

Perceptions of Health Care Professionals' Credibility as a Predictor of Patients' Satisfaction with their Medical Care and Physician

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The purpose of this study was to examine how patients' perceptions of source credibility related to their satisfaction with the quality of medical care they received and satisfaction with their physician. Patients' perceptions of the competence and caring dimensions of source credibility were analyzed for physicians, nurses, and support staff members. Three hypotheses were proposed and supported. Results indicated that higher perceptions of competence and caring for each member of the medical team were related to more patient satisfaction. This paper discusses the importance of the doctor-patient, nurse-patient, and support staff-patient relationships in light of the findings.

Keywords: Source Credibility; Patient Satisfaction; Quality of Medical Care

During routine visits to a clinic, patients often have interactions with separate health care professionals. For example, patients are likely to schedule an appointment with a support staff member (administrative assistant), answer questions asked by a nurse, and be examined by a physician. Shart (1993) suggested that health communication researchers should examine relationships in the health care context other than the traditional doctor-patient relationship, which has received the most empirical attention

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to date. She argued that "the multi- and inter-professional aspects of health care have been underrepresented within communication studies" (p. 37). The primary purposes of the current study are to replicate research concerning the traditional doctor-patient relationship (e.g., Richmond, Smith, Heisel, & McCroskey, 2002) and extend it to the relationships patients have with support staff and nurses. To accomplish these purposes, this study examines if patients' perceptions of health care professionals' competence and caring result in more satisfaction with the quality of care they receive and their satisfaction with the physician.

Patient Satisfaction

Research examining patients' satisfaction suggests that the patients' communication apprehension can interfere with how satisfied they are with the care received and the doctor-patient relationship (Ayres, Colby-Rotell, Wadleigh, & Hopf, 1996; Richmond, Smith, Heisel, & McCroskey, 1998). Other communication variables have a similar effect on patients' satisfaction. For example, several studies suggest that when physicians used non-immediate communication behaviors, such as frowning or avoiding direct eye contact, patients were less satisfied with the care they received and with the physician (Conlee, Olvera, & Vagin, 1993; Richmond, Smith, Heisel, & McCroskey, 2001).

Fewer studies have examined patients' satisfaction in relation to the nurse-patient and support staff-patient relationships. Similar to the doctor-patient relationship, the nurse-patient relationship is an interpersonal one in which nurses engage in a variety of communication behaviors with patients (Morse & Piland, 1981). These include listening, instruction, conflict management, routine information exchange, and advising. A follow-up study indicated that nurses viewed their primary duties as advising patients on health-related issues and giving them instructions (Honeycutt & Worobey, 1987). To accomplish their duties, nurses felt that they needed to use an open or receptive communication style with patients. This study questions if source credibility relates to patients' satisfaction.

Source Credibility

Source credibility refers to a receiver's perceptions that a source is believable (McCroskey, 1992). Within the concept of credibility are three components: competence, caring, and trustworthiness (McCroskey & Teven, 1999). *Competence* involves having knowledge or expertise in a given area. *Caring* is the degree to which a person perceives that a source has the person's best interests at heart. *Trustworthiness* involves the degree of trust a receiver has with the source. This study focuses on the competence and caring dimensions of credibility in relation to patients' satisfaction.

One study found that patients perceived that their medical records were kept confidential when health care professionals were more competent and caring (Paulsel, Richmond, McCroskey, & Cayanus, 2005). In other studies, patients reported that

they were more satisfied with credible physicians (Richmond et al., 2002) and more likely to comply with the requests of credible physicians (Wrench & Booth-Butterfield, 2003). These findings suggest that source credibility significantly impacts patients' perceptions and level of satisfaction. Competence and caring are important dimensions of source credibility that should be examined in order to improve our understanding of the interpersonal nature of the working relationships patients develop with health care professionals.

A triad of variables appears to occur together, in which health care professionals collaborate with one another, provide patients with a high quality of care, and are more satisfied with the health care organization (Coeling & Cukr, 2000). This triad focuses on the communication between physicians and nurses that results in increased satisfaction of the nurse staff. A natural question, then, is if the same variables work together for patient satisfaction; that is, when patients perceive that health care professionals collaborate and try to provide patients with a high quality of care, are patients more satisfied? One way to answer this question is by analyzing patients' perceptions of the medical teams' competence and caring. Therefore, the following hypotheses are posed:

- H1: Patients' satisfaction with the quality of medical care received and their physician is positively correlated with their perceptions of physician competence and caring.*
- H2: Patients' satisfaction with the quality of medical care received and their physician is positively correlated with their perceptions of nurse competence and caring.*
- H3: Patients' satisfaction with the quality of medical care received and their physician is positively correlated with their perceptions of support staff competence and caring.*

Because one or more of these three hypotheses was expected to be confirmed, the following research question was posed:

- RQ1: To what extent are patients' perceptions of physician, nurse, and support staff competence and caring collectively predictive of the patients' satisfaction with the quality of medical care received and their physician?*

Method

Participants

Questionnaires were mailed to 1,600 patients predominately residing in Texas. All of the participants attended a large medical clinic in Houston, Texas, during the six months prior to the surveys being mailed out. Approximately 394 questionnaires were returned, yielding a 25% return rate. Of these, 36 questionnaires were not completed correctly and excluded from the data analysis.

Demographic information indicated that 142 participants were male, 207 were female, and one was unknown. Thirty-one participants were 45 years old or younger, 59 of the participants were 46 to 55 years old, 83 participants were 56 to 65 years old,

180 participants were 66 or older, and five ages were unknown. Participants reported that 88.5% were white non-Hispanic, 3.6% were African American, 3.6% were Native American, 1.7% were Hispanic, 0.6% were Asian American, and 0.6% identified themselves as "other."

Procedure and Instrumentation

Each questionnaire contained a cover letter, survey, and postage-paid return envelope. The cover letter asked participants to voluntarily complete and return the enclosed survey. The cover letter also reassured patients that their responses would remain anonymous and confidential. Participants were asked to complete the survey based on the health care professionals who cared for them during their most recent visit to the clinic.

Source credibility

The competence and caring dimensions of source credibility, revised by McCroskey and Teven (1999), were used to measure patients' perceptions of their physician, nurse, and support staff credibility.¹ Each dimension was measured with six bipolar words using seven-point scales. Higher scores on the scales represented higher perceptions of competence and caring. The alpha reliability estimates for the competence dimension were .66 ($M = 40.2$, $SD = 3.6$) for physicians, .90 ($M = 37.1$, $SD = 5.8$) for nurses, and .93 ($M = 35.6$, $SD = 7.1$) for support staff. The alpha reliability estimates for the caring dimension were .88 ($M = 39.3$, $SD = 5.1$) for physicians, .91 ($M = 36.8$, $SD = 6.9$) for nurses, and .94 ($M = 33.9$, $SD = 8.0$) for support staff.

Satisfaction with quality of care and physician

Two measures of satisfaction were used in this study. The Perceived Quality of Medical Care scale developed by Richmond et al. (1998) was used to measure patients' general satisfaction with the medical care they received. The scale used six bipolar words with seven-point response options. Higher scores represent higher satisfaction with the quality of medical care received. The alpha reliability estimate obtained for this instrument was .87 ($M = 39.8$, $SD = 4.7$).

The Satisfaction with Physician scale developed by Richmond et al. (1998) was used to measure patients' satisfaction with their physician. The scale used three bipolar words with seven-point response options. Higher scores represent greater satisfaction with the physician. The alpha reliability estimate obtained for this instrument was .93 ($M = 20.1$, $SD = 2.6$).

Results

The first hypothesis predicted that patients' perceptions of satisfaction with the quality of medical care received and their physician would be positively correlated with

Table 1 Simple and Multiple Correlations between Predictors and Criterion Variables

	Predictor variables		Multiple R
	Competence	Caring	
Basis of satisfaction with medical care			
Physician	.53	.73	.76
Nurse	.53	.55	.57
Support staff	.40	.44	.44
Basis of satisfaction with physician			
Physician	.45	.68	.68
Nurse	.42	.46	.46
Support staff	.32	.36	.36

All correlations are statistically significant, $p < .001$.

their perceptions of *physician competence and caring*. The simple correlational results indicate that this hypothesis was supported for both dimensions of credibility (see Table 1). For the research question, the multiple correlation for perceived physician competence and caring with patients' satisfaction with the quality of care was $R = .76$ [$F(2, 322) = 217.23, p < .001$]. The multiple correlation for perceived physician competence and caring with satisfaction with the physician was $R = .68$ [$F(2, 320) = 138.53, p < .001$]. Both of these results indicate a strong association between physician competence and caring and patients' satisfaction. Competence and caring explain 57% of the variance in patients' satisfaction with the quality of medical care received and 46% of the variance in patients' satisfaction with their physician.

The second hypothesis predicted that patients' perceptions of satisfaction with the quality of medical care received and their physician would be positively correlated with their perceptions *nurse competence and caring*. The simple correlational results indicate that this hypothesis was supported for both dimensions of credibility (see Table 1). For the research question, the multiple correlation for perceived nurse competence and caring with patients' satisfaction with the quality of care was $R = .57$ [$F(2, 289) = 69.61, p < .001$]. The multiple correlation for perceived nurse competence and caring with satisfaction with the physician was $R = .46$ [$F(2, 286) = 39.37, p < .001$]. Both of these results indicate a moderately high association between nurse competence and caring and patients' satisfaction. Competence and caring explain 33% of the variance in patients' satisfaction with the quality of medical care received and 22% of the variance in patients' satisfaction with their physician.

The third hypothesis predicted that patients' perceptions of satisfaction with the quality of medical care received and their physician would be positively correlated with their perceptions of *support staff competence and caring*. The simple correlational results indicate that this hypothesis was supported for both dimensions of credibility (see Table 1). For the research question, the multiple correlation for perceived support staff competence and caring with patients' satisfaction with the quality of care

was $R = .41$ [$F(2, 258) = 30.84, p < .001$]. The multiple correlation for perceived support staff competence and caring with satisfaction with the physician was $R = .36$ [$F(2, 258) = 19.29, p < .001$]. Both of these results indicate a moderate association between support staff competence and caring and patients' satisfaction. Competence and caring explain 19% of the variance in patients' satisfaction with the quality of medical care received and 13% of the variance in patients' satisfaction with their physician.

Discussion

The purpose of this study was to examine how patients' perceptions of the competence and caring dimensions of source credibility relate to and predict their satisfaction with the quality of medical care they received and their physician. Results indicated that greater perceptions of credibility related to more satisfaction. Specifically, perceptions of physician, nurse, and support staff competence and caring were positively correlated with patients' satisfaction with the care they received and their physician. Consistent with past research, these results suggest that patients appear to develop meaningful, professional relationships with multiple members of a medical team (Morse & Peland, 1981; Paulsel et al., 2005). While numerous studies focus on the doctor-patient relationship, the importance of the nurse-patient and support staff-patient relationships should not be overlooked.

The results of this study also indicated that perceptions of competence and caring significantly predicted patients' satisfaction. Source credibility accounted for the most variance in patients' satisfaction when it came to the doctor-patient relationship and the least variance in the support staff-patient relationship. It is highly likely that patients spend the most time with the physician and the least time with support staff members, such as administrative assistants who schedule appointments. In this study, patients might have experienced more difficulty assessing the competence and caring of support staff. This would explain why only 13% of the variance was accounted for in support staff competence and 19% of the variance was accounted for in support staff caring. Nevertheless, the results are not trivial; perceptions of competence and caring for all members of a medical team appear to be important in influencing patients' satisfaction. This is especially evident in the doctor-patient relationship, where source credibility accounted for approximately half of the variance in patients' satisfaction.

As with most studies, there are important reservations relevant to this study. First, no causality should be inferred from this study. All results were correlational, and no directional causation has been established by this research. Future experimental design research should explore the possibility of the causality of health care professionals' credibility leading to the kinds of outcomes examined in this study.

Second, the most troubling limitation of this study is that the participants were all volunteers contacted by mail. Additionally, the majority of participants were over the age of 66. We cannot infer that our sample of patients was representative of the population of patients to whom surveys were sent. The fact that so few respondents indicated that they questioned the credibility of the medical team suggests that our

sample represented the more satisfied members of the population. An alternative explanation is that the medical clinic from which our sample was drawn is highly successful and has an excellent reputation for quality patient care.

As indicated by this study and others, the physician-patient relationship is one of many working relationships patients develop. Just as the communication behaviors of physicians influence patients' satisfaction (Richmond et al., 1998, 2001, 2002), the nurse and support staff communication behaviors might also influence patients' satisfaction. Future research should continue to explore the communication behaviors of physicians, nurses, and support staff in relation to patient satisfaction.

This study emphasizes the importance of the competence and caring dimensions of source credibility in the interactions between patients and medical personnel. Patients' perceptions appear to influence their level of satisfaction with multiple health care professionals who provide assistance during routine visits to a clinic. Future research should also continue to examine the importance of patients' perceptions in relation to other communication behaviors displayed by a medical team. Because perceptions of competence and caring appeared to influence patient's satisfaction, so might trustworthiness, the third dimension of source credibility.

Note

1. Because the cooperating agency's experience indicated that response rates would go down if the questionnaire employed was longer, only the competence and caring dimensions of source credibility were examined.

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