

TALK NERDY TO ME: THE ROLE OF INTELLECTUAL STIMULATION IN THE SUPERVISOR-EMPLOYEE RELATIONSHIP

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ABSTRACT

This study investigates (1) if communication with one's supervisor is related to empowerment through establishing perceptions of leader integrity, and (2) the extent to which the relationship between leader integrity and empowerment is moderated by intellectual stimulation. Due to the dynamic nature of today's organizational environment, understanding the nuances among these variables is vital to effective performance at the individual and organizational level. Hierarchical multiple regression tests were performed with a sample of 259 nurses in two regional healthcare facilities in the Midwestern United States. The results support a moderated-mediation relationship such that open communication with one's supervisor is positively related to empowerment through perceptions of leader integrity, but the relationship between leader integrity and empowerment varies across levels of intellectual stimulation. Specifically, while supervisor integrity mediates the relationship between patient safety communication and empowerment, this mediated relationship is only significant for followers who experience high intellectual stimulation, and is not significant for followers who report low intellectual

stimulation. Thus, open communication and leader integrity will only empower followers if the leader is intellectually stimulating. This research clarifies how leaders in health care environments should communicate with their followers to empower them to think and act by their own initiative. Specifically, followers who communicate openly with their supervisor will feel more empowered, but only if they experience high intellectual stimulation which can improve their job performance and patient safety overall.

Key Words: Employee Empowerment, Supervisor Integrity, Patient Safety Communication, Nursing, Intellectual Stimulation

INTRODUCTION

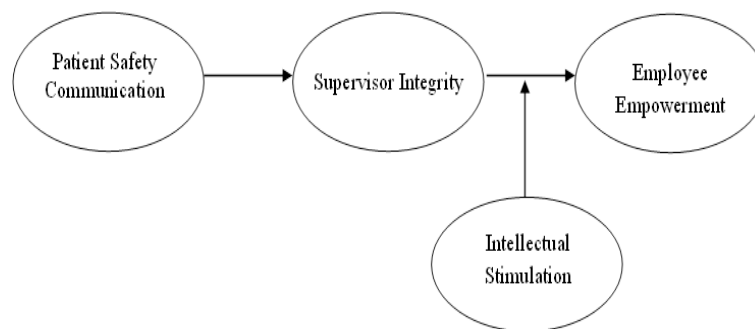
Today's work environment is characterized by high demands, high stress, and ever-increasing complexity. This is especially true in the healthcare sector where employees face very high expectations, but often do not have the social support, skills, or time needed to perform well which can lead to medical errors and diminish patient care (Ruotsalainen, Verbeek, Marine, and Serra, 2014). These errors can become extremely costly as medical errors are the third leading cause of death in the U.S. (Bercarich, 2013), and payments for malpractice lawsuits in the U.S. average approximately \$3.9 billion per year (Harris, Peeples, and Metzloff, 2013). As over 70% of incidents which cause patient harm in healthcare facilities are due to communication failures (JCAHO, 2008; Lee et al., 2012; Leonard et al., 2004; Reader et al., 2006), it is vital for leaders to facilitate communication in a way that improves employee performance.

Recent calls for research have echoed this need for a better understanding of how leader behaviors, such as communication transparency and leader integrity, influence follower outcomes such as job performance and psychological well-being from both mediating and moderating perspectives (Syrek, Apostel, and Antoni,

2013; Volgelgesang, Leroy, and Avolio, 2013). Furthermore, Tuckey, Bakker, and Dollard (2012) called for research regarding how leaders can augment followers' personal resources (e.g., feelings of empowerment) by shaping perceptions of work and appealing to their innate psychological needs, which they indicated could be a two-phase mediation process.

The current study responds to these recent calls by conceptualizing how leaders can shape working conditions by exhibiting behaviors which engender personal resources from followers. To this end, we propose a two-phase moderated-mediation process in which leaders first fulfill followers' innate psychological needs by shaping working conditions, and subsequently facilitate followers' personal resources by exhibiting transformational leadership behaviors. Specifically, we hypothesize and empirically test the moderated-mediation model depicted in Figure 1, which maintains that open communication with one's supervisor will be positively related to employee empowerment through the establishment of perceptions of leader integrity, but the relationship between leader integrity and employee empowerment will be moderated by intellectual stimulation.

Figure 1
Hypothesized Mediating and Moderating Relationships



This study proceeds in the following manner. First, extant research on the constructs of interest is reviewed to highlight robust findings and develop hypothesized relationships. The measures and research methodology used to test the hypothesized relationships are subsequently presented along with the results of the quantitative analyses. Finally, limitations and future research opportunities are discussed followed by the implications of this study for research and practice.

**PERCEPTION OF SUPERVISOR INTEGRITY AS A
MEDIATOR OF THE RELATIONSHIP BETWEEN
PATIENT SAFETY COMMUNICATION AND
EMPLOYEE EMPOWERMENT**

In responding to Tuckey and colleagues' (2012) call for research on the relationships between the leadership behaviors, followers' psychological needs, and followers' personal resources, the current study examines open communication regarding patient safety in the healthcare setting as the leader behavior which shapes the working conditions, followers' perceptions of the leader's integrity as the psychological need being fulfilled, and employee empowerment as the personal resources that are augmented as a result. The need for an effective communication environment is particularly vital to hospital performance not only because patients' lives are at stake, but also because caring for patients requires communication between employees with disparate skills, training, experiences, roles, and perspectives on the provision of patient care (WHO, 2009).

Patient safety communication is defined in this study as the extent to which the leader communicates the importance of patient safety and encourages the reporting of medical errors. However, getting employees to report medical errors is not as easy as simply writing a policy or

procedure because the employee's job may be at stake if s/he is at fault. Furthermore, patients in most medical facilities receive care from several nurses and doctors which makes it difficult to identify when the error occurred and who is responsible for that error. Therefore, the problem is getting employees to report errors even when doing so could cost their job and it would be possible for them to escape blame. To solve this problem, we have to look beyond simple command and control procedures to appeal to employees at a psychological level to facilitate this type of communication.

Extant research has found that when leaders exhibit transparent communication and act in accordance with that communication, this alignment between words and deeds engenders a perception of leader integrity among followers, and establishes the foundation of an effective leader-follower relationship (Barry & Crant, 2000; Simmons, 2002; Vogelgesang, Leroy, and Avolio, 2013). Therefore, as leaders communicate the importance of a goal (i.e., talking the talk) and take actions which align with that goal (i.e., walking the walk), followers will perceive that leader as having behavioral integrity and are more likely to prioritize that goal in performing their jobs (Edmondson, 1999; Halbesleben, 2013; Simons, 2008). For instance, if a nursing manager communicates that patient safety is the primary goal of a medical unit and encourages nurses to report medical errors, but then fires nurses every time they report an error, nurses will not perceive that leaders actions to be consistent with his or her communication. Alternatively, if the leader establishes safe reporting policies or provides training sessions to improve patient care, then nurses will perceive that leader to have behavioral integrity and prioritize that goal in their actions. In this manner, leaders in the healthcare context can create a work environment that supports open communication and

the reporting of medical errors, even when doing so could be job-threatening.

Robust relationships have been discovered between leader integrity and many follower outcomes such as increased job performance (Palanski et al., 2011; Vogelgesang et al., 2013), organizational citizenship behaviors (OCBs), (Dineen et al., 2006), organizational commitment (Leroy et al., 2012) and work engagement (Vogelgesang et al., 2013). While integrity is a dimension of trust (Mayer, Davis, and Schoorman, 1995), and the relationship between trust and employee empowerment has been established in extant research (e.g., Maynard et al., 2012), the isolated dimension of leader integrity has not been examined in relation to employee empowerment. Parceling out the isolated dimensions of leadership is important to not only discover a more fine-grained understanding of these constructs and their effects on followers, but also the moderating mechanisms which influence these relationships (Gardner et al., 2011; Walumbwa et al., 2008).

Spreitzer (1995) defines employee empowerment as a motivational construct manifested in four cognitions: meaning, competence, self-determination, and impact. Empowerment has been found to be positively correlated with several job-related dimensions such as productivity (Koukkanen & Katajisto, 2003), job satisfaction, and organizational commitment (Maynard et al., 2012). Empowerment is particularly vital in the healthcare context because unexpected events occur rapidly and frequently, and every patient is unique with regard to medical history, genetics, medications, and allergies. Because leaders cannot be physically present every time a problem occurs, they must communicate in a way that empowers employees to think and act on their own, as employee empowerment improves performance in dynamic environments at the

individual, group, and organizational levels (Maynard, Gilson, and Mathieu, 2012).

As open communication between leaders and followers is positively related to feelings of empowerment (Beckett & Kipnis, 2009; Hawks, 1992; Siegall & Gardner, 2000), once a leader has established open communication with followers and acted in accordance with the goal or mission to which s/he has ascribed, thereby establishing perceptions of leader integrity, followers will be more likely to feel empowered in their work. In the healthcare context, leadership and work environments are essential to feelings of empowerment (Koukkanen and Katajisto, 2003), so if a leader creates an environment which supports open communication regarding patient safety, followers will perceive that leader to be a person of integrity and will feel empowered to make decisions which align with the established goal.

***H1:** Communication with one's supervisor regarding patient safety will work through (be mediated by) the perception of supervisor integrity to influence employee empowerment. (Please refer to Figure 1)*

MODERATOR: INTELLECTUAL STIMULATION

Tuckey (2012) called for research examining leadership behaviors which facilitate employee empowerment such as encouraging followers to identify opportunities in problems. Thus, the second objective in this research is to examine the extent to which the relationship between perceptions of supervisor integrity and employee empowerment varies as a function of a moderating variable. Specifically, this research posits that this relationship is likely to vary across levels of intellectual stimulation because effective empowerment requires that employees add value to the firm beyond

simply replicating the actions of their supervisor. In other words, employees who perceive their supervisor to be a person of integrity, but have not been encouraged to think outside the box (i.e., intellectual stimulation) are not likely to feel empowered to think and act by their own initiative. In fact, because they have high trust in their leader, they are likely to do the opposite and depend almost entirely on his or her perspective.

Dionne, Yammarino, Atwater, and Spangler (2003) define intellectual stimulation as the degree to which a leader encourages followers to exhibit behaviors that display intelligence, logic, rationality, and complex problem solving skills. Intellectual stimulation is a dimension of transformational leadership which was conceptualized by Burns (1978) in the context of political leadership. Transformational leadership has been a prolific area of research for over 30 years resulting in findings of robust relationships to individual, team, and organizational performance (Wang, Oh, Courtright, and Colbert, 2011) as well as numerous positive affective outcomes (Avolio & Yammarino, 2013). The isolated dimensions of transformational leadership have recently begun to be investigated to determine the relative impact where conceptually relevant (Peng, Lin, McDonough, Hu, & Zhang 2013). Recent research has found the isolated dimension of intellectual stimulation to be positively related to outcomes such as innovation, promotion, motivation, and work meaningfulness, and have called for future research examining the impact of this dimension of transformational leadership on other relevant outcomes (Bolkan, Goodboy, & Griffin, 2011; Peng et al., 2013; Yasin, Nawab, Bhatti, & Nazir, 2014; Zhou, Hirst, & Shipton, 2012).

In this study, we propose that intellectual stimulation will be useful as a mechanism in the healthcare setting to strengthen the relationship between followers'

communication with their leader, perceptions of his or her integrity, and feelings of empowerment. In order for patient safety communication to be effective in engendering feelings of empowerment, an infrastructure that advocates a patient safety-driven culture has to be put in place since achieving this goal requires fundamental changes in the structural system of any organization. Even if nurses could take the necessary actions to address certain problems as they arise, any key restructuring of the systems to make errors less likely to occur in the first place requires involvement from top management and other key decision makers (Tucker and Edmondson 2003). More so, since nurses rarely have the power and influence to implement new work systems, it is necessary for them to be able to think critically and to use complex problem solving skills in order to take the appropriate actions when needed, and in a timely manner.

A supervisor who is perceived to be a person of integrity will be one that promotes the aforementioned patient-safety driven culture since integrity is being true to the mission and vision of the organization (Van Ryzin, 2005). Thus, such a supervisor will further establish an intellectually stimulating environment where nurses are able to adapt and respond to any situation that has a subsequent effect on patient safety. In other words, high levels of intellectual stimulation will empower the nurses to learn, apply, and share lessons from personal experience, instead of solely mirroring their supervisor (i.e., low levels of intellectual stimulation). By being empowered to critically think, nurses will have the self-determination to be independent problem solvers, therefore, allowing them to have a bigger positive impact over what happens in their unit.

H2: Employee perceptions of supervisor integrity will interact with (be moderated by) supervisor use of

intellectual stimulation to influence employee empowerment such that the impact of supervisor integrity on empowerment will be stronger with greater supervisor use of intellectual stimulation (please refer to Figure 1).

METHODS

Sample

Questionnaires were made available to 751 nurses at two regional healthcare facilities in the Midwestern United States. Prior to completing the questionnaire, nurses viewed a video explaining the study, its importance, and the confidentiality of responses. Participants were asked to complete the questionnaire during their shift and return it to a collection box in their unit. Questionnaires were then collected by researchers after a two week period. A total of 259 usable questionnaires, a response rate of 35%, were available for subsequent analyses. Not surprisingly, the sample was predominantly female (95%) and college educated (90%). Approximately two thirds of respondents had been in their current position for at least five years, with a majority having worked for their immediate supervisor for at least five years. Several work units were represented in the sample with surgical and emergency services among the most frequently reported (24% and 19%, respectively).

Measures

The questionnaire included measures of nurses perceptions related to their immediate supervisor, their work environment, and demographic descriptors.

Patient safety communication. This measure assessed nurse perceptions relating to the extent that their supervisor supports the reporting of patient safety-related information. It consists of three, five-point items relating to the supervisor communicating the importance of and supporting open communication of patient safety as well as the reporting of medical errors. These measures were

included given that patient safety is a “mission critical” imperative of healthcare facilities and were developed in collaboration with a hospital administration professional.

Supervisor integrity and supervisor use of intellectual stimulation. Integrity consisted of four five-point items assessing employee perceptions of the honesty and genuineness of their supervisor, adapted from Mayer, Davis, and Schoorman (1995). Intellectual stimulation consisted of three, five-point items assessing supervisor management style in encouraging innovative problem solving, adopted from the Multifactor Leadership Questionnaire (Bass & Avolio, 1997).

Employee empowerment. Empowerment consisted of six, five-point items assessing employee perceptions of their impact in their department (perceived influence and control) and self-determination in doing their job (perceived autonomy and independence), adapted from the Psychological Empowerment Instrument (Spreitzer, 1995; 1996).

FINDINGS

The purpose of this study is to test for moderated-mediation, that is, that the mediational effect of integrity on empowerment varies across levels of intellectual stimulation. As a precursor to analyses, reliability, convergent validity, and discriminant validity were assessed for multi-item measures. Confirmatory factor analysis (AMOS 18) was used to assess the convergent validity of measures. The initial measurement model evidenced lower loadings for two observed indicators for the empowerment construct which contributed to a variance extracted level that was below recommended cutoffs (Fornell & Larker, 1981). As a consequence, these items were removed from further analysis. Based on remaining items for multi-item measures, reliabilities (Cronbach's

Alpha and composite reliability) were above .80 and average variance extracted (AVE's) were above .50, which are greater than recommended thresholds (Fornell & Larker, 1981). Confirmatory factor analysis also supports the convergent validity of measures as observed indicators were all statistically significant ($p < .05$) for their corresponding factors. Measurement model fit statistics $\chi^2(65) = 134.82$, $p = .00$, NNFI = .97, CFI = .98, RMSEA = .07 suggest that the observed indicators are representative of constructs with the combination of NNFI, CFI, and RMSEA consistent with fit index standards recommended for good fitting models (Bagozzi & Yi, 1988). Table 1 presents measures used in this study.

With respect to discriminant validity, for constructs, the AVE's for each construct is greater than the squared correlation between constructs except for two instances – the squared correlation between safety communication and integrity and the squared correlation between integrity and intellectual stimulation which is not surprising given that a component of supervisory trust would be highly correlated with aspects of supervisory communication and behavior. Overall, these results provide some support for the discriminant validity of the construct measures (Fornell & Larker, 1981). Summated scores of the multi-item scales were used to address the research hypotheses. Table 2 provides the means, standard deviations, and correlations associated with measures.

Table 1
Results of Confirmatory Factor Analysis

Constructs and Items	Standardized Coefficient
Patient Safety Communication (<i>scaled: never/always</i>)	
My supervisor communicates the importance of patient safety.	.85
My supervisor supports the reporting of medical errors.	.88
My supervisor supports open communication about patient safety.	.95
Supervisor Integrity (<i>scaled: strongly disagree/strongly agree</i>)	
My supervisor is truthful in his/her dealings with me.	.94
I would characterize my supervisor as honest.	.93
My supervisor keeps his/her promises.	.92
My supervisor is sincere and genuine	.95
Intellectual Stimulation (<i>scaled: strongly never/always</i>)	
My supervisor enables me to think about old problems in new ways.	.91
My supervisor provides me with new ways of looking at puzzling things.	.94
My supervisor gets me to rethink ideas that I had never questioned before.	.90
Employee Empowerment (<i>scaled: strongly disagree/strongly agree</i>)	
My impact on what happens in my department/unit is significant.	.61
I have a great deal of control over what happens in my department/unit.	.88
I have considerable opportunity for independence and freedom in how I do my job.	.64
I have significant influence over what happens in my department/unit.	.76

Note: All standardized coefficients are significant at $p < .05$.

Table 2
Descriptive Statistics and Correlations for Constructs

	Mean	Standard Deviation	X1	X2	X3
X1 Patient Safety Communication	4.1	0.99			
X2 Supervisor Integrity	3.6	1.32	.76**		
X3 Intellectual Stimulation	3.0	1.14	.73**	.79**	
X4 Employee Empowerment	3.6	0.96	.46**	.49**	.55**

** Correlation is significant at the .01 level.

Hierarchical regression analysis, involving a series of models increasing in complexity, was used as a means of testing the hypothesized mediating and moderating relationships (Cohen & Cohen, 1983). In the first series of models, to test for mediation, safety communication is entered as a predictor of integrity and then safety communication and integrity are entered as predictors of empowerment. In the second series of models, to test the moderating effect of intellectual stimulation, intellectual stimulation and the interaction term (integrity x intellectual stimulation) are added to the first series models with safety communication and integrity predicting empowerment.

In order to test whether integrity mediates the effect of safety communication on empowerment, three conditions must be met. 1. Safety communication should have a significant effect on integrity. 2. Safety communication should also have a significant effect on empowerment. 3. As compared to condition #2, the impact of safety communication on empowerment should significantly diminish when integrity is included in a regression model with safety communication predicting empowerment (Baron & Kenny, 1986).

With respect to H1, safety communication has a significant effect on integrity, thus, condition #1 is met.

Safety communication also significantly influences empowerment, thus, condition #2 is met. Lastly, the influence of safety communication is significantly diminished (with the standardized coefficient decreasing from .46 to .21) when integrity is included in the regression model predicting empowerment, however its influence is still significant, partially meeting condition #3. In summary, predictions are partially supported in that integrity is found to partially mediate the relationship between safety communication and empowerment (please refer to Table 3).

Table 3

Hierarchical Regression Analyses Testing the Mediating Effect of Supervisor Integrity and the Moderating Effect of Intellectual Stimulation on Integrity and Employee Empowerment

Model Results					
	Adjusted R ²	R ² Change	F Value	F Value Change	VIF
Mediation Test					
Integrity = (.76**) Safety Communication	.58		358.33**		
Empowerment = (.46**) Safety Communication	.21		69.61**		
Empowerment = (.21*) Safety Communication + (.33**) Integrity	.26	.05	44.33**	15.20**	2.39
Moderation Test					
Empowerment = (.07) Safety Communication + (.10) Integrity + (.43**) Intellectual Stimulation	.32	.06	39.89**	22.87**	3.05
Empowerment = (.12) Safety Communication + (-.35*) Integrity + (-.23) Intellectual Stimulation + (1.04**) Integrity X Intellectual Stimulation	.35	.03	34.03**	11.50**	36.23

Note: Standardized coefficients appear in parentheses.

*p<.05; ** p < .01

We next examine the moderating role of intellectual stimulation on empowerment (H2). In the first step, safety communication, integrity, and intellectual stimulation are entered as predictors of empowerment. In the second step, to test the moderating effect of intellectual stimulation, the interaction term (integrity x intellectual stimulation) is added to the first step model. Mean centering was not employed, as evidence suggests that there is no advantage to mean centering in terms of addressing collinearity issues or the stability of estimates (Echambadi & Hess, 2007).

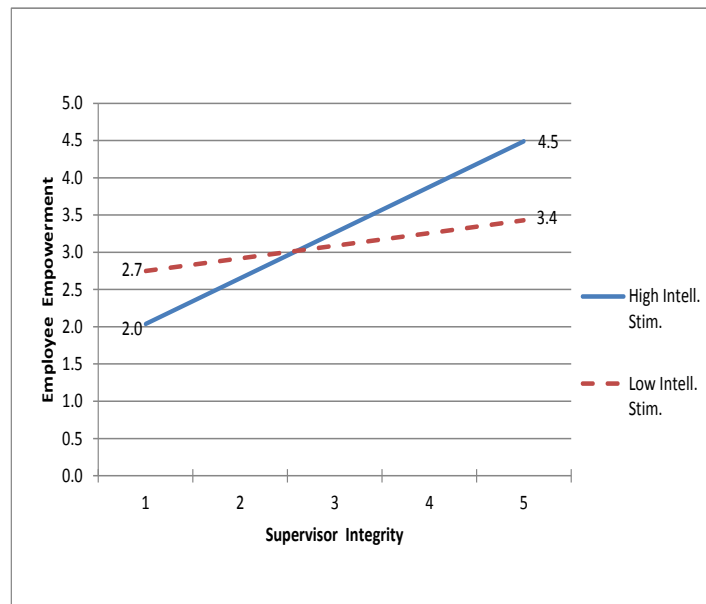
Table 3 presents results of the hierarchical regression analyses. Predictions receive support by the data given that the integrity x intellectual stimulation interaction significantly explains an additional amount of variance in empowerment (R^2 change = .03, significant at $p < .01$ level), after controlling for the direct effects of safety communication, integrity, and intellectual stimulation, with the influence of safety communication nonsignificant. This effect compares favorably with common ranges (R^2 changes .02-.03) reported for moderator effects in non-experimental studies (Champoux & Peters, 1987).

As a precaution, variance inflation factors (VIF's) were examined to assess the effects of collinearity among the independent variables, particularly when the interaction term is a function of the other independent variables. Note that the VIF for the interaction term is above the recommended 10.0 cutoff (Hair *et al.*, 2006). As a further check, the authors also utilized the two-step procedure identifying condition indices above 30, and for any such indices, identifying multiple constructs with variance proportions above 90 percent. The condition index for the interaction term was 41.74. However, the proportion of variance accounted for by this term did not exceed .90 for two or more variables (Hair *et al.*, 2006). Thus, a collinearity problem is not indicated. Taken together, results support the prediction of moderated-mediation, that

is, the mediational effect of integrity between safety communication and empowerment varies across levels of intellectual stimulation.

To identify the nature of the interaction, slopes are plotted for individuals one standard deviation above the mean (Mean = 4.7) and for individuals one standard deviation below the mean (Mean = 1.3) for intellectual stimulation. Figure 2 displays the interaction effect on empowerment. As expected, for employees in the high intellectual stimulation group, stronger integrity perceptions significantly enhanced their empowerment ($F=4.41$, $p < .05$). In contrast, integrity perceptions do not have this effect on empowerment for employees in the low intellectual stimulation group ($F=.81$, $p = .37$).

Figure 2: Interactive Effects of Supervisor Integrity and Intellectual Stimulation on Employee Empowerment



In summary, consistent with predictions, the perception of supervisor integrity partially mediates the

effect of supervisor safety communication on employee empowerment. Further, intellectual stimulation is found to interact with perceived supervisor integrity to moderate the relationship between integrity and empowerment. Specifically, when employee intellectual stimulation is high, supervisory integrity has a strong positive effect on employee empowerment. In contrast, when employee intellectual stimulation is low, supervisory integrity does not have a significant effect on employee empowerment.

LIMITATIONS AND FUTURE RESEARCH

As with any single study, this research has limitations. One limitation relates to the study's cross-sectional, single-source (self-report) design. Future longitudinal research could assess similar supervisor-employee relational processes over time. This limitation notwithstanding, it is important to note that common methods variance is not likely to account for interaction effects, a focus of this study, as method variance should increase correlations consistently between construct measures (Aiken and West, 1991). Future research could observe behaviors which correspond to the variables examined in this study, such as patient safety communication, to eliminate the limitations associated with self-report measures. Another measure could include supervisor evaluations of the nurses that could be cross-examined with the self-reported data gathered.

Another limitation of the current study is that there are many important dependent and independent variables which are significantly related to the tested model, but are beyond the scope of this study. For example, empowerment has been found to be related to many positive organizational outcomes (Maynard, Gilson, and Mathieu, 2012) which would be valuable extensions to this research such as job performance. In order to distinguish between

real and ostensible results (Walumbwa et al. 2011), it would be very interesting to measure actual reporting of medical errors to determine if empowered nurses are not only more confident in making decisions that align with the organization's mission, but are also more likely to report errors that occur.

Future studies could have a more detailed dissection of followers' educational backgrounds in order to test for differences in the need for intellectual stimulation across different degrees (e.g., Associate, Bachelor, Graduate, or a High School Diploma). The main reason behind this distinction is the focus on the development of skills such as communication and critical thinking in four-year and graduate degrees, while the Associate's curriculum tends to focus more on technical skills. This would also help control for any reporting errors regarding an associate's degree being reported as a college degree since 90% of our sample reported having a college degree while 37.9% of the nurse workforce hold an Associate's degree as reported by the U.S. Department of Health and Human Services (DHHS, 2013), which is not considered to be a college degree. Due to the increasing demand and necessity of such skills, the Bureau of Labor Statistics (2014) stated that more and more employers are requiring bachelor's degrees. This necessity is further met with the increasing percentage of nurses seeking a bachelor's degree or higher, an increase from 50% to 55% over the past decade (DHHS, 2013). It would be interesting to observe whether a discrepancy in nurses' perceptions of intellectual stimulation exists since a distinction in nurses' behavioral responses, in terms of critical thinking ability and decision making skills among different educational levels has been established (Pardue 1987).

IMPLICATIONS AND CONCLUSIONS

The implications of this investigation are important to both research and practice. With regard to research, the findings of this study will strengthen the predictive validity of theory regarding the communication-integrity-empowerment relationship in the healthcare setting. As extant research stands, this relationship is assumed to be generalizable across a variety of contexts and conditions. However, this study finds that in the healthcare setting, this is not always the case as it is only under the condition of high intellectual stimulation that open communication and leader integrity lead to feelings of empowerment, whereas low intellectual stimulation renders the mediated relationship insignificant. Without this understanding, other researchers examining these constructs in the healthcare setting are more likely to conclude that there is not a relationship between communication/integrity and empowerment because they are not aware of the conditional limitations caused by the moderating effects of intellectual stimulation on this relationship. This could lead to type II errors (i.e., false negative), which is the more grievous form of error, as they may not find a relationship that actually does exist. As such, we extend current theory by examining more nuanced relationships among existing constructs which is consistent with approaches aimed at theory deepening as noted by Perugini and Bagozzi (2001).

While the examined variables are certainly vital in the healthcare setting, they are conceptually relevant to any organizational setting. Tucker and Edmondson (2003) identified the similarities between nurses and front-line employees in terms of 'low influence levels' as well as the common features that healthcare facilities share with other service organizations such as time pressure, uncertainty in the workplace, and the vitality of effective information sharing which gives rise to errors and prevents

organizational learning. Therefore, it is not enough for followers to simply report errors, since this only addresses one facet of the problem. For the reporting to be efficacious, such occurrences have to evolve into learning opportunities in order to prevent such incidents in the future and further contribute to the overarching goal of patient safety prioritization.

In addition, leader behavior, intellectual stimulation, and employee empowerment have been found to relate to a variety of affective, behavioral, and performance-related outcomes across a wide variety of industries (Bolkan, Goodboy, & Griffin, 2011; Maynard et al., 2012; Peng et al., 2013; Yasin, Nawab, Bhatti, & Nazir, 2014; Zhou, Hirst, & Shipton, 2012). As a result, the findings of this study are likely to generalize across industries which are characterized by frequent challenges in day to day operations and serious repercussions to errors committed such as workforces that deal with occupational safety. Given the importance of leadership in most dynamic industries, constructs such as open communication with leaders, leader integrity, intellectual stimulation, and empowerment will remain pertinent to organizational success for decades to come.

With regard to practice, this research is vital to understanding the nuances in the relationship between nurses and their leaders. Patient safety is a primary metric by which healthcare facilities measure their performance, and the exogenous independent variable in this study is open communication with one's supervisor regarding patient safety. Thus, a clear understanding of these findings can improve the effectiveness of the type of communication (i.e., intellectually stimulating) that occurs between functional department leaders and the nursing staff to not only improve the organization's financial performance, but also save human lives. For instance, without this knowledge, a leader may openly communicate with his or

her nursing staff, and they may perceive him or her to be a person of integrity, but ignoring intellectual stimulation will inhibit the effectiveness of the unit by limiting the nurses' sense of empowerment. Given the rapid pace at which problems occur and situations change, being able to think for oneself is a vital competency pertinent to maximizing patient safety.

Another important implication of this research for healthcare facilities is a close examination of their policies and procedures for dealing with the reporting of medical errors. Even if patient safety is promoted as the primary goal of every department within the organization and the reporting of medical errors is verbally encouraged, are the policies and procedures established in a way to help employees grow and improve or be penalized or even fired? While there are certainly cases of gross employee negligence, there are also cases of organizational reward systems which reward compliance and punish creativity. It is these systems which limit intellectual stimulation and hinder employee empowerment as well as subsequent job performance.

Leaders in healthcare facilities should take careful consideration of these findings as they indicate that it is employees' perceptions of leaders' integrity with regard to words and actions which mediates between communicating openly with employees about patient safety and employee empowerment. This is more commonly known as doing what you say you will do. If there is not alignment between words and actions, the leader may be limited to coercing employees to perform with threats rather than motivating them to perform by appealing to their intellect.

Leaders should also examine if the training they provide is intellectually stimulating. For instance, in a training scenario or when a problem occurs on the job, does the leader address the situation by simply stating what the right action is, or does s/he ask questions of those being

trained to help inspire them to think through problems rather than memorize answers to questions. Because every scenario and patient is unique, the value of a single answer has diminishing marginal utility to the nurse, but the value of learning how to think will produce substantial value for the employee, the hospital, and most importantly, the patient. Overall, these findings are crucial for leaders and followers alike to understand and implement into their day to day interactions. In a world typified by constant change and never-ending challenge, it is only through careful consideration of how our words and actions influence those around us that we can ever hope to make a lasting difference in the lives of others.

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