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Convergent and Predictive Validity of the ICA Audit in Healthcare Organizations

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Abstract

This study sought to validate two widely used instruments: the International Communication Association (ICA) Communication Audit and the Communication Satisfaction Questionnaire (CSQ) within the context of healthcare organizations. The focus on healthcare organization stems from the current paradigm shift which has placed a greater emphasis on healthcare consumers. Additionally, this context is of particular importance given the role of communication in creating and alleviating occupational stress and contributing to employee satisfaction in healthcare organizations. Participants included 42 individuals representing seven types of healthcare organizations. Findings indicate that the ICA Audit does not predict satisfaction as measured by the CSQ. However, the organizational outcomes and communication relationship dimensions of the ICA Audit were positively correlated with the CSQ scale. Thus, the ICA Audit did not demonstrate predictive validity, but showed strong convergent validity.

Key Words: ICA, CSQ, healthcare, organization, employee

According to the United States Department of Labor, healthcare was deemed the largest industry in the country employing 14 million people (2008). Moreover, it is estimated that 580,000 establishments comprise what is known as the healthcare industry. Yet, there is drastic variation amongst the different establishments in terms of size, staff, and overall organizational structure. Approximately 77% of the healthcare industry consists of physician, dentist, and other health practitioner offices. Hospitals represent only 1% of the healthcare industry landscape; however, hospitals employ 35% of all healthcare industry workers (United States Department of Labor, 2008). The growing number of organizations and employees in the healthcare industry are essential for societal functioning; therefore, further examination is necessary especially since these organizations and employees have a profound impact on the lives of others.

The Present Landscape of Healthcare

Given the differences that exist in each type of healthcare organization, it is imperative that internal structures and processes align for organizations to function properly. Likewise, it is important to note that employee satisfaction, work climate, and overall attitudes can impact the maintenance of these internal processes (Kushnir & Cohen, 2008). In addition to the various types of healthcare organizations there are multiple types of relationships within these healthcare organizations to consider including: provider-consumer, employer-employee, managers-staff, and institution-communities (Fry, 1986). Analyzing organizations, specifically in the realm of healthcare, is beneficial due to the unique aspects of the organizations and the important services they provide. Individuals employed in this industry are not as transient as other industries, given the required education and training needs (United States Department of Labor, 2008). Consequently, the organizational processes, climate, and employee satisfaction become more salient for the healthcare industry. Furthermore, healthcare organizations differ from most organizations in that the patient, provider, and publics are all impacted by the communication and interactions occurring internally.

The impact of patient, provider, and publics are also demonstrated in the current landscape of the healthcare industry, which is marked by the paradigm shift to a focus on consumers in a collaborative manner (e.g., patients) – forming the consumer-driven market (Gupta, 2003). This shift has lead to the development of consumer-driven health plans (CDHP). CDHPs seek to redefine the costs of healthcare and responsibilities between employees and employers (Abbott & Feltman, 2002; Lo Sasso, Rice, Gabel, & Whitmore 2004; Vesely, 2007). Essentially in this business model, consumers work with their physicians in a partnership, which has been noted as a very powerful force in affecting health care outcomes for the better (Calabretta, 2002). The move toward CDHPs is not likely to dissipate in the near future; thus, it is critical for researchers and industry professionals to understand how the adoption and nature of a consumer-driven market affects employee communication and satisfaction in the healthcare setting. Hence the purpose of this study is twofold. First, this study seeks to validate two widely used instruments: the International Communication Association (ICA) Communication Audit and the Communication Satisfaction Questionnaire (CSQ). Secondly, communication and satisfaction within healthcare organizations will be examined.

Roles and Occupational Stress in Healthcare

As a result of the consumer driven-landscape, roles within healthcare organizations are evolving from the notion of strictly delivering quality care to the formation of managerial roles that elicit both teamwork and collaboration (Willard & Luker, 2007; Maddux & Maddux, 2008). Each of these internal processes is dependent upon the communication occurring within the

organization. Thus, training is vital for the well-being of these organizations and a necessity for disseminating information to employees at all levels. For instance, Rossi, Polack, Kappel, Avtgis, and Martin (in press) state that regardless of the communication skills training a doctor receives during residency, it is still imperative that all employees within a healthcare workplace be comfortable and knowledgeable on the importance of communication. Further, Avtgis and Polack (2007) found that a patient's perceived relational quality with their physician played a role in predicting physicians' competence, which directly relates to communication competence.

This research reiterates the importance of a constant flow of communication throughout all levels of an organization. Information flow amongst the various levels encourages the sharing of new information, which is essential for team members' specific roles to prevail and collaboration to occur. As such, practicing relationship building techniques between the hierarchies and the departments can help define role boundaries and tasks, which ultimately benefits the entire organization (Willard & Luker, 2007). While the notion of roles are important in all organizations, they are particularly critical for healthcare organizations, given that these positions involve some degree of caretaking. Moreover, these positions are often marked by occupational stress which can, in turn, affect workplace communication and satisfaction.

The National Institute for Occupational Safety and Health defines occupational stress as "the harmful physical and emotional responses that occur when the requirements of the job do not match the capabilities, resources, or needs of the worker" (DHHS (NIOSH), 2008, p.1). The impact of occupational stress on healthcare employees has many consequences. Previous research has linked levels of stress to the decline in physical health of healthcare employees (Graham, Albery, Ramirez, & Richards, 2001; Weinberg & Creed, 2000). Careers in healthcare often involve handling or caring for an individual's health concerns. Consequently, caring for another individual's health has the tendency to increase stress (Revicki & May, 1985). Most noteworthy about stress, is that healthcare workers are aware of the stress that accompanies the job, but the benefits of the job may far outweigh the consequences (e.g., saving people's lives).

Occupational stress in the healthcare field can be caused by multiple factors including an increase in workload, time demands, responsibility for others health, feelings of incompetence, lack of information, and lack of communication (Bowell, 1992; Dimatteo, Shugars & Hays, 1993; Mikkelsen, Saksvik, & Landsbergis, 2000; Numerof, Shachar Hendin, & Cramer, 1984; Wolfgang, 1988). Job stress in the healthcare context has also been linked to an increase in substance abuse, poor psychiatric health, burnout, and decreased job satisfaction (Gellis, 2001; Glasberg, Nordberg, & Soderberg, 2007; Graham et al., 2001; Revicki, Whitely, Gallery, & Allison, 1993; Weinberg & Creed, 2000). Thus, occupational stress in the healthcare field is an important issue to address because of the myriad of negative consequences it may have on employees' well being, as well as, the detrimental effects it could have on patients (e.g., decreased satisfaction, possible illness). For example, Leiter, Harvie, and Frizell (1998) found a significant relationship between healthcare providers' stress levels and the impact on patients' satisfaction with hospital stays. For any healthcare organization, decreased patient satisfaction directly impacts business productivity and rapport with clients. This can be translated to employees, as well as patients and providers, through communication and effective training, specific to the healthcare industry (Amason, Thompson, Hochwarter, & Harrison, 1995).

Communication and the dissemination of information are key components in addressing this issue. Through the use of appropriate communication occupational stress may be alleviated, information may be increased, and time may be properly managed (Mikkelsen et al., 2000). Communication influences the effectiveness and productivity within an organization; therefore,

the lack of effective communication hinders an organization's growth and messages sent to the public (Amason et al., 1995). The importance of reducing job stress among healthcare employees is recognized as a factor that would directly increase job and patient satisfaction (Dimatteo et al., 1993; Gellis, 2001; Leiter et al., 1988; Stacciarini & Troccoli, 2003). Due to the important role of communication in organizations and the importance to individual employees, it is necessary to use instruments which accurately reflect the constructs and provide reliable and valid measures of the communication and satisfaction experienced by healthcare employees.

Measurement of Communication and Satisfaction

Communication

Communication is central to an organization's success (Hargie, Tourish, & Wilson, 2002). Given the importance of communication in the organization, scholars involved in the International Communication Association deemed it necessary to devise an instrument which would assess the communication that actually occurs in an organization. Hence, the ICA Communication Audit was developed, tested, and implemented as a comprehensive and standardized instrument (Goldhaber & Krivonos, 1977). Greenbaum, DeWine, and Downs (1987) argued that the ICA Audit was a "significant milestone" in organizational communication which advanced the field to "new levels of maturity" (p.131).

The ICA Communication Audit was developed by over 100 researchers from six different countries over a period of five years (Brooks, Callicoat, & Siegerdt, 1979). The audit focuses on several variables within the workplace including: a) the amount of information needed and actually received b) the amount of information needed to be sent and actually sent c) levels of follow-up information provided d) information actually received and desired from sources e) timeliness f) satisfaction with organizational outcomes g) quality of communication relationships and h) formal and informal networks/channels. When utilized in its entirety, the ICA Audit involves mixed methodology including interviews, surveys, network analysis, critical incident analysis, and communication diaries (Brooks et al., 1979). DeWine and James (1988) argued that the ICA Communication Audit has immensely impacted the study of organizational communication. The audit is equally useful in the organizations in which it has been applied. The audit allows researchers to identify current or potential problems and elicits suggestions for improvement (DeWine & James, 1988). In addition to being prescriptive, the ICA Communication Audit also serves as a preventative measure for organizational problems (Goldhaber & Krivonos, 1977). In studies which followed up with organizations who had implemented changes based on the ICA Communication Audit, organizations perceived significant improvements in communication effectiveness, improved satisfaction and morale, and supported the utility of the audit (Brooks et al., 1979; Hargie, Tourish, & Wilson, 2002). Henderson (2005) argued that organizations should audit the communication occurring at least annually, if not more often.

The ICA Communication Audit has been utilized in health organizations (Frone & Major, 1988; Goldhaber & Krivonos, 1977; Henderson, 2005). For example, Frone and Major (1988) reported that perceived communication quality was positively related to job satisfaction for managerial nurses. However, the recent empirical studies of healthcare organizations and the application of the ICA Audit are limited. Given the comprehensive nature of the audit and the impact the audit has on organizations, it is important to further refine and validate the measurement tools which are being employed. Thus, this study seeks to further understand the relationships between communication and satisfaction in healthcare organizations. In order to

understand the relationships between the two, it is necessary to examine satisfaction in the workplace.

Satisfaction

Satisfaction has a significant impact on psychological health, thus it is a critical construct for consideration in the realm of communication behavior (Hecht, 1978). Avgtis and Taber (2006) found that the quality of relationships within organizations plays a large role in job satisfaction. Likewise, research indicates that affirming communication (i.e., relaxed, friendly, and attentive communication) results in a variety of positive effects within the workplace, including job satisfaction (Rossi et al., in press). Contrary to affirming communication resulting in satisfaction, individuals who believe powerful others (i.e., superiors) affect their outcomes report a decrease in satisfaction with coworkers and superiors (Avtgis & Brogan, 1999).

Given the importance of satisfaction and its relationship with communication behavior, Downs and Hazen developed a questionnaire to assess this relationship. It has been 30 years since Downs and Hazen (1977) introduced the CSQ, which stemmed from Downs' time studying a public utility company. Specifically, Downs realized, during his tenure with the utility company, that employees' positions were tied to their communication satisfaction. This discovery coupled with the need, at that time, to develop organizational audits gave rise to the CSQ. The CSQ was developed using a three-staged study methodology to assess the relationship between communication and job satisfaction. While the CSQ was developed to assess communication and job satisfaction, it is worth noting that the construct of communication satisfaction has been utilized in three contexts: interpersonal, group, and organizational (Hecht, 1978).

The CSQ consists of eight dimensions of communication satisfaction, which include a) communication climate b) supervisory communication c) organizational integration d) media quality e) horizontal/informal/coworker communication f) corporate information g) personal feedback and h) subordinate communication (Downs & Hazen, 1977). The eight dimensions are defined in the following paragraph.

Communication climate refers to an employee's identification with the organization as well as his/her attitudes toward communication in the workplace. *Supervisory communication* involves the two-way communication between supervisor and subordinate. This dimension is primarily concerned with the following: superior openness to new ideas, superior attentiveness, and superior guidance when it comes to job-related issues. Whereas, *organizational integration* consists of the degree or amount of information an employee has with regards to the immediate work environment. *Media quality* deals with the various communication channels an organization utilizes, such as, meetings and written forms of communication (e.g., memos). *Horizontal/informal/coworker communication* deals with the flow of information across coworkers. Namely, this dimension is concerned with the accuracy of information and the grapevine effect of communication. *Corporate information* is the broadest dimension in terms of the type of information since it encompasses all information within the organization. *Personal feedback* involves an employee's need for information regarding his/her job performance and the clarity of the criteria associated with which he/she is being judged upon. *Subordinate communication* similar to supervisory communication, entails both upward and downward communication only with subordinates as the primary target (Clampitt & Downs, 1993; Downs & Hazen, 1977).

Crino and White (1981) were the first to assess the communication satisfaction dimensions since the development of the CSQ. The eight-factor dimensionality determined by

Downs and Hazen was consistent and reported alpha coefficients for the eight factors. Thus, the results suggested that job satisfaction and performance have an overall impact on businesses' economic health. More recently, Clampitt and Downs (1993) examined two employee perceptions of the communication satisfaction factors as it related to job productivity. Additionally, they investigated the role of organizational type as moderating the relationship between communication and productivity in two organizations – a loan and savings company and a chair manufacturer. Rankings of the factors varied in each organization, but overall findings revealed that communication did in fact, have an impact on productivity in the workplace (Clampitt & Downs, 1993).

Beyond workplace productivity, communication satisfaction has also been correlated with organizational structure (Rudolph & Welker, 1998), organizational identification (Nakra, 2006), and tenure (Gregson, 1990). Pinicus (1986) examined the relationships between employees' satisfaction with organizational communication, job satisfaction, and supervisors' evaluations of employees' job performance in the healthcare context. Findings indicated that there was a positive relationship between communication satisfaction and job satisfaction and job performance. Moreover, the relationship between communication and job satisfaction was significantly stronger than the relationship between communication satisfaction and job performance. Yet, to date, the use of the CSQ in the context of healthcare organizations is limited and what empirical work exists is dated.

Healthcare organizations are challenged with working in a consumer-driven market. Based on the limited research regarding the role of both communication and satisfaction in the workplace, this study assessed the validity of the ICA Audit as a tool which can be utilized in healthcare organizations. Additionally, this study will examine both convergent and predictive validity between the ICA Audit and the CSQ. This is particularly important to address given the role of occupational stress individuals in the field of healthcare experience. Ultimately, such stress contributes to communication and satisfaction in the workplace.

Rationale

Sincoff and Goyer (1977) posited that the lack of validity with regards to the ICA Audit was troublesome, and encouraged the examination of the ICA Audit with other measures of organizational communication. Thus, this study seeks to examine both the convergent and predictive validity of the ICA Communication Audit. The ICA Communication Audit not only assesses the communication occurring in an organization, but also assesses an employee's satisfaction with relationships in the workplace. Scholars have reported good predictive validity for the organizational outcomes which are experienced. Specifically, the information adequacy as measured by the ICA Audit predicted satisfaction with the immediate supervisor, personal influence, co-workers, top management and job satisfaction (Daniels & Spiker, 1983; Goldhaber & Krivonos, 1977; Spiker & Daniels, 1981). Similarly, the CSQ is intended to measure several dimensions of satisfaction. Thus, the following hypothesis was posed to test the predictive validity of the ICA Audit.

H1: The ICA Communication Audit will be a significant predictor of satisfaction as measured by the CSQ.

The ICA Audit dimension labeled *organizational outcomes* is conceptualized as overall job and organization satisfaction. The CSQ conceptually overlaps with the organizational outcomes as measured by the ICA Audit. Thus, the two should be positively correlated, indicating that they are measuring similar constructs and providing convergent validity for the

ICA Audit. As such, the following hypothesis was posed:

H2: The organizational outcomes dimension of the ICA Communication Audit will be positively correlated with the CSQ scale.

The *communication relationships* dimension of the ICA Audit measures satisfaction with multiple interpersonal relationships which exist in the organization. The CSQ also focuses on the interpersonal relationships which exist in the workplace. The conceptual similarity between the previously stated ICA dimensions and CSQ scale, as a whole, suggests that similar constructs are being measured, which will provide further convergent validity of the ICA Audit. Thus, the following hypothesis was forwarded:

H3: The communication relationships dimension of the ICA Communication Audit will be positively correlated with the CSQ scale.

Method

Participants

Participants (*N*= 42) were comprised of males (*n*= 2) and females (*n*=39), with one participant not specifying sex. The majority of participants were full-time employees (76.2%) followed by part-time employees (21.4%) from seven organizations. The participants represented an insurance brokerage agency (*n*=2), a nursing team from a large hospital (*n*=9), a plastic surgery office (*n*=11), a pediatric dentist office (*n*=7), a pediatric office (*n*=5), a dermatology office (*n*=4), and a pharmacy benefit management organization (*n*=4).

Procedures

Healthcare organizations were identified through snowball sampling techniques. Once identified, ten organizations were presented with an overview of the research and a formal request for participation in the study. Of the ten organizations contacted, seven chose to participate in the study. Each organization was given two participation options. First, organizations could request that hard copies of the survey packet be mailed to them with self-addressed stamped envelopes included for return. Second, organizations could request electronic copies of the survey packet to be emailed and distributed through the organizational email addresses. Electronic surveys were then returned to the research team via email or via postal mail (if the respondent selected to print the survey). The survey packet included two measures and demographic information *Instrumentation*

The ICA Communication Audit in its entirety contains 116 items. *Information actually received now* was measured using 13 items, with the same 13 items being used to assess the *information needed to be received*. *Information actually sent now* was measured with 13 items, with the same 13 items and response scale being used to assess the *information needed to be sent*. *Follow-up information actually sent now* was measured using 5 items, with the same five items and response scale being used to assess *follow-up information needed to be sent*. *Sources of information now* was measured using 9 items, with the same nine items and response scale being used to assess *sources of information needed*. *Timeliness of information received* was measured using 6 items. *Organizational relationships* were measured using 19 items. *Organizational outcomes* were measured using 13 items. *Channels of communication used now* were measured using 8 items with the same eight items and response scale being used to assess *channels of communication needed*. All measures were assessed uding a 5-point Likert-type scale ranging from 1 (very little) to 5 (very great). Previous reliabilities for the scales have ranged from .73 to .94 (Daniels & Spiker, 1983; DeWine & James, 1988; Goldhaber & Krivonos, 1977; Spiker & Daniels, 1987). The current reliabilities ranged from .83 to .98. Please see Table One for reliabilities, means, and standard deviations.

The CSQ is a self-report measure designed to assess communication satisfaction. The CSQ contains 40 items (e.g., Information about my progress in my job) with each of the eight factors or dimensions, previously defined, containing 5 items. Respondents used a 7-point Likert-type scale ranging from 1 (very dissatisfied) to 7 (very satisfied). It should be noted that the five items dealing with subordinate communication are only to be answered by those in supervisory roles. The reliability for the eight dimensions has ranged from .75 to .94 (Crino & White, 1981; Downs & Hazen, 1977). Please see Table One for reliability, mean, and standard deviation.

Table One

Variables	Cronbach's Alpha	Mean	Standard Deviation
Information Received- Now	.92	3.10	.78
Information Received- Needed	.97	3.55	.98
Sending Information- Now	.95	3.06	.81
Sending Information- Needed	.98	3.11	1.15
Follow-up- Now	.95	2.84	.97
Follow-up- Needed	.96	3.42	1.25
Sources- Now	.91	3.13	.71
Sources- Needed	.96	3.31	1.12
Timeliness	.90	3.01	.81
Relationships	.95	3.52	.75
Outcomes	.94	3.37	.76
Channels- Now	.83	2.76	.74
Channels- Needed	.91	2.95	.93
Communication Satisfaction Questionnaire	.97	4.65	.94

Results

Hypothesis one predicted that the ICA Audit scores would be predictive of employee satisfaction. The independent variables of the ICA Audit were regressed to predict satisfaction. Results of a hierarchical linear regression analysis indicate that the relationship between the ICA Communication audit and the CSQ was not significant (F (3) =.24, p=.66).

Hypothesis two predicted that organizational outcomes of the ICA Audit and the CSQ scale would be positively correlated, indicating convergent validity. Results of a Pearson correlation indicate that this relationship is significant (r =.86, p<.001). The Pearson correlation showed a positive, large relationship; therefore, as the organizational outcomes increases so does communication satisfaction.

Hypothesis three predicted that the communication relationships dimension of the ICA Audit would be positively correlated with the CSQ scale, indicating convergent validity. Results of a Pearson correlation reveal that this relationship is significant (r =.55, p<.05). The Pearson correlation showed a positive, large relationship; therefore, as communication relationships increased so does communication satisfaction.

Discussion

The present study addressed the validity of both the ICA Audit and the CSQ in the

context of healthcare organizations. Specifically, this study examined both convergent and predictive validity between the ICA Audit and the CSQ. This is a particularly important avenue of research to assess, given the role of communication in creating and alleviating occupational stress and contributing to employee satisfaction in healthcare organizations. Likewise, the examination of these tools is of particular significance given the current paradigm shift which has placed a greater emphasis on healthcare consumers and is likely creating added pressure for healthcare employees to please and appease demanding consumers through effective internal functioning.

Hypothesis one predicted that the ICA Communication Audit would be a significant predictor of satisfaction as measured by the CSQ; however, this hypothesis was not supported. This finding is not consistent with previous research which has reported that the ICA Audit does have power in predicting satisfaction (Daniels & Spiker, 1983; Goldhaber & Krivonos, 1977; Spiker & Daniels, 1981). Based on previous research which found that satisfaction impacts psychological health (Hecht, 1978) and that the reduction of occupational stress is recognized as a factor that would improve both job and patient satisfaction (Dimatteo et al., 1993; Gellis, 2001; Leiter et al., 1988; Stacciarini & Troccoli, 2003) it is important that the ICA Communication Audit accurately reflect the construct of communicative behavior. Thus, this finding indicates that the ICA Audit does not predict satisfaction as measured by the CSQ. It would appear that ICA Audit is not a comprehensive tool; therefore, further refinement and validation of the measure is needed, specifically as it relates to satisfaction experienced by healthcare employees.

As hypothesis two predicted, the organizational outcomes dimension of the ICA Audit was positively correlated with the CSQ scale. This confirms that both scales successfully measure similar constructs, thus convergent validity is present. This is important in organizations since job satisfaction is necessary for healthcare workers to function to the best of their potential and further the progress of the workplace (Harmon et al., 2003). As noted earlier, the relationship between communication and job satisfaction is strong, which results in a more effective and productive organization. This is crucial, especially in healthcare organizations given that the relationships held with the public are dependent upon internal levels of satisfaction.

As predicted by hypothesis three, positive interpersonal relationships were related with communication satisfaction. This suggests that the quality of relationships within organizations is important to maintaining communication satisfaction. It is important to interpret the results with caution due to the inability to determine whether satisfied employees build stronger relationships, or positive interpersonal relationships lead to workplace satisfaction. The relationship between interpersonal relationships and satisfaction is evident in these findings, and indicates a link between the relationships developed within the organization and job satisfaction. These findings coincide with previous research that linked affirming communication style to positive effects within the workplace, including job satisfaction (Rossi et al., in press). Thus, satisfaction and communication in healthcare organizations is directly reflective of the relationships between employees' and the communication that enhances such relationships.

Although informative, this study was limited in several ways. First, this study had a small number of respondents. The limited number of participants hindered the calculation and use of discrepancy scores for the ICA Audit to assess predictive validity of the ICA Audit. However, it is reasonable to assess both communication information currently received and information needed as two separate predictors of communication satisfaction, as captured in the ICA Audit. Moreover, it is worth noting that the diagnostic nature of instruments, like the ICA and the CSQ, should not be hindered by the small number of participants. Second, the sample was homogenous

in nature. Specifically, the sample was predominantly female and the organizations were all located in the eastern United States. Third, the participants were only partial representations of each department in which they worked, and may have only provided a partial picture of the communication occurring in the organization. Finally, the ICA Audit in its original form may not accurately reflect the demographics for healthcare professionals. For example, the maximum income which can be reported on the questionnaire is $25,000. This income ceiling may be dated due to the time period in which the instrument was developed, and using the ICA Audit in its original form may detract from true group and employee differences.

Future research should begin by addressing these limitations through recruitment of larger and more diverse sample sizes. With larger populations of participants, future research should also separate and evaluate differences between practicing medical professionals (e.g., doctor, nurse) and those employed in industry (e.g., corporate settings) to determine if further refinement of the tool is needed based on the contexts. The instrument should be refined in order to reflect the current landscape of the healthcare industry and to more specifically assess healthcare organizations.

This study has important implications for the utility of the ICA Audit and assessing communication in organizations. The questionnaire was completed by individuals working in healthcare; therefore, the results presented here increase external validity making the scales more useful to organizations and organizational communication scholars. The results provide the basis for making recommendations to participating organizations to make necessary changes to improve communication within the organization and improve employee satisfaction. Extending the utility of the scales to diverse, yet all health focused, organizations allows for the specific examination and specific communicative recommendations necessary to diagnose and improve organizations. Most importantly, the ability to accurately diagnose and address communication and satisfaction issues in these types of organizations will impact the public at large, through more effective healthcare for the consumers.

The goal of this research was to validate the ICA Audit. Taken together, the results and implications suggest that the ICA Audit is in need of refinement and further validity testing in order to successfully assess satisfaction. However, the results suggest that both the ICA Audit and the CSQ are viable for the examination of the organizations and have the potential to impact individual employees, entire organizations, and those who are served by healthcare organizations.

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