlying Knowledge Sharing and Performance," *Organization Science* (18:1), pp. 71-88.

Riege, A., 2005. "Three-dozen knowledge-sharing barriers managers must consider", *Journal of Knowledge Management*, (9:3), pp. 18-35.

Riordan, C. M., and Weatherly, E. W., 1999, "Defining and measuring employees' identification with their work groups," *Educational and Psychological Measurement*, (59:2), pp.310-324.

Sawyer, A., Ball, D., 1981. "Statistical Power and Effect Size in Marketing Research," *Journal of Marketing Research,* (18:3), pp.275-305. DOI:10.2307/3150969.

Segars, A. H., and Grover, V., "Re-examining perceived ease of use and usefulness," *MIS quarterly* (17:4), pp. 517-525.

Sosa, L., 2009. "Application-Specific RandD Capabilities and the Advantage of Incumbents," *Management Science* (55:8), pp. 1409-1422.

Subramaniam, M., & Youndt, M. A., 2005. "The Influence of Intellectual Capital on the Types of Innovative Capabilities," *Academy of Management Journal*, (48:3), pp. 450–463.

Tabachnick, B., and Fidell, L., 2007, "Experimental designs using ANOVA," Thomson/Brooks/Cole.

Tajfel, H., and Turner, J. C., 1979. "An integrative theory of intergroup conflict," The social psychology of intergroup relations, (33), pg. 47.

Vera, D., & Crossan, M., 2004. "Strategic Leadership and Organizational Learning," *Academy of Management Review*, (29:2), pp. 222–240.

Volberda, H. W, Foss, N. J., and Lyles, M. A., 2010. "Absorbing the Concept of Absorptive Capacity: How to Realize Its Potential in the Organization Field," *Organization Science* (21), pp. 931-951.

Wheaton, B., Muthen, B., Alwin, D., F., and Summers, G., 1977, "Assessing Reliability and Stability in Panel Models," Sociological Methodology, (8:1), pp. 84-136.

Zinko, R., Ferris, G. R., Blass, F. R., & Laird, M. D., 2007. "Toward a theory of reputation in organizations," In J. J. Martocchio (Ed.), *Research in personnel and human resources management,* (26), pp. 163–204. Oxford, UK: JAI Press/Elsevier Science Ltd.

Zinko, R., Ferris, G., Humphrey, S., Federico, C. and Federico, A., 2012. "Personal Reputation in Organizations: Two-study Constructive Replication and Extension of Antecedents and Consequences," *Journal of Occupational and Organizational Psychology,* (85:1), pp.156-180. DOI: 10.1111/j.2044-8325.2010.02017.x.