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Patient Behaviors and Beliefs : Are Standardized Patients Different?

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ABSTRACT

An abstract of the thesis of Colleen Shannon Lewy for the Master of Science in Psychology presented December 8, 1997.

Title: Patient Behaviors and Beliefs: Are Standardized Patients Different?

Standardized patients (SP's) are lay people who are trained to evaluate and train clinical skills for medical personnel. It was hypothesized that since SP's have had practice and experience interacting with medical personnel that they would exhibit higher levels of patient interaction with their own health care providers. Surveys were sent to SP's affiliated with two medical schools in the Northwest as well as a control group from a local university. Surveys consisted of the Thompson Decisional Involvement scale, the Ende Autonomy Preference Index, the Krantz Health Opinion Survey: Information Seeking subscale, a Satisfaction Criteria scale, and an Expectations survey. Also included were short answer questions for the SP's to comment on their experiences.

Results suggest that the majority of SP's thought that their experience had affected their expectations, satisfaction criteria, and perceptions of their own physicians. However, the scales for the expectations and satisfaction criteria were inadequate for determining if there were any differences between SP's and controls. Further, SP's who had performed within the last 12 months, also had significantly lower levels of respect toward doctors in general.

Marginally significant were lower levels of desire for involvement in medical decisions affecting lifestyle. Surprisingly SP's wanted less decisional involvement in purely medical decisions. Overall, scores for decisional involvement indicated desire for more involvement than the scores of the participants in studies by other investigators completed only five and seven years previously.

PATIENT BEHAVIORS AND BELIEFS:

ARE STANDARDIZED PATIENTS DIFFERENT?

by

COLLEEN SHANNON LEWY

A thesis submitted in partial fulfillment of the
requirements for the degree of

MASTER OF SCIENCE
in
PSYCHOLOGY

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1998

In loving memory of

Donald Bryan Dennis

1908 - 1994

"We shouldn't teach great books; we should teach a love of reading."

From R. Evans, B.F. Skinner:

The Man & His Ideas [1968]

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Patient Participation

How actively a patient should participate in his or her health care is an area of interest to many people including social scientists, consumer groups and medical personnel. The last thirty years have seen remarkable changes in what was thought to be appropriate levels of patient participation. Historically, the role of the doctor was to determine what was best for the patient and the role of the patient was to do as he or she was told. Good patients did not question their doctor's orders. This paradigm was based on the assumption that patient preferences could be judged by physicians and that only physicians had the training necessary to make appropriate choices for their patients. It was not required to inform patients of their options, and it was often considered highly appropriate to keep patients uninformed so as to spare them the burden of decision making (Katz, 1984).

Over time however, an increasingly educated public has become more interested in being involved in their health care. As a consequence, doctors are held more accountable for informing patients about, and involving patients in their own health care (Katz, 1984). This consumer approach focuses on "purchaser's (patient's) rights and seller's (physician's) obligations, rather than on physician's rights (to direct) and patient obligations (to follow directions)" (Haug & Lavin, 1981, p. 213). This new style of interaction emphasizes patients taking more of an active role in their health care and doctors being less authoritarian. It also emphasizes patient autonomy, involvement, and a partnership between doctors and patients.

Coupled with this consumerist approach has been the enactment of various laws and charters to ensure accountability to patients. In 1973, the American Hospital Association's Bill of Rights was enacted. While the association expected that all of the 7,000 hospitals accredited by the association would endorse the statement, it did not penalize any that did not. This statement declared among other issues, that patients have the right to obtain complete and up-to-date knowledge concerning treatment and diagnosis in terms that they can understand. Patients also have the right to receive all the facts needed to give informed consent (Annas, 1989).

The doctrine of informed consent first became law in 1957 and was initially designed to give patients access to the information necessary to give intelligent consent (Katz, 1984). However, it was eventually expanded to include "a description of the recommended treatment or procedure", a "description of the risks and benefits", a "description of alternatives", "the likely results of no treatment", "the probability of success", "major problems anticipated in recuperation", and "any other information generally provided to patients in this situation by other qualified physicians" (Annas, 1989 p.86).

Despite the legal status of the informed consent doctrine, patients still have difficulty asserting an active role in the decision-making process. There are several reasons why this is so. First, there may be ambiguity that a decision needs to be made or that any other options exist. It may be unclear as to who is supposed to make the decision in some situations. Often, relevant medical information is not available to the patient. Finally, it may not be clear who the decision maker is loyal to. For example, a physician may have higher loyalty to a patient's parents than the patient (Annas, 1989).

The American Civil Liberties Union introduced a model patient charter that consists of 25 sections covering all aspects of medical care, including potential patients, emergency admissions, inpatients, discharge and post-discharge, and patient advocacy. The charter stresses the right of the patient to participate in decision making and to have complete information concerning all procedures in language he or she can understand (Annas, 1989). While this is the most explicit statement of a patient's rights, it is unclear how many hospitals have adopted it. Despite the legality of the informed consent doctrine, according to Katz (1984), the legal requirement does no more then provoke a monologue by the physician who describes the recommended procedure in such a way as to increase patient compliance. There is little if any discussion about uncertainties or alternatives to the procedure. This does not lead to a shared decision-making. When Katz discussed the disclosure and consent rule with a group of eminent surgeons, they "seemed genuinely puzzled by the 'quaint' informed consent rule, particularly since they were certain that they could always guide their patients to accept the treatment they had selected for them" (p. 26).

An underlying problem is that many physicians do not choose to share full information with their patients. This is exemplified by one textbook of medicine, Harrison's Principles of Internal Medicine (1994), which is in its thirteenth edition, and published in nine languages. It states under the section labeled "Incurability and Death" that

> Although some would argue otherwise, there is no ironclad rule that the patient must be told "everything," even if the patient is an adult and the head of a family. How much the patient is told should depend upon the patient's ability and capacity to deal with the possibility of imminent death; often this capacity grows with time and, whenever possible, gradual rather then abrupt disclosure is the best strategy. This decision may also take into consideration the patient's religious beliefs, financial and business affairs, and to some extent the wishes of the family" (p. 5).

However, the American Medical Association's Code of Medical Ethics (1997) states that "It is a fundamental ethical requirement that a physician should at all times deal honestly and openly with patients . . . .Only through full disclosure is a patient able to make informed decisions regarding future medical care" (p.125). It is apparent from examining the field of breast cancer that the debate on sharing information with patients has resulted in many different levels of information actually exchanged. Eighteen states have felt it necessary to enact additional statutes to enforce patient rights to adequate treatment options for breast cancer (Nayfield, Bongiovanni, Alciati, Fischer, & Bergner, 1994).

There is evidence that an active role by the patient has a number of advantages. Brody, Miller, Lerman, Smith, and Caputo (1989) recruited patients who showed increasing or new symptoms in the week prior to their clinic visit from an internal medicine clinic. Most of the patients had only minor problems. Patients completed a questionnaire before their visit with the doctor and received follow-up interviews by telephone one day and one week later. In addition, physicians completed a questionnaire after each visit. Patients were asked to indicate how active they wanted to be in medical decision making on a four-point Likert-type scale. Based on their answer, patients were divided into two groups: active or passive participators. There were no significant differences between these two groups on the basis of age, sex, patients' sense of control over their illness, physicians' ratings of the seriousness of the illness or physicians' expectations of how much relief the patient would receive. However, those patients who felt that they had played an active role had lower levels of concern, a greater sense of personal control, greater patient satisfaction and less discomfort one week later than patients who did not choose an active role. Also, patients were much more likely to adhere to medical treatment if they felt comfortable actively seeking out the information necessary to understand what was required of them. The following sections will examine the role that patient participation plays in patient information seeking, patient perceptions of personal control, patient decision making, and patient satisfaction.

Information Seeking

One of the biggest sources of disagreement over how extensive patient participation should be is the area of information exchange. Typically, most patients want all the information they can get (Beisecker & Beisecker, 1990), while many doctors either do not believe in sharing all information (Dunn, 1995), or underestimate how much information patients desire (Catalan et al., 1994). In a study by Faden et al. (1981) examining patients and parents of underage children who were being seen for seizure disorders, 81% to 94% of patients and parents of underage patients felt that detailed disclosure would make them feel "a lot more confident about both their drug and their physician". In fact, when respondents were asked if they would be willing to stay 15 minutes longer, or pay $2.00 more so they could receive additional information about therapies, 96% of parents and adults patients were willing to stay longer, and 90% of parents and 91% of adult patients were willing to pay the extra money. When respondents were asked the maximum amount of money that they would be willing to spend to receive additional information, 25% of adult patients and parents felt that they would be willing to spend $30.00. Fifty percent of adult patients and parents would be willing to stay 45 minutes longer to receive additional information. On the other hand, fewer than 15% of physicians surveyed felt that a detailed disclosure would give patients and parents of patients “a lot more confidence” in their drugs. Indeed, over 50% of the adult neurologists and over a third of the pediatric neurologists thought that disclosures would cause patients and parents of patients to be less likely to adhere correctly to the physician’s recommendations. Patient desire for information is not based on whether the news is good or bad. Blanchard, Labrecque, Ruckdeschel, and Blanchard (1988) studied cancer patients who were hospitalized for diagnosis, treatment, or terminal illness. Investigators found that 92% of the patients surveyed preferred to have all information, both the good and the bad.

It would seem that at least some physicians are not supplying patients with even the basic information required by the doctrine of informed consent. In a study by Roter et al. (1990), the amount of information shared with patients during routine visits to sexually transmitted disease clinics was examined. Information was collected through patient surveys and audiotapes of the clinic visits. All but two of 60 patients received some kind of diagnosis during these visits. There was an average of 2.75 professional contacts at each clinic visit. However, 25% of the patients received no information on treatment, and 28% of the patients received no preventative advice. In total, only 57% of patients were given complete information.

Surprisingly, while most patients report that they are extremely interested in having all information available, they don’t seem willing to simply ask their doctors questions. In a study by Beisecker and Beisecker (1990), while patients reported wanting as much information as possible, they used only an average of 3.4 information seeking comments (ranging from 0 to 24 per patient). Thirty out of 106 patients made no information-seeking comments at all. Additionally, Roter (1984) found that direct medical questions represented only three percent of total patient interactions.

It is possible to increase patient information seeking behaviors experimentally. Greenfield, Kaplan, and Ware, Jr. (1985) found with an experimental intervention designed to increase patient involvement, that the experimental group ended up being twice as effective as the control group in obtaining information from their physicians. The intervention was designed to increase information-seeking ability and help patients understand the diagnostic process.

Clinical assistants, prior to a patient's scheduled visit with a physician, helped the patient identify issues that that were important to his or her health care. Also discussed were the various options for the management of health care issues. Patients in the experimental group were encouraged to ask questions, and to discuss and negotiate medical issues with their physicians. By having patients rehearse their questions, patients were also helped to overcome possible psycho-social barriers such as embarrassment, intimidation or forgetfulness. The experimental group experienced significantly fewer physical and role-related problems. It was of interest that in this study patients in the experimental group did not ask more questions;

rather, they came up with more indirect methods of seeking information. For example, the experimental group talked about issues that had happened to other people or they used humor to address uncertainties. The author hypothesized that asking questions is too "threatening or direct" for many patients even after the successful experimental intervention.

Because of the obvious disparity between what patients claim they want versus what they actually try to get, a number of investigators have examined what factors influence a patient's ability to successfully acquire information. According to Waitzkin (1984), women receive more total physician time, and more explanations. They also tended to ask more questions. More education, higher social class, or unpleasant prognoses were also associated with more doctor time and explanations. Marginally significant was the positive relationship between the uncertainty of the doctor's diagnosis and information giving; the more uncertain a doctor was about the diagnosis and outcome, the more information they gave to the patient. However, despite the differences in the amount of information patients received, there was no difference between the genders, social classes, or education levels among patients' expressed desires for information.

According to Mathews (1983), this "unequal sharing of medical knowledge" (p. 1372) can be examined using the rules of ethnomethodology. Ethnomethodology is the study of the common sense rules that people operate by. Practitioners of ethnomethodology believe that through language, people come to shape and define the world around them. Using this theory, Mathews posits that physicians make up decision rules that they use to "classify patients for the desirability of keeping them informed" (p. 1372). Given that more educated and wealthier patients receive more information, these patients must somehow create the impression that they are better able or more deserving of the information that the doctor has to offer.

Given that doctors have a language very specific to medicine, it is likely that it is easier for patients with more education to understand them. Then there is also the issue of the balance of power. In a typical doctor-patient relationship, the doctor will have most of the power. The doctor will also represent a certain social class or level of wealth. It is likely that patients who are of similar levels of wealth or similar social class wouldn't experience as much awe or feelings of social distance (Cartwright, 1964). There is also the problem of status difference. Patients with higher levels of education may not feel "constrained by any habit of deference to those of higher social standing" (Haug & Lavin, 1983 p. 69). Cartwright found that "patients in the professional class were more likely to ask questions while those in the unskilled manual group more often wanted to be told" (p. 86). Also, "working class patients may be more diffident about expressing criticism, and also possibly less articulate about their difficulties in communication" (p. 193). So patients from a lower socio-economic class would have both a harder time understanding their doctors and be less willing to ask questions to clarify what their doctors said to them.

While some studies (Waitzkin, 1984) would indicate that women from all social and educational levels are seemingly more adept at information seeking then their male counterparts, there may be a different explanation for them. According to Wallen, Waitzkin, and Stoeckle (1979), although females ask for and receive a greater number of explanations, physicians did not perceive this as being due to a greater interest in information. Significantly more of physicians' responses to females were lower in technicality than were the female patients' questions that prompted the physicians to answer. Conversely, physicians tended to match the level of male technical question levels in their answers. Finally, contrary to other findings, women received significantly more explanations, but not significantly more explanation time. Therefore, many of the explanations may have been devoid of meaning. It seems it may be controversial if females are truly receiving more quality explanations then males. However, given that they have more exposure to clinical settings, they are certainly more practiced at seeking out information then their male counterparts.

While it would seem that most patients want all of the information that they can get, it is important not to overlook the small but significant numbers that do not. Sensky and Catalan (1992) argue that often older patients, those who are seriously ill, and patients of some ethnic groups or cultures do not want more information. It seems reasonable that older patients, who may reflect the older model of health care, would not be accustomed to the idea of taking responsibility for their health care. Also, if one is seriously ill, one may not feel capable of taking the responsibility for his or her health care or even want information. Finally, patients from other cultures may have different models of health care that involve vastly different roles for information exchange between the doctor and patient.

According to some physicians, there are potential problems associated with patients having complete information. Some physicians do not believe that patients remember what they are told (Horder et al., 1972 as cited in Tuckett & Williams, 1984). Others believe that the communication gap between doctors and patients is just too wide for true sharing of information (Waitzkin, 1984). Finally, some investigators believe that patients need to "idealize and believe in their doctors whose very presence is the most powerful (placebo) drug and that therefore a rational exchange of information could undermine therapeutic effectiveness" (Tuckett & Williams, 1984 p. 571). Even if this were true, it would still be unethical to withhold information based on this theory. Instead it would seem more prudent to give patients as much information as they are interested in having.

Control

One way that information may be of benefit to patients is that for many patients, learning about their conditions can be a form of control. A study by

Thompson, Pitts, and Schwankovsky (1990), encouraged patients in the experimental group to seek information by either prompting them to write down questions for their physicians or receiving a message from their physician encouraging them to ask questions. These patients were significantly more likely to ask questions, and had greater perceptions of control then the control group. Investigators concluded that the intervention was successful because it was related to a socio-emotional need of the patients. Lerman et al. (1990) found that patients' perceptions regarding their physicians' attempts to encourage their participation were positively related to their feelings of control.

According to Krantz, Baum, and Wideman (1980), for some patients increased participation is associated with an increase in perceived control possibly because it leads participants to believe that they can influence their outcome. For other patients, information could be a form of cognitive control. It may help patients cope with unpleasant events or help patients to reframe future events in a more positive light (Averill, 1973). Others (Lerman et al., 1990) argue, that in addition to increased participation leading to increased control, individuals who believe that they have more control may be better able to elicit more information. It seems likely that both increasing the amount of information a patient has may lead to more control and that more control may lead to more information seeking. Once again, not all patients are interested in increased information, which should not be taken as a reflection of their desire for control.

Decision Making

Although the majority of patients seem to be interested in becoming fully informed regarding their health, many patients do not seem to be interested in making decisions about their health care. As was mentioned earlier, in the study by Blanchard, Labrecque, Ruckdeschel, and Blanchard, (1988), 92% of hospitalized cancer patients wanted all information available regarding their health care. However, only 69% of these felt that they would want to participate in decisions. This would seem to indicate that decision making and information seeking are seen by patients as separate concepts. Additionally, 75% of the patients who desired all of the information regarding their health care wanted to be involved in decisions regarding treatment options. This suggests that interest in information about health care is related to interest in decision making. However, it seems that it is necessary to decision making to have a high level of information. This would make intuitive ense because in order to make a good decision, most people want to understand the information necessary to make such a decision.

There are a number of patient factors that may influence decision making. Some studies (Sensky & Catalan, 1992) have found that the older, or sicker a patient is, the less he or she wants to make decisions and the lower the socio-economic status the patient, the less he or she will want to make decisions. Females are much more likely to want to make decisions then males. Blanchard, Labrecque, Ruckdeschel, and Blanchard, (1988), found in a study of hospitalized cancer patients that older, married men with lower performance status, who had been given a life expectancy of either less than three months, or greater than one year, were more likely to want to leave therapeutic decisions to their doctors.

Decision making is like information seeking because clinicians are likely to both under or overestimate what the patient actually desires. A study by Strull, Lo, and Charles, (1984), found that 41% of hypertensive patients surveyed desired more information about their condition while clinicians underestimated patient preferences for discussion about therapy in 29% of cases and over estimated patient preferences 11% of the time. Conversely, 53% of patients surveyed wished to participate in making decisions while clinicians believed that patients wanted to be involved in 78% of the cases. The investigators concluded that overall, clinicians have a tendency to underestimate a patient's desire for information but to overestimate a patient's desire to make decisions. Upon closer examination of these studies, attention seemed to be focused on either the patient or the physician, but not on the type of decision itself. This problem was corrected in a study by Thompson, Pitts, and Schwankovsky (1993).

Thompson divided the kinds of decisions that a patient is likely to make into two categories: medical and non-medical. Thompson found that patients are willing to let physicians make decisions that are medical and thus not within a patient's realm of expertise, but with respect to decisions that have implications for a patient's lifestyle, patients become much more interested in being part of those decisions.

Patient satisfaction

A look at the literature on patient satisfaction reveals that this is a nebulous concept. Although there are an abundance of studies on the subject, there seems to be very little agreement about what exactly is patient satisfaction. This is probably the cause of so many contradictory findings. Some studies find patient satisfaction to be linked to patient or physician demographics (Ross, Mirowsky, & Duff, 1982; Hulka et al., 1975), but others do not (Hall, Irish, Roter, Ehrlich, & Miller, 1994). Some researchers have found that satisfaction can be related to the type of communication, (Rowland-Morin, & Carroll, 1990), other researchers have not even considered communication in their experimental design. However, most studies seem to agree that patients are much more likely to use non-technical criteria over technical criteria in determining their levels of satisfaction since most patients do not feel qualified to judge technical aspects (DiMatteo & Hays, 1980; Ross, Mirowsky, & Duff, 1982).

The literature is mixed about whether interventions designed to increase patient information seeking behaviors will increase patient satisfaction. Greenfield, Kaplan, and Ware (1985) used an experimental intervention designed to increase patient involvement. They used an assistant to help the patient think about relevant medical issues, frame, and rehearse questions. The experimental group was just as satisfied as the control group. Thompson, Nanni, and Schwankovsky (1990) used an intervention designed to increase communications skills by asking patients in the experimental group to come up with three questions. In a follow-up study, investigators added a message of encouraging questions from the physician to the patient. The experimenters found that patients in both experimental groups asked more questions and were more satisfied with their visits.

Roter (1977) found that patients in the group which had been given advice and practice in asking questions related to a clinical encounter, did indeed ask more questions than the control group. However, the group that had been coached, and had asked more questions, was also distinguished by negative affect, anxiety, anger, and dissatisfaction with the clinical encounters. It is unclear why the more active patients were dissatisfied. Perhaps this dissatisfaction may be due to the doctors in the study being unprepared to handle higher levels of information seeking from their patients.

Standardized Patients

It is beyond the scope of this thesis to investigate all the issues involved in doctor patient interactions. The intent of this project was to look at these issues from a new perspective. To accomplish this, a set of participants with unique skills and experiences were used. They are known as standardized patients. According to Howard Barrows, M.D., who created and developed the concept in the early 1960's, a standardized patient is "a person who has been carefully coached to simulate an actual patient so accurately that the simulation cannot be detected by a skilled clinician. In performing the simulation, the standardized patient presents the 'gestalt' of the patient being simulated, not just the history, but the body language, the physical findings, and the emotional and personality characteristics as well" (Barrows, 1987, p. 1). Standardized patients, known as SP's, may be actors, laypeople, or actual patients, (with or without symptoms), usually have no medical background and are used for testing as well as training medical students. For both evaluation and/or training purposes, medical students are taught to treat the SP's as if they were actual patients.

The purpose behind SP's is to improve clinical competence among medical personnel. Clinical competence is "a complex set of skills that include the abilities to interview, perform a physical examination, make diagnostic and treatment decisions, and communicate with a patient and his or her family while demonstrating good interpersonal skills" (Vu et al. 1992, p. 42). Clinical competence has been positively correlated with patient satisfaction and compliance (Stewart, 1984; Garrity, 1981) health outcomes (Auerbach, 1983), and negatively correlated with malpractice claims (Shapiro, et al., 1989; Adamson, Tschann, Gullion, & Oppenberg, 1989).

Despite the importance of clinical competence, historically, there have been inadequate mechanisms for both the evaluation and the teaching of clinical skills at most medical schools. The traditional system for the training and evaluation of clinical skills emphasized written examinations and clinical performance evaluations. However, written examinations, while good at reporting what students believe they will do inside an exam room, may not reflect what students will actually do. Clinical exams are by their very nature, performance based. Therefore, a written exam which reflects the theoretical nature of clinical skills may be an inappropriate way to judge students' actual clinical behaviors.

Since a large part of clinical exam skills is performance based, it would seem reasonable to make the examination of a student's clinical skills performance based as well. When students are evaluated through performance evaluations, they are observed by senior physicians. However, senior physician observation is extremely limited (Blank, Grosso & Benson, Jr. ,1984). For example, in a survey of medical students in their final year of medical school at Mount Sinai, Gold, Hadda, Taylor, Tideiksaar, and Mulvihill, (1995), found that only 60% of the students surveyed had been observed taking a history and 65% had either never or only once been observed giving a physical examination. Additionally, this method does not permit systematic exposure to various common diseases in clinical training; instead, exposure is based on whatever medical cases present during the student's rotation. This introduces the possibility that students may graduate with limited to no experience in various areas, resulting in physicians with different and unknown, levels of clinical experience. Senior physician observation has also been shown to be subjective, unreliable, and unsystematic (Blank, Grosso & Benson, 1984). Medical schools, aware of the need for a more effective way to teach and evaluate clinical skills, are increasingly using a different strategy in order to enhance the reliability and objectivity of clinical skills evaluation. This strategy involves the use of an SP.

Standardized Patient Training

Although SP training differs from medical school to medical school, individuals taking on the roles of patients are generally trained to assess and report student communication and information-sharing skills as well as general manner and psycho-social skills, such as eye contact and courtesy. Some SP's even evaluate physical exam skills. Through the use of SP's, clinical skills assessors are able to standardize patient presentations to large numbers of examinees allowing for standardized teaching, as well as standardized requirements. These standardized presentations ensure that medical students are exposed to whatever clinical presentations a medical school considers important. Since each examinee would be given the same criteria for an acceptable clinical performance, each score can be compared in meaningful ways.

In the last 30 years, the use of SP's has become very popular in many medical schools. In 1989, Stillman, Regan, Philbin, and Haley (1990) surveyed American and Canadian medical schools and found that 70% (94 out of 136) used SP's at their medical schools with an average of 27 SP's per school (ranging from two to 125). SP's were used for a variety of clinical teaching purposes including breast and pelvic examinations, male genitourinary examinations, the teaching and evaluation of interviewing skills, history-taking skills, counseling and patient education skills, complete physical exams as well as partial physical exams, and focused encounters consisting of a brief history and physical examination. Additionally, SP's are beginning to be used in the training of other types of medical personnel such as residents, physicians in private practice (Swanson & Stillman, 1990), foreign medical graduates (Cohen, Rothman, Ross & Poldre, 1991), and nursing students, and dentists (Hazelkorn & Robins, 1996). Therefore, it is likely that a more current survey would reveal that the numbers of people trained to perform as SP's has grown tremendously since 1989. Ongoing research is being conducted (Colliver & Williams, 1993; Van der Vleuten & Swanson, 1990) in order to examine the reliability and validity of SP ratings of students. Included in these studies are investigations of the impact of gender (both SP and student) on the evaluation process, the accuracy and consistency of role enactment, the reliability of scores obtained on an SP examination, and the number of SP cases needed for an SP examination to obtain reliability in pass/fail situations (Colliver & Williams, 1993).

SP's are also involved in feedback, and performance rating. Giving feedback to students is an important part of helping medical students improve their clinical skills and a function that "regular patients" (henceforth known as patients) seem unable to do. In a study by Feletti and Carney (1984), investigators found that patients reported a high degree of satisfaction with a group of medical students even though faculty ratings of the interactions found significant problems in their communication and clinical skills. Feletti and Carney followed up the initial study with one involving confederate medical students assigned to either perform a clinical visitation very well, or very poorly, as measured by the patients' checklists. Investigators found that medical students did very well on the checklists, regardless of how they had actually performed. However, a nurse was assigned to have a "chat" afterwards with the patients about the medical student interaction. The nurse found that the positive ratings on the checklists were not due to patients being unable to discriminate between poor and good performances. Instead, the investigators hypothesized that regular patients, while able to tell good clinical examinations from poor ones, are reluctant to be critical of medical students.

Medical schools and medical associations are comfortable enough with an SP examination to make the SP program part of the high stakes licensure process. In 1990, SP examinations were initiated in Canada as a requirement for certification and licensure for the College of Family Physicians (Grand'Maison, Lescop, Rainsberry, & Brailovsky, 1992). Later, SP examinations were expanded to include all types of specialties (Miller, 1994) and it is expected that the United States will follow suit within the next ten years, (E. J. Keenan, personal communication, March 8, 1996). As part of licensure and certification, an SP examination would help determine which physicians would be granted a license to practice medicine. The use of SP's is gaining in popularity and it is expected that SP's will become part of the exam structure that all medical students will be expected to excel in. Furthermore, if SP exams are part of the licensing process, even more medical students will be exposed to SP's in order to gain maximum exposure to a variety of medical conditions.

Standardized Patient Training Effects

While the numbers of SP's are increasing, and while reliability and validity studies continue, very little is being done to examine the effects of SP training on the SP's themselves. Has SP training had an effect on these individual's interactions with their own physicians? Initial data would suggest that there is a connection.

Two studies have looked at the health care perceptions of SP's. Woodward and Gliva-McConvey (1995) randomly chose retired, current and new SP's from a large pool to participate in one of five focus groups. The investigators found that SP's felt that they ended up with different expectations of their health care providers, including the belief that providers should "demonstrate good clinical skills, be empathetic, not talk down to patients, and listen to patient's concerns" (Woodward & Gliva-McConvey, p. 419). In order to fulfill their new expectations, some SP's changed physicians, while others re-negotiated more egalitarian and participatory relationships with their physicians. SP's also thought they had improved their communication skills and that they received "better and more information" from their health care providers since they could ask more pertinent questions. They felt they had more insight and empathy toward health care professionals but also thought they could more easily discern between different levels of quality in their health care. Although this focus group study is intriguing, it is exploratory and the hypotheses generated need to be examined further.

The second study examining SP perceptions was by Rubin, Philp, and Hartman (1995). Questionnaires were given immediately before, and after as well as a year after a SP experience. Investigators found that immediately after the experience, SP's who had had previous experience performing as an SP, viewed their own doctors less positively, while SP's with no previous experience saw their own doctors either as more positive or had no change in perceptions. A year later, the original group of SP's was tested again. Both experienced and new SP's perceptions reflected their original levels from the questionnaires filled out before their shared SP experience. However, SP's who had had previous experience, manifested significantly higher feelings of respect toward their physicians then those who had had only one experience as an SP. The authors hypothesized that the experience of being an SP leads SP's to become more critical of their own health care. In this study, the use of longitudinal methodology was significant since it established that the training itself could change an SP's perceptions. It is not merely that individuals who are interested in being SP's are initially more critical toward physicians.

These studies are preliminary and the results suggest the need for further study. It would seem that through training and participating as an SP, laypeople are learning both to expect certain types of behaviors from their own physicians and are learning new skills in order to elicit better responses from their own physicians. Given that there are different types of training that an SP may engage in, it would be expected that the type of training an SP receives would affect the SP's in judging physicians and meeting needs. For example, one would expect that SP's who have been trained to evaluate medical students' physical exam skills would be more critical of their own doctors' physical exam skills. Also, SP's who had been given the training to give feedback to medical students should have an easier time re-negotiating their relationships with their own physicians than those SP's who hadn't practiced being "up front" with their points of view.

With initial studies looking so promising, further investigation is warranted if only for taking a new look into doctor-patient relationships. A new look holds the possibility of adding a fresh perspective and possibly new knowledge. If it is indeed true that SP's are more successful at having their needs met within the context of their own doctor's offices, and that it is due to their training, perhaps aspects of this training can be applied more generally to improve patient satisfaction or at least improve levels of patient participation.

Expectations

It would seem reasonable that the experience of being an SP could affect a person's expectations of his or her own physician. Through the process of teaching and evaluating a medical student's clinical skills, SP's are learning what the medical profession perceives as the appropriate roles for both the physician and the patient. For most SP's, the unique opportunity of being an SP is their first experience with medical training. Since this medical training is being taught by professionals in a medical school setting, it would come across as highly credible and for most SP's, set new, more specific standards of quality health care. These more specific standards of quality care would come from SP's being given specific criteria to judge medical students. Not only do SP's learn the appropriate behaviors for physicians, but often through SP training, they learn the appropriate behaviors for themselves as patients. SP training also may give both insight into the amount and type of work that medical students perform which could lead toward heightened feelings of respect towards the medical students.

It would seem a logical next step for SP's to compare their own health professionals to this new standard. This would include not only the psycho-social aspects of health care but also technical parts of medical care such as what to expect on the physical examination.

Most patients base their feelings of satisfaction only on the psycho-social and not the technical aspects of health care. Brody, Miller, Lerman, Smith, and Caputo, (1989) found that patients who received non-technical interventions such as education, stress counseling, and negotiation were significantly more satisfied. Perceptions about the technical aspects of the interaction, such as the examination, tests, medications, etc., were unrelated to satisfaction. It is hypothesized that most patients do not feel that they have enough expertise to judge the more technical aspects of a clinical visit (Ross, Mirowsky, & Duff, 1982; Roter, 1977). However, SP's may feel differently. Many of them have been trained in what a proper physical exam is and what it should include. They may have also been trained in what the proper types of questions should be for certain sets of symptoms. Therefore, they may in part base their satisfaction on the technical aspects of a clinical interaction.

According to Ditto and Hilton (1990), expectations toward the medical field typically come from family and friends during "lay conferral sessions". These sessions often occur shortly before a trip to one's health care provider. Typical expectations of their health care providers include beliefs that patients will be provided with information about the nature of their condition and that they will experience concerned, personal, treatment (Ditto & Hilton, 1980). If it is the case that patients are already expecting informative and caring treatment, how is it that the study by Woodward and Gliva-McConvey (1995) found that SP's reported that they had established new criteria for judging their physicians? The SP's, like the rest of the population, should already be expecting "quality care" from their health care providers.

There are a number of possible explanations. According to Ditto and Hilton, (1980), dissatisfaction occurs when a patient does not receive what he or she expects. This would lead to the hypothesis that both SP's and the general population have equally high expectations of health care. However, in the study by Woodward and Gliva-McConvey (1995), SP's felt that they had become more critical toward their health care providers implying that SP expectations were higher after their training. Therefore, it is likely that people's expectations may be no more specific than that health care providers will be caring individuals who provide information. However, SP's who have been given criteria about what their physicians are supposed to do, and have been taught that SP feedback and opinions are important, probably have much more specific expectations. They have learned that having a physician who is technically competent, as well as psycho-socially appropriate should not be considered a bonus, but instead is something they deserve. Furthermore, unlike most health care consumers, SP's have learned what technically competent and psycho-socially appropriate means. Not knowing what is considered appropriate behavior within a health care setting is considered a barrier to effective communication between patients and doctors (Mathews,1983).

There are also additional barriers. Many patients believe that doctors do not expect patients to ask questions, while other patients are concerned that they will reveal their ignorance through information seeking. These beliefs may be challenged by SP training. SP's have learned that the proper role of a patient is to ask questions, and the role of a doctor is to supply information. Furthermore, SP's have spent more time interacting with medical personnel. Some researchers hypothesize that women tend to receive a greater number of explanations from physicians (Pendleton & Bochner, 1980) because they are familiar and therefore more comfortable in health care settings (Wallen, Waitzkin, & Stoeckle, 1979). This comfort with medical personnel and health settings would also be the case for SP's. One could also conclude that getting what one wants out of the doctor-patient relationship is at least partially a matter of practice. Therefore, SP's with experience should be more successful at information seeking then SP's who have just begun.

All of this is relevant to the background that SP's bring to their own clinical experiences. Given that they have spent (in some cases) significant amounts of time practicing with medical professionals, and they have been given considerable insight into medical training, it is likely that they have little awe of their own physicians. Since they have also had exposure to many technical terms associated with medicine, they are likely to know what many of the terms mean. In addition, they will have been taught that if a physician is doing his or her job, he or she will not be using a lot of medical jargon. While SP's may represent all social classes and economic backgrounds, it is likely that with their level of knowledge and assurance, they come across to physicians as patients who should be given more information.

It is also likely that SP's will not settle for anything less. Because of their additional training, SP's will have added criteria for judging both non-technical and technical aspects of the encounter with their physicians. Because of those more elevated standards or at least more specific standards across a large spectrum of skills than the average patient, SP's are harder to satisfy.

Another group of patients that may have insight and expertise into their own health care are physicians. Physicians as patients would be in a position where they, like SP's, would have technical expertise and familiarity with a medical setting. However, when Ende, Kazis, and Moskowitz (1990) studied a group of physicians' preferences of decision making for their own health care, they found unexpected results. The investigators found that physicians were only slightly more interested in making decisions than regular patients and less interested in information seeking. Overall, their preferences for autonomy were similar to patients without any medical training. However, the group of physician patients were significantly younger, more educated and had a significantly larger number of men than the control group. This may be partially responsible for the results. In previous studies, although females were found to ask for, and receive, more information, so were the more educated (Waitzkin, 1984).

However, it is likely that with the knowledge base of physician patients, they do not need to seek out additional information. Or, they are too embarrassed to reveal their ignorance to another physician. It is not likely that SP's would have the same knowledge base as physicians so it is likely that this would not be the pattern for them. The decision making results were surprising. It would be expected that both SP's and physicians would be more likely to take an active role in decision making. In order to be certain the results are valid, follow-up needs to take place with a control group that is similar to the physician patients.

In essence, while SP's are trained to perform in ways that would strengthen clinical training for medical personnel, they themselves are learning how to more effectively get what they need from clinical interactions. This assertiveness contrasts with the average person who doesn't know what role he or she needs to play in attaining the information he or she wants, and isn't comfortable asserting him or herself. The average person may also chose more passive ways of trying to get information such as joking or attributing problems to others (Greenfield, Kaplan & Ware, 1985). It is possible that patients also avoid unpleasant clinical situations by not complying with a physicians' instructions, missing appointments, or changing providers altogether. SP's have learned that they are entitled to a physician with a pleasant demeanor who will treat them respectfully, and politely, which means that the physician will answer questions. This sense of entitlement and the SP's practice within the clinical situation make it likely that SP's would choose a more assertive way of reacting if they were unhappy with their physicians.

In summary, the aim of this thesis is to examine the following hypotheses:

Hypothesis 1: SP's who haven't trained or performed in the last year will have different expectations and different attitudes of respect for their doctors than controls and SP's who have trained or performed in the last 12 months.

Hypothesis 2: SP's who have performed in the past year will have higher rates of information seeking than controls and SP's who haven't performed in the previous 12 months.

Hypothesis 3: SP's who have performed in the last 12 months will have different criteria in determining their satisfaction with their health care providers than SP's who haven't performed in the last 12 months or non-SP's.

Hypothesis 4: Both SP's and controls will be more interested in making non-medical decisions than medical ones, but SP's who have performed in the last 12 months will be more willing to make medical decisions than controls or

SP's who haven't performed in the last 12 months.

Methods

Participants

SP's were recruited from two Northwest medical schools that use SP's as part of their training programs. An SP was defined as anyone 18 or older that had one or more experiences performing for medical students. No limit was placed on length of time since the last SP experience. There were 152 people who met these criteria. As an incentive, potential subjects who filled out and returned the survey were entered into a raffle for two people at a restaurant in their area.

One of the medical schools required the consent of their employees in order to release names and addresses. A letter was sent from the medical school administrators soliciting consent. Fifteen out of the 40 SP's associated with the medical school withheld consent. Questionnaires were mailed to the remaining 137 eligible subjects from both medical schools. Fifteen of the questionnaires were undeliverable. Eighty-two questionnaires, or 67.8% of the SP's who received questionnaires, completed and returned them.

SP's ranged in age from 18 to 84 years with an average of 44.36 years (SD = 16.94). All were at least high school graduates and 31.7% had a Master's, doctoral or other advanced degree. A majority of SP's rated their health as excellent (52.4%), and 59.8% were female. A preponderance of SP's (47.5%) had a household income between $20,000 and $40,000 per year. While a sizable proportion (18.3%) had a household income of $50,000 or more.

SP's performed from one to over 31 hours, with 42.7% having completed over 31 hours. The proportion of SP's who had performed in the previous 12 months was 64.6%. The vast majority 65.9%, believed their experiences had changed their perceptions of their own physicians. SP's also believed that their experiences had changed their expectations of their physicians (67.1%). Finally, 59.8% thought that their experiences had influenced their satisfaction with their physicians. Out of those who thought that their satisfaction levels had been influenced, 50% had become more satisfied and 50% were less satisfied.

A control group was recruited through local university undergraduate psychology classes. Students who acted as controls were offered extra class credit. One hundred and forty students chose to participate.

Controls did not differ significantly from SP's with respect to income, health, or sex. However, there was a statistically significant difference in age ($\underline{t} = -10.53$, df = 218, $\underline{p} < .001$). See Table 1 for means and standard deviations. There was also a significant difference in education level ($\underline{U} = 218.5$, $\underline{p} < .0001$, two-tailed). The majority of controls (72.1%) had some college, while SP's were much more evenly distributed across the education categories (Table 2).

Table 1
Subjects' Ages (years)

	Age		
	Mean	SD	N
Control	26.7	7.9	140
SP	44.4	16.9	80

Table 2
Subject's Education (years)

	Education	
	Control (%)	SP (%)
High school graduate	1.4	7.3
Some college or tech. school	72.1	28.0
College graduate	21.4	18.3
Some post graduate education	5.0	14.6
Master's, Ph.D., M.D., etc.	0.0	31.7

All participants were informed that their names and responses would be held in confidence and that future SP employment opportunities would not depend on participation in the study. All participants signed an informed consent form, and treatment of participants was in accordance with the ethical standards of the APA.

Materials

Survey materials consisted of a cover letter which included the informed consent, a stamped envelope pre-addressed to the investigator, and the survey materials. The cover letter identified the investigator, included her phone number for questions, and described the purpose of the investigation (see Appendix A for a copy of a cover letter). The survey materials consisted of eight parts.

Section (A) of the survey materials was used to determine satisfaction criteria. Participants were given a list of potential characteristics modified from a physician characteristics list by Rubin, Philp and Hartman, (1995). Respondents rated each characteristic on a five-point Likert-type scale regarding the importance of each characteristic in determining satisfaction with their doctor. Section (B) consisted of one five-point Likert-type question designed to examine levels of respect toward doctors in general.

Section (C) was used to examine the expectations of professional competence and psycho-social skills that participants had regarding their physicians. Statements of professional competence were taken from the Satisfaction with Medical Care Scale (Zyzanski, Hulka, and Cassel,1974). This scale had three subscales: Professional Competence, Personal Qualities (of the physicians) and Cost/Convenience. Four statements were from the Professional Competence subscale. A sample statement from the Professional Competence subscale was, “Doctors will do everything they can to keep from making a mistake.” Statements were selected that emphasized either positive or negative beliefs in what patients could expect from doctors in general.

Four statements were also used to investigate psycho-social skills. These statements covered areas such as jargon and rapport, which were areas typically graded when subjects performed as SP’s. A sample statement was, “It is okay for a doctor to explain treatment and diagnosis using language that is not easily understandable.” Participants indicated their expectations through a five-point Likert-type scale ranging from “strongly agree” to “strongly disagree.”

Sections (D) and (E) of the survey focused on patient decision making. Section (D) consisted of the Desire for Involvement Questionnaire (DIQ) by Thompson, Pitts, and Schwankovsky (1993). The purpose of this scale was to determine whether or not patients wanted to participate in lifestyle decision making that was not medical in nature but was still in the health care setting. The DIQ scale consisted of nine scenarios that described a medical problem in which there were two choices for treatment. While both types of treatment had equal chances of success, they had different implications for the type of lifestyle the patient would be allowed to lead. For each scenario, participants were asked to picture themselves as the patient and to choose who they thought should make the decision about which treatment program they receive. In one example, participants were asked to imagine that they had a painful, chronic illness. Treatment A was a strong pain medication that left the participant “groggy and might worsen the condition in the long run.” The other option was to do nothing and live with the pain. The participant responded as to who (the doctor and/or the patient) should make the treatment decision on a five-point Likert-type scale. Thompson, Pitts and Schwankovsky (1993) found an internal reliability of .87 (Chronbach’s alpha). They also reported that the scale showed convergent validity by correlating the scale with other types of patient involvement scales. The first scale, the

Autonomy Preference Index (API) by Ende, Kazis, Ash, and Moskowitz (1989), measured patient involvement desires but looked at scenarios requiring medical expertise. It correlated with the DIQ ($r=.45$ $p<.001$). The Behavioral Self-Management Subscale of the Health Opinion Survey (HOS), by Krantz, Baum, and Wideman (1980) also correlated with the DIQ ($r=.34$ $p<.001$). Thompson et al. pointed out that the DIQ scale demonstrated discriminate validity by not having a large correlation with the HOS subscale. Although the two scales were both measuring patient involvement with health care, the two scales assessed two distinctly different types of desire for involvement. The HOS subscale was a measure of patient preference for self care and the DIQ scale was a measure of patient preference for medical lifestyle decision making.

Section (D) was composed of the Autonomy Preference Index or API by Ende, Kazis, Ash, and Moskowitz (1989). This index was composed of two different subscales. The first subscale had fifteen items and measured patient preferences on medical decision making. This subscale had two sections. The first section listed six statements with five-point Likert-type scales. The second section contained three medical vignettes, each followed by three statements with the same Likert-type scales. The vignettes reflected varying degrees of medical seriousness: “upper respiratory tract illness,” “high blood pressure,” and “myocardial infarction.” Test-retest reliability was reported at .84 and Cronbach’s alpha was .82. Concurrent validity was established through the correlation of this scale with a general statement by the patient summing up his or her attitude regarding who should be in control of his or her health care. Patients' answers on the scale correlated with this overall statement at $r=.54$, $p<0.0001$.

Only the vignette section was used for this study because it was directly comparable to the vignettes in Thompson, Pitts and Schwankovsky's DIQ scale. Thompson et al. designed the DIQ scale to mirror the format of the vignette section of the Ende Autonomy scale. Both questionnaires use the same response subscale. Thompson et al. compared the DIQ scale to both the vignette subscale and the full decision making scale. They found that using the vignette subscale instead of the full version did not lead to considerably different results (Thompson, Pitts, & Schwakovsky, 1993). The second part of the overall API measured information seeking preferences. It was not used, as its focus was on patient information preferences instead of patient behavior in seeking information (Nease & Brooks, 1995).

Section (F) consisted of the information subscale from the Krantz Health Opinion Survey (Krantz, Baum, & Wideman, 1980). This subscale had even statements in which the participant was given a forced choice of "agree" or "disagree" for each statement. However, in order to better distinguish differences between responders, a five-point, Likert-type scale was used instead. A sample statement was "I usually don't ask the doctor or nurse many questions about what they're doing during a medical exam."

Krantz, Baum and Wideman reported that the information subscale had a Kuder-Richardson 20 reliability of .76 and a test-retest reliability of .59. Higher information subscale scores were found to be associated with increased patient questions ($r=.28$, $p<.03$). Subjects that received high information subscale scores asked an average of 5.3 questions, medium scoring subjects asked 3.4 questions, and low scoring subjects asked an average of 1.3 questions.

Section (G) collected basic demographics such as age, gender, education, health status and total household income. For education level, and household income, subjects indicated which category best represented their education or income. Health status was collected through a five-point Likert-type scale.

Section (H) was given only to the SP's. It was designed to elicit information about the SP experience including whether the participant had performed in this activity in the last year and how many total hours were spent in this activity. Additionally, participants were given the opportunity to comment about whether they have gained knowledge about health care, and if they felt that SP training had changed the way they interacted with their own physicians. Answers were collected through short-answer/fill-in-the-blank format. Finally, a section was included allowing the participant to volunteer what it was like to be an SP. Specifically, SP's were asked to describe how if at all, the experience of being an SP impacted upon their perceptions, expectations and satisfaction levels with their own health care providers.

It was estimated that subjects should be able to complete the questionnaire in less than thirty minutes. Hypotheses, survey materials, and analyses are summarized in Appendix A (Table 1).

Results

Reliabilities:

Internal consistency was measured using Chronbach's alpha. An alpha level of .7 or above was the criterion for acceptable reliability levels. The alpha for the Expectations Survey was $\alpha = .3698$. Reliabilities were also run on only the first four questions of the Expectations Survey which were taken from the Professional Competence subscale of Zyzanski, Hulka, and Cassel (1974) ($\alpha = .3342$). The last four questions were composed by the investigator to examine psycho-social issues. Reliability was calculated separately for just these questions with $\alpha = .5521$. The internal consistency of the Krantz Information Seeking scale was $\alpha = .83$. The internal consistency eliability of the Satisfaction Criteria Scale was $\alpha = .86$. The Thompson, Nanni, and Schwankovsky (1990) Decision for Involvement (DIQ) scale and the Autonomy Preference Index (API) by Ende, Kazis, Ash, and Moskowitz (1989) had reliability levels of $\alpha = .88$ and $\alpha = .76$ respectively.

Hypotheses

Significant differences were found between controls and SP's with regard to both age and education. Since previous studies have indicated that both age and education are important factors in patient participation, all of the following hypotheses controlled for these variables.

All hypotheses were analyzed through either ANCOVAs or MANOVAs. These tests require that the independent variable(s) and the covariates in each situation (age and education) do not have significant interactions. This potential interaction was tested using multiple regression and in each case was found to be non-significant.

Hypothesis 1:

SP's who haven't trained or performed in the last year will have different expectations and different levels of respect for their doctors than controls and SP's who have trained or performed in the last year.

Expectations

Table 2 lists the observed and adjusted means for expectations. An analysis of covariance was run with the total score on the Expectations questionnaire serving as the dependent variable, the status of the participant as the independent variable and the level of education and age of the participants as covariates. There was no significant difference in expectations between the different types of participants after controlling for age and ducation ($F = 2.15$, $p =.118$). The covariate education played a significant role in the model ($t = -2.15$, $p = .03$) but age did not ($t = .69$, $p = .49$).

Table 2
Observed and Adjusted Means for Expectations

	Observed M	Adjusted M*
Control	29.65	29.51
SP with Exp. in Last 12	30.17	30.32
SP with no Exp. in Last 12	30.67	30.66

* Means are adjusted for the covariates age and education

Respect

An analysis of covariance was run with respect as the dependent variable, and participant status as the independent variable. Age and education were entered as covariates. While the covariates were not significant (age: $t = -1.05$, $p = .29$, education: $t = -.84$, $p = .40$), the status of the participant was marginally significant ($F = 2.92$, $p = .056$).

Table 3 lists the observed and adjusted means for respect. In order to determine which groups were significantly different, a post-hoc simple contrast was run with the control group as the comparison group. This test revealed that there were no significant differences between the control group and the SP's who had not performed in the previous 12 months ($t = 1.63$, $p < .10$). However, there were significant differences between the control group and SP's who had performed in the previous 12 months ($t = -2.39$, $p < .02$). SP's who have performed in the last 12 months had significantly lower levels of respect after controlling for age and education.

Table 3
Observed and Adjusted Means for Respect

	Observed M	Adjusted M*
Control	3.78	3.70
SP with Exp. in Last 12	3.35	3.40**
SP with no Exp. in Last 12	3.79	3.82

* Means are adjusted for covariates age and education.
** Adjusted mean differs significantly (p < .05) from the control. A score of 3 = Average and a score of 4 = High.

Hypothesis 2:

SP's who have performed in the last year will have higher rates of information seeking than controls and SP's who haven't performed in the previous 12 months.

Information Seeking

Table 4 lists the adjusted and observed means for information seeking. An analysis of covariance was calculated with the Krantz Information Seeking scale as the dependent variable, the status of the participant as the independent variable and age and education as covariates. Participant status was not significant ($F = 1.05$, $p = .35$). The covariate age wasn't significant ($t = -.03$, $p = .98$); however, the covariate education was significant ($t = .2.07$, $p = .04$). After controlling for age and education, there was no difference between participants for information seeking.

Table 4
Observed and Adjusted Means for Information Seeking

	Observed M	Adjusted M*
Control	25.10	25.61
SP with Exp. in Last 12	27.23	26.84
SP with no Exp. in Last 12	25.37	25.25

* Means adjusted for covariates age and education.

Hypothesis 3:

SP's who have performed in the last 12 months will have different criteria in determining their satisfaction with their health care providers than SP's who haven't performed in the last 12 months or non-SP's.

Satisfaction Criteria Scale

Table 5 lists the observed and adjusted means for satisfaction. To test the third hypothesis, an analysis of covariance was conducted. The total score on the Satisfaction Criteria Scale served as the dependent variable, with the status of the participant serving as the independent variable, and age and education serving as the covariates. The analysis showed that there were no differences between participant groups ($F = .17$, $p = .84$). The covariate age was not significant ($t = -.15$, $p = .88$). However, education was significant ($t = 2.29$, $p = .02$). After controlling for age and education, there was no difference between satisfaction criteria levels for the three types of participants.

Table 5
Observed and Adjusted Means for Satisfaction Criteria

	Observed M	Adjusted M*
Control	23.01	23.66
SP with Exp. in Last 12	23.91	23.33
SP with no Exp. in Last 12	22.78	22.71

*Means are adjusted for covariates age and education.

As shown in Table 6, participants thought that all of the criteria used in the Satisfaction Criteria Survey was important in determining satisfaction. The three questions that scored the lowest (4, 8, & 14) referred to "enthusiasm," "note taking," and "not charging too much money."

Table 6
Observed Means and Standard Deviations for Each Satisfaction Criterion

Question #	Observed M*and SD
1	1.17 ± .45
2	1.69 ± .78
3	1.76 ± .86
4	2.10 ± .94
5	1.29 ± .62
6	1.50 ±.75
7	1.73 ±.91
8	2.42 ± 1.07
9	1.22 ± .56
10	1.53 ± .72
11	1.50 ± .66
12	1.51 ± .69
13	1.69 ± .77
14	2.07 + .1.14

*participants responded on a 5 point Likert-type scale with 1 = important and 5 = not important.

Hypothesis Four:

Both SP's and controls will be more interested in making non-medical decisions than medical ones, but SP's who have performed in the last 12 months will be more willing to make medical decisions than controls or SP's who haven't performed in the last 12 months.

Decision Making

For the multivariate analysis of covariance, the two decision-making scales served as the dependent variables, with age and education serving as the covariates, and participant status serving as the independent variable. The overall model was significant as shown in Table 7. There were significant differences between participant groups in decision making after controlling for age and education. Both age and education were not significant covariates for the API scale (age: $t = -.85$, $p = .40$; education: $t = -.85$, $p = .40$). However, for the DIQ scale, age was not significant ($t = -.373$, $p = .71$) but education was ($t = -1.989$, $p = .05$). The standardized canonical coefficients reflected the relative importance of these covariates with age = -.241, and education = -.985 respectively.

Table 7
Overall Summary Statistics for Decision Making

Wilks's Λ	df	F	p
.93	4, 426	3.88	.004

Since there were three separate groups of participants (controls, SP's with no experiences in the last 12 months, and SP's with experience in the last 12 months), two discriminant functions were possible (as shown in Table 8). However, as shown in Table 9, only the first function was significant.

Table 8
Descriptors of Each Discriminant Function

Root	Eigenvalue	Canon. Cor.	Sq. Cor.
1	.063	.244	.059536
2	.010	.101	.010201

Table 9
Significance of Each Discriminant Function

Root	Adj. Wilks's Λ	df	F	p
1	.93088	4, 426	3.88304	.004
2	.98978	1, 214	2.21024	.139

As shown in Table 10, both the standardized coefficient as well as the univariate F tests show that the difference between participants was reflected primarily in the API scale. The standardized coefficient for the DIQ scale was low relative to the standardized coefficient for the API scale, indicating that the API scale was much more important in showing a difference between participant groups. However, the univariate F for the DIQ scale approached significance and will be discussed further.

Table 10
Standardized Discriminant Function Coefficients and Univariate F Tests

Test Type	Standardized Coef.	F	p
DIQ Scale	.242	2.80	.063
API Scale	.891	6.48	.002

In order to determine which participant groups were significantly different in their decision making, a simple contrast was run with the controls as the comparison group. For the DIQ scale, there was no significant difference found between controls and SP's who had performed in the last 12 months ($t = .27647$, $p < .78$). However there was a significant difference between controls and SP's who hadn't performed in the last 12 months ($t = 2.22$, $p = .03$). Therefore, after controlling for age and education, SP's who haven't performed in the last 12 months had scores that were marginally significantly higher then controls on the DIQ scale.

Examining the simple contrasts from the API scale showed that controls were significantly different from both the SP's who had performed in the last 12 months ($t = 2.49$, $p < .01$) as well as SP's who had not performed in the last 12 months ($t = 3.45$, $p < .00$). Consequently, SP's had significantly higher levels of decision making as measured by the API scale after controlling for age and education. The observed and adjusted means are shown in Table 11.

Table 11
Observed and Adjusted Means For Both Decision-Making Scales

Scale	Participant Type	Observed Mean	Adjusted Mean
DIQ	Control	2.27	2.19
	SP (in the last 12 mon.)	2.17	2.23
	SP (not in last 12 mon.)	2.49	2.51*
API	Control	3.37	3.33
	SP (in the last 12 mon.)	3.56	3.59*
	SP (not in last 12 mon.)	3.72	3.74*

* Adjusted mean differs significantly from the control.

Unexpectedly, as can be seen by the direction of the means, SP's who had not performed in the last 12 months were significantly less willing to make medical decisions concerning lifestyle (DIQ scale) than either controls or SP's who had performed in the last 12 months after controlling for age and education. For the API scale, both SP's who had performed as well as those SP's who had not performed in the previous 12 months were less willing to make medical decisions after controlling for age and education. However, with a score of "1" (equaling the patient alone making a decision) and a score of "3" (equaling the doctor and the patient making the decision equally), all participants were interested in playing an active role in decision making.

In Thompson, Pitts, and Schwankovsky's (1993) article, participants were given both the API and the DIQ scales. The authors segregated the scores into three levels of age (43 and under, 44 - 65 and 66 and older), two levels of education (some college and below or college graduate and above) and two levels of sex. Table 12 contains the Thompson, Pitts, and

Schwankovsky API and DIQ scores as well as the scores from the present study segregated into the same groups. With the exception of the category “Young Age”, Thompson, Pitts, and Schwankovsky’s results were higher than the scores from this thesis indicating that their participants wanted less involvement in decision making than participants in the current study.

Table 13 compares the scores on the API scale broken down by individual vignettes (Upper Respiratory Infection, Hypertension, and Myocardial Infarction) for the participant groups in the present study and for physicians as patients and controls as reported by Ende, Kazis, Mark, and Moskowitz (1990). For each vignette, the Ende et al. controls had the highest scores and the Ende et al. physicians had the second highest scores indicating that the Ende et al. participants had less interest in patient involvement in decision making.

Table 12

A Comparison of Mean Scores* (SD's) On the DIQ and API Scales for Thompson, Pitts, and Schwankovsky (1993) and This Study

Group	Participant Type	API	DIQ
Young Age			
	SP in last 12 mon.	3.42 (.51)	2.07 (.58)
	No SP in last 12 mon.	3.85 (.46)	2.56 (.48)
	Control	3.38 (.49)	2.27 (.61)
	Thompson's results**	3.6 (.56)	2.5 (.63)
Middle Age			
	SP in last 12 mon.	3.73 (.46)	2.26 (.73)
	No SP in last 12 mon.	3.58 (.40)	2.11 (.34)
	Control	3.27 (.58)	2.13 (.48)
	Thompson's results**	3.9 (.56)	2.7 (.72)
Old Age			
	SP in last 12 mon.	3.80 (.49)	2.42 (.60)
	No SP in last 12 mon.	3.51 (.42)	2.61 (.79)
	Control	----	----
	Thompson's results**	4.1 (.59)	2.9 (.68)
Female			
	SP in last 12 mon.	3.56 (.53)	2.12 (.63)
	No SP in last 12 mon.	3.67 (.46)	2.64 (.47)
	Control	3.41 (.45)	2.30 (.61)
	Thompson's results**	3.9 (.59)	2.7 (.68)
Male			
	SP in last 12 mon.	3.59 (.47)	2.26 (.65)
	No SP in last 12 mon.	3.77 (.46)	2.32 (.62)
	Control	3.30 (.56)	2.20 (.55)
	Thompson's results**	3.9 (.59)	2.7 (.75)
Low Education			
	SP in last 12 mon.	3.72 (.51)	2.27 (.64)
	No SP in last 12 mon.	3.51 (.59)	2.69 (.62)
	Control	3.41 (.49)	2.32 (.59)
	Thompson's results**	3.9 (.61)	2.9 (.70)
High Education			
	SP in last 12 mon.	3.49 (.49)	2.12 (.63)
	No SP in last 12 mon.	3.79 (.42)	2.38 (.48)
	Control	3.27 (.50)	2.11 (.61)
	Thompson's results**	3.8 (.59)	2.6 (.65)

*Scores are based on a 5-point Likert-type scale. (1 = "You Alone" should make the decision and 5 = "The Doctor Alone" should make the decision). **Thompson's scores were reverse coded so they match the direction of the current study.

Table 13

Mean Autonomy Preferences* for Participant Groups and Physicians

Vignette	Participant Type	Mean (SD)
Upper Respiratory Illness		
	SP in the last 12 mon.	3.29 (.67)
	No SP in the last 12 mon.	3.53 (.63)
	Control	2.99 (.58)
	Ende et al. Physicians	3.82 (.09)
	Ende et al. Controls	4.11 (.06)
Hypertension		
	SP in the last 12 mon.	3.46 (.61)
	No SP in the last 12 mon.	3.53 (.63)
	Control	3.34 (.65)
	Ende et al. Physicians	4.14 (.08)
	Ende et al. Controls	4.73 (.05)
Myocardial Infarction		
	SP in the last 12 mon.	3.94 (.66)
	No SP in the last 12 mon.	3.99 (.49)
	Control	3.79 (.69)
	Ende et al. Physicians	4.84 (.08)
	Ende et al. Controls	5.0 (.02)

*Ende et al. scores were rescored to correspond with the same 5-point, Likert-type scale used in thesis (1 = "You alone," 5 = "The doctor alone").

Discussion

This study addressed several hypotheses regarding doctor-patient interaction using a group of laypeople with unique experiences known as SP's. There were several advantages in using SP's. Studying these individuals may help determine if patient participation levels are related to particular kinds of experience or practice with medical personnel. These individuals may also help identify the particular aspects of doctor-patient interactions that are pertinent to patient satisfaction. By using SP's to examine patient attitudes and experiences, it may be possible to assess whether or not higher levels of patient involvement may be taught and if follow up teaching is needed.

Another reason to study SP's is the increasing number of people who are being exposed to this type of training. It is important to learn what hidden costs or benefits accompany this training. Learning if SP's have altered, or heightened expectations of their own health care providers is important because it will affect how they will participate, seek information, and make decisions in the health care setting. Also important is whether SP's will establish unique criteria for satisfaction with medical interactions. The implications for doctor-patient communication are significant. These findings are pertinent not only to private practice but to managed care as well. Managed care is becoming increasingly popular as traditional insurance becomes less popular, largely because managed care is seen as a way to control soaring medical costs. Indications suggest that the trend toward managed care will continue (Bischoff & Nash, 1996).

Managed care may bring unique challenges to doctor-patient interactions. While there are many types of managed care, most restrict the physician's autonomy, usually in the form some aspect of clinical prescriptions or by encouraging reduced services. Skeptics suggest that this limitation will result in managed care having a lower of quality care than private practice. However, according to Chernew (1995), upon review of twenty-four studies of diagnostic test use, there was no difference in quality of patient care between private practice and managed care groups although there were lower testing rates found in the managed care group.

Patient perceptions of quality care remain extremely important; especially in order for various managed care organizations to compete. If a patient believes that he or she is receiving poor care, he or she will be less satisfied. Patients who are dissatisfied are more likely to leave health care plans than patients who are satisfied. If dis-enrollment is common, health maintenance organizations may then lose their focus on long-term or preventive care since the patient may not stay around long enough for the maintenance organization to reap the benefits of the preventive care investment (Bischof & Nash, 1995). Therefore, health care providers as well as patients have a vested interest in keeping patients as satisfied as possible.

Having patients with high levels of participation in health care decisions may also be in the interest of managed care organizations. For many patients, such participation is linked to improved satisfaction, and other positive behaviors such as adherence, control and illness outcomes discussed in earlier sections of this study. Therefore, it is likely that in order for managed care to survive as a viable and satisfactory option for the health care consumer, managed care organizations will need to encourage patient participation in decision making.

One way for managed care organizations to monitor physicians will be though the use of the SP. Such patients will be able to help both managed care organizations as well as private doctors evaluate not only quality of care but the provider's success in encouraging participation.

The primary purpose of this thesis was to establish that SP's as a group were different as health care consumers than the general population. This goal met with limited success. However, before going into detail about each hypothesis, some attention should be paid to demographics. Unexpectedly, the SP's in this study tended to be highly educated with 31.7% having completed advanced degrees. This is a great deal higher than the percentage of advanced degrees in the general population in the geographic area. For people over the age of 25 for Oregon and Washington, the percentage of advanced degrees is only 23.7% (CensusCD 1.1, 1996).

A discussion with the recruiter of SP's for one of the two medical schools provided a possible explanation (B.J. Cottrell, personal communication, July 12,1997). Despite the growing number of SP's, most are still recruited through word of mouth. Since the recruiter works in a large university setting, many of the people recruited work there or are relatives of people who work there. This results in a sample skewed toward a high number of participants with advanced degrees. The large percentage of SP's with high levels of education led to significant differences between SP's and the controls with regard to education. Since controls were taking undergraduate psychology classes, their education levels were fairly homogeneous.

As expected there was significant differences in age between controls and the SP's. Since the control sample was taken from undergraduate classes at a major university, the majority of the participants were in their early 20's. Conversely, SP's from every age group are recruited in order to represent a large variety of patients.

Controlling for age and education, do SP's really make different patients? The four hypotheses studied in this thesis were designed to test just this idea. The results would suggest that this issue is more complicated than expected.

Hypothesis One

SP's who haven't trained or performed in the last year will have different expectations and different levels of respect for their doctors than controls and SP's who have trained or performed in the last year.

Although a majority of SP's reported having different expectations because of their experiences (67.1%), the Expectations questionnaire did not show any significant difference between control and SP expectations. There are a number of possible explanations. The most likely one is that the Expectations questionnaire was not reliable. Chronbach's alpha for the overall questionnaire was at an unacceptable level of $\alpha = .37$. Even the two subsections did not hold together well with a Chronbach's alpha of $\alpha = .33$ for the Professional Competence subscale and $\alpha = .55$ for the items covering psycho-social issues. Therefore, the results of this questionnaire may reflect other factors besides expectations. Alternatively, the expectations that the SP's referred to as changed may not have been covered in this questionnaire. Finally, SP's may report that their expectations have changed without them really changing. In today's society, with its emphasis on taking charge of one's health care, this may be a more socially appropriate attitude. Further attention is needed to the development of a valid and reliable expectations survey.

While the results for the Expectations questionnaire did not reveal any differences between the control participants and the SP's, the respect question was more definitive in differentiating between participant groups. As expected, SP's with no experience in the previous year were statistically identical in attitudes of respect to the control group. However, SP's who had performed in the last 12 months had significantly lower levels of respect than controls. Therefore, it is possible that recent performance lowers an SP's feelings of respect toward physicians. Over time, respect may increase. Perhaps this is due to exposure to medical students who by their nature are not polished in either their knowledge or clinical skills yet. Additionally, as Rubin, Philp, and Hartman (1995) suggest, it is possible that the experience makes SP's more critical of their health care. However, since this was not a longitudinal study, there may be other factors that also influenced this result.

Hypothesis Two

SP's who have performed in the last year will have higher rates of information seeking than controls and SP's who haven't performed in the previous 12 months.

Unexpectedly, there was no difference between participant groups in their reported amount of information seeking after controlling for age and education. Since the reliability of the Krantz information seeking scale was at an acceptable level of $\alpha = .83$, it is not likely that this finding reflects an unreliable result. Instead, this finding suggests that the experience of being an SP does not cause a change in information seeking. This is contrary to predictions, since it was anticipated that the practice of playing a patient role and the knowledge of how a doctor should behave would encourage information seeking during an SP's actual health care visit. Since the literature would seem to suggest that most patients want more information than is provided to them by their doctors (Beisecker & Beisecker,1990), it isn't likely that SP's are satisfied with the amount of information provided to them by their doctors. It may be that, since most SP roles do not specifically address information seeking, this aspect of being an assertive patient does not translate into concrete information seeking skills.

Hypothesis Three

SP's who have performed in the last 12 months will have different criteria for determining their satisfaction with their health care providers than SP's who haven't performed in the last 12 months and non-SP's.

Unexpectedly, there was no difference in total scores on the satisfaction criteria scale for the subject groups. While this may indicate that these groups do not have different criteria for satisfaction, there is an alternate explanation. Scores on all 14 items were quite high (observed average means for each question ranged from only 1.17 - 2.42 on a five-point Likert-type scale with 1 = important) indicating that participants thought that all items were important. This apparent ceiling effect suggests that this particular scale may not be sufficiently discriminating to determine if subject groups have different satisfaction criteria.

Hypothesis Four

Both SP's and controls will be more interested in making non-medical decisions than medical ones, but SP's who have performed in the last 12 months will be more willing to make medical decisions than controls or SP's who haven't performed in the last 12 months.

As expected, the average scores for the DIQ scale were lower than those from the API scale, indicating that participants were more interested in making medical decisions affecting lifestyle rather than purely medical decisions. Since people are likely to have more experience making decisions concerning lifestyle versus those that are entirely medical, this was to be expected. This finding also supports Thompson, Pitts, and Schwankovsky's results (1993) that showed similar, directional differences between the two scales.

For the DIQ scale, SP's who had performed in the last 12 months had marginally significant higher scores than controls. There was no difference between SP's who hadn't performed in the last 12 months and controls. These results, while only marginally significant, are intriguing. They could indicate that the experience of being an SP discourages people from wanting to play as large a role in lifestyle decision making. However, over time, without further SP experience to reinforce this change in attitude, SP's return to their original feelings. What aspect of SP experience could make those who have performed recently less willing to make life style medical decisions? Since this group is the same group that feels less respect toward doctors in general, it is not probable that they want to give up some of their decision making because of feelings of respect. Instead, it is likely that this group is finding doctors that they are more satisfied with and feel more comfortable giving up some of their decision making power. This explanation is supported by the results on satisfaction levels. The majority of SP's (59.8%) felt that their satisfaction had changed, with 50% becoming more satisfied and 50% becoming less satisfied. Many SP's commented that the physicians who met their new, heightened expectations were more satisfying as health care providers and physicians who didn't meet these new expectations were less satisfying.

For the API scale, both types of SP's scored significantly higher than controls indicating that they are much less likely to want more involvement in medical decision making than the SP's. This was also surprising. Looking at the average scores for each group (control = 3.33, SP in the last 12 months = 3.59, and SP not in the last 12 months = 3.74); it seems likely that there is a difference between the two SP groups (this analysis could not be performed due to using up degrees of freedom determining that both SP groups were different from controls). If SP's who have had recent experience are significantly different in desire to make medical decisions from SP's who haven't had recent experience, then the same phenomenon associated with wanting to play a reduced role in decision making concerning lifestyle may also be associated with purely medical decision making. There is also the possibility that people who chose to become SP's are somehow different than other people. It was expected, however, that people who were interested in being SP's would be the type of patients that would be more, not less assertive in medical interactions. Even if the two SP groups are not significantly different, overall, SP's have less interest in medical decision involvement than controls. Perhaps this reflects SP exposure to the vast amount of knowledge medical students have to learn. SP's may be developing a new appreciation about what they don't know.

It is important to note that although the controls were more likely than the other groups to want to play a larger decision making role for both the DIQ as well as the API scales, SP's still wanted to be highly involved in both types of decision making. The group of SP's with the highest mean (indicating the least amount of decisional involvement) was for the one that hadn't had any experience in the last 12 months. Their average score on the API scale was 3.72 which corresponded to between 3 ("The doctor and you equally") and 4 ("Mostly the doctor").

Comparing the decision making results found in this study to those found by Thompson, Pitts, and Schwankovsky (1993) reveals some interesting differences. Thompson, Pitts and Schwankovsky gave the DIQ and the API scales to a randomly selected, age stratified, membership of an HMO organization. For both scales, the authors reported means for age tricotomized into three groups, gender dicotomized into two groups, and education dicotomized into two groups. Breaking down the results from the current study into the same sets of groups for both SP's and controls (not controlling for either age or education), reveals that the Thompson, Pitts, and Schwankovsky subjects (with the exception of the youngest group) wanted the lowest levels of decisional involvement. It was expected that these subjects would have scores closest to the controls in this thesis since they do not have the special education of the SP's. However, the controls from this thesis wanted the most decisional involvement of any group.

What could account for the different scores between the controls in this thesis and Thompson, Pitts, and Schwankovsky's participants? There are several possible factors. While it is not clear where the authors found their subjects, the first author is in Southern California and it is likely that her subjects live there as well. Patient participation levels may be different in California than the Northwest. Or, more likely, the difference in patient decision involvement is due to the passage of time and the increasingly sympathetic climate toward patient involvement. Thompson, Pitts, and Schwankovsky's study was published in 1993 so their data was collected prior to that year. The last five years have witnessed enormous changes in the arena of patient involvement. The difference in scores may be a reflection of these changes. This explanation would also explain the high scores on the API scale by controls and physicians as patients found by Ende, Kazis, and Moskowitz (1990). Even physicians as patients wanted less decisional involvement than did any of the participants in the present study. Follow-up in this area would be advisable in order to determine if these changes do indeed reflect a population change toward higher levels of patient involvement in decisions or other factors such as geography.

The Overall Effects of Being an SP

Taking in the results of this thesis as a whole, how, if at all, are SP's affected by their training? Descriptive data would indicate that the majority of SP's feel differently about interactions with their health care providers. However, for expectations and satisfaction criteria, the scales were inadequate measures of whether SP thoughts translated into actions. For information seeking, results would suggest that there may not be an increase in concrete behavior. For decision making and respect toward doctors in general, there may be a negative effect that fades with time.

Overall, education played a large role in levels of respect, satisfaction criteria, and expectations. However, age did not. This was surprising because the literature suggests that as one gets older, the less likely a person is to want information or decisional involvement (Sensky & Catalan, 1992). Perhaps age was not a factor in this study, because even the older subjects ad high levels of education that served as a "protective" mechanism against non-involvement.

Limitations

There are a number of limitations with this study that need to be addressed. These results are based on self-reporting which may have encouraged SP participants to respond in a way that they perceive will receive social approval such as being assertive in a doctor's office or in a way hat the researcher expects. This may be another explanation for SP's reporting qualitatively that their expectations, satisfaction levels and perceptions had changed, but quantitative results indicating otherwise.

Another limitation was that in order to recruit the maximum number of SP's possible, no limitation was placed on when SP's performed last. This meant that for the SP's who didn't respond, there was no way to tell if they didn't respond because they didn't chose to or because the investigator didn't have a current address for them. It is likely that those who chose to participate tended to have more extreme opinions. Anecdotally, the investigator noted that a couple of SP's called or wrote on their forms that they had recently had negative experiences with physicians and that they were happy to have an opportunity to talk about their experiences.

Another limitation is that more definitive results would likely be obtained with a larger sample size. SP populations, while growing, are currently small, and all who were SP's 18 years and older, at two particular sites, were invited to participate in this study. While introducing SP's from other sites introduces other possible biases, such as different trainers and different geographic areas that may have unknown effects, two sites were felt to be necessary to obtain a sufficiently large sample. Both sites are in the same general geographic region, so hopefully this bias was minimized.

There was also anecdotal evidence that many of the SP's had previous experience in the health care field. Upon reflection, this should not be surprising given where the employees were recruited. At least one physician was in the sample of SP's. In the future, SP's should be asked about both their education in general as well as their medical education specifically.

In short, starting with a sample of SP's at two different sites was deemed as an important first step for this exploratory study. A logical next step would be to expand this study to include more variables such as type of training received, experience, or other unknown factors. However, this will have to wait for a larger sample size. Clearly, more research in this area will be needed.

In conclusion, this study examined if SP's were affected by experiences in the relationships with their actual health care providers. This was important because SP's may have insights into the doctor-patient relationship that might lead to further understanding of the complex relationship that doctors and patients have with each other. In today's consumer society, with decreasing levels of patient satisfaction, any deeper understanding of how to improve this relationship is important in order for educators to train health care providers to best meet the needs of their patients and for patients to be comfortable being active health care consumers.

References

Adamson, T.E., Tschann, J.M., Gullion, D.S., & Oppenberg, A.A. (1989). Physician communication skills and malpractice claims: A complex relationship. Western Journal of Medicine, 150, 356-360.

American Medical Association. (1997). Code of Medical Ethics (150th Anniversary Ed.). Chicago: Author.

Annas, G.J. (1989). The Rights of Patients: The Basic ACLU Guide to Patient Rights (2nd ed.). Carbondale and Edwardsville: Southern Illinois University Press.

Auerbach, S.M., Martelli, M.F. & Mercuri, L.G. (1983). Anxiety, information, interpersonal impacts, and adjustment to a stressful health care situation. Journal of Personality, and Social Psychology, 44(6), 1284-1296.

Averill, J.R. (1973). Personal control over adversive stimuli and its relationship to stress. Psychological Bulletin, 80, 286-303.

Barrows, H.S. (1987). Simulated (Standardized) Patients and Other Human Simulations. Chapel Hill: Health Sciences Consortium.

Beisecker, A.E., & Beisecker, T.D. (1990). Patient information-seeking behaviors when communicating with doctors. Medical Care, 28(1) 19-28.

Bischof, R.O., and Nash, D.B. (1996). Managed care: Past, present, and future. Medical Clinics of North America, 80(2) 225-244.

Blanchard, C.G., Labrecque, M.S., Ruckdeschel, J.C., & Blanchard, E.B. (1988). Information and decision-making preferences of hospitalized adult cancer patients. Social Science and Medicine, 27(11), 1139-1145.

Blank, L.L., Grosso, L.J. & Benson, J.A. (1984). A survey of clinical skills evaluation practices in internal medicine residency programs. Journal of Medical Education, 59, 401-406.

Brody, D.S. (1989). Patient perception of involvement in medical care. Journal of General Internal Medicine, 4, 506-511.

Brody, D.S., Miller, S.M., Lerman, C.E., Smith, D.G., & Caputo, C. (1989). Patient perception of involvement in medical care: Relationships to illness attitudes and outcomes. Journal of General Internal Medicine, 4, 506-511.

Cartwright, A. (1964). Human Relations and Hospital care. London: Routledge & Kegan Paul.

CensusCD 1.1, (1996). Area Snapshot.

Chernew, M. (1995). HMO use of diagnostic tests: A review of the evidence. Medical Care Research and Review, 52, 196-222.

Cohen, R., Rothman, A.I., Ross, J., & Poldre, P. (1991). Validating an objective structured clinical examination (OSCE) as a method for selecting foreign medical graduates for a pre-internship program. Academic Medicine, 66(9) S67-S69.

Colliver, J.A., & Williams, R.G. (1993). Technical issues. Academic Medicine, 68(6) 454-463.

Ditto, P.H., & Hilton, J.L (1990). Expectancy processes in the health care interaction sequence. The Journal of Social Issues, 46(2) 97-124.

Dunn, S.M. (1995). Barriers and challenges in training health care providers for patient education. Patient Education and Counseling, 26, 131-138.

Ende, J., Kazis, L., Ash, A., & Moskowitz, M.A. (1989). Measuring patients' desire for autonomy: Decision making and information-seeking preferences among medical patients. Journal of General Internal Medicine, 4, 23-30.

Ende, J., Kazis, L, & Moskowitz, M.A. (1990). Preferences for autonomy when patients are physicians. Journal of General Internal Medicine, 5, 506-509.

Faden, R.R., Becker, C., Lewis, C., Freeman, J., & Faden, A.I. (1981). Disclosure of information to patients in medical care. Medical Care, 19(7), 718-733.

Feletti, G.I., & Carney, S.L. (1984). Evaluating patients' satisfaction with medical students' interviewing skills. Medical Education, 18, 15-20.

Gold, G, Hadda, C., Taylor, B., Tideiksaar, R., & Mulvihill, M. (1995). A standardized patient program in a mandatory geriatrics clerkship for medical students. The Gereontologist, 35(1) 61-66.

Grand'Maison, P., Lescop, J., Rainsberry, P., & Brailovsky, C.A.

(1992). Large-scale use of an objective, structured clinical examination for licensing family physicians. Canadian Medical Association Journal, 146(10) 1735-1740.

Greenfield, S., Kaplan, S., & Ware, J.E. (1985). Expanding patient involvement in care. Annals of Internal Medicine, 102, 520-528.

Hall, J.A., Irish, J.T., Roter, D.L., Ehrlich, C.M., & Miller, L.H. (1994). Satisfaction, gender, and communication in medical visits. Medical Care 32(12) 1216-1231.

Haug, M.R., & Lavin, B. (1981). Practitioner or patient- Who's in charge? Journal of Health and Social Behavior, 22, 212-229.

Hazelkorn, H.M. & Robins, L.S. (1996). Actors play patients: Using surrogate patients to look into private practice. Public Health Reports, 111, 129-132.

Isselbacker, K.J., Brauwald, E., Wilson, J.D., Martin, J.B., Fauci, A.S., & Kasper, D.L. (Eds.). (1994). Harrison's Principles of Internal Medicine (Thirteenth ed., Vol. 1). New York: McGraw-Hill Inc.

Katz, J. (1984). The Silent World of Doctor and Patient. New York: The Free Press.

Keller, V.F., & Carroll, J.G. (1994). A new model for physician-patient communication. Patient Education and Counseling, 23, 131-140.

Kleinman, A., Eisenberg, L, & Good, B. (1978). Culture, illness, and care. Annals of Internal Medicine, 88, 251-258.

Krantz, D.S., Baum, A., & Wideman, M.V. (1980). Assessment of preferences of r self-treatment and information in health care. Journal of Personality and Social Psychology, 39(5) 977-990.

Lerman, C.E., Brody, D.S., Caputo, G.C., Smith, D.G., Lazaro, C.S., & Wolfson, H.G. (1990). Patients' perceived involvement in care scale: Relationship to attitudes about illness and medical care. Journal of General Internal Medicine, 5, 29-33.

Mathews, J.J.(1983). The communication process in clinical settings. Social Science and Medicine, 17(18), 1371-1378.

McKinlay, J.B. (1975). Who is really ignorant - Physician or patient? Journal of Health and Social Behavior, 16(1), 3-11.

Miller, G.E. (1994). The clinical skills assessment alliance. Academic Medicine, 69(4) 285-287.

Nayfield, S.G., Bongiovanni, G.C., Alciati, M.H., Fischer, R.A., & Bergner, L. (1994). Review: Statutory requirements for disclosure of breast cancer treatment alternatives. Journal of the National Cancer Institute, 86(16) 1202-1208.

Nease, R.F., & Brooks, W.B. (1995). Patient desire for information and decision making in health care decisions: the autonomy preference index and the health opinion survey. Journal of General Internal Medicine, 10 593-600.

Pendleton, D.A., & Bochner, S. (1980). The communication of medical information in general practice consultations as a function of patients' social class. Social Science and Medicine, 14A, 669-673.

Ross, C.E., Mirowsky, J., & Duff, R.S. (1982). Physician status characteristics and client satisfaction in two types of medical practice. Journal of Health and Social Behavior, 23, 317-329.

Roter, D.L. (1977). Patient participation in the patient-provider interaction: The effects of patient question asking on the quality of interaction, satisfaction and compliance. Health Education Monographs, 5(4) 281- 315.

Roter, D.L. (1984). Patient question asking in physician-patient interaction. Health Psychology, 3(5) 395-409.

Roter, D.L., Knowles, N., Somerfield, M., & Baldwin, J. (1990). Routine communication in sexually transmitted disease clinics: an observational study. Public Health Briefs, 80(5), 605-606.

Rowland-Morin, P.A., & Carrol, J.G. (1990). Verbal communication skills and patient satisfaction. Evaluation & the Health Professions, 13(2) 168-185.

Rubin, N.J., Philp, E., & Hartman, J. (1995). Health care perceptions: Do they change for the standardized patient [Abstract]. 34th Annual Research in Medical Education Conference.

Sensky, T., & Catalan, J. (1992). Asking patients about their treatment. British Medical Journal, 305, 1109-1110.

Shapiro, R.S., Simpson, D.E., Lawrence, S.L., Talsky, A.M, Sobocinski, K.A., Schiedermayer, D.L. (1989). A survey of sued and nonsued physicians and suing patients. Archives of Internal Medicine, 149, 2190-2196.

Stillman, P.L., Regan, M.B., Philbin, M., & Haley, H. (1990). Results of a survey on the use of standardized patients to teach and evaluate clinical skills. Academic Medicine 65(5) 288-292.

Strull, W.M., Lo, B., Charles, G. (1984). Do patients want to participate in medical decision making? Journal of the American Medical Association, 252(21) 2990-2994.

Swanson, D.B., & Stillman, P.L. (1990). Use of standardized patients for teaching and assessing clinical skills. Evaluation & the Health Professions, 13(1) 79-103.

Thompson, S.C., Nanni, C. & Schwankovsky, L. (1990). Patient-Oriented interventions to improve communication in a medical office visit. Health Psychology, 9(4) 390-404.

Thompson, S.C., Pitts, J.S., & Schwankovsky, L. (1993). Preferences for involvement in medical decision-making: situational and demographic influences. Patient Education and Counseling, 22, 133-140.

Tuckett, D., & Williams, A. (1984). Approaches to the measurement of explanation and information-giving in medical consultations: A review of empirical studies. Social Science and Medicine, 18(7), 571-580.

van der Vleuten, C.P.M. & Swanson, D.B. (1990). Assessment of clinical

skills with standardized patients: State of the art. Teaching and Learning in Medicine, 2(2) 58-76.

Vu, N.V., Barrows, H.S., Marcy, M.L., Verhulst, S.J., Colliver, J., & Travis, T. (1992). Six years of comprehensive, clinical, performance-based assessment using standardized patients at the southern Illinois university school of medicine. Academic Medicine, 67(1) 43-50.

Waitzkin, H. (1984). Doctor-patient communication: Clinical implications of social scientific research. Journal of the American Medical Association, 252(17), 2441-2446.

Wallen, J., Waitzkin, H., & Stoeckle, J.D. (1979). Physician stereotypes about female health and illness: A study of patient's sex and the informative process during medical interviews. Woman & Health, 4(2), 135-146.

Woodward, C.A., & Gliva-McConvey, G. (1995). The effect of simulating on standardized patients. Academic Medicine, 70(5) 418-420.

Zyzanski, S.J., Hulka, B.S., & Cassel, J.C. (1974). Scale for the measurement of "satisfaction" with medical care: Modifications in content, format and scoring. Medical Care, 12(7), 611-620.

Appendix A

July 2, 1997

Colleen Lewy
Psychology Department
Portland State University
P.O. Box 751
Portland, OR 97207

SP
SP address

Dear SP:

My name is Colleen Lewy and I am a third year graduate student at Portland State University. I used to work in the Teaching Services office at OHSU where I worked with standardized patients. Watching the new medical school curriculum changes and other innovations such as standardized patients is one of the reasons I decided to go back to school and specialize in doctor-patient communication.

Standardized patients are a growing group of individuals that are being used at medical schools and in other training situations around the world. In your capacity as a member of this group, I am writing to you because I believe that due to your training, you may have a unique perspective on health care. Even if you haven't done any standardized patient training in a while, I am still very interested in your thoughts. I hope that you would be willing to share your opinions with me for my thesis.

If you are willing, please fill out the attached questionnaire and return it in the addressed, stamped envelope by **July 16.** In order to make it a little more fun, **participants who return completed questionnaires will be entered into a raffle for dinner for two** ($100.00 gift certificate) at Higgin's Restaurant.. I will notify the winner by **July 23rd**. If you are not willing, this will in no way affect any future interactions you have with anyone at OHSU. The staff that are involved with picking you for future standardized patient roles will not know who did or did not choose to participate. Choosing not to participate will also not affect your relationship with the department of Psychology, or any other part of Portland State University.

The opinions that you share will be confidential. I will have your names and addresses since I have mailed you this survey to you but I will keep those in a locked file. Your surveys will be given unique numbers of identification so that I may know who has completed their surveys and be able to enter those people into the dinner for two drawing.

The survey should take less than 30 minutes to fill out and may cause you inconvenience or unpleasant feelings about your experience with health care. You will not receive any direct benefit from taking part in the study, but the study may help increase knowledge that may help others in the future. If you have any questions, or if I can in any way be of help to you, you may call me at (503) 494-2270.

By completing the survey, you are implying that you have consented to participate in this study.

Sincerely,

Colleen Lewy
colleenl@ix.netcom.com

If you have concerns or questions about this study, please contact the Chair of the Human Subjects Research Review Committee, Research and Sponsored Projects, 105 Neuberger Hall, Portland State University, (503) 725-3417.

Table 1

Summary of Hypotheses and the Survey Materials

Hypothesis	Materials	Section of Survey[a]	Proposed Statistical Analysis
Hypothesis 1: Experienced SP's, new SP's and control's expectations and attitudes of respect toward doctors.	Expectations Survey: Four statements taken from Zyzanski, Hulka, and Cassel (1974), Professional Competence Subscale.	Section C	ANCOVA
	Question about respect toward doctors in general.	Section B	ANCOVA
Hypothesis 2: SP and control's information seeking rates.	Krantz Health Opinion Survey: Information Seeking Subscale.	Section F	ANCOVA
Hypothesis 3: SP and control's satisfaction criteria.	Satisfaction Criteria Scale modified from Rubin, Philp and Hartman (1995).	Section A	ANCOVA
Hypothesis 4: SP and control's interest in making medical and non-medical decisions.	Thompson DIQ Scale.	Section D	MANOVA
	Ende Autonomy Preference: Decision Vignettes Subscale.	Section E	

[a] This column refers to the section of the participant survey where specific materials can be found.

Appendix B:

Patient Behaviors and Beliefs Healthcare Survey

Section A.

Which of the following physician characteristics are important to you to be *satisfied* with your physician on a particular visit? (1=important, 5=not important).

	Important				Not Important
1. Ability to explain well:	1	2	3	4	5
2. Expresses concern:	1	2	3	4	5
3. Eye contact:	1	2	3	4	5
4. Enthusiasm:	1	2	3	4	5
5. Physical examination skills	1	2	3	4	5
6. Helping you feel involved in your own health care	1	2	3	4	5
7. Introducing him/herself	1	2	3	4	5
8. Note taking	1	2	3	4	5
9. Overall knowledge	1	2	3	4	5
10. Not making you feel rushed	1	2	3	4	5
11. Belief in your problems	1	2	3	4	5
12. Interest	1	2	3	4	5

13. Friendliness	1	2	3	4	5
14. Not charging too much money	1	2	3	4	5

Section B:

Circle the appropriate response:

1. What is your level of respect toward doctors in general?

Very low	Low	Average	High	Very High

Section C:

The following questions attempt to determine what you think about the medical profession. Circle the appropriate responses:

1. People do not know how many mistakes doctors really make.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree

2. Today's doctors are better trained than ever before.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree

3. Doctors will do everything they can to keep from making a mistake.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree

4. Doctors are put in the position to know more than they possibly could.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree

5. It is okay for a doctor to explain treatment and diagnosis using language that is not easily understandable.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree

6. A doctor should ask questions or take notes in such a way that the interview progresses in a smooth manner without unnecessary delays.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree

7. A doctor should give a patient encouragement and feedback.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree

8. A doctor should attempt to educate a patient about their condition, treatment, or healthy lifestyle choices.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree

Section D.

For the following scenarios, try to imagine yourself in each situation. Then indicate who you think should decide which treatment program you should receive; You alone, mostly you, the doctor and you equally, mostly the doctor, or the doctor alone.

Suppose you fall and seriously injure your knee. There are two treatment programs that are medically appropriate for your condition. You can either have surgery that will be painful and require bed rest for a month OR you can enter a twice-a-week rehabilitation program for a year. Both have a 90% chance of success.

1. Who should decide which treatment program you receive?

You alone	Mostly you	The doctor and you equally	Mostly the doctor	The doctor alone

Suppose your doctor tells you that you have high blood pressure. Two treatment choices are possible. One is medication that has possible effects of dizziness, weight gain, and impotence. The second is to adhere to a low-salt diet that involves restricting many of your favorite foods. Both have been found to be moderately successful.

2. Who should decide which treatment program you receive?

You alone	Mostly you	The doctor and you equally	Mostly the doctor	The doctor alone

Suppose your doctor discovers that you have a cancerous growth. There are two surgical treatments available. One is to have extensive surgery which would be disfiguring, but would most likely remove all the cancer. The second is to have minor surgery that would not be disfiguring, but would require follow-up chemotherapy that may have side effects of nausea, hair loss, and fatigue.

3. Who should decide which treatment program you receive?

You alone	Mostly you	The doctor and you equally	Mostly the doctor	The doctor alone

Suppose you visit your doctor because you start having occasional stress headaches. There are two ways to treat your headaches. One is for the doctor to give you a powerful medication that will eliminate the pain but make you too drowsy to be able to work. The other is to attend four stress reduction classes.

4. Who should decide which treatment program you receive?

You alone	Mostly you	The doctor and you equally	Mostly the doctor	The doctor alone

Suppose that you have a chronic illness that is painful. It could be treated with strong pain medication that would leave you groggy and might worsen your condition in the long run OR you could not treat the pain and just live with it.

5. Who should decide which treatment program you receive?

You alone	Mostly you	The doctor and you equally	Mostly the doctor	The doctor alone

Suppose that you were diagnosed with a kidney condition. A new drug treatment was available that is very effective but has been known to cause heart irregularities and permanent vision problems in some patients. The other alternative is to have the standard treatment --it won't cure you but will manage the problem with few side effects.

6. Who should decide which treatment program you receive?

You alone	Mostly you	The doctor and you equally	Mostly the doctor	The doctor alone

Suppose you developed an upper respiratory infection. A new antibiotic is available--it works in a short time, but requires you to wake up several times during the night to take medication. The other choice is to have the standard treatment--it will take longer to knock out the infection, but you do not need to disturb your sleep.

7. Who should decide which treatment program you receive?

You alone	Mostly you	The doctor and you equally	Mostly the doctor	The doctor alone

Suppose you have surgery and need to take pain medication for a week to control pain from your incision. Two choices for pain administration are available: a pain control machine by the side of your bed that allows you to push a button to get a dose of pain medication at regular intervals OR the usual situation where you call the nurse when you need more medication.

8. Who should decide which method of getting pain medication should be used?

You alone	Mostly you	The doctor and you equally	Mostly the doctor	The doctor alone

Suppose you have a history of heart problems and have been having recurring episodes of moderately severe heart pain. There are two methods available for treating your condition: an invasive procedure involving some risk and discomfort OR a long term modified and restrictive diet.

9. Who should decide which treatment program you receive?

You alone	Mostly you	The doctor and you equally	Mostly the doctor	The doctor alone

Section E.

For each statement, circle the appropriate choice.

Vignettes:

Upper Respiratory Tract Illness: "Suppose you developed a sore throat, stuffy nose, and cough that lasted for three days. You are about to call your doctor on the telephone. Who should make the following decisions?"

1. Whether you should be seen by the doctor.

You alone	Mostly you	The doctor and you equally	Mostly the doctor	The doctor alone

2. Whether a chest x-ray should be taken.

You alone	Mostly you	The doctor and you equally	Mostly the doctor	The doctor alone

3. Whether you should try taking cough syrup.

You alone	Mostly you	The doctor and you equally	Mostly the doctor	The doctor alone

High Blood Pressure: "Suppose you went to your doctor for a routine physical examination and he or she found that everything was all right except that your blood pressure was high (170/100). Who should make the following decisions?"

4. When the next visit to check your blood pressure should be.

You alone	Mostly you	The doctor and you equally	Mostly the doctor	The doctor alone

5. Whether you should take some time off from work to relax.

You alone	Mostly you	The doctor and you equally	Mostly the doctor	The doctor alone

6. Whether you should be treated with medication or diet.

You alone	Mostly you	The doctor and you equally	Mostly the doctor	The doctor alone

Myocardial Infarction: "Suppose you had an attack of severe chest pain that lasted for almost an hour, frightening you enough so that you went to the emergency room. In the emergency room the doctors discover that you are having a heart attack. Your own doctor is called and you are taken up to the intensive care unit. Who should make the following decisions?"

7. How often the nurses should wake you up to check your temperature and blood pressure.

You alone	Mostly you	The doctor and you equally	Mostly the doctor	The doctor alone

8. Whether you may have visitors aside from your immediate family.

You alone	Mostly you	The doctor and you equally	Mostly the doctor	The doctor alone

9. Whether a cardiologist should be consulted.

You alone	Mostly you	The doctor and you equally	Mostly the doctor	The doctor alone

Section F.

The following questions ask for your opinions about different kinds of health care. For each statement below, circle the answer which best fits your opinion. Each person is different, so there are no "right" or "wrong" answers. Please try to circle an answer for each question, and don't leave any blank.

1. I usually don't ask the doctor or nurse many questions about what they're doing during a medical exam.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree

2. I'd rather have doctors and nurses make the decisions about what's best than for them to give me a whole lot of choices.

Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree

3. Instead of waiting for them to tell me, I usually ask the doctor or nurse immediately after an exam about my health.

Strongly Agree Uncertain Disagree Strongly
Agree Disagree

4. I usually ask the doctor or nurse lots of questions about the procedures during a medical exam.

Strongly Agree Uncertain Disagree Strongly
Agree Disagree

5. It is better to trust the doctor or nurse in charge of a medical procedure than to question what they are doing.

Strongly Agree Uncertain Disagree Strongly
Agree Disagree

6. I usually wait for the doctor or nurse to tell me about the results of a medical exam rather than asking them immediately.

Strongly Agree Uncertain Disagree Strongly
Agree Disagree

7. I'd rather be given many choices about what's best for my health then to have the doctor make decisions for me.

Strongly Agree Uncertain Disagree Strongly
Agree Disagree

Section G.

---

1. Age: _______ **2. Sex:** M F

3. Circle the highest year of education you have completed:

1. Some high school
2. High school graduate
3. Some college or technical school
4. College graduate
5. Some post-graduate education
6. Master's, Ph.D., law degree etc.

4. Circle the approximate level of your household income:

1. $0-$10,000
2. $10,001-$20,000
3. $20,001-$30,000
4. $30,001-$40,000
5. $40,001-$50,000
6. Greater than $50,000

5. How would you rate your health?

1. Excellent
2. Fair
3. Average
4. Poor
5. Bad

Section H. Standardized Patient Section:

Approximately how many hours have you performed as an SP? This would not include training but would include OSCE's and any other experiences of performing for medical personnel.

1. **Hours (circle one):** 0-4 4-8 8-12 12-16 17-20 21-25 26-30 31+

2. Have you performed as an standardized patient within the last twelve months?

yes_____ no_____

3. Do you think the experience of being a standardized patient has affected your perception of your physician in any way?

yes______ no______

4. If yes, in what ways has the experience influenced your perception of your physician?

____

____

____

____

5. Do you think the experience of being a standardized patient has affected what you expect from your physician?

yes______ no______

6. If yes, in what ways has the experience of being an SP influenced your expectations of your physician?

____

____

____

7. Do you think the experience of being a standardized patient has affected how satisfied you are with your physician?

yes______ no_______

8. If yes, are you more inclined to be more or less satisfied?

More_______ Less_______

9. Why? ____

____

____

____

____

____

____

Table 11
Observed and Adjusted Means For Both Decision-Making Scales

Scale	Participant Type	Observed Mean	Adjusted Mean
DIQ	Control	2.27	2.19
	SP (in the last 12 mon.)	2.17	2.23
	SP (not in last 12 mon.)	2.49	2.51*
API	Control	3.37	3.33
	SP (in the last 12 mon.)	3.56	3.59*
	SP (not in last 12 mon.)	3.72	3.74*

* Adjusted mean differs significantly from the control.

Unexpectedly, as can be seen by the direction of the means, SP's who had not performed in the last 12 months were significantly less willing to make medical decisions concerning lifestyle (DIQ scale) than either controls or SP's who had performed in the last 12 months after controlling for age and education. For the API scale, both SP's who had performed as well as those SP's who had not performed in the previous 12 months were less willing to make medical decisions after controlling for age and education. However, with a score of "1" (equaling the patient alone making a decision) and a score of "3" (equaling the doctor and the patient making the decision equally), all participants were interested in playing an active role in decision making.

In Thompson, Pitts, and Schwankovsky's (1993) article, participants were given both the API and the DIQ scales. The authors segregated the scores into three levels of age (43 and under, 44 - 65 and 66 and older), two levels of education (some college and below or college graduate and above) and two levels of sex. Table 12 contains the Thompson, Pitts, and

Schwankovsky API and DIQ scores as well as the scores from the present study segregated into the same groups. With the exception of the category “Young Age”, Thompson, Pitts, and Schwankovsky’s results were higher than the scores from this thesis indicating that their participants wanted less involvement in decision making than participants in the current study.

Table 13 compares the scores on the API scale broken down by individual vignettes (Upper Respiratory Infection, Hypertension, and Myocardial Infarction) for the participant groups in the present study and for physicians as patients and controls as reported by Ende, Kazis, Mark, and Moskowitz (1990). For each vignette, the Ende et al. controls had the highest scores and the Ende et al. physicians had the second highest scores indicating that the Ende et al. participants had less interest in patient involvement in decision making.

Table 12

A Comparison of Mean Scores* (SD's) On the DIQ and API Scales for Thompson, Pitts, and Schwankovsky (1993) and This Study

Group	Participant Type	API	DIQ
Young Age			
	SP in last 12 mon.	3.42 (.51)	2.07 (.58)
	No SP in last 12 mon.	3.85 (.46)	2.56 (.48)
	Control	3.38 (.49)	2.27 (.61)
	Thompson's results**	3.6 (.56)	2.5 (.63)
Middle Age			
	SP in last 12 mon.	3.73 (.46)	2.26 (.73)
	No SP in last 12 mon.	3.58 (.40)	2.11 (.34)
	Control	3.27 (.58)	2.13 (.48)
	Thompson's results**	3.9 (.56)	2.7 (.72)
Old Age			
	SP in last 12 mon.	3.80 (.49)	2.42 (.60)
	No SP in last 12 mon.	3.51 (.42)	2.61 (.79)
	Control	----	----
	Thompson's results**	4.1 (.59)	2.9 (.68)
Female			
	SP in last 12 mon.	3.56 (.53)	2.12 (.63)
	No SP in last 12 mon.	3.67 (.46)	2.64 (.47)
	Control	3.41 (.45)	2.30 (.61)
	Thompson's results**	3.9 (.59)	2.7 (.68)
Male			
	SP in last 12 mon.	3.59 (.47)	2.26 (.65)
	No SP in last 12 mon.	3.77 (.46)	2.32 (.62)
	Control	3.30 (.56)	2.20 (.55)
	Thompson's results**	3.9 (.59)	2.7 (.75)
Low Education			
	SP in last 12 mon.	3.72 (.51)	2.27 (.64)
	No SP in last 12 mon.	3.51 (.59)	2.69 (.62)
	Control	3.41 (.49)	2.32 (.59)
	Thompson's results**	3.9 (.61)	2.9 (.70)
High Education			
	SP in last 12 mon.	3.49 (.49)	2.12 (.63)
	No SP in last 12 mon.	3.79 (.42)	2.38 (.48)
	Control	3.27 (.50)	2.11 (.61)
	Thompson's results**	3.8 (.59)	2.6 (.65)

*Scores are based on a 5-point Likert-type scale. (1 = "You Alone" should make the decision and 5 = "The Doctor Alone" should make the decision). **Thompson's scores were reverse coded so they match the direction of the current study.

Table 13

Mean Autonomy Preferences* for Participant Groups and Physicians

Vignette	Participant Type	Mean (SD)
Upper Respiratory Illness		
	SP in the last 12 mon.	3.29 (.67)
	No SP in the last 12 mon.	3.53 (.63)
	Control	2.99 (.58)
	Ende et al. Physicians	3.82 (.09)
	Ende et al. Controls	4.11 (.06)
Hypertension		
	SP in the last 12 mon.	3.46 (.61)
	No SP in the last 12 mon.	3.53 (.63)
	Control	3.34 (.65)
	Ende et al. Physicians	4.14 (.08)
	Ende et al. Controls	4.73 (.05)
Myocardial Infarction		
	SP in the last 12 mon.	3.94 (.66)
	No SP in the last 12 mon.	3.99 (.49)
	Control	3.79 (.69)
	Ende et al. Physicians	4.84 (.08)
	Ende et al. Controls	5.0 (.02)

*Ende et al. scores were rescored to correspond with the same 5-point, Likert-type scale used in thesis (1 = "You alone," 5 = "The doctor alone").

Discussion

This study addressed several hypotheses regarding doctor-patient interaction using a group of laypeople with unique experiences known as SP's. There were several advantages in using SP's. Studying these individuals may help determine if patient participation levels are related to particular kinds of experience or practice with medical personnel. These individuals may also help identify the particular aspects of doctor-patient interactions that are pertinent to patient satisfaction. By using SP's to examine patient attitudes and experiences, it may be possible to assess whether or not higher levels of patient involvement may be taught and if follow up teaching is needed.

Another reason to study SP's is the increasing number of people who are being exposed to this type of training. It is important to learn what hidden costs or benefits accompany this training. Learning if SP's have altered, or heightened expectations of their own health care providers is important because it will affect how they will participate, seek information, and make decisions in the health care setting. Also important is whether SP's will establish unique criteria for satisfaction with medical interactions. The implications for doctor-patient communication are significant. These findings are pertinent not only to private practice but to managed care as well. Managed care is becoming increasingly popular as traditional insurance becomes less popular, largely because managed care is seen as a way to control soaring medical costs. Indications suggest that the trend toward managed care will continue (Bischoff & Nash, 1996).

Managed care may bring unique challenges to doctor-patient interactions. While there are many types of managed care, most restrict the physician's autonomy, usually in the form some aspect of clinical prescriptions or by encouraging reduced services. Skeptics suggest that this limitation will result in managed care having a lower of quality care than private practice. However, according to Chernew (1995), upon review of twenty-four studies of diagnostic test use, there was no difference in quality of patient care between private practice and managed care groups although there were lower testing rates found in the managed care group.

Patient perceptions of quality care remain extremely important; especially in order for various managed care organizations to compete. If a patient believes that he or she is receiving poor care, he or she will be less satisfied. Patients who are dissatisfied are more likely to leave health care plans than patients who are satisfied. If dis-enrollment is common, health maintenance organizations may then lose their focus on long-term or preventive care since the patient may not stay around long enough for the maintenance organization to reap the benefits of the preventive care investment (Bischof & Nash, 1995). Therefore, health care providers as well as patients have a vested interest in keeping patients as satisfied as possible.

Having patients with high levels of participation in health care decisions may also be in the interest of managed care organizations. For many patients, such participation is linked to improved satisfaction, and other positive behaviors such as adherence, control and illness outcomes discussed in earlier sections of this study. Therefore, it is likely that in order for managed care to survive as a viable and satisfactory option for the health care consumer, managed care organizations will need to encourage patient participation in decision making.

One way for managed care organizations to monitor physicians will be though the use of the SP. Such patients will be able to help both managed care organizations as well as private doctors evaluate not only quality of care but the provider's success in encouraging participation.

The primary purpose of this thesis was to establish that SP's as a group were different as health care consumers than the general population. This goal met with limited success. However, before going into detail about each hypothesis, some attention should be paid to demographics. Unexpectedly, the SP's in this study tended to be highly educated with 31.7% having completed advanced degrees. This is a great deal higher than the percentage of advanced degrees in the general population in the geographic area. For people over the age of 25 for Oregon and Washington, the percentage of advanced degrees is only 23.7% (CensusCD 1.1, 1996).

A discussion with the recruiter of SP's for one of the two medical schools provided a possible explanation (B.J. Cottrell, personal communication, July 12,1997). Despite the growing number of SP's, most are still recruited through word of mouth. Since the recruiter works in a large university setting, many of the people recruited work there or are relatives of people who work there. This results in a sample skewed toward a high number of participants with advanced degrees. The large percentage of SP's with high levels of education led to significant differences between SP's and the controls with regard to education. Since controls were taking undergraduate psychology classes, their education levels were fairly homogeneous.

As expected there was significant differences in age between controls and the SP's. Since the control sample was taken from undergraduate classes at a major university, the majority of the participants were in their early 20's. Conversely, SP's from every age group are recruited in order to represent a large variety of patients.

Controlling for age and education, do SP's really make different patients? The four hypotheses studied in this thesis were designed to test just this idea. The results would suggest that this issue is more complicated than expected.

Hypothesis One

SP's who haven't trained or performed in the last year will have different expectations and different levels of respect for their doctors than controls and SP's who have trained or performed in the last year.

Although a majority of SP's reported having different expectations because of their experiences (67.1%), the Expectations questionnaire did not show any significant difference between control and SP expectations. There are a number of possible explanations. The most likely one is that the Expectations questionnaire was not reliable. Chronbach's alpha for the overall questionnaire was at an unacceptable level of $\alpha = .37$. Even the two subsections did not hold together well with a Chronbach's alpha of $\alpha = .33$ for the Professional Competence subscale and $\alpha = .55$ for the items covering psycho-social issues. Therefore, the results of this questionnaire may reflect other factors besides expectations. Alternatively, the expectations that the SP's referred to as changed may not have been covered in this questionnaire. Finally, SP's may report that their expectations have changed without them really changing. In today's society, with its emphasis on taking charge of one's health care, this may be a more socially appropriate attitude. Further attention is needed to the development of a valid and reliable expectations survey.

While the results for the Expectations questionnaire did not reveal any differences between the control participants and the SP's, the respect question was more definitive in differentiating between participant groups. As expected, SP's with no experience in the previous year were statistically identical in attitudes of respect to the control group. However, SP's who had performed in the last 12 months had significantly lower levels of respect than controls. Therefore, it is possible that recent performance lowers an SP's feelings of respect toward physicians. Over time, respect may increase. Perhaps this is due to exposure to medical students who by their nature are not polished in either their knowledge or clinical skills yet. Additionally, as Rubin, Philp, and Hartman (1995) suggest, it is possible that the experience makes SP's more critical of their health care. However, since this was not a longitudinal study, there may be other factors that also influenced this result.

Hypothesis Two

SP's who have performed in the last year will have higher rates of information seeking than controls and SP's who haven't performed in the previous 12 months.

Unexpectedly, there was no difference between participant groups in their reported amount of information seeking after controlling for age and education. Since the reliability of the Krantz information seeking scale was at an acceptable level of $\alpha = .83$, it is not likely that this finding reflects an unreliable result. Instead, this finding suggests that the experience of being an SP does not cause a change in information seeking. This is contrary to predictions, since it was anticipated that the practice of playing a patient role and the knowledge of how a doctor should behave would encourage information seeking during an SP's actual health care visit. Since the literature would seem to suggest that most patients want more information than is provided to them by their doctors (Beisecker & Beisecker,1990), it isn't likely that SP's are satisfied with the amount of information provided to them by their doctors. It may be that, since most SP roles do not specifically address information seeking, this aspect of being an assertive patient does not translate into concrete information seeking skills.

Hypothesis Three

SP's who have performed in the last 12 months will have different criteria for determining their satisfaction with their health care providers than SP's who haven't performed in the last 12 months and non-SP's.

Unexpectedly, there was no difference in total scores on the satisfaction criteria scale for the subject groups. While this may indicate that these groups do not have different criteria for satisfaction, there is an alternate explanation. Scores on all 14 items were quite high (observed average means for each question ranged from only 1.17 - 2.42 on a five-point Likert-type scale with 1 = important) indicating that participants thought that all items were important. This apparent ceiling effect suggests that this particular scale may not be sufficiently discriminating to determine if subject groups have different satisfaction criteria.

Hypothesis Four

Both SP's and controls will be more interested in making non-medical decisions than medical ones, but SP's who have performed in the last 12 months will be more willing to make medical decisions than controls or SP's who haven't performed in the last 12 months.

As expected, the average scores for the DIQ scale were lower than those from the API scale, indicating that participants were more interested in making medical decisions affecting lifestyle rather than purely medical decisions. Since people are likely to have more experience making decisions concerning lifestyle versus those that are entirely medical, this was to be expected. This finding also supports Thompson, Pitts, and Schwankovsky's results (1993) that showed similar, directional differences between the two scales.

For the DIQ scale, SP's who had performed in the last 12 months had marginally significant higher scores than controls. There was no difference between SP's who hadn't performed in the last 12 months and controls. These results, while only marginally significant, are intriguing. They could indicate that the experience of being an SP discourages people from wanting to play as large a role in lifestyle decision making. However, over time, without further SP experience to reinforce this change in attitude, SP's return to their original feelings. What aspect of SP experience could make those who have performed recently less willing to make life style medical decisions? Since this group is the same group that feels less respect toward doctors in general, it is not probable that they want to give up some of their decision making because of feelings of respect. Instead, it is likely that this group is finding doctors that they are more satisfied with and feel more comfortable giving up some of their decision making power. This explanation is supported by the results on satisfaction levels. The majority of SP's (59.8%) felt that their satisfaction had changed, with 50% becoming more satisfied and 50% becoming less satisfied. Many SP's commented that the physicians who met their new, heightened expectations were more satisfying as health care providers and physicians who didn't meet these new expectations were less satisfying.

For the API scale, both types of SP's scored significantly higher than controls indicating that they are much less likely to want more involvement in medical decision making than the SP's. This was also surprising. Looking at the average scores for each group (control = 3.33, SP in the last 12 months = 3.59, and SP not in the last 12 months = 3.74); it seems likely that there is a difference between the two SP groups (this analysis could not be performed due to using up degrees of freedom determining that both SP groups were different from controls). If SP's who have had recent experience are significantly different in desire to make medical decisions from SP's who haven't had recent experience, then the same phenomenon associated with wanting to play a reduced role in decision making concerning lifestyle may also be associated with purely medical decision making. There is also the possibility that people who chose to become SP's are somehow different than other people. It was expected, however, that people who were interested in being SP's would be the type of patients that would be more, not less assertive in medical interactions. Even if the two SP groups are not significantly different, overall, SP's have less interest in medical decision involvement than controls. Perhaps this reflects SP exposure to the vast amount of knowledge medical students have to learn. SP's may be developing a new appreciation about what they don't know.

It is important to note that although the controls were more likely than the other groups to want to play a larger decision making role for both the DIQ as well as the API scales, SP's still wanted to be highly involved in both types of decision making. The group of SP's with the highest mean (indicating the least amount of decisional involvement) was for the one that hadn't had any experience in the last 12 months. Their average score on the API scale was 3.72 which corresponded to between 3 ("The doctor and you equally") and 4 ("Mostly the doctor").

Comparing the decision making results found in this study to those found by Thompson, Pitts, and Schwankovsky (1993) reveals some interesting differences. Thompson, Pitts and Schwankovsky gave the DIQ and the API scales to a randomly selected, age stratified, membership of an HMO organization. For both scales, the authors reported means for age tricotomized into three groups, gender dicotomized into two groups, and education dicotomized into two groups. Breaking down the results from the current study into the same sets of groups for both SP's and controls (not controlling for either age or education), reveals that the Thompson, Pitts, and Schwankovsky subjects (with the exception of the youngest group) wanted the lowest levels of decisional involvement. It was expected that these subjects would have scores closest to the controls in this thesis since they do not have the special education of the SP's. However, the controls from this thesis wanted the most decisional involvement of any group.

What could account for the different scores between the controls in this thesis and Thompson, Pitts, and Schwankovsky's participants? There are several possible factors. While it is not clear where the authors found their subjects, the first author is in Southern California and it is likely that her subjects live there as well. Patient participation levels may be different in California than the Northwest. Or, more likely, the difference in patient decision involvement is due to the passage of time and the increasingly sympathetic climate toward patient involvement. Thompson, Pitts, and Schwankovsky's study was published in 1993 so their data was collected prior to that year. The last five years have witnessed enormous changes in the arena of patient involvement. The difference in scores may be a reflection of these changes. This explanation would also explain the high scores on the API scale by controls and physicians as patients found by Ende, Kazis, and Moskowitz (1990). Even physicians as patients wanted less decisional involvement than did any of the participants in the present study. Follow-up in this area would be advisable in order to determine if these changes do indeed reflect a population change toward higher levels of patient involvement in decisions or other factors such as geography.

The Overall Effects of Being an SP

Taking in the results of this thesis as a whole, how, if at all, are SP's affected by their training? Descriptive data would indicate that the majority of SP's feel differently about interactions with their health care providers. However, for expectations and satisfaction criteria, the scales were inadequate measures of whether SP thoughts translated into actions. For information seeking, results would suggest that there may not be an increase in concrete behavior. For decision making and respect toward doctors in general, there may be a negative effect that fades with time.

Overall, education played a large role in levels of respect, satisfaction criteria, and expectations. However, age did not. This was surprising because the literature suggests that as one gets older, the less likely a person is to want information or decisional involvement (Sensky & Catalan, 1992). Perhaps age was not a factor in this study, because even the older subjects ad high levels of education that served as a "protective" mechanism against non-involvement.

Limitations

There are a number of limitations with this study that need to be addressed. These results are based on self-reporting which may have encouraged SP participants to respond in a way that they perceive will receive social approval such as being assertive in a doctor's office or in a way hat the researcher expects. This may be another explanation for SP's reporting qualitatively that their expectations, satisfaction levels and perceptions had changed, but quantitative results indicating otherwise.

Another limitation was that in order to recruit the maximum number of SP's possible, no limitation was placed on when SP's performed last. This meant that for the SP's who didn't respond, there was no way to tell if they didn't respond because they didn't chose to or because the investigator didn't have a current address for them. It is likely that those who chose to participate tended to have more extreme opinions. Anecdotally, the investigator noted that a couple of SP's called or wrote on their forms that they had recently had negative experiences with physicians and that they were happy to have an opportunity to talk about their experiences.

Another limitation is that more definitive results would likely be obtained with a larger sample size. SP populations, while growing, are currently small, and all who were SP's 18 years and older, at two particular sites, were invited to participate in this study. While introducing SP's from other sites introduces other possible biases, such as different trainers and different geographic areas that may have unknown effects, two sites were felt to be necessary to obtain a sufficiently large sample. Both sites are in the same general geographic region, so hopefully this bias was minimized.

There was also anecdotal evidence that many of the SP's had previous experience in the health care field. Upon reflection, this should not be surprising given where the employees were recruited. At least one physician was in the sample of SP's. In the future, SP's should be asked about both their education in general as well as their medical education specifically.

In short, starting with a sample of SP's at two different sites was deemed as an important first step for this exploratory study. A logical next step would be to expand this study to include more variables such as type of training received, experience, or other unknown factors. However, this will have to wait for a larger sample size. Clearly, more research in this area will be needed.

In conclusion, this study examined if SP's were affected by experiences in the relationships with their actual health care providers. This was important because SP's may have insights into the doctor-patient relationship that might lead to further understanding of the complex relationship that doctors and patients have with each other. In today's consumer society, with decreasing levels of patient satisfaction, any deeper understanding of how to improve this relationship is important in order for educators to train health care providers to best meet the needs of their patients and for patients to be comfortable being active health care consumers.

References

Adamson, T.E., Tschann, J.M., Gullion, D.S., & Oppenberg, A.A. (1989). Physician communication skills and malpractice claims: A complex relationship. Western Journal of Medicine, 150, 356-360.

American Medical Association. (1997). Code of Medical Ethics (150th Anniversary Ed.). Chicago: Author.

Annas, G.J. (1989). The Rights of Patients: The Basic ACLU Guide to Patient Rights (2nd ed.). Carbondale and Edwardsville: Southern Illinois University Press.

Auerbach, S.M., Martelli, M.F. & Mercuri, L.G. (1983). Anxiety, information, interpersonal impacts, and adjustment to a stressful health care situation. Journal of Personality, and Social Psychology, 44(6), 1284-1296.

Averill, J.R. (1973). Personal control over adversive stimuli and its relationship to stress. Psychological Bulletin, 80, 286-303.

Barrows, H.S. (1987). Simulated (Standardized) Patients and Other Human Simulations. Chapel Hill: Health Sciences Consortium.

Beisecker, A.E., & Beisecker, T.D. (1990). Patient information-seeking behaviors when communicating with doctors. Medical Care, 28(1) 19-28.

Bischof, R.O., and Nash, D.B. (1996). Managed care: Past, present, and future. Medical Clinics of North America, 80(2) 225-244.

Blanchard, C.G., Labrecque, M.S., Ruckdeschel, J.C., & Blanchard, E.B. (1988). Information and decision-making preferences of hospitalized adult cancer patients. Social Science and Medicine, 27(11), 1139-1145.

Blank, L.L., Grosso, L.J. & Benson, J.A. (1984). A survey of clinical skills evaluation practices in internal medicine residency programs. Journal of Medical Education, 59, 401-406.

Brody, D.S. (1989). Patient perception of involvement in medical care. Journal of General Internal Medicine, 4, 506-511.

Brody, D.S., Miller, S.M., Lerman, C.E., Smith, D.G., & Caputo, C. (1989). Patient perception of involvement in medical care: Relationships to illness attitudes and outcomes. Journal of General Internal Medicine, 4, 506-511.

Cartwright, A. (1964). Human Relations and Hospital care. London: Routledge & Kegan Paul.

CensusCD 1.1, (1996). Area Snapshot.

Chernew, M. (1995). HMO use of diagnostic tests: A review of the evidence. Medical Care Research and Review, 52, 196-222.

Cohen, R., Rothman, A.I., Ross, J., & Poldre, P. (1991). Validating an objective structured clinical examination (OSCE) as a method for selecting foreign medical graduates for a pre-internship program. Academic Medicine, 66(9) S67-S69.

Colliver, J.A., & Williams, R.G. (1993). Technical issues. Academic Medicine, 68(6) 454-463.